GLENN COUNTY
WATER ADVISORY COMMITTEE

Glenn County Department of Agriculture
720 North Colusa St., Willows, CA 95988
Phone: 530.934.6501 FAX: 530.934.6503
Email: wateradv@countyofglenn.net
Website: http://www.glenncountywater.org/

AGENDA

MEETING DATE:	**Tuesday, September 13, 2016**
TIME:	**1:30 P.M.**
PLACE:	**Glenn-Colusa Irrigation District**
	344 East Laurel Street
	Willows, CA 95988

I. INTRODUCTIONS:

Water Advisory Committee Members:

David Alves	Central River Irrigation Districts
Terry Bressler	East County Reclamation and Irrigation Districts
Ted Trimble	East County Reclamation and Irrigation Districts
John Amaro	Glenn-Colusa Irrigation District
Larry Domenighini	Glenn County Farm Bureau
Ken Sullivan	Orland Unit Water Users Association
Bruce Roundy	Resource Conservation District
Mike Vereschagin	Tehama Colusa Canal Authority Districts
Mike Alves	Tehama Colusa Canal Authority Districts
Mark Lohse	At-Large Private Pumpers (Agricultural/Municipal/Industrial)
Rob Vlach	At-Large Private Pumpers (Agricultural/Municipal/Industrial)
Darin Titus	At-Large Private Pumpers (Agricultural/Municipal/Industrial)
Del Reimers	At-Large Private Pumpers (Agricultural/Municipal/Industrial)

Technical Advisory Committee Members:

Lance Boyd	At-Large, South Area
Erin Smith	Department of Water Resources
Allan Fulton	UC Cooperative Extension
Matt Gomes	Glenn County Planning and Public Works
Kevin Backus	Glenn County Environmental Health
Ben Pennock	At-Large, Central Area
Marcie Skelton	Glenn County Department of Agriculture
Anjanette Shadley	At-Large, East Area
John Brooks	At-Large, North Area
Leigh McDaniel	Board of Supervisors (ex-officio)

II. APPROVAL OF MINUTES:

A. Consider approval of the Minutes from the meeting of July 12, 2016.
B. Consider approval of the Minutes from the meeting of July 21, 2016

III. AGENDA ITEMS:

A. Public Comment: Any person wanting to address the Water Advisory Committee on any item NOT ON TODAY'S AGENDA may do so at this time. Please limit your comments to three (3) minutes. The Water Advisory Committee will not be making decisions or determinations on items brought up during Public Comment.

B. Discussion and/or Action Items:

1. Sustainable Groundwater Management Act (SGMA) update (DISCUSSION)- Receive update and engage in open discussion on SGMA activities.
2. Well Permit Application Update/Well Permit Ordinance- Further discussion on draft well permit application presented at July 12, 2016 meeting and provide direction regarding next steps. Consider development of a draft ordinance to gather additional information including e-logs to present to the Board of Supervisors. (POSSIBLE ACTION)

III. NEXT MEETINGS:

The next WAC meeting has not been scheduled.

The next TAC meeting has not been scheduled.

IV. ADJOURN:

Any documents related to agenda items that are made available to the Water Advisory Committee before the meeting shall be available for review during regular business hours at 720 North Colusa Street, Willows, California, 95988.

In compliance with the Americans with Disabilities Act, if you need special assistance or accommodations to participate in this meeting, please contact Lisa Hunter at the Glenn County Department of Agriculture at 530-934-6501. Notification at least 48 hours prior to the meeting will enable the Glenn County Water Advisory Committee to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35.101-35.164 ADA Title II.)

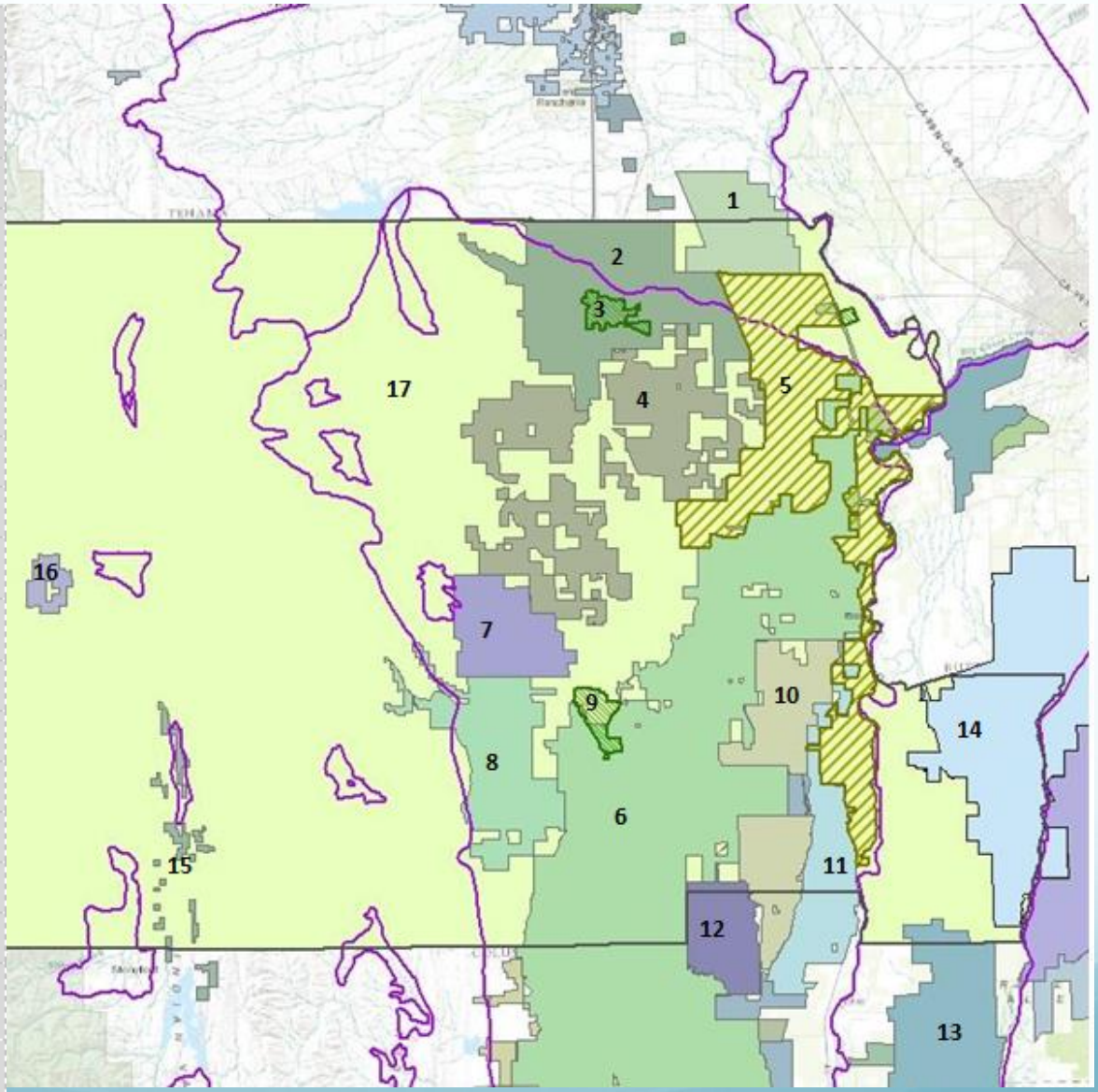
Preliminary Eligible GSAs in Glenn County

1	Capay Rancho Water District
2	Orland Unit Water Users Association*
3	City of Orland
4	Orland-Artois Water District
5	Proposed Glenn County Groundwater Management District**
6	Glenn-Colusa Irrigation District
7	Glide Water District
8	Kanawha Water District
9	City of Willows
10	Provident Irrigation District
11	Princeton-Codora-Glenn Irrigation District
12	Willow Creek Mutual Water Company*
13	Reclamation District 1004
14	Western Canal Water District
15	Stony Creek Water District***
16	4-E Water District***
17	Glenn County

* Not eligible to be a stand-alone GSA

** Proposed new water district currently in the LAFCO process

*** Not in a high or medium priority groundwater basin



Chapter 080 Water Well Drilling Permits & Standards

- **Section 010 Purpose**

  The board of supervisors finds that the protection of groundwater within the county is of major concern to the residents of the county for the protection of their health, welfare and safety. The board further finds that the adoption of the following standards are necessary for the protection of the groundwater within the county. (Ord. 818 § 1 (part), 1984.)

- **Section 020 Permit Requirements**

  It is unlawful to drill any type of well for the extraction of groundwater of any nature or description, or for a property owner to allow such drilling on his land, or to abandon any such well, without first obtaining a permit therefor. (Ord. 818 § 1 (part), 1984.)

- **Section 030 Permit Application, Issuance & Term**

  A. The health officer shall review all completed applications for permits. If the application, site evaluation or plans do not conform to the requirements of all pertinent laws, the application shall be denied in writing, including the reasons for denial. If the health officer is satisfied that the proposed work conforms to the requirements of this chapter and all pertinent laws and ordinances, a water well permit shall be issued.

  B. The health officer shall stamp or endorse in writing all permits and all sets of approved plans. One set of such approved plans and the permit shall be retained by the health officer and another set shall be kept at the well construction site, open to inspection of the health officer at all reasonable times. All work shall conform to the approved plans for which the permit has been issued and any approved amendments.

  C. Every permit expires one year after issuance. If the permittee cannot complete the work within one year, and applies for an extension before the permit expires, the health officer may extend the permit for one additional year.

(Ord. 1060 § 77, 1995.)

- **Section 040 Inspections**

  In addition to the inspections required by Section 15.110.080 of this code, an inspection shall be made before grouting occurs. (Ord. 1183 § 2, 2006; Ord. 818 § 1 (part), 1984.)

- **Section 050 Drilling Log**

  Upon completion of the drilling, the permittee shall submit a drilling log to the county building inspector. (Ord. 818 § 1 (part), 1984.)

- **Section 060 Standards**

  A. In order to provide minimum standards for the proper regulation of well drilling and abandonment, the water well standards: State of California (Department of Water Resources Bulletin 74-81 and 74-90), as may be amended from time to time, is adopted, incorporated and made a part of this chapter by reference without further publication, as though set forth at length in this chapter and is declared to be the well drilling and abandonment code of the county, and shall apply to and govern all wells drilled or abandoned in the unincorporated areas of the county.

  B. All annular well seals shall extend at least five feet into the first low permeability stratum encountered, or to fifty feet, whichever is the lesser depth.

  1. No well seal shall be less than twenty feet deep except as provided in Bulletin 74-90.

  2. Where the low permeability stratum is less than five feet thick, the annular seal shall extend through its entire thickness.

  3. Steel well casing shall be no less than ten gauge in thickness.
  (Ord. 982 § 6, 1991; Ord. 818 § 1 (part), 1984.)

- **Section 070 Permit Revocation & Recision**

  A. A permit issued pursuant to this chapter may be revoked by the health officer if the health officer determines that a violation of this chapter exists, that written notice has been directed to the permittee specifying the violation, and that the permittee has failed or neglected to take corrective action within 30 days of the date of the notice.

  B. A permit may also be rescinded by the health officer upon determination that the permit was obtained by false statement or misrepresentation. The permittee shall be notified in writing of the action. The recision shall be effective upon the date of issuance of the permit.

(Ord. 1060 § 79, 1995.)

- **Section 080 Appeals**

A. An owner whose application for a water well permit has been denied, or whose permit has been revoked, may file an appeal with the board of supervisors within 30 days of the action of the health officer under section 20.08.070. The appeal shall be accompanied by any required filing fee.

B. The appeal shall be made in writing and shall demonstrate that all of the following circumstances apply:

1. The water well site clearly meets all required setbacks and all other standards of this chapter;

2. The use of a water well on the property does not pose any danger to the public health or safety.

(Ord. 1060 § 80, 1995.)

Links
[1] http://www.countyofglenn.net/water-well-drilling-permits-standards

Glenn County Environmental Health Department

247 N. Villa Avenue, Willows, CA 95988
Tel: 530-934-6102 Fax: 530-934-6103

Well Construction/Destruction Permit Application

A plot plan shall be submitted on a separate 8½" x 11" Sheet of paper.

Applicant Information

Well Permit #

Owners Name: _____ APN: _____

Mailing Address: _____ Phone #: _____

Email Address: _____ Fax #: _____

Well Contractor*: _____ License #: _____

***Well contractor must be C-57 licensed.** Phone #: _____

Contractor's Email: _____ Fax #: _____

Property Location: _____

(Please provide nearest cross road)

TYPE OF WORK: Construction ☐ Repair ☐ Destruction ☐

Well Type:

Domestic Water Supply ☐
Industrial Water Supply ☐
Agricultural Well ☐
Monitoring Well ☐
Public Water Supply ☐
Soil Boring ☐
Other ☐

Construction Details:

Proposed:	Actual:
Depth: _____	Depth: _____
Casing Diameter: _____	Casing Diameter: _____
Seal Depth: _____	Seal Depth: _____

Seal shall extend at least 5 feet into or through a clay layer.

Distance From Well to:

Septic Tank (ft.): _____

Leachfield (ft.): _____

Confined Animal Facility (ft.): _____

Gravel Pack Yes ☐ No ☐ Casing Material: _____ Sealing Material: _____

Signature of Owner or Contractor

I certify that I have read this application and the above information is correct. I agree to comply with all laws relating to this construction, and hereby agree to obtain all required inspections of the well. I agree to provide this department with a minimum of 48 hours prior notification before desired inspection time(s). Every permit expires one year after issuance. If the permittee cannot complete the work within one year, and applies for an extension before the permit expires, the health officer may extend the permit for one additional year.

_____ _____

Signature of Owner or Contractor Date

Conditions of Approval

Date: _____ Permit Approval: _____

Glenn County Environmental Health Department

Date: _____ Final Approval: _____

Glenn County Environmental Health Department

Rec'd by:	Receipt #:	Paid:	Date:

Glenn County Environmental Health Department

247 N. Villa Avenue, Willows, CA 95988
Tel: 530-934-6102 Fax: 530-934-6103

Well Permit Application

Well Permit #

Applicant Information:

Owners Name:_____ Phone #:_____

Mailing Address:_____ Fax #:_____

Email Address:_____

Well Contractor:_____ Phone #:_____

Well Contractor Email:_____ Fax #:_____

Well Contractor CA C-57 License #_____

Property & Well Location:

Assessor's Parcel Number:_____ Well GPS Coordinates:_____

Well Longitude:_____ Well Latitude:_____

Property Address/Location:_____

(Provide Nearest Cross Road)

Type of Work:

New Well ☐ Replacement Well ☐ Repair/Deepen ☐ Test Hole ☐ Destruction ☐

Well Type:

Domestic ☐ Industrial ☐ Agricultural ☐ Monitoring ☐ Public ☐ Soil Boring ☐ # ( )
Cathodic Protection ☐ Other ☐ _____

Distance From Well:

Septic Tank (ft.):_____ Leachfield (ft.):_____ Animal Enclosure (ft.):_____

Pump Information:

Pump Contractor:_____ Phone #:_____

License Number:_____ Pump Type:_____ Horsepower:_____

Construction Detail Proposed:

Well Depth (ft):_____ Conductor Material:_____

Borehole Dia. (in):_____ Conductor Dia. (in):_____

Casing Depth (ft):_____ Conductor Depth (ft):_____

Casing Dia. (in):_____ Seal Depth (ft):_____

Casing Material:_____ Gravel Pack: Yes ☐ No ☐

Casing Gauge:_____

Construction Detail Actual:

Well Depth (ft):_____ Conductor Material:_____

Borehole Dia. (in):_____ Conductor Dia. (in):_____

Casing Depth (ft):_____ Conductor Depth (ft):_____

Casing Dia. (in):_____ Seal Depth (ft):_____

Casing Material:_____ Gravel Pack: Yes ☐ No ☐

Casing Gauge:_____

Destruction Detail:

Well Depth (ft):_____ Well Diameter (in):_____ Depth to Water (ft):_____

Sealing Material:

Neat Cement ☐ 10.3 Sack, Sand Cement ☐ Concrete ☐

Bentonite: Type:_____ Product Name:_____

Plot Plan

Indicate all distances in feet. Provide the names of streets or roads nearest to the property. Provide dimensions of the property, water surface features and all existing and proposed structures. Provide locations of existing and proposed onsite wastewater treatment systems, including expansion and repair areas, within 300 feet of the new well. Provide locations of all other wells within 300 feet of the new well. Location information shall include all adjacent parcels, if within the setbacks.

A labelled satellite image or aerial photo (ex. Google earth) may be submitted in place of a plot plan drawing and would be preferred.

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Permit Application Conditions of Approval

Agreement and Signature of Owner and Well Contractor:

I certify that I have read this application and the information described herein is correct. I agree to comply with all State and County laws, standards, ordinances, regulations and conditions related to this well, and hereby agree to obtain all required inspections of this well. I agree to contact the Environmental Health Department at least 2-business days prior to the desired inspection time(s). I agree to submit a "*Well Completion Report*" (if required) to the Environmental Health Department, within 60 days of well seal completion.

I understand that this well may become subject to further requirements and/or restrictions in order to meet groundwater management and/or sustainability goals, including, but not limited to, metering, extraction reporting, required monitoring, reduced pumping, or revised scheduling. I certify that I will work cooperatively with County Officials and hereby authorize County Officials to enter this property, with prior notification, in order to implement groundwater management and/or sustainability goals.

I understand every permit expires one year after issuance. I further understand that if the well cannot be completed within one year I may apply for an additional one year extension, before the permit expires and with Environmental Health Department approval.

_____ _____

Signature of Owner Date

_____ _____

Signature of Well Contractor Date

Official Use Only

Date:_____ Application Approval:_____

REHS Signature

Date:_____ Conductor Seal Approval:_____

REHS Signature

Date:_____ Annular Seal Approval:_____

REHS Signature

Date:_____ Well Log Received:_____

REHS Signature

Date:_____ Final Approval:_____

REHS Signature

Date:_____ Fee Paid:_____ Receipt #:_____ Rec'd by:_____

Water Well Ordinance

Butte County Code 23B

Adopted: April 22, 2014

Effective Date: May 22, 2014

23B-1 Purposes.

It is the purpose of this chapter to provide minimum procedures for the proper construction of water wells and for the proper destruction of abandoned wells in order to ensure that water obtained from wells within the County of Butte will be suitable for the purposes for which used and that wells constructed or abandoned pursuant to this chapter will not cause pollution or impairment of the quality of the groundwater within the county. An additional purpose of this chapter is to attempt to reduce potential well interference problems to existing wells and potential adverse impacts to the environment which could be caused by the construction of new wells or the repair or deepening of existing wells where a permit is required under this chapter.

23B-2 Definitions.

For the purposes of this chapter, the following words and phrases shall have the meanings respectively ascribed to them by this section:

(a) **Public water system well:** A water well constructed or used to supply water for domestic purposes in systems subject to the requirements of sections 116275 et seq. of the California Health and Safety Code (California State Safe Drinking Water Act), or as amended.

(b) **Individual well:** A well or water well meeting the definitions of wells or water wells in chapter II, part I, general A-K (bulletin 74-81), Water Well Standards, State of California, except groundwater monitoring wells less than fifteen (15) feet in depth. This definition includes agricultural wells.

(c) **Abandoned well:** A well which is a public nuisance or which has not been used for a period of one (1) year and is not being properly maintained. For purposes of this definition, proper maintenance shall include but not be limited to (1) the prevention of conditions which could impair the quality of water in the well or in the water-bearing formations penetrated and (2) marking the well and keeping the surrounding area clear of brush and debris so that the well can be clearly seen. Abandoned wells shall include a well drilled to secure water but which is a “dry hole” and not to be used for water. Dry holes not cased, sealed and completed as an individual well or public water supply well shall be destroyed under permit prior to abandonment of the site by the well driller or commencement of a new drill hole. Abandoned wells shall also include drainage wells which are no longer being utilized for drainage.

(d) **Drainage well:** "Drainage well" shall mean any hole or well dug, drilled, bored or otherwise constructed for the purpose of disposing of storm drainage water into subsurface strata.

(e) **Health officer:** The health officer of the County of Butte or his or her authorized representative.

(f) **Pitless adapter:** Watertight casing surface seal unit manufactured for the purpose of providing a leak tight casing.

(g) **District:** Means a district wholly or in part located within the boundaries of the county, which is a purveyor of waters for agricultural, domestic, or municipal use and which has adopted a resolution of intention to adopt a groundwater management plan for purposes of implementing the plan and establishing a groundwater management program pursuant to the provisions of Water Code sections 10753.2 et seq.

(h) **Groundwater:** Means all water beneath the surface of the ground, whether or not flowing through known and definite channels.

(i) **Property owner:** Property owner and address as shown on the last equalized assessment roll or current public record of the Butte County Assessor.

(j) **Consolidated formation:** Hard rock-material strata of sedimentary; igneous or metamorphic rock.

(k) **Engineered pumping capacity:** The pumping capacity of a pump in gallons per minute considering normal operating conditions and total head loss of an integrated piping/irrigation system.

23B-3 Permit required.

No person, firm, association, organization, partnership, joint venture, business trust, corporation, company, federal, state or local agency, or special district formed under the laws of this state shall, within the unincorporated area of the County of Butte, construct, repair or deepen any public water supply well, or individual well, or destroy any abandoned well unless a written permit has first been obtained from the health officer as provided in this chapter.

23B-4 Permit application.

Applications for permits shall be made to the health officer together with the required fee established by ordinance by the board of supervisors of the County of Butte. If construction, repair, deepening or destruction of a well is begun prior to obtaining a permit, the fee for such permit may be doubled, but shall not relieve any person from fully complying with the provisions of this chapter nor from any other penalties described in this chapter. Applications shall be made on forms provided by the health officer. Applications for permits to construct, repair or deepen a well shall include the following information:

(a) Location of the well on the property/parcels and the location and size in acreage of the contiguous properties, assessor's parcel number, township, range and section of the parcels to be served.

(b) Name, address and contractor's license number of the person who will construct the well.

(c) The proposed depth of the well.

(d) Proposed use of the well.

(e) An accurate plot plan which will show the following:

(1) Property lines with dimensions and existing and proposed buildings.

(2) Sewage disposal systems, sewer lines, and any other works carrying or containing sewage within two hundred (200) feet of the proposed well.

(3) All intermittent perennial, natural or artificial bodies of water or watercourses.

(4) All other existing wells.

(5) The approximate surface drainage pattern of the property and areas subject to flooding.

(6) Location of the well to be constructed, repaired, or deepened.

(7) Wells subject to section 23B-5c. and the engineered pumping capacity of the pump to be installed or replaced.

(f) Proposed diameter of the well casing for the well to be constructed, repaired, or deepened.

(g) Such additional information as reasonably required by the health officer. Applications for permits to destroy an abandoned well shall include such information as the health officer deems necessary.

(h) The health officer is authorized to reduce the amount of information required to be included in a permit application for any well which comes within section 23B-5 d.

23B-4a Coordination of review of permit application by local agency having adopted a groundwater management plan and notification of contiguous parcel owners.

(a) If a permit application is for a well located within the boundaries and/or service area of a local agency which has adopted a groundwater management plan pursuant to part 2.75 of division 6 of the California Water Code (commencing at section 10750), then the health officer shall give such local agency at least thirty (30) days to review and comment on the permit application before the health officer acts on the application. Provided further that whenever an application to drill a well within the boundaries or service area of a local agency is received, the health officer shall submit a copy of the application to the local agency if requested by the local agency.

(b) Any person, public or private agency at the time of application for a permit to drill a well with a casing diameter in excess of eight (8) inches shall deliver a copy of the well application or notification form provided by the health officer by mail to the last known address of all parcel owners within the area defined in section 23B-5c. The health officer shall issue a permit not sooner than thirty (30) working days after receiving a declaration or affidavit from the permit applicant stating compliance with this notice requirement or receiving other evidence of compliance with this section.

(c) Any person, public or private agency, at the time of application for a permit to drill a monitoring and/or mitigation well shall deliver a copy of the well application by mail to the last known address of all contiguous parcel owners.

23B-5 Well standards.

Standards for the construction, repair, reconstruction, deepening, abandonment and destruction of wells in Butte County shall be as specified within bulletin 74-81 and its supplement bulletin 74-90, Water Well Standards, State of California, except where superseded by state or federal law or modified by resolution of the board of supervisors.

23B-5a Implementation and Local Interpretation of Standards.

The Health Officer shall, within 30 days of the date of adoption of this ordinance, develop a Well Construction Manual for the purpose of documenting interpretations to facilitate and implement adopted standards and to specify local implementation practices. The Manual shall be maintained and made available to the public by Butte County Public Health Department, Environmental Health Division.

23B-5b Pumping capacity and parcel size.

The pumping capacity of the pump for a well required to have a new permit under this chapter after July 25, 1996, shall not be greater than fifty (50) gallons per minute per acre to reasonably serve the overlying land, including contiguous parcels of land under the same ownership as the land upon which the well is located. The total of the pumping capacities of the pumps for the new well and all existing wells (excepting wells which are exempt under section 23B-5d (1) and section 23B-5d (4) located within the applicable parcels shall not exceed fifty (50) gallons per minute per acre.

23B-5c Well spacing requirements.

After July 25, 1996, any well required to have a new permit under this chapter with a pump having an engineered pumping capacity stated below shall be located no closer to an existing well than as indicated on the graph entitled, “Well Spacing Requirement” and dated March 1, 1995, which graph is incorporated herein by reference, (Attachment A of Ordinance No. 3272), except that one (1) well may be located within a parcel so long as the well is in compliance with section 23B-5a. Where a new well complies with section 23B-5a but cannot comply with this section (23B-5c), the health officer shall require that the well’s location comply with the well spacing requirement to the extent reasonably possible. All wells with an engineered pumping

capacity of greater than five thousand (5,000) gallons per minute must apply for a variance under this chapter. The following table shows examples of the engineered pumping capacity to well spacing requirement:

Engineered Pumping Capacity (gallons per minute)	Well Spacing Requirement (feet)
1,000	450
2,000	1,150
3,000	1,700
4,000	2,200
5,000	2,600
Greater than 5,000	Variance shall be required

23B-5d Exempt Wells.

The following wells shall not be subject to sections 23B-5b and 23B-5c, except as noted herein:

(a) A well with an eight-inch or smaller diameter well casing.

(b) The repair or deepening of an existing well which requires a permit under this chapter, if the engineered pumping capacity of the pump is not increased.

(c) Replacement of a well that is destroyed in accordance with this chapter with a well having a pump that has the same engineered pumping capacity as the pump for the well that is destroyed and is drilled within one hundred (100) feet of the destroyed well.

(d) Limited purpose wells, including:

(1) Frost protection well where the well shall only be operated during the crop frost seasons. These wells shall be subject to section 23B-5c and not section 23B-5a;

(2) Well which is only used for fire suppression;

(3) Monitoring and mitigation wells; and

(4) Exploratory wells used only for the limited purpose of determining the presence of sufficient potable water on parcels not verified as having been created in compliance with state and local laws. The purpose of an exploratory well is to facilitate a determination of whether a parcel can be developed. Requirements for exploratory wells are specified in section 23B-5e of this Chapter.

(e) Public water supply wells located within the public water supply agency's service area, except that the section 23B-5c well spacing requirements shall apply to new public water supply wells as they relate to existing wells located outside of the public water supply agency's service area.

23B-5e Requirements for exploratory wells.

(a) No permit for construction of an exploratory well shall be issued prior to direct consultation between the health officer and the property owner, and after the property owner has signed a "Non-Development (Exploratory) Water Well Permit Disclaimer/Acknowledgment" acknowledging all of the following:

(1) The exploratory well will not be used for any purpose other than for determining the availability of an adequate water supply as described in subsection (b) of this section; and

(2) Issuance of the exploratory well permit will not convey an entitlement for any further development of the parcel as described in subsection (b) of this section.

(b) No person shall maintain or use an exploratory well for any purpose other than for determining the availability of an adequate supply of water to meet the needs for future parcel development. The restriction on the ability to maintain and use an exploratory well shall remain in force until the Land Development Division of the Public Works Department has performed a parcel clearance review and cleared the parcel for development. If the Land Development Division does not clear the parcel for development and determines it was not created in compliance with all state and local requirements that were in effect at the time of parcel creation, the restriction on the ability to maintain and use an exploratory well shall remain in force until a Certificate of Compliance is recorded for the parcel.

(c) No person shall install a pump, a pressure tank, electrical service or in any other way develop an exploratory well that would enable it to be used for other than its intended purpose.

23B-6 Persons to whom permits shall be granted.

Permits shall be granted pursuant to this chapter only to persons licensed to drill water wells, pursuant to the provisions of Business and Professions Code section 7000 et seq., possessing a C-57 water well contractors license required by section 13750.5 of the California Water Code, or to the owner of the property or authorized representative.

23B-6a Persons permitted to drill a well.

All wells shall be drilled only by a person licensed to drill water wells pursuant to the provisions of Business and Professions Code section 7000 et seq. possessing a C-57 water well contractors license required by section 13750.5 of the California Water Code.

23B-7 Permit valid for one year.

Permits issued pursuant to this chapter shall be valid for one (1) year from date of issuance and shall automatically become void one (1) year from the date of issuance unless renewed prior to the expiration date. One (1) renewal may be granted by the health officer for a fee of half the original application fee.

23B-8 Filing of well driller's report.

Upon completion of a well, the owner or licensed well driller shall file a copy of a well driller's report with the health officer. Said report shall be filled out completely, signed by the well driller and shall be in the same form and content as the California State Department of Water Resources Well Drillers Report, and shall include such other information as will enable the health officer to determine that the well was installed in compliance with the standards required by this chapter and required well standards. This provision shall not be deemed to release any person from the requirement to file said report with the state department of water resources. No work shall be deemed to have been completed until the well driller's report has been received by the health officer.

23B-8a Well registration.

Owners of existing wells within the county may register their wells by completing and filing with the health officer a well registration form prescribed by the county. The well registration information will assist the county in administering this chapter and, in cooperation with water agencies within the county, in developing groundwater management plans.

23B-9 Inspections.

(a) The health officer or his designated representatives are hereby empowered to enter upon private property in order to make inspections for the purpose of enforcing the provisions of this chapter. A final inspection of the work performed on any well pursuant to this chapter shall be made by the health officer unless such inspection is waived by him. No permittee shall be deemed to have complied with this chapter or his permit until such inspection has been either made and the installation approved, or waived.

(b) The Butte County Health Department, Division of Environmental Health, shall be notified a minimum of twenty-four (24) hours prior to installing or placing a sanitary seal. Drillers who anticipate completing a well in less than a day may notify the health officer twenty-four (24) hours prior to commencement of drilling and provide the anticipated time to commence the sanitary seal. If the health officer fails to appear at the well site at the time designated for sealing, the well may be sealed without the presence of the health officer.

23B-9a Drainage wells prohibited.

The installation or construction of drainage wells within the unincorporated area of the County of Butte is prohibited. Abandoned existing drainage wells shall be destroyed under a well permit in a manner approved by the health officer. The health officer may approve subsurface drainage trenches meeting the location and depth requirements for individual sewage disposal leaching fields for the temporary disposal of drainage where no other drainage method is feasible. Permits for other types of recharge or injection wells shall not be issued by the health officer without written approval of the California State Regional Water Quality Control Board.

23B-9b Well sealing.

In addition to well sealing requirements specified within state well standards bulletin 74-81 and bulletin 74-90, all wells shall be sealed to minimize the risk of introducing shallow water contamination into a deep aquifer. The annular seal shall be of sufficient depth to exclude water above the fifty-foot depth. Unless otherwise specified by the health officer the seal shall be extended five (5) feet into the first consolidated formation encountered below fifteen (15) feet to a maximum required sealing depth of fifty (50) feet.

23B-9c Flood protection.

Whenever possible, wells shall be located outside of any area subject to flooding. If it is not possible to locate a well outside of a flood area, the well casing shall extend three (3) feet or more above the 100-year flood elevation. Within "areas of special flood hazard," as defined in section 26-29 of this Code, for which flood elevations have been established, the casing shall terminate three (3) feet or more above the established 100-year flood elevation. The health officer may accept an approved watertight "pitless adapter" as a means to provide flood protection for an individual well to serve a single-family residence.

23B-9d Well casing.

In addition to the well casing requirements of state well bulletin 74-81 and bulletin 74-90, unless otherwise approved by the health officer, the minimum thickness of steel casing shall be three sixteenths (3/16) inch.

23B-10 Violations; penalties.

(a) Any construction, repair or reconstruction of any well or any destruction of any abandoned well in violation of the provisions of this chapter shall constitute a misdemeanor punishable as prescribed in section 1-7 of this Code; provided, however, that nothing herein shall be deemed to abrogate or annul the right to enjoin or abate such violations by civil action.

(b) Any violation of the provisions of this chapter as specified in subsection 23B-5e of this chapter shall constitute an infraction and shall be punishable by imposition of the following fines:

  (1) Upon a first conviction, a fine of one thousand dollars ($1000.00);

  (2) Upon a second conviction of violating the same chapter of this Code within the twelve (12) month period immediately preceding the commission of the current violation, a fine of three thousand dollars ($3000.00);

  (3) Upon a third conviction of violating the same chapter of this Code within a twelve (12) month period immediately preceding the commission of the current violation, a fine of five thousand dollars ($5000.00).

(c) Any violation which may be otherwise charged and punishable as an infraction pursuant to subsection (b) of this section may be charged and punishable as a misdemeanor if the defendant has been convicted of three (3) or more violations of the same chapter of this Code within the twelve (12) month period.

(d) Each and every day or portion thereof that a person violates or continues to violate any such provision of this chapter constitutes a separate offense and may be charged and punished separately without awaiting conviction of any prior violation.

23B-11 County action not guarantee.

This chapter shall not be construed as imposing upon the county any liability or responsibility for damage resulting from defective construction, repair or reconstruction of any well or any destruction of any abandoned well or for damage to or interference with wells on adjoining or other properties. Further, neither the issuance of a permit pursuant to this chapter, final inspection of work performed on any well pursuant to this chapter nor the waiver of such final inspection shall be, nor construed to be, a guarantee by the County of Butte that suitable water in sufficient quantity is available from any well.

23B-12 Water quality requirement.

Any well which produces water with a water quality greater than two thousand five hundred (2,500) parts per million of total dissolved solids shall be destroyed in accordance with this chapter unless the well owner can prove to the satisfaction of the health officer that the well can be sealed to prevent the lower quality water from entering the well and that result is actually achieved.

23B-13 Minimum well depth of new individual wells for domestic purposes.

It shall be the responsibility of the well owner to insure that a new individual well for domestic purposes will operate properly assuming a repeat of the groundwater conditions experienced during the period 1987 through 1994 in the area in which the new well is located.

23B-14 Variances.

Upon application therefor and after notice is given as required under this chapter, the health officer may issue a variance permit and shall prescribe thereon such conditions as, in the health officer's judgment, are necessary to carry out the purposes of this chapter. If the health officer needs the advice of an expert geologist or groundwater hydrologist in order to make a decision on the variance application, the health officer may retain such expert and the costs shall be borne by the applicant. The health officer shall inform the applicant of the not-to-exceed cost of such expert advice before the cost is incurred, and the applicant may withdraw the variance application before any such costs are incurred. Following the issuance of a variance, the health officer shall not issue a well permit for a period of fifteen (15) days.

23B-15 Appeal.

(a) Any person whose application for a permit or for an approval has been revoked or denied, may, within thirty (30) days after the date of such denial or revocation, appeal therefrom in writing, accompanied with the appropriate appeal fees, to the board of supervisors. Upon the filing of a sufficient and proper appeal and payment of the fees provided for in this Code, the clerk of the board shall fix a time and place for a public hearing. The board shall affirm or overrule the denial or revocation. This section does not authorize appeals to the board from any action of the health officer authorized or required by state law or regulation.

(b) Any person, may, within fifteen (15) days after the date of the issuance of a variance under this chapter, appeal therefrom in writing, accompanied with the appropriate appeal fees, to the board of supervisors. Upon the filing of a sufficient and proper appeal and payment of the fees provided for in this Code, the clerk of the board shall fix a time and place for a public hearing. The board shall affirm or overrule the issuance of a variance. This section does not authorize appeals to the board from any action of the health officer authorized or required by state law or regulation.

(c) If the The board needs the advice of an expert geologist or groundwater hydrologist in order to make a decision on the appeal, the board may retain such expert advice, and the costs shall be borne by the appellant. The board shall inform the appellant of the not-to-exceed cost of such expert advice before the cost is incurred and the appellant may withdraw the appeal before any such costs are incurred. If the board needs to retain an expert, then the hearing on the appeal may be continued for up to sixty (60) days so as to allow the expert time to investigate and to write a report on the results of that investigation. The report shall be a public document and a copy of the report shall be given to the appellant.

(d) At the hearing of an appeal to the board of supervisors, any interested party may present oral or written evidence. Following the hearing, the board shall render a decision upon the appeal and may sustain, modify, or reverse any action of the health officer. The decision of the board shall be final.

23B-16 Fees and notices.

(a) Program administration fees. Any applicant for permits or services pursuant to this Chapter shall pay fees to the health officer as established by Chapter 43 at the time of submission of application and in advance of the requested or required service.

(b) Variance and appeal fees. Any person filing an application for a variance permit shall pay a fee equal to the actual cost for county employees' time in reviewing and otherwise processing, the application and for the county's costs of publishing hearing notices. Appeal fees are payable pursuant to section 23B-4 and Chapter 43 of this Code. The variance fees will be payable as follows:

(1) The application shall be accompanied by an initial fee deposit paid to the health officer;

(2) When the initial deposited funds are depleted to an amount equal to twenty-five (25) percent of the original deposit, no additional processing of the application will occur until the applicant or appellant deposits with the health officer sufficient funds to restore a balance equal to the amount required by chapter 43 of this Code, unless a lesser amount is approved by the health officer. In the event the applicant or appellant does not provide sufficient funds to continue processing the application, the application will be deemed denied;

(3) All deposited funds shall be maintained in a separate budget control account; and

(4) After final action on the application, any funds remaining in the account shall be returned to the applicant or appellant. If the actual cost for county employee's time and publishing are less than the money deposited, the remaining amount shall be returned. If the costs are greater than the money deposited, the applicant or appellant shall pay the additional amount. In the event that payment is not received for the additional amount within thirty (30) days' notice by the health officer or the clerk of the board of supervisors, as applicable, effective upon mailing by first class mail, the matter will be immediately referred to central collections.

(c) Notices.

(1) Variances. A notice of application for a variance shall be mailed to the property owners located within the area specified under section 23B-5c, including the owners of all wells registered with the county pursuant to section 23B-8a or identified by the applicant in the application. Such notice shall be mailed at least fifteen (15) days before the health officer shall take action on the variance.

(2) Appeals. A notice of hearing on an appeal shall be both published in a newspaper of general circulation in accordance with Government Code sections 6060 and 6061 and be mailed to the owners of all property located within the area specified under section 23B-5c, including the owners of all wells registered with the county pursuant to section 23B-8a or identified by the applicant in the application.

(3) The notice shall be mailed to the property owners or to the owners shown on the section 23B-8a well registration roll. The notice shall indicate the time, date and place of the hearing and the location of the subject well property. Notice is not required to be given to property owners who are served by a public water supply well and notice shall instead be given to their public water supplier. Failure of any property owner to receive such a notice shall not affect in any manner the action taken by the board of supervisors.

WATER WELL CONSTRUCTION PERMIT

Date paid: _____ $_____

Receipt No. _____

❒ **Small Diameter Domestic Well (casing 8 inch diameter or less)**
❒ **Public Water System Well** ❒ **Repair/Deepening (same pump capacity)**
❒ **Replacement, Same Pump Capacity, 100 ft of destroyed well**
❒ **Large Diameter Well (> 8 inch diameter)**
❒ **Destruction** ❒ **Fire Suppression**
❒ **Frost Protection**

WP Well

Completed by applicant

APPLICATION

APN #: _____ TrakIt #: _____

_____ _____
Applicant Name (Please print) Property Owner Name

_____ _____
Applicant Mailing Address Construction Site Address

_____ _____
City State Zip City State Zip

_____ _____
Property Owner Name Property Owner Telephone

Exploratory well? ❒ Yes ❒ No _____
C-57 Well Driller Name

If "yes," has the ***Non-Development (Exploratory) Water Well Permit Disclaimer/Acknowledgment*** document been signed by the property owner? ❒ Yes ❒ No

Proposed Depth: _____ Casing Diameter: _____

The ***Important Information for Applicant/Property Owner*** (located on the back of this page) been reviewed by applicant or, if the applicant is not the property owner, has the information been shared with the property owner? ❒ Yes ❒ No

Additional Information for Large Diameter Wells Only

Within Water District? ❒ Yes ❒ No

Engineered Pump Capacity: _____GPM

Name of Water District: _____

Acreage of Parcel(s) to be Served: _____

If other wells also serve the above referenced parcel(s), provide an attachment that specifies for each well: (1) APN, (2) Pump Horse Power, and (3) Pump Capacity in Gallons per Minute (GPM). Note: Maximum pump capacity is 50 GPM/acre served.

Applicant Acknowledgement

As the applicant, I am: ❒ the property owner, ❒ the C-57 licensed well driller, ❒ the property owner's authorized representative. I certify that the information in this application is correct to the best of my knowledge.

_____ _____
Applicant Signature Date of Application

Completed by Environmental Health

PERMIT

CONSTRUCTION APPROVAL

This permit is issued based on review of the attached design and it has been determined that it meets the requirements of Butte County Code Chapter 23B, Water Wells.

_____ _____
Environmental Health Specialist Date of Issuance

Comments/Conditions: _____

FINAL APPROVAL AND CERTIFICATE OF COMPLETION

Well Construction/Destruction Approval

_____
Environmental Health Specialist Date

Well Final Approval/Certification of Completion

_____
Environmental Health Specialist Date

Applicant: See important information on reverse side of application.

TEL- 530.538.7281 | 202 MIRA LOMA DRIVE
FAX- 530.538.5339 | OROVILLE, CA 95965

!!! Important Information for Applicant/Property Owner !!!

- Permit valid only for construction in the location shown on the attached plot plan, stamped "Approved." Variation from the approved location must have prior approval by Environmental Health.
- Permit valid only if drilled by a C-57 Licensed Contractor.
- Environmental Health recommends that the water from this well be tested for water quality when the well is completed in order to confirm that the water is potable (safe drinking water quality).
- Environmental Health will not release for occupancy any future building permit for a residence served by this well that has not been tested, at a minimum, to verify the absence of total and fecal coliform and a nitrate level of less than 10 milligrams per liter.
- Permit valid 1 year from the date of issuance.

Official Use Only Below

A. Well Seal Inspection

1. Requested by: _____ Call in date/time: _____
2. Ready date/time: _____ _____ ❒ A.M. ❒ P.M.
3. Inspection date: _____ ❒ Approved ❒ No seal inspection
4. Inspector name: _____
5. Comment (if seal not approved or inspection not performed): _____

_____

B. Water Well Report/Destruction Report

2. Date received: _____ Date reviewed: _____
3. Reviewer name: _____

❒ Approved ❒ Not received

4. Comment (if report not approved or not received): _____

_____

C. Disinfection Report

2. Date received: _____ Date reviewed: _____
3. Reviewer name: _____

❒ Approved ❒ Not received

4. Comment (if report not approved or not received): _____

_____

D. Well Final Inspection

2. Inspection date: _____ Inspector: _____

❒ Approved ❒ Not inspected by EH but Certification of Completion provided by a licensed well driller or pump contractor?

3. Comment (if final not approved or Certificate of Completion not received: _____

_____

4. For large diameter wells only, capacity of installed pump verified by:

❒ Pump "specification sheet" ❒ Other; please explain: _____

Update: March 10, 2016

Well Application Packet

Contents

- Instructions
- Job Site Locator
- Permit Application
- Site Drawing Form
- Well Schematics
- Informational Material on Wells

Update: March 10, 2016

Update: March 10, 2016

Instructions

1. Identify the job site location

Please provide clear, detailed directions for driving to the job site and provide a vicinity sketch. This is especially important if the job site is in a remote area. A Job Site Locator form is provided for convenience.

2. Identify whether the application is for an "exploratory well?"

It is always advisable for well permit applications to be reviewed by Butte County Department of Development Services (DDS) to be sure that there are no site restrictions that might impact well placement.

You can opt to avoid this review by designating the well as "exploratory." Exploratory wells cannot be developed or used in anyway and a Disclosure document must be signed by the property owner. When the parcel is subsequently reviewed by DDS prior to building permit issuance, the designation can be changed, provided no complicating factors are identified in the DDS review.

3. Select a licensed well driller

Wells need to be drilled by a contractor who has a "C-57" license designation by the California Contractors State Licensing Board. Pumps need to be installed either by a contractor who has a C-57 license or a C-61/D21 license.

Note: The well driller will work with the property owner to identify the optimal well site. Our office needs to inspect the job site and approve the proposed well site. Once the Well Permit has been issued, the driller is required to provide our office with a 24-hour notification to allow us to inspect the construction and well seal process.

4. Complete the development of the well

In order for a Well Permit to be "finalled" and certified by our office as complete, the well needs to be fully developed with a concrete slab around the casing and an installed pump with electrical service. The property owner is highly advised to test their water for water quality to assure that it is safe to drink. Future building permits for structures served by the well will not be released for occupancy until the well water has been tested to verify the absence of total and fecal coliform and a nitrate level of less than 10 milligrams per liter.

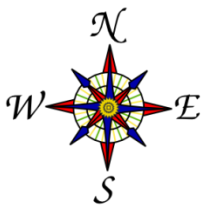
Update: March 10, 2016

Job Site Locator

Dear applicant: It is very helpful for staff when you clearly describe the location of the job site. This is especially important when the job site is in a remote area. Please complete this form and use the marker tape provided by our staff to clearly mark the entrance to the job site and proposed well location.

Provide **Written Directions** for Locating Job Site

Provide **Vicinity Sketch** to Assist in Locating Job Site



Update: March 10, 2016

Update: March 10, 2016

WATER WELL CONSTRUCTION PERMIT

Date paid: _____ $_____

Receipt No. _____

☐ Small Diameter Domestic Well (casing 8 inch diameter or less)
☐ Public Water System Well ☐ Repair/Deepening (same pump capacity)
☐ Replacement, Same Pump Capacity, 100 ft of destroyed well
☐ Large Diameter Well (> 8 inch diameter)
☐ Destruction ☐ Fire Suppression
☐ Frost Protection

WP Well

Completed by applicant

APPLICATION

APN #: _____ TrakIt #: _____

Applicant Name (Please print) _____ Property Owner Name _____

Applicant Mailing Address _____ Construction Site Address _____

City _____ State _____ Zip _____ City _____ State _____ Zip _____

Property Owner Name _____ Property Owner Telephone _____

Exploratory well? ☐ Yes ☐ No C-57 Well Driller Name _____

If "yes," has the *Non-Development (Exploratory) Water Well Permit Disclaimer/Acknowledgment* document been signed by the property owner? ☐ Yes ☐ No Proposed Depth: _____ Casing Diameter: _____

The *Important Information for Applicant/Property Owner* (located on the back of this page) been reviewed by applicant or, if the applicant is not the property owner, has the information been shared with the property owner? ☐ Yes ☐ No

Additional Information for Large Diameter Wells Only

Within Water District? ☐ Yes ☐ No Engineered Pump Capacity: _____ GPM

Name of Water District: _____ Acreage of Parcel(s) to be Served: _____

If other wells also serve the above referenced parcel(s), provide an attachment that specifies for each well: (1) APN, (2) Pump Horse Power, and (3) Pump Capacity in Gallons per Minute (GPM). Note: Maximum pump capacity is 50 GPM/acre served.

Applicant Acknowledgement

As the applicant, I am: ☐ the property owner, ☐ the C-57 licensed well driller, ☐ the property owner's authorized representative. I certify that the information in this application is correct to the best of my knowledge.

Applicant Signature _____ Date of Application _____

Completed by Environmental Health

PERMIT

CONSTRUCTION APPROVAL

This permit is issued based on review of the attached design and it has been determined that it meets the requirements of Butte County Code Chapter 23B, Water Wells.

Environmental Health Specialist _____ Date of Issuance _____

Comments/Conditions: _____

FINAL APPROVAL AND CERTIFICATE OF COMPLETION

Well Construction/Destruction Approval

Environmental Health Specialist _____ Date _____

Well Final Approval/Certification of Completion

Environmental Health Specialist _____ Date _____

Applicant: See important information on reverse side of application.

TEL: 530.538.7281 | 202 MIRA LOMA DRIVE
FAX: 530.538.5339 | OROVILLE, CA 95965

!!! Important Information for Applicant/Property Owner !!!

- Permit valid only for construction in the location shown on the attached plot plan, stamped "Approved." Variation from the approved location must have prior approval by Environmental Health.
- Permit valid only if drilled by a C-57 Licensed Contractor.
- Environmental Health recommends that the water from this well be tested for water quality when the well is completed in order to confirm that the water is potable (safe drinking water quality).
- Environmental Health will not release for occupancy any future building permit for a residence served by this well that has not been tested, at a minimum, to verify the absence of total and fecal coliform and a nitrate level of less than 10 milligrams per liter.
- Permit valid 1 year from the date of issuance.

Official Use Only Below

A. Well Seal Inspection

1. Requested by: _____ Call in date/time: _____
2. Ready date/time: _____ _____ ❒ A.M. ❒ P.M.
3. Inspection date: _____ ❒ Approved ❒ No seal inspection
4. Inspector name: _____
5. Comment (if seal not approved or inspection not performed): _____

_____

B. Water Well Report/Destruction Report

2. Date received: _____ Date reviewed: _____
3. Reviewer name: _____

❒ Approved ❒ Not received

4. Comment (if report not approved or not received): _____

_____

C. Disinfection Report

2. Date received: _____ Date reviewed: _____
3. Reviewer name: _____

❒ Approved ❒ Not received

4. Comment (if report not approved or not received): _____

_____

D. Well Final Inspection

2. Inspection date: _____ Inspector: _____

❒ Approved ❒ Not inspected by EH but Certification of Completion provided by a licensed well driller or pump contractor?

3. Comment (if final not approved or Certificate of Completion not received: _____

_____

4. For large diameter wells only, capacity of installed pump verified by:

❒ Pump "specification sheet" ❒ Other; please explain: _____

SITE PLAN REQUIREMENT CHECKLIST

GENERAL INFORMATION

Your site plan may be reviewed by various departments: Development Services, Public Works, CDF, Agriculture Commission, etc. so you will need to include information to satisfy numerous agencies.

- Please label all elements as clearly and completely as possible
- Site plans must be fully dimensioned and clearly drawn on clean paper, 8.5' x 11 ' minimum or up to 11' x 17' maximum
- Blow-ups or insets should be used to provide more detail where required. A scaled site plan may be required, if necessary for septic system permit or other plan review.

GENERAL INFORMATION ITEMS REQUIRED

- ❑ Owner's name
- ❑ Assessor's Parcel Number
- ❑ North arrow
- ❑ Property lines with dimensions: As shown on the assessor's map or parcel map
- ❑ Distances between improvements and from property lines
- ❑ Setbacks
- ❑ Any features, such as cliffs or areas of slope: Include direction and approximate degree of slope

EXISTING AND PROPOSED ON-SITE IMPROVEMENTS, INCLUDING:

- ❑ Buildings and other structures
- ❑ Pools
- ❑ Tanks
- ❑ Retaining walls
- ❑ Cuts and/or fills

ROAD FEATURES, INCLUDING

- ❑ Location and name of frontage road(s) serving property
- ❑ Locate of driveways
- ❑ Right-of-way
- ❑ Easements

ALL WATER RELATED FEATURES, INCLUDING:

- ❑ Flood zone
- ❑ Septic/sewage disposal systems (original and replacement)
- ❑ Wells
- ❑ Waterlines
- ❑ Springs
- ❑ Creeks or streams
- ❑ Seasonal creeks and drainage ditches

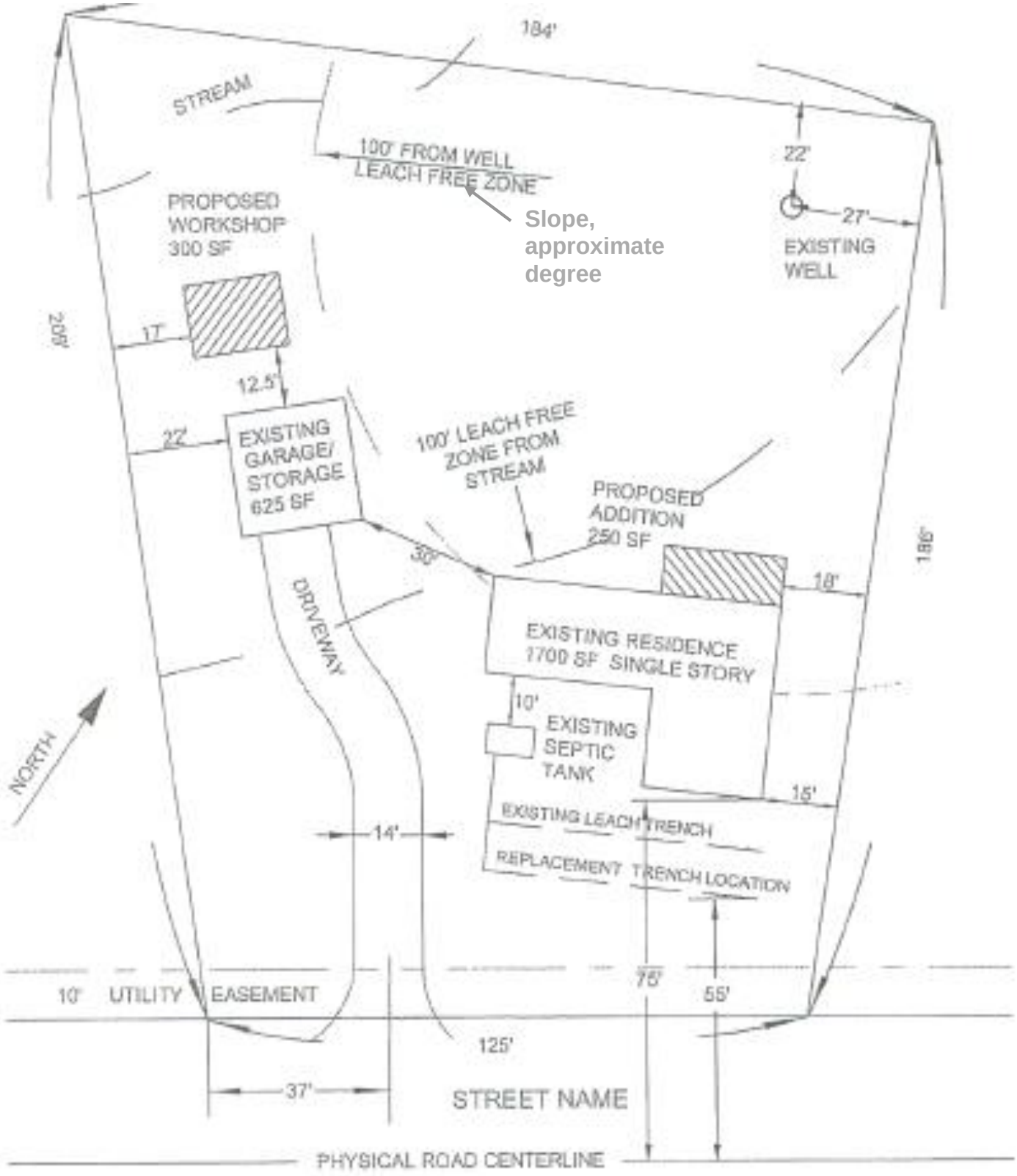
The information provided on the attached site plan and application is accurate and complete to the best of my knowledge. (Please attach this signed document to your site plan.)

_____

Applicant Signature Date

Update: March 10, 2016

Example Site Plan



Update: March 10, 2016

SITE PLAN Assessor's Parcel Number: ☐☐☐–☐☐☐–☐☐☐ Trakit #:_____

I certify that the information in this site plan is accurate and complete to the best of my knowledge.

_____

Signature Date

Owner Name: _____ Scale 1" = _____

Address / Phone: _____

Site Location: _____

Contact Name: _____ Phone: _____

WHAT YOU NEED TO KNOW ABOUT YOUR WELL

DO YOU GET YOUR WATER FROM A WELL? PLEASE READ ON!

Private well owners are responsible to make sure that their own water is safe. Butte County joins you in concern for your family's well being, and is pleased to help answer these important questions:

- What is a well?
- Do you know your surroundings?
- How do wells become contaminated?
- How do I know if my water is safe?
- What should I test my water for?
- How can I protect my water?
- Who can help me?

WHAT IS A WELL?

Simply stated, a well is a hole drilled into the earth to obtain water. Slotted plastic or metal well casing is placed in the hole and a pump is installed to pump the water out. Properly constructed wells have a sanitary seal installed around the upper portion of the well casing to reduce the chance of surface water and pollutants on the surface from entering the well. Improperly constructed wells including hand-dug wells and some older wells without sanitary seals may allow contaminants to enter the well. Wells must be drilled and constructed properly under permit from the Butte County Environmental Health Division. Further information is available from Environmental Health at 530-538-7281,

HOW DO WELLS BECOME CONTAMINATED?

Some groundwater contains dissolved naturally occurring elements such as arsenic, boron, selenium, or radon (a gas formed by the natural breakdown of radioactive uranium in the soil). Whether these natural contaminants can cause health problems depends on the amount of the substance present, how long you have been exposed to the substance and on your overall health. In addition to natural substances, groundwater can be polluted by human activities generating contaminants such as:

- Microorganisms (agricultural operations, sewage treatment ponds, septic systems)
- Fuels- gasoline & diesel (gas stations, auto body shops, maintenance yards, industrial facilities)
- Solvents – Volatile Organic Compounds such as trichlorethylene and perchlorethylene (dry cleaners, industrial facilities, auto repair shops, chemical storage facilities)
- Nitrates (agricultural operations, septic systems)
- Pesticides (agricultural operations, suburban yards)
- Metals – lead, arsenic & copper (mining, old agricultural operations, industrial operations, leaded fuel, household plumbing)

DO YOU KNOW YOUR SURROUNDINGS?

If you are using a private well for your drinking water supply it is advised that you become aware of the types of activities that are occurring near your well that could potentially impact your water quality and quantity.

HOW DO I KNOW IF MY WATER IS SAFE?

Naturally occurring chemicals in the soil can give well water a distinctive taste and odor. On the other hand, 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

Having your water tested regularly will help you become aware of a potential problem early so that you take steps to address it.

WHAT SHOULD I TEST MY WATER FOR?

There are a variety of drinking water tests available. Wells are most often tested for bacteria only. This is a readily available and relatively inexpensive test. However testing only for bacteria does not provide conclusive information about other possible contaminants. Based on your knowledge of activities in your neighborhood, you can work with the analytical laboratory to select the appropriate tests. Below are examples of common contaminants and appropriate tests:

- Gasoline and Diesel/Motor Oil - EPA Method 8015
- Volatile Organic Compounds - EPA Method 8260
- Pesticides - EPA Method 8080
- Herbicides - EPA Method 8150
- Metals and Inorganics (I.e. arsenic, lead, nitrates, chromium, fluoride) - EPA Method 200 Series
- Bacteria (Total Coliform and Fecal Coliform) EPA Colilert Method

Some contaminants that have been found in Butte County include: *trichloroethylene (TCE), tetrachloroethylene (PCE), arsenic, nitrates, methyl tert-butyl ether (MTBE), fecal coliforms, and a variety of volatile organic compounds. For a list of qualified laboratories, please refer to the Yellow Pages under the listing of "Laboratory Testing".*

HOW OFTEN SHOULD I HAVE MY WATER TESTED?

We recommend you test your well for total and fecal coliform bacteria prior to use.

The following is offered as a guideline for testing existing wells:

- *Bacteriological* tests should be run at least twice a year, if you have an unsealed well. On a sealed well, once every two years is recommended.
- *Volatile Organic Compounds and Pesticides* should be run at least every 3 to 5 years if

the well is located in an area where those constituents are a known concern due to surrounding land use practices or naturally occurring compounds.

- *Nitrates and Metals* should be run at least once every five years if your well is located in an area of concern about high nitrate levels.

You may contact Butte County Environmental Health if you are concerned that your well may be located in one of the areas of concern described above. If any of the above are detected, you should immediately consult with the Butte County Environmental Health, one of the agencies listed below, or with a C-57 licensed well.

The results of your well tests are usually considered private information. Check with your laboratory regarding confidentiality.

DO MY RESULTS PRESENT A HEALTH RISK? CAN I PROTECT MY WATER?

The Environmental Protection Agency (EPA) and State of California set the Maximum Contaminant Level (MCL) for many substances in public drinking water. There are no regulations for private water supplies. Call Butte County Environmental Health at 530-538-7281 for more information or visit the CA-DHS Drinking Water Office website at:

http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HOW CAN I PROTECT MY WATER?

Here is a list of things you can do to protect your well water:

- Periodically inspect exposed parts of the well for damaged casing, broken or missing well cap, or cracked seals.
- Slope the area around your well to drain surface runoff away from the well.
- Avoid mixing or storing pesticides, fertilizers, fuels or other chemicals near the well.
- Pump and inspect your sewage disposal system regularly.
- Never dispose of toxic chemicals down household drains.
- Hire a C-57 licensed well driller for any new well construction, modification, abandonment, closure, or inspection.

If you hire a C-57 licensed well driller to inspect your well, items that can be addressed in the report include:

- Information about the brand, size, date codes of all visible equipment
- Inspection of the equipment and assertion that each component is either in working order or that the defects are listed
- Water quantity measured in gallons per minute using a method that measures GPM until the drawdown is stabilized
- Report from a certified laboratory, at a minimum testing for fecal and total coliform bacteria
- Estimate for any repairs that are necessary to bring the well up to optimal functionality

Most types of water contamination can be treated. Water softeners or filters do not guarantee water safety. Different contaminants may require specific treatment systems. If you have contaminated water, contact the agencies listed below for advice.

WHO REGULATES MY WELL?

Water quality from privately owned and used wells is not regulated. Butte County has adopted a well ordinance that regulates the construction and development of wells, but it is your responsibility as a property owner to maintain your well, to monitor your water quality, and to help protect the quality of drinking water in Butte County. The Butte County well ordinance can be found at: (put in link here).

WHO CAN HELP ME?

Butte County Public Health Department
Division of Environmental Health
202 Mira Loma Drive
Oroville, CA 95965
530-538-7281

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Chapter 35
WELL STANDARDS

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35-1 Intent of provisions.

It is the purpose of this chapter to protect the health, safety, and general welfare of the people of the state of California by ensuring that the groundwaters of this state will not be polluted or contaminated. To this end, minimum requirements are contained in this chapter for construction, reconstruction, repair, and destruction* of water wells, cathodic protection wells, and monitoring wells. By enacting the model ordinance proposed by the State Water Resources Control Board, the board of supervisors is specifically intending to reserve the right to amend this chapter in a manner consistent with state law to address local problems of compliance and enforcement. (Ord. No. 509, § 1.1.)

*The California Water Code Section 13801(b) refers to well construction, maintenance, and abandonment standards. Since the Department of Water Resources "Water Well Standards" defines an abandoned well in terms of an undesirable condition, best remedied by destruction of the well, this usage is followed in this chapter.

35-2 Definitions and interpretations.

(a) As defined in other documents. Except as otherwise required by the context of this chapter, the terms used in this chapter shall have the same meaning as in chapter 10 of division 7 of the California Water Code and the Department of Water Resources Bulletin 74-81 and subsequent supplements or revisions.

(b) "Board" shall mean the governing board of the local jurisdiction having well standards authority: the county board of supervisors.

(c) "Enforcement agency" shall mean that agency(s) designated by the board to administer and enforce this chapter.

(d) "Person" shall mean any person, firm, corporation or governmental agency, to the extent authorized by law.

(e) "Well" or "water well." The California Water Code, Section 13710, defines well or water well to mean "...any artificial excavation constructed by any method for the purpose of extracting water from, or injecting water into, the underground." The State Water Resources Control Board does not intend that potholes, drainage trenches or canals, waste water ponds, shallow root zone piezometers, stock ponds, or similar excavations be included within the definition of wells.

(f) Tense or gender. Words used in the present tense include the future as well as the present. Words used in the masculine gender include the feminine and neuter. The singular number includes the plural, and the plural the singular.

(g) Section headings: when contained in this chapter, shall not be deemed to govern, limit, modify, or in any manner affect the scope, meaning, or intent of the provisions of any section. (Ord. No. 509, § 1.2.)

35-3 Permit applications – When required – Penalty – Exception.

(a) When required. No person shall dig, bore, drill, deepen, modify, repair, or destroy a water well, cathodic protection well, observation well, monitoring well or any other excavation that may intersect ground water without first applying for and receiving a permit as provided in this ordinance unless exempted by law.

(b) Penalty for failure to obtain permit. Any person who shall commence any work for which a permit is required by this ordinance without having obtained a permit shall be required, if subsequently granted a permit for this work, to pay double the standard permit fee.

(c) Emergency work. The above provisions shall not apply to emergency work required on short notice to maintain drinking water or agricultural supply systems. In such cases, the person responsible for the emergency work shall:

(1) Urgency. Satisfy the enforcement agency that such work was urgently necessary.

(2) Conformance with standards. Demonstrate that all work performed was in conformance with the technical standards as designated in section 35-10. (Ord. No. 509, § 2.1.)

35-4 Permit application procedure.

Applications for permits shall be made to the enforcement agency on forms approved by the agency and shall contain all such information the enforcement agency requires to accomplish the purposes of this chapter. The application shall be accompanied by the required filing fee. If the enforcement agency finds the application contains all necessary information, it shall issue to the applicant a comprehensive permit containing such conditions as are necessary to fulfill the purposes of this chapter. (Ord. No. 509, § 2.2.)

35-5 Permit filing fees.

Filing fees may be set by the board from time to time by ordinance. (Ord. No. 509, § 2.3.)

35-6 Permit conditions.

(a) Limitations. When the enforcement agency issues a permit pursuant to this chapter, it may condition the permit in any manner necessary to carry out the purposes of this chapter. Conditions may include, but are not limited to such quantity and quality testing methods as the enforcement agency finds necessary.

(b) Performance bond. The enforcement agency may require a performance bond as a condition to the permit.

(c) Persons permitted to work on wells. All construction, reconstruction, or destruction work on wells shall be performed by a person who possesses an active C-57 contractor's license in accordance with the provisions of the California Business and Professions Code, Section 7000, et seq., and Water Code Section 13750.5.

(d) Proper disposal of drilling fluids. The permit shall contain a clause requiring the safe and appropriate handling and disposal of drilling fluids and other drilling materials used in connections with the permitted work.

(e) Abandoned wells. As a condition of a construction or reconstruction permit, any abandoned wells on the property shall be destroyed in accordance with standards provided in this chapter.

(f) Posting of permit. It shall be the responsibility of the permittee to maintain a copy of this permit on the drilling site during all stages of construction or destruction. (Ord. No. 509, § 2.4.)

35-7 Permit – Denial.

The enforcement agency shall deny an application for a permit if, in its judgment, issuance of a permit is not in the public interest. (Ord. No. 509, § 2.5.)

35-8 Permit – Expiration.

The permittee shall complete the work authorized by the permit within the time and before the date set out in the permit. If there have been exceptional circumstances, the enforcement agency may grant the applicant an extension. Upon the expiration of the permit, no further work shall be done unless and until the applicant has received an extension or a new permit. (Ord. No. 509, § 2.6.)

35-9 Permit – Suspension and revocation.

(a) Circumstances for such action. The enforcement agency may suspend or revoke any permit issued pursuant to this chapter, whenever it finds that the permittee has violated any of the provisions of this chapter, or has misrepresented any material fact in his application, or any supporting documents, for such a permit. Prior to ordering any such suspension or revocation, the enforcement agency shall give the permittee an opportunity for a hearing

thereon, after reasonable notice. The hearing shall be before the enforcement agency head or his designated representative. An appeal may be made as set forth below.

(b) Consequences. No person whose permit has been suspended or revoked shall continue to perform the work for which the permit was granted until, in the case of suspension, such permit has been reinstated by the enforcement agency.

(c) Ordered additional work. Upon suspending or revoking any permit, the enforcement agency may order the permittee to perform any work reasonably necessary to protect the underground waters from pollution or contamination, if any work already done by the permittee has left a well in such condition as to constitute a hazard to the quality of the underground waters. No permittee or person who has held any permit issued pursuant to the ordinance shall fail to comply with any such order. (Ord. No. 509, § 2.7.)

35-10 Well standards.

(a) Department of Water Resources Bulletin 74-81. The California Department of Water Resources Bulletin 74-81 "Water Well Standards, State of California" except as modified by subsequent revisions.

(b) All subsequent supplements and revisions. All subsequent Bulletin 74-81 supplements or revisions issued by the Department of Water Resources, once the revised standards have been reviewed at appropriate public hearing. (Ord. No. 509, § 3.)

35-11 Variances.

The enforcement agency shall have the power under the following specified conditions to grant a variance from any provision of the standards referenced above and to prescribe alternative requirements in their place. (Ord. No. 509, § 4.)

35-12 Special circumstances.

There must be, in a specific case, a special circumstance where practical difficulties or unnecessary hardship would result from the strict interpretation and enforcement of any standard. (Ord. No. 509, § 4.1.)

35-13 Intent of chapter not compromised.

The granting of such a variance is consistent with the purposes of this chapter. (Ord. No. 509, § 4.2.)

35-14 Special groundwater protection.

The enforcement agency may designate areas where groundwater quality problems are known to exist and where a well will penetrate more than one aquifer. The enforcement agency may require in these designated areas special well seal(s) to prevent mixing of water from several aquifers. Where an applicant proposes well construction, reconstruction, or destruction work in such an area, the enforcement agency may require the applicant to provide a report prepared by a registered geologist or registered civil engineer (California Business and Professions Code Sections 7850 and 6762 respectively) that identifies all strata containing poor quality water and recommends the location and specifications of the seal or seals needed to prevent the entrance of poor-quality water or its migration into other aquifers. (Ord. No. 509, § 5.)

35-15 Inspections generally.

The enforcement agency shall make an inspection of the annular seal construction work. It may make an initial inspection of each proposed drilling site, an inspection at the completion of the work, and inspections at such other times as it deems appropriate. (Ord. No. 509, § 6.)

35-16 Initial inspection.

Upon receipt of an application, the enforcement agency may make an inspection of the drilling site prior to the issuance of a well permit. The purpose of this inspection is to determine whether there are any site conditions such that the enforcement agency shall do the following:

(a) Relocation of drilling site. Require relocation of the drilling site should the location shown on the permit application be too close to potential sources of pollution.

(b) Additional conditions. Set additional conditions if needed to remediate any previously unknown groundwater quality protection problems. (Ord. No. 509, § 6.1.)

35-17 Inspection of well seal.

The enforcement agency shall inspect the annular space grout depth prior to the sealing.

(a) Required notice. The enforcement agency shall be notified by the well driller a minimum of twenty-four hours prior to sealing the annular space. Drillers who anticipate completing a well in less than one day shall notify the enforcement agency twenty-four hours prior to commencement of drilling and provide the anticipated time to commence the sealing of the annular space.

(b) Should enforcement agency fail to be present. If the enforcement agency wishes to allow a seal to be tremied or placed without inspection, the driller shall seal the well in accordance with the standards of this chapter and any permit conditions. No seal shall be tremied or placed until permission to proceed is given. (Ord. No. 509, § 6.2.)

35-18 Final inspection.

If requested by the enforcement agency, the driller shall notify the enforcement agency within seven days of the completion of their work at each drilling site. The enforcement agency may make a final inspection after completion of the work to determine whether the well was completed in accordance with this chapter. (Ord. No. 509, § 6.3.)

35-19 Waiver of inspections.

The enforcement agency may waive inspections should any of the following conditions exist:

(a) Well inspected by other agencies. Inspections may be waived where the work will be inspected by the staff of the California Regional Water Quality Control Board of the California Department of Health Services if these designated agencies will inspect and report to the enforcement agency on all drilling features required by the standards.

(b) Monitoring wells under specified conditions. Inspections may be waived for monitoring wells that will penetrate only aquifers containing degraded waters or will penetrate only formations that normally contain no water.

(c) Drilling sites known to have no threats to ground water quality. Initial inspections may be waived when the drilling site is well known to the enforcement agency staff and it is known that no significant threats to groundwater quality exist in the area. (Ord. No. 509, § 6.4.)

35-20 Completion reports generally.

The driller shall provide the enforcement agency a completion report within thirty days of the completion of any well construction, reconstruction, or destruction job. (Ord. No. 509, § 7.)

35-21 Submittal of state "Report of Completion."

A copy of the "Report of Completion" (Water Well Driller's Report, Department of Water Resources Form 188) required by the California Water Code Section 13751 shall be submitted by the permittee to the enforcement agency within thirty days of construction, alteration, or destruction of any well. This report shall document that the work was completed in accordance with the standards and all additional permit conditions. This section shall not be deemed to release any person from the requirement to file said report with the state department of water resources. (Ord. No. 509, § 7.1.)

35-22 Completion reports – Confidentiality.

In accordance with the California Water Code Section 13752, reports shall not be made available for inspection by the public but shall be made available for inspection by governmental agencies for use in making studies. Reports shall be made available to any person who obtains written authorization from the owner of the well. (Ord. No. 509, § 7.2.)

35-23 Completion reports – Other agency's requirements.

Any person whose application for a permit has been denied, or granted conditionally, or whose permit has been suspended or revoked, or whose variance request has been denied, may appeal to the board, in writing, within ten days after any such denial, conditional granting, suspension, or revocation. Such appeal shall specify the grounds upon which as set forth herein. The clerk of the board shall set such appeal for hearing at the earliest practicable time, and shall notify the appellant and the enforcement agency, in writing, of the time so set at least five days prior to the hearing. (Ord. No. 509, § 8.1.)

35-24 Appeals – Right of hearing.

Any person whose application for a permit has been denied, or granted conditionally, or whose permit has been suspended or revoked, or whose variance request has been denied, may appeal to the board, in writing, within ten days after any such denial, conditional granting, suspension, or revocation. Such appeal shall specify the grounds upon which as set forth herein. The clerk of the board shall set such appeal for hearing at the earliest practicable time, and shall notify the appellant and the enforcement agency, in writing, of the time so set at least five days prior to the hearing. (Ord. No. 509, § 8.1.)

35-25 Appeals – Action by the board.

After such hearing, the board may reverse, wholly or partly, or may modify the order or determination appealed from. (Ord. No. 509, § 8.2.)

35-26 Right of entry and inspection.

Representatives of the enforcement agency shall have the right to enter upon any premises at all reasonable times to make inspections and tests for the purpose of such enforcement and administration. If any such premises are occupied, he shall first present proper credentials and demand entry. If the same is unoccupied, he shall first make a reasonable effort to locate the owner or other person having charge or control of same and demand entry. If such entry is refused, he shall have recourse to such remedies as are provided by law to secure entry. (Ord. No. 509, § 9.)

35-27 Abatement of abandoned wells.

All persons owning an abandoned well as defined in the well standards shall destroy it before December 31, 1991, except those excluded by the California Health and Safety Code Section 24440. (Ord. No. 509, § 10.)

35-28 Violation a misdemeanor.

Any person who violates any of the provisions of this chapter is guilty of a misdemeanor, and upon conviction thereof is punishable by such penalties as the board shall from time to time set by ordinance. (Ord. No. 509, § 11.1.)

35-29 Civil enforcement – Notice of violation.

(a) Notice of violation recordation. Whenever the enforcement agency determines that a well (1) has not been completed in accordance with a well permit or the plans and specifications relating thereto, (2) has been constructed without the required permit, or (3) an abandoned well has not been destroyed in accordance with the standards, the enforcement agency may record a notice of violation with the office of the county recorder. The owner(s) of the property, as revealed by the assessment roll, on which the violation is situated and any other person responsible for the violation shall be notified of the recordation, if their address is available.

If the property owner(s) or authorized agent disagree with the determination, he may submit evidence to the enforcement agency indicating that there is no violation and then shall have a right to appeal an adverse decision of the enforcement agency to the board in accordance with the provisions of the following section.

(b) Appeal – Action by the board.

(1) Date of hearing. Upon receipt of the notice of appeal, the board shall, within fifteen days following the filing of the appeal, set a date for public hearing thereon.

(2) Evidence. The evidence before the board shall consist of the records in the enforcement agency's files and any other relevant evidence which, in the judgment of the board, should be considered to effectuate and implement the policies of this chapter.

(3) Decision by board. The board may reverse or affirm, wholly or in part, or modify the decision or the notice of violation and may make such order as should be made. Such action shall be final.

(c) Removal of violation notice. The enforcement agency shall submit a removal of notice of violation to the county recorder when (1) it is determined by the enforcement agency or the board, after review, that no violation of this chapter exists; or (2) all required and corrective work has been completed and approved by the enforcement agency. (Ord. No. 509, § 11.2.)

35-30 Civil enforcement – Nuisance.

Violations of this chapter may also be redressed in the manner hereinafter set forth by civil action. In addition to being subject to prosecution, any person who violates any of the provisions of this chapter may be made the subject of a civil action. Appropriate civil action includes, but is not limited to, injunctive relief and cost recovery. (Ord. No. 509, § 11.3.)

35-31 Remedies cumulative.

The remedies available to the board to enforce this chapter are in addition to any other remedies available under ordinance or statute, and do not replace or supplant any other remedy but are cumulative thereto. (Ord. No. 509, § 11.4.)

35-32 Reports to the regional board.

Pursuant to the California Water Code Section 13225(c), the enforcement agency shall submit a report, not less than annually, to the California Regional Water Quality Control Board(s) having jurisdiction in their area. This report shall contain the following date, unless the regional board determines a lesser amount of information is necessary:

(a) Wells constructed or destroyed. The number of wells constructed or destroyed.

(b) Abatement action. Descriptions of all well destructions undertaken by the enforcement agency using its regulatory authority under nuisance abatement powers.

(c) Variances granted. A description of each specific case where variances were granted and the circumstances that made a variance necessary.

(d) Inspections waivers granted. A description of each specific case where an inspection was waived and the circumstances that made the waiver necessary. (Ord. No. 509, § 12.)

ORDINANCE NO. 2006

AN ORDINANCE OF THE BOARD OF SUPERVISORS OF THE COUNTY OF TEHAMA AMENDING TITLES 9 AND 10 OF THE TEHAMA COUNTY CODE RELATING TO GROUNDWATER AQUIFER PROTECTION AND WATER WELLS

THE BOARD OF SUPERVISORS OF THE COUNTY OF TEHAMA ORDAINS AS FOLLOWS:

SECTION 1. The Board of Supervisors of the County of Tehama hereby finds and declares the following:

(A) Tehama County is entering the fourth year of an historic drought, with 2015 projected to become the one of the driest years on record, and a distinct possibility exists that the current drought will stretch into a fifth straight year in 2016 and beyond.

(B) California's water supplies statewide, including those serving Tehama County, continue to be severely depleted despite a limited amount of rain and snowfall this winter, with record low snowpack in the Sierra Nevada mountains, decreased water levels in most of California's reservoirs, reduced flows in the state's rivers and shrinking supplies in underground water basins.

(C) The impact of the drought upon Tehama County's groundwater aquifers is substantial, as decreased surface water supplies have resulted in increasing reliance on groundwater, thereby magnifying the negative effects naturally resulting from the drought.

(D) New expedited actions are needed to reduce these harmful impacts to Tehama County's groundwater aquifers, in order to ensure the long-term vitality of these basins and the adequacy of future water supplies therefrom for lawful and beneficial uses.

(E) The use of groundwater to supply activities and land uses conducted in violation of applicable ordinances, and the off-parcel use of groundwater without a permit in violation of Chapter 9.40 of the Tehama County Code, is wasteful and unreasonable, and threatens both immediate and permanent harm to the reasonable, beneficial, and lawful uses of groundwater from every affected aquifer.

(F) Non-agricultural groundwater wells located on vacant parcels, which do not supply any land use lawfully permitted by the Tehama County Code,

or any permitted off-parcel use, facilitate the wasteful and unreasonable use of groundwater for unlawful and unpermitted activities on the parcel, or the unlawful and unpermitted use of groundwater off-parcel, or both. Such wells further facilitate the perpetuation of unlawful land uses in contravention of Tehama County's General Plan and ordinances.

(G) It is therefore necessary to ensure that drilling of any new non-agricultural wells on vacant parcels is delayed until such time as a lawful permitted use of that parcel is established, or a lawful off-parcel use permit is obtained. It is further necessary to ensure that existing non-agricultural wells on vacant parcels are maintained in a manner that does not allow for ready extraction of groundwater therefrom until such time as a lawful and permitted use of the parcel is established, or a lawful off-parcel use permit is obtained.

(H) Preservation of Tehama County's groundwater aquifers further necessitates that the prohibitions and enforcement provisions of Chapter 9.40 of the Tehama County Code, pertaining to aquifer protection, be expanded and enhanced, in order to effectively prevent and remedy future violations.

SECTION 2. Section 9.40.030 of the Tehama County Code is hereby repealed.

SECTION 3. Section 9.40.030 is hereby added to the Tehama County Code to read:

9.40.030 Permit required for extraction of groundwater for use off-parcel. It shall be unlawful to extract groundwater of any nature or description, or for a property owner to allow such extraction on his land, or for any person to knowingly cause, permit, aid, abet, suffer, or furnish equipment or labor for such extraction, for the purpose of using the water or selling the water for use on other than the parcel of land upon which the extraction occurs, or contiguous parcels of land under the same ownership as the parcel from which the extraction occurs, without first obtaining a permit as provided in this chapter. It shall be unlawful to knowingly use water extracted in violation of this section on other than the parcel of land upon which the extraction occurs, or contiguous parcels of land under the same ownership as the parcel from which the extraction occurs, or for a property owner to knowingly allow such use on their land, or for any person to knowingly cause, permit, aid, abet, suffer, or furnish equipment or labor for such use, without first obtaining a permit as provided in this chapter. This provision does not apply to the extraction of water for the purposes of supplying a "public water system," a "community water system," a "noncommunity water system," or "state small water system" as defined by Division 5, Part 1, Chapter 7 of the California Health and Safety Code commencing with Section 4010, serving residents of the County of Tehama.

SECTION 4. Section 9.42.334 is hereby added to the Tehama County Code to read:

9.42.334 Permitted Use Required.

A. Except as provided in subdivision (c), no permit shall be issued for any individual well with a casing diameter of eight (8) inches or less unless the parcel upon which the well is located contains a permitted use which will be supplied by the well.

B. For purposes of this section and Section 9.42.399, "permitted use" shall mean only the following, as determined by the Director of Planning in accordance with Title 17 of this Code:

1. In the case of property located within the R-1, R-2, R-3, R-4, RE, AG-1, AG-2, AG-3, and AG-4 zoning districts, actual residential use of the premises that is conducted in a residential structure or manufactured home on a permitted foundation system for which a final certificate of occupancy has been issued in accordance with Title 15 of the Tehama County Code.

2. In the case of property located within the C-1, C-2, C-3, C-4, M-1, M-2, GR, PD, PA, and AV zoning districts, actual use of the premises for a purpose permitted within that zoning district and otherwise in compliance with the Tehama County Code that is conducted in a structure or manufactured home on a permitted foundation system for which a final certificate of occupancy authorizing such use has been issued in accordance with Title 15 of the Tehama County Code.

3. In AG-1, AG-2, AG-3, AG-4, NR, GR, and PF zoning districts, an active commercial agricultural use that is permitted within that zoning district and otherwise in compliance with the Tehama County Code.

C. The following individual wells are exempt from this Section:

1. A well permit may be issued for an individual well that will supply a structure or manufactured home for which a building permit has been obtained, and not expired, if that structure when completed and actually used will constitute a permitted use under this section.

2. A well permit may be issued for an individual well that will supply an off-parcel use for which a permit has been issued in accordance with Chapter 9.40 of this Code.

SECTION 5. Section 9.42.399 is hereby added to the Tehama County Code to

read:

9.42.399 Maintenance of Dormant Wells.

A. Except where the context otherwise requires, the following definitions shall govern the construction of this Section:

1. "Dormant well" shall mean any individual well with a casing diameter of eight (8) inches or less which has not been used to supply water to a permitted use located on the same parcel for a period of ninety (90) days or more.

2. "Permitted use" shall have the same meaning set forth in Section 9.42.334.

B. Except as provided in subdivision (d), every dormant well shall be idled by (i) removal of the pump and motor to render the well inoperative, and (ii) covering the well with a watertight welded seal that cannot be removed without the use of tools to prevent injury to persons and the entrance of undesirable water, rodents or foreign matter.

C. Any person idling a well under this Section, or reactivating a well that was previously idled, shall provide written notification to the Director of Environmental Health. It shall be unlawful and a violation of this chapter for any person to tamper with the seal placed upon a dormant well, or to extract water from a dormant well, or to cause, permit, aid, abet, suffer, or furnish equipment or labor for such tampering or extraction, without first notifying the Director of Environmental Health as provided herein.

D. The following individual wells are exempt from this Section:

1. An individual well actively used to supply an off-parcel use for which a permit has been issued in accordance with Chapter 9.40 of this Code, in compliance with the terms of that permit, shall not be considered a dormant well for purposes of this chapter.

E. Any dormant well that is not idled in the manner set forth in this subsection is hereby declared to be a public nuisance. Such nuisance may be abated in the manner set forth in Chapter 10.16, in addition to any other remedies.

SECTION 6. Section 10.16.200 of the Tehama County Code is hereby repealed.

SECTION 7. Section 10.16.200 is hereby added to the Tehama County Code to read:

10.16.200 Administrative Civil Penalties.

A. In addition to any other remedy or penalty prescribed in this chapter, any nuisance as described in this chapter may be subject to an administrative penalty in the following amounts:

1. Up to one hundred dollars per day, or part thereof, for the first violation.

2. Up to two hundred dollars per day, or part thereof, for a second violation of the same ordinance within one year.

3. Up to five hundred dollars per day, or part thereof, for each additional violation of the same ordinance within one year.

4. Notwithstanding subdivisions (a)(1) through (a)(3), any nuisance resulting from a violation of Chapter 9.40 of the Tehama County Code may be subject to an administrative penalty of up to one thousand dollars per day.

The administrative penalty may be imposed via the administrative process set forth in this section, as provided in Government Code Section 53069.4, or may be imposed by the court if the violation requires court enforcement without an administrative process.

SECTION 8. This ordinance shall take effect thirty (30) days from the date of its adoption, and prior to the expiration of fifteen (15) days from the adoption thereof shall be published at least one time in the *Red Bluff Daily News*, a newspaper of general circulation in Tehama County.

The foregoing ordinance was duly passed and adopted by the Board of Supervisors of the County of Tehama, State of California, at a regular meeting of the Board of Supervisors on the 9th day of June, 2015 by the following vote:

AYES: Supervisors Garton, Williams, Chamblin, Carlson and Bundy

NOES: None

ABSENT OR NOT VOTING: None

CHAIRMAN, Board of Supervisors

STATE OF CALIFORNIA)
) ss
COUNTY OF TEHAMA)

I, JENNIFER A. VISE, County Clerk and ex-officio Clerk of the Board of Supervisors of the County of Tehama, State of California, hereby certify the above and foregoing to be a full, true and correct copy of an ordinance adopted by said Board of Supervisors on the 9th day of June, 2015.

DATED: This 9th day of June, 2015.

JENNIFER A. VISE, County Clerk and ex-officio Clerk of the Board of Supervisors of the County of Tehama, State of California.

By Angela L Ford
Deputy

Chapter 9.40 - AQUIFER PROTECTION

Sections:

9.40.010 - Definitions.

The definitions applying to this chapter shall be those definitions found in Section 15.56.020, Title 15 of this code together with the definitions set out in this section. In the event of conflict between a definition in this section and one found in Section 15.56.020, the definition in this section shall control for the purposes of this chapter.

1. "Conjunctive use" and "conjunctive operation" shall mean the coordinated operation of a groundwater basin and surface water supplies. One purpose is to artificially recharge a basin during years of above-average precipitation so that groundwater can be withdrawn during years of below-average precipitation, when surface supplies are less than normal. Conjunctive operation also refers to meeting the needs of an area within the county through the coordinated use of groundwater during years when surface water is not available.
2. "Culture (land use)" shall mean the land use or land cover existing under natural conditions or as modified by man.
3. "Domestic water well" shall mean a well devoted exclusively to the residential and related yard, garden and barnyard uses within the curtilage of a dwelling located on the same parcel of land as the served dwelling house or upon another parcel of land respecting which the owner of the served dwelling has a legally cognizable interest in the nature of real property. Such uses as recognized in this section do not include the growing of crops, or production of other agricultural commodities for commercial purposes.
4. "Groundwater" shall mean water in the zone of saturation. Groundwater is presumed to be percolating, although it does occur in known and definite channels.
5. Groundwater, Confined. "Confined groundwater" shall mean a body of groundwater overlain by material sufficiently impervious to sever free hydraulic connection with overlying groundwater except at the intake.
6. Groundwater, Free (Unconfined). Unconfined water is found in the zone of saturation whenever the upper surface of the zone forms a water table under atmospheric pressure, free to rise and fall with changes in volume of stored water.
7. "Hydraulic gradient" shall mean slope of the water table.
8. "Hydrology" shall mean the origin, distribution, and circulation of water through precipitation, stream- flow, infiltration, groundwater storage, and evaporation.
9. "Imported water" shall mean water transported into a watershed from a different watershed. Native water is water naturally within a watershed.
10. "Mining" shall mean extraction of groundwater by any means, including pumping and the use of artesian wells, from any aquifer within the County of Tehama which in contemplation of pre-existing extractions of groundwater used beneficially upon lands overlying the aquifer within the county and the reasonably foreseeable beneficial uses to which groundwater from the aquifer could be made to lands overlying the aquifer within the county which exceeds the reasonably foreseeable replenishment potential of the watersheds' native water together with such imported water as may be available to be applied to recharge the aquifer.
11. "Overdraft" shall mean the condition of a groundwater basin where the amount of water withdrawn exceeds the amount of water replenishing the basin over a period of time. Also, as the point at which extractions from the basin exceed its safe yield plus any temporary surplus.

12. "Percolation" shall mean the movement of water through the soil to the groundwater table.
13. "Permeability" shall mean the capability of soil or other geologic formation to transmit water.
14. "Piezometric surface" shall mean the surface to which the water in a confined aquifer will rise.
15. "Porosity" shall mean voids or open spaces in alluvium, other soils and rocks that can be filled with water.
16. "Radius of influence" shall mean the radial distance from the center of a well bore to the point where there is no lowering of the water table or potentiometric surface (the edge of the well's cone of depression).
17. "Recharge" shall mean flow to groundwater storage from precipitation, infiltration from streams, irrigation, spreading basins, and other sources of water.
18. "Safe yield" shall mean the maximum quantity of water which can be withdrawn annually from a groundwater supply under a given set of conditions without causing an undesirable result. The phrase "undesirable result" is intended to refer to a gradual lowering of the groundwater levels resulting in, or tending to result in, the eventual depletion of or the substantial diminution of the supply of water.
19. "Salt water intrusion" shall mean the movement of salt water into fresh water aquifers.
20. "Specific capacity" shall mean the volume of water pumped from a well in gallons per minute per foot of drawdown.
21. "Spreading water" shall mean discharging native or imported water to a permeable area for the purpose of allowing it to percolate to the zone of saturation. Spreading, artificial recharge and replenishment all refer to operations used to place water in a groundwater basin.
22. "Transmissivity" shall mean the rate of flow of water through an aquifer.
23. "Usable storage capacity" shall mean the quantity of groundwater of acceptable quality that can be economically withdrawn from storage.
24. "Water table" shall mean the surface where groundwater is encountered in a well in an unconfined aquifer.
25. "Zone of saturation" shall mean the area below the water table in which the soil is completely saturated with groundwater.

(Ord. 1617 § 5(part), 1994)

9.40.020 - Mining of groundwater prohibited.

It shall be unlawful to conduct any mining for water within this county, or for the owner of real property to allow groundwater of any nature, or connate water, to be mined, where the water extracted is transported, by any means, from the County of Tehama.

(Ord. 1617 § 5(part), 1994)

9.40.030 - Permit required for extraction of groundwater for use off-parcel.

It shall be unlawful to extract groundwater of any nature or description, or for a property owner to allow such extraction on his land, or for any person to knowingly cause, permit, aid, abet, suffer, or furnish equipment or labor for such extraction, for the purpose of using the water or selling the water for use on other than the parcel of land upon which the extraction occurs, or contiguous parcels of land under the same ownership as the parcel from which the extraction occurs, without first obtaining a permit as provided in this chapter. It shall be unlawful to knowingly use water extracted in violation of this section on

other than the parcel of land upon which the extraction occurs, or contiguous parcels of land under the same ownership as the parcel from which the extraction occurs, or for a property owner to knowingly allow such use on their land, or for any person to knowingly cause, permit, aid, abet, suffer, or furnish equipment or labor for such use, without first obtaining a permit as provided in this chapter. This provision does not apply to the extraction of water fort he purposes of supplying a "public water system," a "community water system," a "noncommunity water system," or "state small water system" as defined by Division 5, Part 1, Chapter 7 of the California Health and Safety Code commencing with Section 4010, serving residents of the County of Tehama.

(Ord. 1617 § 5(part), 1994; Ord. No. 2006, §§ 2, 3, 6-9-2015)

9.40.040 - Radius of influence of well restricted.

It shall be unlawful for any person to operate, or for a property owner to allow any person to operate, any well, excepting a domestic well as defined by Section 9.40.010(3), or a well serving any "public water system," "community water system," "noncommunity water system," or "state small water system," in such a manner that the radius of influence of such well extends beyond the boundaries of the parcel of land upon which the well is located, or alternatively, beyond the boundaries of contiguous parcels of land under the same ownership as that parcel upon which the well is located.

(Ord. 1617 § 5(part), 1994)

9.40.045 - Restriction on radius of influence not applicable to pre-existing operating wells.

The prohibition of Section 9.40.040 shall not be applicable to any well actually in operation in calendar year 1991 or any prior year.

(Ord. 1617 § 5(part), 1994)

9.40.050 - Application for permit.

An application for a permit required in this chapter shall be filed with the Tehama County health agency, environmental health division, on forms provided by said division and shall contain all information required by such division. Concurrently, a request for environmental review thereof shall be filed as required by county guidelines. The application for permit and request for environmental review shall be accompanied by the fees established therefor. Upon receipt of the permit application, the health agency, environmental health division, shall review the application with affected county departments including, but not limited to, the agricultural commissioner and planning director. The health agency, environmental health division shall also review the application with the State Department of Water Resources and the Regional Water Quality Control Board. After obtaining the comments of the affected county departments and the affected state agencies, the health agency, environmental health division, shall cause the application together with all received comments to be reviewed by the county technical advisory committee and file a written report incorporating the observations and recommendations, if any, of the technical advisory committee, accompanied by the planning director's review, with the board of supervisors, with a copy to the applicant. Upon receipt of such report, the board of supervisors shall set a public hearing on the issuance of the permit. Said hearing shall be noticed pursuant to Government Code Section 6061 and said hearing may not be held within fifteen days of the time that the board of supervisors receives the report from the health agency, environmental health division.

(Ord. 1617 § 5(part), 1994)

9.40.060 - Public hearing on issuance of permit.

At said hearing, the applicant shall be entitled to present any relevant evidence to his application. The board may request any additional geologic studies it deems necessary to obtain information required for its decision. The cost of such studies shall be borne by the applicant. The board shall also hear relevant evidence presented by the public and county staff. The board shall consider all effects the proposed permit would have on the affected groundwater, and the affected aquifer or aquifers, including, but not limited to, the hydraulic gradient, hydrology, percolation, permeability, piezometric surface, porosity, recharge, safe yield, salt water intrusion, specific capacity, spreading water, transmissivity, usable storage capacity, water table, and zone of saturation.

(Ord. 1617 § 5(part), 1994)

9.40.070 - Granting of permit.

The permit referred to in this chapter may only be granted where the board, after having reviewed the potential effects referred to in Section 9.40.060, finds and determines that the permit will not bring about an overdraft, will not bring about salt water intrusion, will not adversely affect transmissivity within the aquifer, will not adversely affect the water table and will not result in the mining of water. The decision of the board of supervisors shall be final. The board shall impose such conditions upon the permit so as to prohibit overdraft, and may impose conditions including, specifically but not limited to, a requirement for observation and/or monitoring wells, that it deems necessary for the health, safety and welfare of the people of the County of Tehama. Notwithstanding the foregoing, the board may issue the permit if the board finds that the applicant has provided for mitigation which will offset any adverse effect that is determined to exist.

(Ord. 1617 § 5(part), 1994)

9.40.075 - Temporary emergency permits.

A. Notwithstanding any other provision of this chapter, the board of supervisors may grant a temporary emergency permit in accordance with this section without undertaking the procedures set forth in Sections 9.40.050 through 9.40.070, and without a public hearing.

B. A temporary emergency permit may be issued if the board finds that the proposed use of water on other than the parcel of land upon which the extraction occurs is necessary to prevent or mitigate an emergency, as defined in Public Resources Code section 21060.3. Replacement of domestic water supplies rendered unavailable due to drought conditions for which a state of emergency has been proclaimed by the governor shall constitute mitigation of an emergency under this section.

C. A temporary emergency permit shall be issued only if the board finds that such approval is exempt from review under the California Environmental Quality Act pursuant to Public Resources Code sections 21080, subdivision (b), 21172, or California Code of Regulations, title 2, section 15269 or successor provisions.

D. A temporary emergency permit may only be granted if the board finds and determines that the permit will not bring about an overdraft and will not result in the mining of water.

E. The board shall impose such conditions upon the temporary emergency permit to prohibit overdraft, and may impose conditions including, but not limited to, identification of the well or water source to be used for water acquisition, the timing and quantity of water to be transferred at any time, and a requirement for county observation and/or monitoring of the well identified for use, that it deems necessary for the health, safety, and welfare of the people of the County of Tehama.

F. A temporary emergency permit issued under this section shall be effective for the limited term specified by the Board, not to exceed one hundred eighty days.

G. The decision of the board of supervisors shall be final.

(Ord. No. 1992, § 2, 7-29-2014)

9.40.080 - Annual review of permit.

The permit granted pursuant to this chapter shall be subject to an annual staff review. In the event the health agency, environmental health division, determines that an overdraft is occurring because of the conditions then existing, the permit may be amended by order of the health agency, environmental health division, to decrease the amount of water allowed to be extracted. Said decision by the health agency, environ-mental health division, may be appealed to the board of supervisors by the applicant or any other affected person.

(Ord. 1617 § 5(part), 1994)

9.40.090 - Inspection.

The director or his or her representative, with good cause, may at any and all reasonable times enter any and all places, property, enclosures and structures, for the purposes of making examina-tions and investigations to determine whether any provision of this chapter is being violated.

(Ord. 1617 § 5(part), 1994)

9.40.100 - Violation—Criminal penalty.

Any person who violates any provision of this chapter, or the terms and/or conditions of any permit issued pursuant to this chapter, with intent to do so shall be guilty of a misdemeanor, punishable by fine not exceeding one thousand dollars per violation, or by imprisonment not exceeding six months, or by both such fine and imprisonment; and any person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any such violation is committed, continued, or permitted, and for each and every separate well with which any such violation is committed, continued, or permitted; and for each such subject violation of day or well, shall be subject to the same punishment as for original offense.

(Ord. 1617 § 5(part), 1994)

9.40.110 - Severability.

If any section, subsection, sentence, clause or phrase of this chapter is for any reason held illegal, invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions hereof. The board hereby declares that it would have passed this chapter and each section, subsection, sentence, clause, or phrase hereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared illegal, invalid or unconstitutional.

(Ord. 1617 § 5(part), 1994)

Chapter 9.42 - WELL CONSTRUCTION, REHABILITATION, REPAIR AND DESTRUCTION

Sections:

ARTICLE I. - GENERAL PROVISIONS

9.42.110 - Purpose of provisions.

It is the intent of this chapter to protect the health, safety and general welfare of the people of Tehama County by providing minimum procedures for the proper construction, reconstruction, repair and destruction of wells so that wells constructed or abandoned pursuant to this chapter will not cause the quality of groundwaters within Tehama County to become impaired or polluted. It is also the purpose of this chapter to recognize and define requirements for monitoring well(s) used in environment assessments and site mitigation.

(Ord. 1707 § 1(part), 1999)

9.42.120 - Definitions.

The following terms are defined as used in this section:

"Abandoned well" shall mean a well which has not been used for one year or which is not being properly maintained. For purposes of this definition, "proper maintenance" shall include but not be limited to the prevention of conditions which could impair the quality of water in the well or in the water-bearing formations penetrated. A properly maintained out-of-service well shall not be considered to be an abandoned well. "Abandoned wells" shall include a well drilled to secure water but which is a "dry hole" and not to be used for water. Dry holes not cased, sealed and completed as an individual well or public water supply well shall be destroyed under permit prior to abandonment of the site or commencement of a new drill hole by the driller. Observation or test wells used in the investigation or management of groundwater basins by governmental agencies or engineering or research organizations are not considered abandoned so long as they are maintained for this purpose. However, such wells shall be covered with an appropriate cap, bearing the label, "Observation Well," and the name of the agency or organization, and preferably shall be locked when measurements are not being made. When these wells are no longer used for this purpose or for supplying water, they shall be considered abandoned.

"Active well" shall mean an operating water well.

"Annular space" shall mean the space between two well casings or between the casing and the wall of the drilled hole.

"Aquifer" shall mean a geologic formation, group of formations or part of a formation that is water-bearing and which transmits water in sufficient quantity to supply springs and wells.

"Artesian well" shall mean a well, which obtains its water from a confined aquifer. The water level in an artesian well stands some distance above the top of the aquifer it taps. Where the pressure is sufficient to force the water level above the surface of the ground, the well is termed a flowing artesian well.

"Bailer" shall mean a long narrow bucket with a valve in the bottom used to remove cuttings or fluids from a well.

"Bentonite" shall mean a highly plastic colloidal clay composed largely of montmorillonite used as a drilling fluid additive or as a sealer.

"Casing" shall mean a tubular retaining structure which is installed in the well bore to maintain the well opening.

"Casing vent" shall mean an opening into the top of the well to minimize the possibility of contamination caused by the creation of a partial vacuum during pumping. "Cathodic protection well" shall mean any artificial excavation in excess of fifty feet constructed by any method for the purpose of installing equipment or facilities for the protection electrically of metallic equipment in contact with the ground.

"Clay" shall mean a uniform fine-grained geologic material (grain size less than 0.004 millimeter in diameter) which has a very low permeability.

"Community water supply wells" shall mean a well used for domestic purposes, regardless of type of ownership, if such system has at least five service connections or regularly serves an average of at least twenty-five individuals daily at least sixty days of the year. These systems are also subject to Chapter 7 of Part I of Division 5 of the California Health and Safety Code and are defined completely in California Administrative Code, Title 22, Section 64411(b). The department of environmental health will determine the classification of water systems.

"Conductor casing" shall mean a tubular retaining structure installed in the upper portion of a well between the wall of the drilled hole and the inner well casing.

"Cone of depression" is a depression in the ground-water table or potentiometric surface that has the shape of an inverted cone and develops around a well from which water is being withdrawn. It defines the area of influence of a well.

"Confined groundwater" shall mean groundwater under pressure whose upper surface is the bottom of an impermeable bed or a bed of distinctly lower permeability than the material in which the confined water occurs. Confined groundwater moves under the difference in head between the intake and discharge areas of the water body.

"Connate water" shall mean water entrapped in the interstices of a sedimentary rock at the time it was deposited. These waters may be fresh, brackish, or saline in character. "Connate water" usually applies only to water found in geologically older formations.

"Consolidated material" shall mean a geologic material whose particles are stratified, cemented, or firmly packed together. "Consolidated material" usually occurs at depth, i.e., sandstone.

"Contamination" shall mean an impairment of the quality of waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. "Contamination" shall include any equivalent effect resulting from the disposal of waste, whether or not waters of the state are affected.

"Destroyed well" shall mean a well that has been properly filled so that it cannot produce water nor act as a vertical conduit for the movement of groundwater or surface water.

"Deterioration" shall mean an impairment of water quality.

"Driller's mud" means a fluid composed of water and clay used in the drilling (primarily rotary) operation. The mud serves to remove cuttings from the hole, to clean and cool the bit, to reduce friction between the drill stem and the sides of the hole, and to plaster the sides of the hole. Such fluids range from relatively clear water to carefully prepared mixtures of special purpose compounds.

"Drive shoe" shall mean a forged steel collar with a cutting edge fastened onto the bottom of the casing to shear off irregularities in the hole as the casing advances and to protect the lower edge of the casing as it is driven.

"Gravel-packed well" shall mean a well in which filter material (sand, gravel, etc.) is placed in the annular space between the casing and the bore-hole to increase the effective diameter of the well and to prevent fine-grained material from entering the well during pumping.

"Groundwater" shall mean that part of the subsurface water which is in the zone of saturation.

"Groundwater basin" is a basin consisting of an area underlain by permeable materials, which are capable of storing or furnishing a significant water supply; the basin includes both the surface area and the permeable materials beneath it.

"Grout" shall mean a fluid mixture of cement and water of a consistency that can be forced through a pipe and placed as required. Various additives, such as sand, bentonite, and hydrated lime, are used to meet certain requirements. For example, sand is added when a considerable volume of grout is needed.

"Horizontal wells" shall mean water wells drilled horizontally or at an angle with the horizon (as contrasted with the common vertical well). This definition does not apply to horizontal drains or "wells" constructed to remove subsurface water from hillsides, cuts, or fills.

"Impairment" shall mean a change in quality of water which makes it less suitable for beneficial use.

"Impermeable" shall mean that property of a geologic material that renders it incapable of allowing water to move through it perceptibly under the pressure differences ordinarily found in subsurface water.

"Impervious strata" shall mean a geologic unit which will not transmit water in sufficient quantity to furnish an appreciable supply to wells or springs.

"Inactive or standby well" shall mean a well not routinely operating but capable of being made operable with a minimum of effort.

"Individual well" shall mean a well used to supply domestic water to an individual residence and all other wells not defined as a community water supply well.

"Monitoring wells" shall mean any artificial excavation by any method for the purpose of monitoring fluctuations in groundwater levels, quality of groundwaters, or the concentration of contaminants in underground water or vadose zones.

"Packer" shall mean of device used to plug or seal a well at a specific depth; frequently used as retainers to keep grout in position until it sets.

"Perforations" shall mean openings in a well casing to allow the entrance of groundwater into the well. Perforations may be made either before or after installation of the casing.

"Permeability" shall mean the capacity of a geologic material for transmitting fluid. The degree of permeability depends upon the size and shape of the openings and extent of the interconnections.

"Pollution" shall mean an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects such waters for beneficial uses, or affects facilities which serve such beneficial uses. "Pollution" may include "contamination."

"Pressure grouting" shall mean a method of forcing grout into specific portions of a well, such as the annular space, for sealing purposes. Pressure is maintained for a length of time sufficient for the cementing mixture to set.

"Quality of water or water quality" shall mean chemical, physical, biological, bacteriological, radiological, and other properties and characteristics of water, which affects is use.

"Recharge and injection wells" shall mean wells constructed to introduce water into the ground as means of replenishing groundwater basins, repelling the intrusion of seawater, or disposing of wastewater.

"Rehabilitation" shall mean the treatment of a well by chemical or mechanical means (or both) to recover lost production caused by incrustation or clogging of screens or the formation immediately adjacent to the well.

"Sanitary seal" shall mean a grout, mastic, or mechanical device to make a watertight joint between the pump and the casing or the concrete base or around wires extending into the casing.

"Screen or well screen" shall mean a factory-perforated casing used in a well that maximizes the entry of water from the producing zone and minimizes the entrance of sand.

"Surface seal" shall mean a monolithically poured concrete platform constructed around the top of the well casing on thoroughly compacted earth (four feet by four feet by four inches).

"Test wells" shall mean wells constructed for the purpose of obtaining the information needed to design a well prior to its construction. Such wells are not to be confused with "test holes" or "exploration holes" which are temporary in nature (i.e., uncased excavations whose purpose is the immediate determination of existing geologic and hydrologic conditions). Test wells are cased and can be converted to monitoring or production wells.

"Tremie" shall mean a tubular device or pipe used to place grout in the annular space.

"Unconfined (free) groundwater" shall mean groundwater that has a free water table, i.e., water not confined under pressure beneath relatively impermeable rocks.

"Unconsolidated material" shall mean a sediment that is loosely arranged or unstratified or whose particles are not cemented together occurring either at the surface or at depth.

"Waste" shall mean sewage, and/all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation of whatever nature, including such waste placed within containers of whatever nature prior to, and for purposes of disposal.

"Water well" shall mean any artificial excavation constructed by any method for the purposes of extracting water from, or injecting water into, the underground. This definition shall not include oil and gas wells, or geothermal wells constructed under the jurisdiction of the department of conservation, except those wells converted to use as water wells; or wells used for the purpose of dewatering excavations during construction or stabilizing hillsides or earth embankments.

"Well pit" shall mean an excavation in which the top of the well casing is below the ground surface.

(Ord. 1707 § 1(part), 1999)

ARTICLE II. - PERMITS

9.42.210 - Required.

A. No person, firm, association, organization, partnership, joint venture, business trust, corporation, company, or special district formed under the laws of this state shall within the unincorporated area of Tehama County construct, repair, alter, destroy or deepen any community water supply well, individual well, cathodic protection well, monitoring well, or abandoned well without first obtaining a permit from the department of environmental health as provided in this chapter.

B. Any person who shall commence any work for which a permit is required by this chapter without first having obtained a permit therefor shall, except under extraordinary circumstances, pay double the permit fee established by the board of supervisors for such work if subsequently permitted to obtain a permit. It shall be the responsibility of the well driller to maintain a copy of this permit on the drilling site during all stages of construction or destruction.

(Ord. 1707 § 1(part), 1999)

9.42.215 - Exemptions.

Monitoring wells ten feet or less in depth to determine the feasibility of on-site sewage disposal shall be exempt from these requirements. For monitoring wells greater than ten feet in depth, a written request for exemption must be submitted stating the reasons therefor. The director of environmental health shall make a decision based upon but not limited to the depth of the well, length of site activity, activities on site, groundwater characteristics, and surrounding uses of the land.

(Ord. 1707 § 1(part), 1999)

9.42.220 - Application.

Applications for permits shall be made to the department of environmental health on forms approved by the health officer and shall contain all such information the health officer requires and be accompanied by the required fee established by ordinance.

(Ord. 1707 § 1(part), 1999)

9.42.230 - Term.

Permits issued pursuant to this chapter shall be valid for one hundred eighty days from the date of issuance unless renewed prior to the expiration date. One renewal may be granted by the health officer for a fee of one-half the original application fee.

(Ord. 1707 § 1(part), 1999)

9.42.240 - Failure to obtain.

A. Any person who shall commence any work for which a permit is required by this chapter without first having obtained a permit therefor shall be in violation of this chapter.

B. It is the responsibility of any and all persons performing any part of the work described in this chapter to ascertain that a valid well construction permit has been issued by the department of environmental health.

(Ord. 1707 § 1(part), 1999)

9.42.250 - Validity of permit.

The issuance or granting of a permit pursuant to this chapter shall not be deemed or construed to be a permit for or approval of any violation of this chapter. The issuance or granting of a permit shall not prevent the enforcing agent from thereafter requiring correction of violations or from preventing construction operations being carried out thereunder when in violation of this chapter.

(Ord. 1707 § 1(part), 1999)

9.42.260 - Fees generally.

The board of supervisors may establish a schedule of fees for permits, applications, appeals and for other services, and such schedule when adopted shall become a part thereof. A copy of the schedule of fees shall be kept on file in the office of the department of environmental health for review by the public.

(Ord. 1707 § 1(part), 1999)

9.42.270 - Emergency repairs.

A. In the event of an emergency, repair or replacement of a well may be begun without obtaining a permit.

B. All emergency work shall comply with the provisions of this chapter.

C. As soon as possible (next working day), the owner or his authorized representative shall apply for a permit and shall, in addition, submit a statement explaining in detail the nature of the emergency. If the enforcing agent finds that the work done does not comply with the provisions of this chapter, he

shall order that such additional work be performed as may be necessary to comply with this chapter or shall order that the well be destroyed as provided in this chapter.

(Ord. 1707 § 1(part), 1999)

9.42.280 - Security.

A. Prior to the issuance of a licensed well driller's first permit in Tehama County pursuant to this chapter, the well driller shall obtain a surety bond executed in favor of the county, in the penal amount of five thousand dollars; provided, that the surety thereon is a corporation duly authorized by the laws of the state to execute such bonds.

B. In the event a personal bond is furnished, the amount of said bond shall be five thousand dollars.

C. Before any permit shall be issued, the county counsel shall examine and approve any such bond posted under this chapter.

D. The condition of said bond shall be that applicant, as principal thereof, will, truly and faithfully perform all duties and obligations required of him/her by said sections of this chapter and such terms, conditions, orders and directions as the enforcing agency may deem necessary for the protection of human health, safety, and general welfare.

(Ord. 1707 § 1(part), 1999)

9.42.285 - Security-Monitoring wells or cathodic protection wells.

At the time of application for a permit to construct, reconstruct, or repair monitoring wells used in environmental assessments and site mitigation, the registered professional required by state laws, regulations or local ordinances or their authorized representative shall apply and provide their current registration number and wet stamp with signature on all plot plans and specifications. The responsible registered professional may, in lieu of a surety bond upon the well driller as required by Section 9.42.280 of this code, submit, at the time of application, a certification stamped with their current registration number and wet signature that to the best of their ability the monitoring wells will be constructed in such a manner as to keep the quality of the groundwater from becoming impaired or polluted.

(Ord. 1707 § 1(part), 1999)

9.42.290 - Public water supply wells.

Anyone who wishes to drill, reconstruct, or modify a public water supply well shall contact the department of environmental health for proper additional permitting procedures and permit amendment procedures as stated in Section 116550 of the California Health and Safety Code.

(Ord. 1707 § 1(part), 1999)

ARTICLE III. - CONSTRUCTION, STANDARDS, TESTING AND INSPECTION

9.42.305 - Persons permitted to drill wells.

No person shall undertake to dig, bore, or drill a water well, monitoring well, or cathodic protection well, or to deepen or reperforate any water well, or monitoring well or cathodic protection well, unless the person responsible for that construction or alteration possesses a C-57 water well contractor's license.

(Ord. 1707 § 1(part), 1999)

9.42.306 - Construction supervision-Monitoring wells.

The responsible registered professional required by state laws, regulations or local ordinances shall supervise the construction of all monitoring well(s) for environmental assessments and site mitigation and shall be responsible for adherence to all state laws, regulations and local ordinances.

(Ord. 1707 § 1(part), 1999)

9.42.310 - Standards-Generally.

Standards for the construction, repair, reconstruction, deepening, abandonment and destruction of wells in the unincorporated area of Tehama County shall be as specified in Sections 9.42.315 through 9.42.430 of this chapter.

(Ord. 1707 § 1(part), 1999)

9.42.315 - Standards-Applicability.

Except as prescribed in Sections 9.42.325 and 9.42.330, these standards shall apply to all types of wells described in Section 9.42.120. Before a change in use of a well, compliance shall be made with requirements for the new use as specified in this chapter. Where it is anticipated that a well will be converted to another use, the enforcing agency may require the installation of a seal to the depth specified for community water supply wells.

(Ord. 1707 § 1(part), 1999)

9.42.320 - Standards-Exemptions.

If the enforcing agency finds that compliance with any of the requirements prescribed in this chapter is impractical for a particular location because of unusual conditions or if compliance would result in construction of an unsatisfactory well, the enforcing agency may waive compliance and prescribe alternative requirements which are equal to these standards in terms of protection obtained.

(Ord. 1707 § 1(part), 1999)

9.42.325 - Standards—Exclusions.

The standards prescribed in Sections 9.42.335 through 9.42.388 do not apply to exploration and test holes. However, the provisions of Section 9.42.395, reports, and Article 4, well destruction, do apply to these holes. Springs are excluded from these standards.

(Ord. 1707 § 1(part), 1999)

9.42.330 - Standards—Special.

A. In locations where existing geologic or groundwater conditions require standards more restrictive than those described in this article, such special additional standards may be prescribed by the enforcing agency.

B. Special standards are necessary for the construction of recharge or injection wells, horizontal wells, and other unusual types of wells. Design of these wells is subject to the approval of the enforcing agency.

(Ord. 1707 § 1(part), 1999)

9.42.334 - Permitted use required.

A. Except as provided in subdivision (C), no permit shall be issued for any individual well with a casing diameter of eight inches or less unless the parcel upon which the well is located contains a permitted use which will be supplied by the well.

B. For purposes of this section and Section 9.42.399, "permitted use" shall mean only the following, as determined by the director of planning in accordance with Title 17 of this Code:

1. In the case of property located within the R-1, R-2, R-3, R-4, RE, AG-1, AG-2, AG-3, and AG-4 zoning districts, actual residential use of the premises that is conducted in a residential structure or manufactured home on a permitted foundation system for which a final certificate of occupancy has been issued in accordance with Title 15 of the Tehama County Code.

2. In the case of property located within the C-1, C-2, C-3, C-4, M-1, M-2, GR, PO, PA, and AV zoning districts, actual use of the premises for a purpose permitted within that zoning district and otherwise in compliance with the Tehama County Code that is conducted in a structure or manufactured home on a permitted foundation system for which a final certificate of occupancy authorizing such use has been issued in accordance with Title 15 of the Tehama County Code.

3. In AG-1, AG-2, AG-3, AG-4, NR, GR, and PF zoning districts, an active commercial agricultural use that is permitted within that zoning district and otherwise in compliance with the Tehama County Code.

C. The following individual wells are exempt from this section:

1. A well permit may be issued for an individual well that will supply a structure or manufactured home for which a building permit has been obtained, and not expired, if that structure when completed and actually used will constitute a permitted use under this section.

2. A well permit may be issued for an individual well that will supply an off-parcel use for which a permit has been issued in accordance with Chapter 9.40 of this Code.

(Ord. No. 2006, § 4,6-9-2015)

9.42.335 - Well location.

A. All wells except monitoring wells for environmental assessments, shall be located within a five-foot radius of the location permitted by the well permit. If minor deviations from the approved plans and specifications arise from prior unknown site conditions, a written plot plan shall be submitted to the department of environmental health and new written approval shall be required prior to construction. The well location determinations shall include but are not limited to the following:

1. Sewer, watertight septic tank or privy pit, fifty feet;

2. Subsurface sewage leaching field, one hundred feet;

3. Cesspool or seepage pit, one hundred fifty feet;

4. Animal or fowl enclosures, lot barnyard and stable area, one hundred feet.

B. Where, in the opinion of the enforcing agency adverse conditions exist, the distances set forth in subsection (A) of this section shall be increased or special means of protection, particularly in the construction of the well, shall be provided.

C. If possible, the well shall be located up the groundwater gradient (upstream) from the specified sources of contamination.

D. The top of the casing shall terminate above grade or above any known conditions of flooding by drainage or runoff from the surrounding land. For community water supply wells, this level is defined as above the floodplain of a one-hundred-year flood as shown on the most recently approved Federal Insurance Rate Maps.

E. The area around the well shall slope away from the well and surface drainage shall be directed away from the well.

F. Where a well is to be near a building, the well shall be far enough from the building so that the well will be accessible for repair, maintenance, etc.

(Ord. 1707 § 1(part), 1999)

9.42.340 - Sealing the upper annular space.

The annular space shall be effectively sealed to protect it against contamination or pollution by entrance of surface and/or shallow, subsurface waters, and to provide protection for the casing against corrosion, to assure structural integrity of the casing, and to stabilize the upper formation.

A. Depth of Seal. The well drilling contractor shall be responsible for sealing the well greater than the below listed minimum depths if necessary to protect the aquifer or casing. The minimum depth of casing and annular seal below the ground's surface shall be as follows:

1. Community water supply wells, fifty feet;

2. Individual domestic wells, twenty feet;

Exception: Shallow wells where the water to be developed is at a depth less than twenty feet. In this instance, the depth of seal may be reduced but in no case less than ten feet and special precautions taken in locating the well with respect to sources of pollution.

3. Industrial wells, fifty feet.

Exception: Shallow wells where the water to be developed is at a depth less than twenty feet. In this instance, the depth of seal may be reduced but in no case less than ten feet and special precautions taken in locating the well with respect to sources of pollution.

4. Monitoring wells, depth discrete. The annular space in such wells must be sealed to make the intake section "depth-discrete."

5. All other wells, twenty feet.

At the discretion of the enforcing agency, the depth of the annular space for any well may be increased to a depth of fifty feet from the surface when the well is close to sources of pollution listed in Section 9.42.335. In areas where freezing is a potential problem, the top of the seal may be below ground surface but in no case more than four feet below ground surface. (See Section 9.42.345B).

If areas within the county appear to warrant a deeper annular seal than those listed in this section, the enforcing agency may recommend that the annular seal be increased to a specified depth in a specific area. These recommendations shall be presented to the county board of supervisors for adoption by ordinance. When adopted, these standards shall have the force and effect of law.

B. Sealing Condition. The requirements set forth in this subsection are to be observed in sealing the annular space:

1. Wells Situated in Unconsolidated Caving Material. An oversized hole, at least four inches greater in diameter than the production casing, shall be drilled and a conductor casing installed to the depth of seal specified in subsection A of this section. The space between the conductor casing and the production casing shall be filled with sealing material. The conductor casing shall be withdrawn as the sealing material is placed whenever possible. Exceptions are public water supply wells which shall require the conductor casing to be pulled with no exceptions. If the conductor casing cannot be withdrawn, the conductor casing may be sealed to a depth at least five feet below the conductor casing.

In areas where it is more probable than not that the conductor casing will not be able to be pulled, perforated conductor casing shall be installed and the space shall be pressure sealed by a pump with the appropriate sealing material.

If this method is employed the following shall be required:

a. An attempt shall be made to pull the perforated conductor casing at the time of the seal placement and, if possible, pulled.

b. The perforations shall be at least three-eighths inch width with at least four perforations every vertical foot of casing.

c. The sealing material shall be neat cement grout, sand-cement grout, six-sack sand or bentonite.

2. Wells Situated in Unconsolidated Material Stratified with Significant Clay Layers. If a clay formation is encountered within five feet of the bottom of the seal described in subsection A of this section, the seal shall be extended into the restrictive formation. An oversized hole at least four inches greater in diameter than the production casing, shall be drilled and the annular space filled with sealing material.

If caving material is present, a conductor casing shall be installed, and the annular space sealed as described in subdivision 1 of this subsection.

3. Wells Situated in Soft Consolidated Formation (Extensive Clays, Sandstones, etc.). An oversized hole, at least four inches greater in diameter than the production casing, shall be drilled to a depth of seal specified in subsection A of this section and the space between the production casing and the drilled hole shall be filled with sealing material.

If a conductor casing is to be installed, the oversized hole shall be at least four inches greater in diameter than the conductor casing and the annular space between the conductor casing and the drilled hole filled with sealing material to the depth specified in subsection A of this section.

4. Wells Situated in "Hard" Consolidated Formations (Crystalline or Metamorphic Rock). An oversized hole described in subdivision 3 of this subsection, shall be drilled to the depth specified in subsection A of this section and the annular space filled with sealing material. If there is significant overburden, a conductor casing may be installed to retain it. If the material is heavily fractured, the seal should extend into solid material. If the well is to be open-bottomed (lower section uncased), the casing shall be seated in the sealing material.

5. Gravel-Packed Wells.

a. With Conductor Casing. An oversized hole, at least four inches greater than the diameter of the conductor casing, shall be drilled to the depth specified in subsection A of this section and the annular space between the conductor casing and drilled hole filled with sealing material. The gravel pack shall terminate at the base of the seal required in Section 9.42.340.

b. Without Conductor Casing. An oversized hole at least four inches greater in diameter than the production casing, shall be drilled to the depth specified in subsection A of this section and the annular space between the casing and drilled hole filled with sealing material. If gravel fill pipes are installed through the seal, the annular seal shall be of sufficient thickness to assure that there is a minimum of two inches between the gravel fill pipe and the wall of the drilled hole. The gravel pack shall terminate at the base of the seal. If a temporary conductor casing is used, it shall be removed as the sealing material is placed.

6. For wells situated in circumstances differing from those described in this section, the sealing conditions shall be as prescribed by the enforcing agency.

C. Sealing Material. The sealing material shall consist of neat cement grout, sand-cement grout, bentonite clay or concrete. Cement used for sealing mixtures shall meet the requirements, including the latest revision thereof, of American Society for Testing and Materials (ASTM/C150 "Standard Specifications for Portland Cement" types I (common construction cement), III (high early strength), and V (for high sulfate resistance, i.e., corrosive waters). Water used for sealing mixtures shall be clean and of a potable quality. Materials used as additives for Portland cement mixtures in the field shall meet the requirements, and latest revision thereof, of ASTM C494 "Standard Specification for Chemical Admixtures for Concrete."

1. Neat cement grout shall be composed of one sack of Portland cement (ninety-four pounds) to four and one-half gallons to six and one-half gallons of clean water.

2. Sand-cement grout shall be composed of not more than two parts by weight of sand and one part of Portland cement to four and one-half to six and one-half (depending on cement type and additives used) gallons of clean water per sack of cement.

3. The materials called six sack sand or six bag mix shall be composed of not less than six sacks of cement per yard of sand/cement mixtures.

4. Concrete is useful in sealing large diameter wells where the volume of annular seal requirement is likely to be substantial. However, unless care is exercised during placement, the coarse aggregate may become separate from the cement or damage the casing. Concrete used shall be Class A (six sacks of Portland cement per cubic yard or 0.76 cubic meter) or Class B (five sacks per cubic yard or 0.76 meter). Aggregates shall meet the requirements, including the latest revision thereof, of ATSM C33 "Standard Specification for Concrete Aggregates."

5. Additives, to make the mix more fluid (up to ten percent of the volume of cement), and bentonite (up to eight percent) to make the mix more fluid and to reduce shrinkage, may be used.

6. Clay may not be used where structural strength of the seal is required, where flowing or moving water might break it down, or where it might dry out. Only bentonite clays are allowed.

Bentonite shall be commercially prepared powdered, granular, pelletized or chipped (crushed) sodium montmorillonite clay. The largest dimension of pellets and chips shall be less than one-fifth of the thickness of the annular space into which they will be placed. Bentonite clay mixtures shall be composed of bentonite clay and clean water thoroughly mixed before placement so that there are no balls, clods, etc. A mixture which is lumpy shall not be used. Pellets or chips may be used where the dry annular space is to be sealed, maximum standing water depth ten feet.

7. Used driller's mud or cuttings or chips from drilling the borehole shall not be used as sealing material for the annular space described in subsection A of this section.

8. The minimum time that must be allowed for materials containing cement to set before construction operations on the well may be resumed shall be:

a. Type I cement, seventy-two hours;

b. Type III cement, forty-eight hours;

c. Type V cement, six hours. Where necessary these times may be reduced by the use of accelerators.

9. Where thermoplastic casing is used, caution should be exercised to control the heat generated during the curing of the cement. The addition of bentonite to the cement mixture (up to eight percent) or circulating water inside the casing will be allowed to lower the temperature of the cement. Additives which accelerate the curing process also tend to increase the heat generated and should not be used where thermoplastic casing is installed.

D. Thickness of Seal. The thickness of the seal shall be at least two inches and not less than five times the size of the largest coarse aggregate used in the sealing material.

E. Placement of Seal.

1. Before placing the seal, all loose cuttings, drilling mud, or other obstructions shall be removed from the annular space, as described in subsection A of this section, by flushing.

2. Before sealing commences, a packer or similar retaining device or a small quantity of sealant may be placed and permitted to set at the bottom of the interval to be sealed to form a foundation for the seal.

3. The sealing material shall be applied, when possible, in one continuous operation from the bottom of the interval to be sealed to the top.

4. Gravity installation of sealant without the aid of a tremie or grout pipe shall not be used unless the interval to be sealed is dry and in no case where the interval is equal to or greater than fifty feet in depth. Concrete shall not be placed without the aid of a tremie or grout pipe when the interval is greater than twenty feet in depth.

(Ord. 1707 § 1(part), 1999)

9.42.345 - Surface construction features.

A. Openings. All openings into the top of the well which are designed to provide access to the well shall be protected against entrance of surface waters or foreign matter by the installation of watertight caps or plugs. Access openings designed to permit the entrance or egress of air or gas (air or casing vents) shall terminate above the ground and above known flood levels and shall be protected against the entrance of foreign material by the installation of downturned and screened "U" bends. All other openings (holes, crevices, cracks, etc.) shall be sealed.

A "sounding tube," taphole with plug or similar access for the introduction of water-level measuring devices shall be affixed to the casing of all wells. For wells fitted with a well cap, the cap shall have a removable plug for this purpose.

1. Where the pump is installed directly over the casing, a watertight seal (gasket) shall be placed between the pump head and the pump base (slab), or a watertight seal (gasket) shall be placed between the pump base and the rim of the casing, or a well cap shall be installed to close the annular opening between the casing and the pump column pipe.

2. Where the pump is offset from the well or where a submersible pump is used, the opening between the well casing and any pipes or cables which enter the well shall be closed by a watertight seal or well cap.

3. If the pump is not installed immediately or if there is a prolonged interruption in construction of the well, a watertight cover shall be installed at the top of the casing.

4. A watertight seal or gasket shall be placed between the pump discharge head and the discharge line; or, in the event of a below-ground discharge, between the discharge pipe and discharge line.

5. All wells should be provided with a surface seal which is constructed around the top of the casing. It shall be free from cracks, honeycombs or other defects likely to detract from its watertightness. The joint between the base and the annular seal must also be watertight. The base shall slope away from the well casing. The minimum size of the concrete base shall be four feet by four feet by four inches.

6. Where the well is to be gravel-packed, and the pack extends to the surface, a watertight cover shall be installed between the conductor casing and the inner casing.

B. Well Pits. Because of their susceptibility to contamination and pollution, the use of well pits is not allowed. A substitute device called a pitless adapter or pitless adapter unit (a variation) shall be used in place of a well pit with prior approval by the enforcing agency.

C. Enclosure of Well and Appurtenances. In community water supply wells, the well and pump shall be located in a locked enclosure to exclude access by unauthorized persons.

D. Pump Blowoff. When there is a blowoff or drain line from the pump discharge, it shall be located above any known flood level and protected against the possibility of backsiphonage or backpressure. The blowoff or drain line shall not be connected to any sewer or storm drain except when protected by an air gap.

E. Air Vents. In community water supply wells, a casing vent shall be installed. In addition, air-release vents shall be installed. Air vents are also recommended for other types of wells except those having jet pump installations requiring positive pressure.

F. Backflow Prevention. All pump discharge pipes not discharging to the atmosphere shall be equipped with a check valve or similar device to prevent backflow and backsiphonage into the well when the pumps shuts down. In addition, irrigation well systems (including those used for golf course irrigation) employing chemical feeders or injectors (a practice called chemigation) shall be equipped with an acceptable backflow prevention device. The backflow prevention device shall be one that has been approved by the enforcing agency.

(Ord. 1707 § 1(part), 1999)

9.42.346 - Surface construction features-Monitoring wells.

Well heads shall be provided with a watertight cap and, if in existence longer than three months, shall be enclosed in a surface security structure that protects the well from the entry of surface fluids, accidental damage, unauthorized access, and vandalism. This may be accomplished by providing a locked well cap or by securing the facility within which a well is located.

(Ord. 1707 § 1(part), 1999)

9.42.347 - Labeling-Monitoring wells.

On all monitoring wells that will be in existence for longer than three months, pertinent well information including well identification, well type, well depth, well casing diameters (if more than one size is used) and perforated intervals shall be permanently affixed to the interior of the surface security structure and the well identification number and well type shall also be affixed on the exterior of the surface security structure.

(Ord. 1707 § 1(part), 1999)

9.42.350 - Disinfection and other sanitary requirements.

A. Disinfection. All wells producing water for domestic use (i.e., drinking or food processing) shall be disinfected following construction or repair and when work is done on the pump, before the well is placed in or returned to service. See the local enforcing agency for details.

B. Gravel. Gravel used in gravel-packed wells shall come from clean sources and should be thoroughly washed before being placed in the well. Gravel purchased from a supplier should be washed at the pit or plant prior to delivery to the well site. During placement of the gravel in the annular space, disinfectants (usually calcium hypochlorite in tablet or granular form) shall be added to the gravel at a uniform rate (two tablets per cubic foot or one pound of the granular form per cubic yard).

C. Lubricants. Mud and water used as a drilling lubricant shall be free from sewage contamination. Oil and water used for lubrication of the pump and pump-bearing shall also be free from contamination.

(Ord. 1707 § 1(part), 1999)

9.42.353 - Proper disposal of drilling fluids.

Drilling fluids and other drilling materials shall be safely and legally handled and disposed of.

(Ord. 1707 § 1(part), 1999)

9.42.355 - Casing.

A. Casing Material. Requirements pertaining to well casing are as follows:

1. Well casing shall be strong and tough enough to resist the forces imposed on it during installation and those forces which can normally be expected after installation.

2. The thickness of steel used for well casing shall be selected in accordance with good design practices applied with due consideration to conditions at the site of the well. There are three principal classifications of steel materials used for water well casing, and all are acceptable for use so long as they meet the following conditions:

a. Standard and Line Pipe. This material shall meet one of the following specifications, including the latest revision thereof:

i. American Petroleum Institute (API) Std. 5L, "Specification for Line Pipe";

ii. API Std. 5LX, "Specification for High Test Line Pipe";

iii. ASTM A53, "Standard Specification for Pipe, Steel, Black and Hot-Dipped Zinc-Coated Welded and Seamless";

iv. ASTM A120, "Standard Specification for Pipe, Steel, Black and Hot-Dipped Zinc-Coated (Galvanized) Welded and Seamless, for Ordinary Uses";

v. ASTM A134, "Standard Specification for Electric-Fusion (Arc)-Welded Steel Pipe (sizes NPS 16 and over)";

vi. ASTM A135, "Standard Specification for Electric-Resistance-Welded Steel Pipe";

vii. ASTM A139, "Standard Specification for Electric-Fusion (Arc)-Welded Steel Pipe (sizes 4 inches and over)";

viii. ASTM A211, "Standard Specification for Spiral-Welded Steel or Iron Pipe";

ix. American Water Works Association (AWWA) C200, "AWWA Standard for Steel Water Pipe 6 inches and larger."

b. Structural Steel. This material shall meet one of the following specifications of the American Society for Testing and Materials including the latest revision thereof:

i. ASTM A36, "Standard Specification for Structural Steel";

ii. ASTM A242, "Standard Specification for High Strength Low Alloy Structural Steel";

iii. ASTM A283, "Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates of Structural Quality";

iv. ASTM A441, "Tentative Specification for High-Strength Low Alloy Structural Manganese Vanadium Steel";

v. ASTM A570, "Standard Specification for Hot-Rolled Carbon Steel Sheet and Strip, Structural Quality."

c. High strength carbon steel sheets referred to by their manufacturers and fabricators as "well casing steel." At present, there are no standard specifications concerning this material. However, the major steel producers market products whose chemical and physical properties are quite similar. Each sheet of material shall contain mill markings which will identify the manufacturer and specify that the material is well-casing steel which complies with the chemical and physical properties published by the manufacturer.

d. Stainless steel casing shall meet the provisions of ASTM A409, "Standard Specification for Welded Large Diameter Austenitic Steel Pipe for Corrosive or High Temperature Service."

3. Plastic is also used as casing for water wells in many locations under a variety of circumstances. Because large-diameter (ten inches or two hundred fifty millimeters and larger) plastic casing has not been used extensively and especially at depths exceeding three hundred feet (ninety meters), special care must be exercised in the design and construction of wells that will employ these sizes. Particular attention should be given to the effect on thermoplastic casing of heat generated during cementing operations (see also subsection (B)(2) of this section, and Section 9.42.340). Prior approval by the enforcement agency is required. There are two groups of plastic materials available:

a. Thermoplastics. This material shall meet the requirements of ASTM F480, "Standard Specification for Thermoplastic Water Well Casing Pipe and Couplings Made in Standard Dimension Ratios (SDR)" including the latest revision thereof. SDR is the ratio of pipe diameter to wall thickness.

b. Thermosets. This material shall meet the requirements of the following specifications including the latest revisions thereof:

i. ASTM D2996, "Standard Specification for Filament Wound Reinforced Thermosetting Resin Pipe";

ii. ASTM D2997, "Standard Specification for Centrifugally Cast Reinforced Thermosetting Resin Pipe";

iii. ASTM D3517, "Standard Specification for Reinforced Plastic Mortar Pressure Pipe";

iv. AWWA C950, "AWWA Standard for Glass-Fiber-Reinforced Thermosetting-Resin Pressure Pipe."

c. All plastic casing used for community water supply wells and individual wells shall meet the provisions of National Sanitation Foundation Standard No. 14 for Plastic Piping System Components and Related Materials.

d. Plastic casing should not be stored in direct sunlight or subjected to freezing temperatures for extensive periods of time. Further, it should be stored so as to prevent sagging and bending.

4. Concrete pipe used for casing shall conform to the following specifications, including the latest revision thereof:

a. ASTM C14, "Standard Specifications for Concrete Sewer, Storm Drain, and Culvert Pipe";

b. ASTM C76, "Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe";

c. AWWA C300, "AWWA Standard for Reinforced Concrete Pressure Pipe Steel Cylinder Type, for Water and Other Liquids";

d. AWWA C301, "AWWA Standard for Prestressed Concrete Pressure Pipe, Steel Cylinder Type, for Water and Other Liquids."

5. Other materials, except as listed in subdivision 6 of this section, may be used for water wells, subject to the approval of the enforcing agency.

6. Galvanized sheet metal pipe (downspout), or natural wood shall not be used as casing.

B. Installation of Casing. All casing shall be placed with sufficient care to avoid damage to casing sections and joints. All joints in the casing above perforations or screens shall be watertight. The uppermost perforations shall be at least below the depth specified in Section 9.42.340A. Casing shall be equipped with centering guides to ensure even thickness of annular seal and/or gravel pack.

1. Metallic Casing. Steel casing may be joined by either welding or by threading and coupling. Welding shall be accomplished in accordance with standards of American Welding Society or the most recent revision of the American Society of Mechanical Engineers Boilers Construction Code. Where casing is driven, the casing shall be equipped with a drive shoe at the lower end.

2. Plastic (Nonmetallic) Casing. Depending on the type of material and its fabrication, plastic casing may be joined by solvent welding or mechanically joined (threaded or otherwise coupled). The solvent cement used for solvent welding shall meet the specifications of the type of plastic used and shall be applied in accordance with the manufacturer's instructions, particularly those pertaining to setting time required for the joint to develop handling strength. An adapter shall be used to join plastic casing to metallic casing or screen.

Plastic casing or screen shall not be driven or otherwise subjected to impact forces during installation. The effects of heat generated by curing cement on plastic casing are discussed in Section 9.42.340(C)(8).

(Ord. 1707 § 1(part), 1999)

9.42.360 - Sealing-off strata.

In areas where a well penetrates more than one aquifer, and one or more of these aquifers contain water that, if allowed to mix in sufficient quantity, will result in significant impairment of the quality of water in the other aquifer(s) or the quality of water produced, the strata producing such poor quality water shall be sealed off to prevent entrance of the water into the well or its migration to other aquifer(s).

A. Strata producing the undesirable quality water shall be sealed off by placing impervious material opposite the strata and opposite the confining formation(s). The seal shall extend above and below the strata no less than ten feet (three meters) even should the confining formation be less than ten feet (three meters) in thickness. In the case of bottom waters, the seal shall extend ten feet (three meters) in the upward direction. The sealing material shall fill the annular space between the casing and the wall of the drilled hole in the interval to be sealed, and the surrounding void spaces which might absorb the sealing material. The sealing material shall be placed from the bottom to the top of the interval to be sealed.

In areas where deep subsidence may occur, provisions shall be made for maintaining the integrity of the annular seal in the event of subsidence. Such preventive measures may include the installation of a sleeve or slip joint in the casing, which will allow vertical movement in the casing without its collapse.

B. Sealing material shall consist of neat cement, cement grout, or bentonite clay (See Section 9.42.340C for description of various materials).

C. Sealing shall be accomplished by a method approved by the enforcing agency.

(Ord. 1707 § 1(part), 1999)

9.42.365 - Well development, redevelopment or conditioning.

A. Developing, redeveloping or conditioning of a well shall be done with care and by methods which will not cause damage to the well or cause adverse subsurface conditions that may destroy barriers to the vertical movement of water between aquifers.

B. The following methods used in developing, redeveloping, or conditioning a well when done with care are acceptable:

1. Overpumping;

2. Surging by use of a plunger;

3. Surging with compressed air;

4. Backwashing or surging by alternately starting and stopping the pump;

5. Jetting the water;

6. Introduction of chemicals designed for this purpose; and

7. A combination of the above.

C. The use of explosives or development shall be done only by persons trained to handle them. Further, they should be used with special care where two or more distinct aquifers separated by a natural barrier have been penetrated.

D. Where the chemicals or explosives have been used, the well shall be pumped until these agents have been removed.

(Ord. 1707 § 1(part), 1999)

9.42.370 - Water quality sampling.

A. Public Water Supply Wells and Certain Industrial Wells. The water from all community water supply wells which provide water for use in food processing shall be sampled immediately following development and disinfection, and appropriate analyses made.

1. Rules and regulations governing the constituents to be tested, type of testing, etc., for community water supply systems are contained in Chapter 15, "Domestic Water Quality and Monitoring," of Title 22, California Administrative Code. Water analysis shall be performed by a laboratory certified by the California Department of Health Services. A copy of the laboratory analysis shall be forwarded to the California Department of Health Services or to the local health development. Approval of the enforcing agency must be obtained before the well is put into use.

2. Except where there is free discharge from the pump with an appropriate air gap, a sample tap shall be provided on the discharge line so that water representative of the water in the well may be drawn for laboratory analysis. The tap shall be located on the system side of the check valve or equivalent backflow preventor.

B. Other Types of Wells. To determine the quality of water produced by a new well, it should be sampled immediately following construction and development. Appropriate analyses shall be made based upon the intended uses of the water.

(Ord. 1707 § 1(part), 1999)

9.42.375 - Large diameter shallow wells.

A. Use as Public Water Supply Wells. Because shallow groundwaters are often of poor quality and because they are easily contaminated, the use of bored or dug wells, or wells less than fifty feet (fifteen meters) deep, to provide community water supplies shall be avoided. When used for this purpose, these wells shall be located at least two hundred fifty feet (seventy-six meters) from any underground sewage disposal system.

B. Bored Wells. All bored wells shall be cased with concrete pipe or steel casing whose joints are watertight from six inches (one hundred fifty millimeters) above the ground surface to the depths specified in Section 9.42.340A. Except where corrugated steel pipe is used as casing, the minimum thickness of the surrounding concrete seal shall be three inches (seventy-five millimeters). Where corrugated steel pipe is employed, the joints are not watertight and a thicker annular seal (no less than six inches or one hundred fifty millimeters) shall be installed.

C. Dug Wells. All dug wells shall be curbed with a watertight curbing extending from above the ground surface to the depths specified in Section 9.42.340A. The curbing shall be of concrete poured-in-place or of casing (either precast concrete pipe or steel) surrounded on the outside by concrete. If the curbing is to be made of concrete, poured-in-place, it shall not be less than six inches (one hundred fifty millimeters) thick. If precast concrete pipe or steel casing is used as part of the curbing, the space between the wall of the hole and the casing shall be filled with concrete to the depths specified in Section 9.42.340A. The minimum thickness of the surrounding concrete shall be three inches (seventy-five millimeters).

D. Casing Material. Either steel (including corrugated steel pipe) or concrete may be used for casing bored or dug wells. Corrugated aluminum pipe is not approved.

1. Steel used in the manufacture of casing for bored or dug wells should conform to the specifications for casing material described in Section 9.42.355. Minimum thickness of steel casing for bored or dug wells shall be:

Diameter		U.S. Standard Gauge or Plate Thickness
Inches	Millimeters	
18	450	8 gauge (4.18 millimeters)
24	600	¼ gauge (6.35 millimeters)
30	750	¼ gauge (6.35 millimeters)
36	900	¼ gauge (6.35 millimeters)
42	1050	¼ gauge (6.35 millimeters)

48	1150	¼ gauge (6.35 millimeters)

Corrugated steel pipe used as casing shall meet the specifications (including the latest revision) of ASTM/A444, "Standard Specification for Steel Sheet, Zinc Coated (Galvanized) by the HOT-DIP Process for Culverts and Underdrains." The minimum thickness of sheet used shall be 0.109 inches (2.8 millimeters).

2. Concrete casing can consist of either poured-in-place concrete or precast concrete pipe. Poured-in-place concrete should be sufficiently strong to withstand the earth and water pressures imposed on it during, as well as after construction. It must be properly reinforced with steel to furnish tensile strength and to resist cracking, and it should be free from honeycombing or other defects likely to impair the ability of the concrete structure to remain watertight. Aggregate small enough to place without bridging should be used. Poured-in-place concrete shall be Class A (six sacks of Portland cement per cubic yard or 0.76 cubic meter) or Class B (five sacks per cubic yard or 0.76 cubic meter). Precast concrete pipe shall be free of blemishes that would impair their strength or serviceability. Concrete pipe shall conform to the specifications listed in Section 9.42.355(A)(4).

(Ord. 1707 § 1(part), 1999)

9.42.380 - Driven wells.

A. It is strongly recommended that driven wells not be used for domestic water supply.

B. Driven wells shall not be installed to a depth greater than twenty-five feet.

C. The minimum wall thickness of steel drive pipe shall not be less than 0.140 inches (3.5 millimeters).

D. The casing shall be two-inch maximum.

E. Well points made of thermoplastic materials should not be driven but jetted and washed into place.

F. Driven wells shall be provided with a surface seal.

G. This section does not apply to monitoring wells.

(Ord. 1707 § 1(part), 1999)

9.42.385 - Rehabilitation, repair or deepening of wells.

A. The following methods used for rehabilitating a well when done with care are acceptable:

1. Introduction of chemicals designed for this purpose;
2. Surging by use of compressed air;
3. Backwashing or surging by alternately starting or stopping the pump;
4. Jetting the water;
5. Sonic cleaning;
6. Vibratory explosive; and
7. Combinations of these.

Methods which produce an explosion (in addition to the use of vibratory explosives mentioned above) are also acceptable; provided, however, they are used with great care, particularly where aquifers are separated by distinct barriers to the movement of groundwater. In those cases where chemicals or explosives have been used, the well shall be pumped until all traces of them have been removed.

B. In the repair of wells, material used for casing shall meet the requirements of Section 9.42.355 of this chapter. In addition, the requirements of Section 9.42.350 shall be followed.

C. Where the wells are to be deepened, the requirements of Sections 9.42.350, 9.42.355, 9.42.360, 9.42.365 and 9.42.370 of this chapter shall be followed.

(Ord. 1707 § 1(part), 1999)

9.42.388 - Temporary covers.

A. Whenever there is an interruption in work on the well such as an overnight shutdown, the well opening shall be closed with a cover. The cover shall be held in place or weighted down in such a manner that it cannot be removed except with the aid of equipment or through the use of tools.

B. During prolonged interruptions (i.e., one week or more), a semipermanent cover shall be installed. For wells cased with steel, a steel cover, tack-welded at the top of the casing is adequate.

(Ord. 1707 § 1(part), 1999)

9.42.390 - Inspections.

A. The enforcing agency is empowered to enter upon private property in order to make inspections for the purposes of enforcing all provisions of this chapter. A final inspection of the work performed on any well pursuant to this chapter shall be made by the enforcing agency unless such inspection is waived by them. No permittee shall be deemed to have complied with this chapter until such inspection has been either made or waived and the installation approved.

B. The enforcing agency shall be notified by the well driller a minimum of twelve hours but not more than forty-eight hours prior to sealing the annular space. Drillers who anticipate completing a well in less than a day may notify the enforcing agency twenty-four hours prior to commencement of drilling and provide the anticipated time to commence the sealing of the annular space. If the enforcing agency fails to appear at the well site at the time designated for sealing, the well may be sealed without the presence of the enforcing agency.

C. The enforcing agency shall be notified by the well driller within seven days of completion of work by the driller and may conduct a final inspection to ensure completion of the well in compliance with this chapter.

(Ord. 1707 § 1(part), 1999)

9.42.395 - Well driller's report.

A copy of the report required by Section 13751 (Division 7, Chapter 10, Article 3) of the Water Code shall be submitted by the well driller to the department of environmental health within thirty days of construction or destruction of any well except driven wells (well points). With the exception of well driller's name, the date the well was drilled and the well yield, all information contained in this report shall remain confidential. Reports may be made available for inspection by government agencies only upon written request, for use in making studies. In addition, reports may be made available to any person who obtains written authorization from the owner of the well. This section shall not be deemed to release any person

from the requirement to file said report with the State Department of Water Resources or with any other federal, state, or local agencies.

(Ord. 1707 § 1(part), 1999)

9.42.396 - Reports required-Monitoring wells.

Upon completion of the monitoring well(s) the responsible registered professional shall submit all required reports detailing the site and monitoring well(s) construction features including, but not limited to well depth, seal depths, perforation depths, log borings, groundwater levels, groundwater gradient and surface seal construction features required by state laws, regulations and local ordinances, to the department of environmental health with in thirty days of completion of the assessment or mitigation. This section shall not be deemed to release any person from the requirements to file said report and other information to other appropriate governmental entities.

(Ord. 1707 § 1(part), 1999)

9.42.398 - Maintenance responsibility.

It shall be the responsibility of the property owner to maintain any well existing on his or her property in such a manner as to not create the risk of pollution or contamination of surface or subsurface waters or to create a safety hazard.

(Ord. 1707 § 1(part), 1999)

9.42.399 - Maintenance of dormant wells.

A. Except where the context otherwise requires, the following definitions shall govern the construction of this section:

    1. "Dormant well" shall mean any individual well with a casing diameter of eight inches or less which has not been used to supply water to a permitted use located on the same parcel for a period of ninety days or more.

    2. "Permitted use" shall have the same meaning set forth in Section 9.42.334.

B. Except as provided in subdivision (D), every dormant well shall be idled by (i) removal of the pump and motor to render the well inoperative, and (ii) covering the well with a watertight welded seal that cannot be removed without the use of tools to prevent injury to persons and the entrance of undesirable water, rodents or foreign matter.

C. Any person idling a well under this section, or reactivating a well that was previously idled, shall provide written notification to the Director of Environmental Health. It shall be unlawful and a violation of this chapter for any person to tamper with the seal placed upon a dormant well, or to extract water from a dormant well, or to cause, permit, aid, abet, suffer, or furnish equipment or labor for such tampering or extraction, without first notifying the director of environmental health as provided herein.

D. The following individual wells are exempt from this Section:

    1. An individual well actively used to supply an off-parcel use for which a permit has been issued in accordance with Chapter 9.40 of this Code, in compliance with the terms of that permit, shall not be considered a dormant well for purposes of this chapter.

E. Any dormant well that is not idled in the manner set forth in this subsection is hereby declared to be a public nuisance. Such nuisance may be abated in the manner set forth in Chapter 10.16, in addition to any other remedies.

(Ord. No. 2006, § 5, 6-9-2015)

ARTICLE IV. - DESTRUCTION OF WELLS

9.42.410 - Purpose.

A. A well that is no longer useful (including exploration and test holes) shall be destroyed in order to:

   1. Assure that the groundwater supply is protected and preserved for future use;

   2. Eliminate potential physical hazard.

B. Observation or test wells used in the investigation or management of groundwater basins by government agencies or engineering or research organizations are not considered abandoned so long as they are maintained for this purpose. However, such wells shall be covered with an appropriate cap, bearing the label, "Observation Well," and the name of the agency or organization, and preferably shall be locked when measurements are not being made. When these wells are no longer used for this purpose, or for supplying water, they shall be considered abandoned.

(Ord. 1707 § 1(part), 1999)

9.42.415 - Abatement of abandoned wells.

All persons owning an abandoned well as defined in this chapter, except those excluded by California Health and Safety Code Section 24440, shall destroy it according to the standards contained in this article.

(Ord. 1707 § 1(part), 1999)

9.42.420 - Requirements—General.

All abandoned wells and exploration or test holes shall be destroyed. Destruction of a well shall consist of the complete filling of the well in accordance with the procedures described in Section 9.42.430.

(Ord. 1707 § 1(part), 1999)

9.42.430 - Requirements—Designated.

A. Preliminary Work. Before the well is destroyed, it shall be investigated to determine its condition, details of construction, and whether there are obstructions that will interfere with the process of filling and sealing. This may include the use of downhole television and photography for visual inspection of the well.

   1. If there are any obstructions, they shall be removed, if possible, by cleaning out the hole.

   2. Where necessary, to ensure that sealing material fills not only the well casing but also any annular space or nearby voids within the zone(s) to be sealed, the casing should be perforated or otherwise punctured.

   3. In some wells, it may be necessary or desirable to remove a part of the casing. However, in many instances, this can be done only as the well is filled. For dug wells, as much of the lining as is possible (or safe) should be removed prior to filling.

B. Filling and Sealing Conditions. The requirements set forth in this subsection are to be observed when certain conditions are encountered:

1. Well Wholly Situated in Unconsolidated Material in an Unconfined Groundwater Zone. If the groundwater supplies are within fifty feet (fifteen meters) of the surface, the upper twenty feet (six meters) shall be sealed with impervious material and the remainder of the well shall be filled with clay, sand, or suitable inorganic material (see subsection (D) of this section).

2. Well Penetrating Several Aquifers or Formations. In all cases the upper twenty feet (six meters) of the well shall be sealed with impervious material. In areas where the interchange of water between aquifers may result in a significant impairment of the quality of water in one or more aquifers, or will result in a loss of artesian pressure, the well shall be filled and sealed so as to prevent such interchange. Sand or other suitable inorganic material may be placed opposite the producing aquifers and other formations where impervious sealing material is not required. To prevent the vertical movement of water from the producing formation, impervious material must be placed opposite confining formations above and below the producing formations for a distance of ten feet (three meters) or more. The formation producing the deleterious water shall be sealed by placing impervious material opposite the formation, and opposite the confining formations for a sufficient vertical distance, but no less than ten feet (three meters) in both directions, or in the case of bottom waters in the upward direction. In locations where interchange is in no way detrimental, suitable inorganic material may be placed opposite the formations penetrated. When the boundaries of the various formations are unknown, alternate layers of impervious and pervious material shall be placed in the well.

3. Well Penetrating Creviced or Fractured Rock. If creviced or fractured rock formations are encountered just below the surface, the portions of the well opposite this formation shall be sealed with neat cement, sand- cement grout or concrete. If these formations extend to considerable depth, alternate layers of coarse stone (one-quarter to four inches) and cement grout or concrete may be used to fill the well. Fine-grained material shall not be used as fill material for creviced or fractured rock formations.

4. Well in Noncreviced, Consolidated Formation. The upper twenty feet (6.1 meters) of a well in a noncreviced consolidated formation shall be filled with impervious material. The remainder of the well may be filled with clay or other suitable inorganic material.

5. Well Penetrating Specific Aquifers, Local Conditions. Under certain local conditions, the enforcing agency may require that specific aquifers or formations be sealed off during destruction of the well.

C. Placement of Material. The requirements set forth in this subsection shall be observed in placing fill or sealing material in wells to be destroyed.

1. The well shall be filled with the appropriate material (as described in subsection D of this section) from the bottom of the well up.

2. Where neat cement grout, sand-cement grout or concrete is used, it shall be poured in one continuous operation.

3. Sealing material shall be placed in the interval or intervals to be sealed by methods that prevent free fall, dilution, and/or separation of aggregates from cementing materials.

4. Where the head (pressure) producing flow is great, special care and methods must be used to restrict the flow while placing the sealing material. In such cases, the casing must be perforated opposite the area to be sealed and the sealing material forced out under pressure into the surrounding formation.

5. In destroying gravel-packed wells, the casing shall be perforated otherwise punctured opposite the area to be sealed. The sealing material shall then be placed within the casing, completely filling the portion adjacent the area to be sealed and then forced out under pressure into the gravel envelope.

6. When pressure is applied to force sealing material into the annular space, the pressure shall be maintained for a length of time sufficient for the cementing mixture to set.

7. To assure that the well is filled and there has been no jamming or bridging of material, verification shall be made that the volume of material placed in the well installation at least equals the volume of the empty hole.

D. Materials. Requirements for sealing and filling materials are as set forth in this subsection:

1. Impervious Sealing Materials. Sealing materials shall have such a low permeability that the volume of water passing through them is of small consequence. Suitable impervious materials include neat cement, sand-cement grout, concrete, and bentonite clay, all of which are described in Section 9.42.340C of this chapter; and well-proportioned mixes of silts, sands, and clay (or cement).

2. Filler Material. Many materials are suitable for use as a filler in destroying wells. These include clay, silt, sand, gravel, crushed stone, native soils, mixtures of the aforementioned types, and those described in subdivision 1 of this subsection. Material containing organic matter shall not be used.

E. Additional Requirements. In all incorporated areas or unincorporated areas where the local enforcement agency deems it necessary, the following additional requirements must be met:

1. A hole shall be excavated around the well casing to a depth of five feet (1.5 meters) below the ground surface and the well casing removed to the bottom of the excavation.

2. The sealing material used for the upper portion of the well shall be allowed to spill over into the excavation to set, the excavation shall be filled with native soil.

F. Temporary Cover. During periods when no work is being done on the well, such as overnight or while waiting for sealing material to set, the well and surrounding excavation, if any, shall be covered. The cover shall be sufficiently strong and well enough anchored to prevent the introduction of foreign material into the well and to protect the public from a potentially hazardous situation.

(Ord. 1707 § 1(part), 1999)

ARTICLE V. - VIOLATIONS, ENFORCEMENT AND APPEALS

9.42.510 - Violations.

Any person who does, permits, or causes any work to be done in violation of this chapter or abandons any well without first complying with this chapter, is guilty of a misdemeanor punishable by a fine not exceeding five hundred dollars or by imprisonment not exceeding six months, or by both such fine and imprisonment. A separate offense is committed upon each day or portion thereof during or on which a violation occurs or continues.

(Ord. 1707 § 1(part), 1999)

9.42.515 - Civil enforcement-Nuisance.

Violation of this chapter constitutes a nuisance and may be redressed in the manner hereinafter set forth by civil action. In addition to being subject to criminal prosecution, any person who violates any of the provisions of this chapter may be made the subject of civil action. Appropriate civil action includes, but is not limited to, injunctive relief and cost recovery.

(Ord. 1707 § 1(part), 1999)

9.42.516 - Remedies cumulative.

The remedies available to enforce this chapter are in addition to any other remedies available under ordinance or statute, and do not replace or supplant any remedy, but are cumulative thereto.

(Ord. 1707 § 1(part), 1999)

9.42.520 - Enforcement.

The health officer or his or her agent, the department of environmental health, shall be empowered to enforce the provisions of this chapter and any amendments herein or hereafter adopted.

(Ord. 1707 § 1(part), 1999)

9.42.530 - Appeals.

The board of supervisors shall act as a board of appeals in making a correct determination of any appeal arising from actions of the enforcing agency. Appeals shall be made in writing accompanied with an appropriate appeal fee, if adopted, and the appellant may appear in person before the board or be represented by an attorney and may introduce evidence to support their claims. Appeals shall be heard at reasonable times at the convenience of this board but no later than thirty days after receipt thereof. The appellant shall cause to be made at his own expense any tests or research required by the board to substantiate his claims. This section does not authorize appeals to the board from any action of the enforcing agency authorized or required by state law, regulation or county ordinance.

(Ord. 1707 § 1(part), 1999)