

# EXHIBIT D

Revisions to Zoning Ordinance  
Sections 29.2 and 30

~~EXISTING TEXT~~

## SECTION 29.2 CRITICAL WATER RESOURCE OVERLAY ZONE "CWR"

### A. APPLICABILITY OF OVERLAY ZONE:

1. The initials "CWR" appearing after a zone abbreviation on a Zoning Map indicates that the property so classified is subject to provisions of this Article in addition to those of the underlying zone.
2. The "CWR" Zone may be applied to any land within the County for which the Board of Supervisors, after public hearing, determines that development may have a detrimental impact on water resources such as those resulting from extractions of ground and/or surface waters which would be beyond the capability of the resource or by contamination of ground or surface waters. **[NEW INSERTED TEXT HERE]**

B. USES PERMITTED: All uses permitted under the basic land use zones; provided, however, that said use is found to conform to the "CWR" Overlay. **[NEW INSERTED TEXT HERE]**

### C. DEVELOPMENT STANDARDS:

1. ~~Water Quantity. Where the "CWR" Overlay Zone pertains to the amount of water available, proof of such water availability shall be demonstrated prior to the division of any parcel of land. Water availability shall be proven by one or all of the following methods:~~
  - ~~a. An on-site well located a minimum of one hundred (100) feet from any stream, and drilled to a minimum depth of fifty (50) feet, for each proposed parcel producing year-round flows of not less than 1-1/2 gpm; or~~
  - ~~b. A spring on each proposed parcel producing year-round flows of not less than 1-1/2 gpm; or~~
  - ~~c. Provide water to each proposed parcel from a public (community) water system defined and regulated under the California Health and Safety Code, Division 5, Pure Water Law.~~
2. ~~Water Quality. Where the "CWR" Overlay pertains to the quality of water, proof of safe drinking water shall be demonstrated prior to the division of any parcel of land. The following conditions may be required at the discretion of the County Health Department:~~
  - ~~a. Chemical analysis of the subject water source to be performed by a state certified laboratory for chemical analysis.~~

~~b. Bacteriological analysis of the subject water source to be performed by a state certified laboratory for bacteriological analysis.~~

~~The nature and scope of said analyses shall be at the discretion of the County Health Department.~~

~~D. EXCEPTIONS: The provisions of this Section shall not be applicable to divisions whereby it is found by the Board of Supervisors that said division would not in any manner necessitate the use of water, either for human or animal consumption or irrigation. Upon such finding, all documents pertaining to said division shall be clearly marked by the zone abbreviation followed by the initials "CWRN". No building, septic tank or other like permits may be issued by any agency for land so designated "CWRN".~~

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1. The initials "CWR" appearing after a zone abbreviation on a Zoning Map indicates that the property so classified is subject to provisions of this Article in addition to those of the underlying zone.
2. The "CWR" Zone may be applied to any land within the County for which the Board of Supervisors, after public hearing, determines that development may have a detrimental impact on water resources such as those resulting from extractions of ground and/or surface waters which would be beyond the capability of the resource or by contamination of ground or surface waters. At the time of adoption of this "CWR" zoning overlay and standards, "CWR" applies to the following watersheds: Hayfork Creek, Rattlesnake Creek (tributary to the South Fork Trinity River), Browns Creek, Indian Creek, lower Weaver Creek, Little Browns Creek, Democrat Gulch, and West Weaver Creek.

### B. USES PERMITTED: All uses permitted under the basic land use zones and any other overlay zones; provided, however, that said use is found to conform to the "CWR" overlay. Where the "CWR" overlay standards are more restrictive than other overlay standards, the "CWR" overlay standards shall prevail.

### C. DEVELOPMENT STANDARDS:

1. Water Quantity. The following standards shall apply prior to the division of any parcel of land:
  - a. Proof of water availability shall be demonstrated by means of a hydrological study approved by the Planning Department with the concurrence of the Environmental Health Department regardless of the water source proposed (for example, well, spring, or surface water) with the exception of where the entire subdivision will be served by an existing and operating water system operated by a public agency as described in the Land Division Ordinance of the County of Trinity, Title 16 of the County code, Section 16.48.123 Subdivision Improvements, Pubic Water Supply. All data shall be gathered during the dry season and prior to the start of the rainy season. Water sources on all parcels shall be collectively evaluated for overall impact to local groundwater supplies. The hydrological study shall satisfy the requirements described in Section 16.48.123 of the County's Land Division Ordinance.
  - b. Best Management Practices (BMPs) to preserve sufficient stream flows for downstream beneficial uses shall be required where water is diverted from a stream or produced by a well within 100 feet of any stream. Sufficient stream flows will be ensured at all times and are defined as those that meet all downstream riparian water obligations and beneficial uses set forth in the California Constitution and the Porter-Cologne Act. BMPs shall conform to current County Building Code and State

Green Code requirements. Proof that such devices have been installed will be required before a ministerial approval is finalized. BMPs used to demonstrate compliance with sufficient stream flows may include:

- i. Greywater systems for approved greywater uses on-site to the maximum extent practical and feasible. Greywater systems must be in place prior to the final approval of a building or septic tank permit.
  - ii. Stormwater collection and storage as outlined in the [5C Program's Stormwater Management Guide](#), an online guide found at <http://www.5counties.org/stormwater.htm>. A hard copy is also available at the County Planning and Building Department.
  - iii. Trickle fill (also known as passive diversion) devices designed to allow diversion of water only during times of sufficient flow. BMP suggestions are available at the 5C Program website at <http://www.5counties.org/trickle.htm> as well as the County Planning and Building Department.
  - iv. Additional methods as approved by the County Planning and Building Departments.
2. For existing parcels, that are not currently served by an existing and operating water system operated by a public agency, that are requesting ministerial and discretionary permitting and/or entitlement actions for a new dwelling, commercial, or industrial activities where water will be required, the following standards shall apply:
- a. In order to protect the safety and welfare of residents, water storage facilities shall be installed on-site on each parcel prior to the issuance of a building permit or other approval. Minimum domestic water use requirements shall be 2,500 gallons of storage per proposed parcel, which shall not include any required fire supply storage set forth in the Safety Element of the General Plan.
  - b. Best Management Practices (BMPs) to preserve sufficient stream flows for downstream beneficial uses shall be required where water is diverted from a stream or produced by a well within 100 feet of any stream. Sufficient stream flows will be ensured at all times and are defined as those that meet all downstream riparian water obligations and beneficial uses set forth in the California Constitution and the Porter-Cologne Act. BMPs shall conform to current County Building Code and State Green Code requirements. Proof that such devices have been installed will be required before a ministerial approval is finalized. BMPs used to demonstrate compliance with sufficient stream flows may include:
    - i. Greywater systems for approved greywater uses on-site to the maximum extent practical and feasible. Greywater systems must be in place prior to the final approval of a building or septic tank permit.
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- iv. Additional methods as approved by the County Planning and Building Departments.

## SECTION 30 GENERAL PROVISIONS AND EXCEPTIONS

All regulations in this Ordinance pertaining to the districts established in Section 4 hereof are subject to the General Provisions, Conditions and Exceptions contained in this Section.

### A. AMBIGUITY

If any ambiguity arises concerning the appropriate classification of a particular use within the meaning and the intent of this Ordinance, or with respect to matter of height, area requirements or zone requirements as set forth herein, the Planning Commission shall ascertain all pertinent facts, and by resolution set forth its findings and interpretations and thereafter such interpretation shall govern. Similar use, as used in this Ordinance, means the same character of use and no less restricted in nature, i.e., generates no more traffic, parking, dust, noise, etc., and if retail uses are specified, "similar" means retail.

### B. USE

All of the uses listed in this Section, and all matters directly related thereto are declared to be uses possessing characteristics of such unique and special classification as making practical their inclusion in any class of use set forth in the various districts defined herein, and therefore the authority for and location of the operation of any of the uses designated shall be subject to the issuance of a Use Permit in accordance with the provisions of Section 32 hereof.

1. When any of the following uses are to be established closer than two-hundred (200) feet to the boundary of any residential district: Dance hall, road house, night club, commercial club, or any establishment where liquor is served, or any commercial place of amusement or recreation, or any place where entertainers are provided.
2. Circus, carnival, open-air theater, racetrack, or similar establishments involving assemblages of people and vehicles.
3. The removal of minerals and natural materials for commercial purposes. This does not include the excavation or removal of materials for a normal construction of buildings, structures, or underground facilities; or the removal of minerals, natural materials or conifers, where such removal is motivated by land leveling as its prime objective.
  1. Drilling for, and/or removal of oil or gas.
  2. Temporary operation of a portable asphalt or concrete batch plant, portable rock screening unit or crusher and/or similar uses as determined by the Planning Commission.

3. Examples of such projects include, but are not limited to: the construction, maintenance or repair of roads, bridges, airports, flood control facilities, utilities, bicycle or pedestrian paths; and improvement projects for fish and wildlife habitat. The use permit shall specify the length of time the temporary use is permitted to operate, but shall not exceed two (2) years without further additional review by the Planning Commission.
4. Directional and informational signs in any district. The location, copy and design of said signs shall be subject to approval of the Planning Commission. No one sign shall exceed a maximum area of four-hundred (400) square feet. Such sign shall be permitted only on property adjacent to freeways approaching communities and within one mile of said communities and which State highways and freeways pass through or near said communities.
5. Juvenile holding facility and related uses not otherwise addressed in this Ordinance or exempted by State law.
6. Guest Ranches, Boarding Schools, Foster Homes, Summer Schools or similar uses in any district where permitted and having an occupancy of seven (7) or more guest students, mentally retarded or needy children on any parcel of land under one ownership shall require a use permit before any use or extension of the present use may be permitted. (Ord. 315-16)
7. Family Care Mobile Homes
  - A. One mobile home in addition to a dwelling otherwise permitted under this ordinance may be temporarily placed on a parcel if all of the following criteria are met:
    1. The temporary mobile home is for the exclusive use and temporary home to provide in-home care to a grandparent or grandparents, parent or parents, siblings or children, of the occupant of the principal dwelling unit; or the principal dwelling unit may be designated as the family care residence, in which case the temporary mobile home shall be utilized by the relative providing the care; and
    2. A Director's Use Permit is first secured, pursuant to Section 32 of this Ordinance; and
    3. The Adult Services division of the County Department of Health and Human Services has provided written verification to the Planning Director confirming that there is an existing medical need for temporary in-home care.



The written verification shall include a specific description of the in-home care services currently required to be provided to the person, such as medication monitoring and management, pain and symptom management, home safety evaluation, IV therapy, blood draws for lab work, tube feeding and management, and end of life care.

The written verification shall be in sufficient detail so that the Planning director, or the Planning Commission, can determine what services are required to enable the person to be maintained in his or her home, rather than being placed in a skilled nursing facility or similar high cost out of home care facility. The assets or income of the person or the family shall not be a factor determining the need for in-home care.

4. Written verification by Adult Services that the intended occupant(s) of the mobile home cannot reasonably be housed in the principle dwelling unit. Said written verification shall state the limitations of the principle dwelling and the needs of the proposed occupant that establish the mobile home is necessary; and
5. Requirements of the Health Department, the Building Department and other public agencies have been met.

B. The placement, installation, and maintenance of the mobile home shall comply with the following:

1. The Family Care Mobile home shall be limited in size to a singlewide unit not to exceed 800 square feet in total area.
2. Running gear, including tires, shall remain operable at all times.
3. Skirting may be affixed to the mobile home for energy conservation, but no skirting or other improvements (including, but not limited to, a cabana, ramada, or deck) shall be affixed or placed adjacent to the mobile home that may limit its immediate mobility. A porch may be placed adjacent to the unit so long as the construction of the porch allows for the immediate separation and removal of the porch from the unit to allow for the mobile home's immediate mobility.
4. The mobile home shall be currently registered pursuant to Chapter 4.7 (commencing with Section 18075) of Part 2 of Division 13 of the California Health and Safety Code.

The term of any use permit issued pursuant to this subsection shall be two years, provided that notwithstanding the provisions of Section 32(E)(4) of this ordinance, the permit may be renewed annually. Application for renewal shall be made prior to expiration of the permit; shall not require a public hearing, unless specified by the Planning Director; shall be subject to a filing fee as specified by resolution of the Board of Supervisors; and shall include confirmation by adult services of the medical need for continuing the temporary in-home care.

- a. If the party who qualified for the health care mobile home dies, or does not reside in the mobile home for 30 consecutive days, then the use permit issued pursuant to this subsection shall automatically terminate.
- b. In case of expiration of the permit or termination of use of the mobile home by other than expiration of the term, the mobile home shall be removed from the property within 30 days of the date of expiration or termination and the mobile home shall not be occupied during that period.
- c. A memorandum of the use permit shall be issued by the Planning Department and recorded in the Office of the County Recorder, of Trinity County, setting forth the expiration date and the terms and conditions of the permit.

C. UTILITIES:

1. Transmission Facilities.

- a. Purpose: It is the intent of this Section to implement with a single procedure Section 12808.5 of the California Public Utilities Code and Sections 53091 and 53096 of the California Government Code which authorizes the County to review and to approve or disapprove the location and construction of facilities for the transmission of electrical energy, operating at 13,000 volts or more (13KVA), such as substations, transmission lines and poles, and accessory structures.

It is the purpose of this Section to provide for these facilities in the County's communities in the most compatible and least obtrusive manner, while insuring that electrical energy is made available to every part of the County. The procedural rules set forth here in are designed to insure that sufficient information is provided in decision on applications submitted.

b. Definitions. For purposes of this Section, the following definitions shall apply:

1. Direct impact shall mean interference with the use of enjoyment of a person's property, real or personal, such as visual impacts, noise impact and interference.
2. Feasible shall mean capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors.
3. High voltage transmission facilities shall mean electrical transmission lines, poles, and accessory structures operated at the electrical potential of 13,000 volts or greater, and substations where at least one of the transmission lines connecting with the facility is operated at the electrical potential of 13,000 volts or greater.
4. Substation shall mean a facility which transforms electrical energy to a lesser voltage for the purposes of sub-regional or localized distribution, or which functions as a transition point from overhead to underground acts as the point of convergence for two or more transmission lines.

c. Procedure:

1. Location. High voltage transmission facilities may be located in any zone subject to the provisions of this Section.
2. Permit Required. A use permit is required to construct and locate a high voltage transmission facility in any zone. Application for a transmission facility permit shall be filed with the Planning Commission and shall be subject to a filing and investigation fee.
3. Information to Accompany Permit Application. An application for a use permit shall be accompanied by plans and the environmental document prepared and certified pursuant to the California Environmental Quality Act Public Resources Code Section 21000 et seq., sufficient in detail to allow the Planning Commission to determine the exact nature and extent of the use. The application shall include at a minimum the following information:
  - a. The expected electrical requirements of the areas within the District or area which will be affected by the project;

- b. The locations and capacities of the high voltage transmission facilities proposed, together with a description of basic technical and design concepts that favor the selection of the chosen locations and list of feasible alternative sites;
- c. An assessment of the type and magnitude of the direct impacts of the proposed project and of each alternative;
- d. Mitigation measures:
  - 1. The measures to be implemented to compensate for or mitigate the direct impacts of the project;
  - 2. Where any portion of a proposed project is adjacent to residentially zoned or residentially used property, or an environmentally sensitive area, a discussion of feasible routing alternatives;
- e. Any other information the Planning Director deems necessary to allow the Planning Commission to determine the exact nature and extent of the proposed project and any impacts of the project.

4. Hearings:

- a. Within 30 days after an application for a use permit is filed and accepted as complete the Planning Commission shall hold a public hearing thereon. The procedural requirements for the hearing shall be governed by Section 32 of this Ordinance; provided, that said hearing may be initiated only by the permit applicant.
- b. Mailed notice of the hearing shall be provided at least 10 days prior to the hearing to the owners of all property within 300 feet of the property subject to the permit; provided, that if such mailed notice would result in notice to more than 250 persons, as an alternative to such mailed notices, notice may be given by placing an advertisement in a newspaper of general circulation within the area affected by the proposed facilities.
- c. The Planning Commission shall approve, approve an alternative, or deny the permit.
- d. Review Criteria and Findings. The Planning Commission shall evaluate applications for such use permits in accordance with intent and purpose statement contained in Subsection A of this Section and any applicable land use plans and policies adopted by the Board of Supervisors.

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- e. Any decision of the Planning Commission on a transmission facilities permit application shall be based on findings concerning:
  1. The consistency of the proposed facilities with the County's General Plan and Specific Plans.
  2. Whether there are feasible alternatives to the proposal.
  3. Such other factors related to the public health, safety and welfare.
  4. Environmentally sensitive areas.
2. Other Public Utilities. Other public utilities including, but not limited to, water, telephone, and Cable TV systems, may be permitted in any district upon first obtaining a use permit, provided that a use permit shall not be required for underground gas, water, telephone or Cable TV systems located within a special district formed for such purposes. Also, a use permit shall not be required for individual service connections or extension.
3. Power Generation and Transmission Facilities. All power generating or transmitting facilities shall conform to the following development and performance standards:
  - a. Noise. All power generating facilities shall be constructed, adjusted or insulated to conform with the noise standards established in Subsection J (3) of this Section.
  - b. Enclosures. All power generating equipment shall be completely enclosed within a building or a fence at least six (6) feet in height. Plans for such enclosures shall be submitted with the permit application.

D. SPECIAL REGULATIONS:

1. Regulations for Private Stables.
  - a. The following regulations shall apply in all cases where a use permit has been issued for the maintenance of a private stable:
    1. Minimum building site area for the first two horses - one (1) acre; each additional horse twenty thousand (20,000) square feet in addition to the one acre.
    2. Stables and paddocks shall not be less than fifty (50) feet from the front property line, nor less than twenty (20) feet from any side or rear property lines, nor closer than forty (40) feet from any dwelling on the same or contiguous property.

2. Temporary Keeping of Livestock in Residential Zoning Districts. (Ord. No. 315-648)

The Planning Director shall establish a waiver process in conjunction with 4H, FFA or student livestock projects in residential zoning districts where animal rearing is prohibited. Such waivers shall include but not be limited to the notification of neighbors, annual renewal and provide for adequate setbacks to reasonably protect neighboring uses. An approved waiver shall be for less than one year and will terminate at the completion of the Trinity County Fair. The Planning Director shall consult with the County Agriculture Commissioner, high school agricultural advisors and the county 4H advisor in developing standards for the waiver process.

3. Second Dwelling Units. (Ordinance No. 315-726)

- a. Purpose. It is the intent of this subsection to provide a procedure whereby one additional dwelling unit can be located on a lot already developed with one dwelling unit. Furthermore, it is also the intent of this section to require that such units only be located on parcels, which are physically capable of accommodating an additional dwelling unit.
- b. Definitions. As used in this Section, the following terms mean:
  1. "Second dwelling unit" is either a detached or attached dwelling unit, which provides complete, independent living facilities for one or more persons, located on the same lot as the existing dwelling. It shall include permanent provisions for living, sleeping, eating, cooking, sanitation, and other such utilities.
  2. "Living area" means the interior habitable area of a dwelling unit including basements and attics but does not include a garage or any accessory structure.
- c. Development Standards. The development standards shall be as follows:
  1. The second dwelling unit may be rented but may not be sold independent of the primary dwelling unit unless the original parcel upon which it is located is subdivided in accordance with the rules and regulations of the California Subdivision Map Act and the Trinity County Subdivision Ordinance.
  2. Second dwelling units may only be located on parcels zoned Single Family, Rural Residential, Duplex and Multiple Family. Second dwelling units are prohibited from being located in other zoning districts unless expressly authorized in other Sections of this Ordinance.

3. The increased floor area of an attached second unit shall not exceed 30 percent of the existing living area.
4. The total floor area of a detached second dwelling unit shall not be less than 256 square feet, or as defined by the California Uniform Building Code as a minimum dwelling unit.
5. The second dwelling unit shall conform to the development standards for the zoning district in which it is located, including, but not limited to setback, height, lot coverage, and density standards (these are based on the minimum parcel size per dwelling unit, as indicated in the land use designation chart of the General Plan), except a minimum ten (10) foot setback is required between detached dwelling units. This setback shall be increased to 60 feet for those parcels where the zoning requires a minimum density of one (1) acre or more per dwelling unit, or the “same practical effect” if approved by the California Department of Forestry and Fire Protection (CDF), in accordance with CCR 1270-1276.
6. The second dwelling unit shall be individually serviced by a sewer hook-up or individual on-site sewage disposal system approved by the Environmental Health Division of the Building and Development Services Department. The Environmental Health Division shall also evaluate the existing system to ensure compliance, sanitary operation and future repair area.
7. Both the primary and the second dwelling unit may utilize a common water supply provided that: 1) a minimum flow of 3 gallons per minute per unit is available for domestic use in addition to meeting water supply requirements for fire protection; ~~2) and~~ the system has been approved by both the Environmental Health Division and the appropriate fire protection agency; and 3) requirements of the Critical Water Resources (CWR) overlay zoning district are satisfied.
8. A Building permit is required. The second dwelling unit shall be constructed in accordance with the local building code requirements.
9. The second dwelling unit shall meet the requirements of the Trinity County Fire Safe Ordinance #1162 for new structures and/or any applicable local fire code.
10. If the second dwelling unit or main dwelling or main dwelling will be a manufactured home, and is to be located on a parcel with Mobile Home Standards overlay (MHS) zoning, then the manufactured home shall meet all codes required by the MHS overlay.

E. HEIGHT:

1. Where chimneys, silos, cupolas, flag poles, monuments, gas storage holders, radio and other towers, water tanks, church steeples and similar structures and mechanical appurtenances are permitted in the district, height limits may be exceeded upon securing a use permit in each case. Local distribution poles for public utilities shall be allowed in all districts and to greater heights than permitted for the districts without receiving a use permit.
2. In any district with a height limit of less than fifty (50) feet, public buildings, schools, churches, hospitals, and other institutions permitted in each district may be erected to a height exceeding that permitted in the district, provided that the gross floor area ratio to building site ratio shall not be increased unless specifically permitted in the district, and provided that the light angle of 70 degrees shall be established and maintained.
3. Upon securing a use permit, any building in any C, R-3, or M District may be erected to a height exceeding that herein specified for such district provided that the floor area ratio to building site area does not exceed that specified in the district.
4. Upon the securing of a use permit as provided herein any building may be erected to a height exceeding that herein, before specified for the respective districts, provided that the gross floor area of such buildings shall not exceed that possible for a building in such respective district erected within the height limit herein before specified for such district.
5. Accessory buildings in R, A, H, and RR Districts shall be limited to a maximum height of twenty-five (25) feet, provided that additional height may be permitted upon securing a use permit; and provided further, that this provision shall not apply to heights of agricultural structures in A, RR, or SC Districts.
6. Where the average slope of a lot is greater than the ratio of one foot rise or fall in seven feet of distance from the established street elevation at the property line, one story in addition to the number permitted in the district in which said lot is situated shall be permitted on the downhill side of any building, provided that the height of the building shall not be increased above the limit specified for said district.

F. YARDS:

1. In any case where an official building line has been established as a part of the Circulation Element of the General Plan, the required yards on the street side shall be measured from such official plan lines, and in no case shall the provisions of this ordinance be construed in permitting any structure to extend beyond such official plan line.



2. In any case where building lines have been established on any Sectional District Map for the purpose of determining building locations with respect to street or highway right-of-way lines, the required yards on the street side shall be measured from such building lines.

For the purpose of determining building locations with respect to street and highway right-of-way lines, building lines are hereby established as shown on the Sectional District Maps adopted under Section 9 of this Ordinance.

3. For the purpose of promoting the public health, safety and general welfare, a fifty (50) foot building setback line is hereby established on all Federal Aid Secondary, and all State highways in the County.

No building or structure (excluding open fences or solid fences less than three (3) feet in height) shall hereafter be erected, constructed or moved so that any portion of the structure is located within the right-of-way of any public road within a public road easement, and no existing structure shall be added to or enlarged so that the addition or enlargement is located within the right-of-way of any public road or within a public road easement.

No building or structure (excluding open fences and solid fences less than three (3) feet in height) shall hereafter be erected, constructed or moved so that any portion of same shall be closer than fifty (50) feet to the center line and no existing building or structure shall be added to or enlarged so that such addition or enlargements shall be closer than fifty (50) feet to the center line of the Federal Aid Secondaries and all State highways.

4. Architectural features such as cornices, eaves and canopies may extend a maximum of thirty (30) inches into any required side yard. Eaves and canopies may extend a maximum of thirty (30) inches into any required front or rear yard. Fire places, not exceeding eight (8) feet in breadth may extend not more than thirty (30) inches into any required front, side or rear yard.

Open, uncovered, raised porches, landing places or outside stairways may project not more than three (3) feet into any required side yard; and not exceeding six (6) feet into any required front or rear yard.

In any R or R-R District, where 50% or more of the building sites on any one block or portion thereof in the same districts have been improved with buildings, the required front yard shall be a depth equal to the average of the front yards of the improved main buildings, to a maximum of that specified for the district in which such building site is located.

5. In case a dwelling is to be located so that the front or rear thereof faces any side lot line, such dwelling shall not be less than ten (10) feet from such lot line.
6. In case a building site is less than sixty (60) feet in width, side yards equal to 10% of the lot width, but no less than four (4) feet, shall be required, except in C or M Districts.
7. In the case of a corner lot adjacent to a key lot, the required side yard on the street side for any building within twenty-five (25) feet of the side line of the key lot shall be equal to the front yard required on the key lot, and if more than twenty-five (25) feet from such side line, the required side yard shall be 50% of the front yard required on the key lot.
8. RESERVED
9. In case of a lot abutting upon two or more streets, the main and accessory buildings shall not be erected so as to encroach upon the front yard required on any of the streets.
10. RESERVED.
11. Nothing contained in the General Provisions shall be deemed to reduce the special yard requirements as set forth in the regulations for any "R", "C-H", "R-R" or "A" Districts.
12. Structures, except utility poles and utility equipment appurtenant thereto, shall not be located so as to encroach on any utility or road easement or right-of-way.

#### G. REGULATIONS FOR SWIMMING POOLS

Swimming pools in any "R" District shall be constructed on the rear half of the lot, or fifty (50) feet from the front lot line, whichever is the less, or unless a different location is approved by the Planning Commission upon the securing of a use permit. Such pool shall not be located closer than five (5) feet from any rear lot line or side line. On the street side of any corner lot, where the rear of a lot line abuts a side lot line. The Planning Commission may reduce these requirements by fifty percent (50%) upon securing a use permit in each case.

Filter and heating systems for such pools shall not be located closer than twenty (20) feet to any dwelling other than the owner's.

No pool shall occupy over forty percent (40%) of the required rear yard. Coverage by a swimming pool shall not be considered in measuring maximum lot coverage. All such swimming pools shall be completely enclosed by a fence at least six (6) feet in height, and all gates shall be self-latching.

## H. RESERVED WATERBODY PROTECTION SETBACKS

In order to protect public welfare and safety, property, and natural resources, development and land use activities shall be restricted in areas immediately adjacent to waterbodies.

1. Within the distances specified in the California Forest Practice Act, 14 CCR 916 et seq. and/or 14 CCR 936 et seq., from a stream, a wetland, lake, or pond, the following uses and activities are prohibited :

- a. Construction;
- b. Grading;
- c. Placement of fill;
- d. Landscaping;
- e. Removal of native species; and/or
- f. Forest conversion.

2. Exceptions to the setback requirements are:

- a. Existing lawns, annual or perennial agricultural, and/or recreational crops and appurtenant structures (e.g., water storage tanks, pumps, irrigation systems) that legally existed on the date of the adoption of this ordinance section;
- b. Fire safe thinning, pruning fuel reduction, and other forest management activities which are required by insurance policies, ordinance, or state laws or permitted by ordinance or state laws;
- c. Remodeling of the interior or exterior of a legal building(s);
- d. Horizontal or vertical expansions of legally existing buildings that cumulatively are either 1) a maximum of 120 ft<sup>2</sup> in area ; or 2) ten percent of the square footage of the first floor of the building as it existed on the date of adoption of this ordinance section, whichever is greater;
- e. Replacement of a legally located building, deck or similar construction in the same location when the structure(s) was damaged or destroyed by fire, flood or other natural disaster. The replacement structure(s) would have to be mitigated with elevation, building materials or other methods so as to reduce, but not necessary entirely eliminate, risks of a repeat of the disaster that damaged or destroyed the previous structure(s);

- f. A parcel that legally existed prior to the effective date of this ordinance section whose size or shape makes it infeasible to build outside of the setback area;
  - g. Circumstances where development outside of the setback area would have greater impacts on hydrography, slope stability, sedimentation, riparian habitats, traffic circulation and/or other infrastructure than building within a setback area;
  - h. When the stream setback area is behind a maintained US Army Corps of Engineers levee.
3. Variances to the setback distance are possible if the applicant can demonstrate to the Planning Director, or the Planning Commission, that, given the proposed uses (and those allowed by the zoning district), a different buffer distance would sufficiently protect resources.

# EXHIBIT E

Revisions to Subdivision Ordinance

## Chapter 16.08

### DEFINITIONS

#### *Section*

16.08.010	Advisory Agency
16.08.020	Approved Access
16.08.030	Certificate of Compliance
16.08.040	Complete
16.08.050	Consistent with the General Plan and Specific Plans
16.08.060	Design
16.08.070	Improvements
16.08.080	Land Project
16.08.090	Latest Equalized Roll
16.08.100	Lot Line Adjustment
16.08.101	Lot Line Adjustment, Major
16.08.102	Lot Line Adjustment, Minor
16.08.110	Lot Line Merger
16.08.111	Preliminary Map
16.08.112	Tentative Subdivision Map
16.08.113	Final Map
16.08.114	Parcel Map
16.08.115	Reversion to Acreage Map
16.08.130	Public Waterway
16.08.140	Quarter-Quarter Division
16.08.150	Reasonable Public Access
16.08.155	Reasonable Public Access Easements
16.08.160	Subdivider
16.08.170	Subdivision
16.08.180	Subdivision Improvement Standards
16.08.190	Subdivision Map Act
<b>A-16.08.195</b>	<b>Surface Water</b>
16.08.200	Deleted per Ordinance No. 1094
16.08.210	Vesting Tentative Maps
16.08.220	Flag Lot

All terms used in this Ordinance which are defined in the Subdivision Map Act are used in this title as so defined. For the purpose of these regulations, the following words and phrases shall be construed as defined in this Chapter.

**Sec. 16.08.010      Advisory Agency**

**Sec. 16.08.155 Reasonable Public Access Easements**

Such easements are as defined in the State Map Act. Such easements also pertain to rivers, streams, and reservoirs. When read in context, "access" is used to describe a route from a road to a riverbank in or on the border of a subdivision (Para. 66478.4). This route need not cross the subdivision (Para. 66478.8). "Easement," as used in paragraph 66478.5, is a right to use part of the same riverbank for recreational, educational, and scientific pursuits. The right to use the bank and the right to a useable route to get there are distinguishable rights.

**Sec. 16.08.160 Subdivider**

Subdivider means a person, firm, corporation, partnership or association who proposes to divide, divides, or causes to be divided real property into a subdivision for himself or others, except that employees and consultants of such persons or entities acting in such capacity, are not "subdividers." (Ord. 352-2, Sec. 2, 1977; Ord. 352, Sec. 3(A) (14), 1975)

**Sec. 16.08.170 Subdivision**

Subdivision means the division, by any subdivider, of any unit or units of improved or unimproved land, or any portion thereof, shown on the latest equalized County assessment roll as a unit or as contiguous units, for the purpose of sale, lease or financing, whether immediate or future, except for leases of agricultural land for agricultural purposes. Property shall be considered as contiguous units, even if it is separated by roads, streets, utility easement or railroad rights-of way. "Subdivision" includes a condominium project, as defined in Section 1350 of the Civil Code, or the conversion of five (5) or more existing dwelling units to a stock cooperative, as defined in Section 11003.2 of the Business and Professions Code. As used in this Chapter, "agricultural purposes" means the cultivation of food or fiber or the grazing or pasturing of livestock.

**Sec. 16.08.190 Subdivision Map Act**

Subdivision Map Act refers to Division 2, commencing with Section 66410, of Title 7 of the Government Code of the State, and all amendments thereto. (Ord. 352-5, Sec. 1, 1979; Ord 352, Sec. 3(A) (17), 1975)

**Sec. 16.08.195 Surface Water**

Surface water refers to any river, stream, creek, wetland, pond, or source of water that collects and is usually accessed from the surface of the ground.

## Chapter 16.48

### SUBDIVISION IMPROVEMENTS

#### **Section**

- 16.48.010 Applicability**
- 16.48.020 General**
- 16.48.030 Improvements Required**
- 16.48.040 Improvement Plans and Permits Required**
- 16.48.050 Preparation and Form of Improvement Plans**
- 16.48.060 Commencement of Improvement Work**
- 16.48.070 Construction and Installation Standards**
- 16.48.080 Temporary Improvements**
- 16.48.090 Inspection of Improvement Work**
- 16.48.100 Coordination of Improvement Work**
- 16.48.110 Improvements Waived**
- 16.48.120 Specific Improvement Requirements**
- 16.48.121 Public Sewage Disposal**
- 16.48.122 Individual or On-site Sewage Disposal**
- 16.48.123 Public Water Supply**
- 16.48.124 Individual or On-site Water Availability**
- 16.48.125 Solid Waste Disposal**
- 16.48.126 Road Improvements**
- 16.48.127 Fire Protection Improvements**
- 16.48.130 Oversizing Improvements - Reimbursement**
- 16.48.140 Improvement Agreement**
- 16.48.150 Form, Filing and Term of Improvement Agreement**
- 16.48.180 Liability for Alterations or Changes**
- 16.48.190 Release of Improvement Security - Completion of Work**
- 16.48.200 Withholding of Building Permits**

#### **Sec. 16.48.010 Applicability**

All divisions of land, and the lots and parcels resulting therefrom, shall be subject to the provisions of this Chapter.

#### **Sec. 16.48.020 General**

The size, design, character, grade, location and orientation, and configuration of lots within a proposed subdivision and improvements required in connection therewith, shall be consistent with the density and uses authorized for the are by the General Plan or the applicable Specific Plan, whichever is more restrictive.



The density, timing or sequence of development may be restricted by considerations of safety, traffic access or circulation, the slope of the natural terrain, the physical suitability of the site (including soil conditions), the nature or extent of existing development, the availability of public services, or other provisions of the regulations.

**Sec. 16.48.030 Improvements Required**

The subdivider shall construct or install all improvements in streets, pedestrian ways, biking paths, channels, easements and other rights-of-way as are necessary for the general use of residents of the subdivision and to meet local traffic, utility, water supply, and drainage needs in accordance with the provisions of this Chapter.

**Sec. 16.48.040 Improvement Plans and Permits Required**

Improvement plans shall be completed by the subdivider prior to the acceptance of the final map or parcel map for filing by the Public Works Director.

Improvements plans shall be prepared by a registered civil engineer of the State of California, or under his direction, at the subdivider's cost. Plans shall conform to improvement standards adopted by the Board of Supervisors pursuant to this Chapter and shall be submitted to the Public Works Director for review and approval.

The final map shall not be deemed to be submitted for approval until the preparation of said plans is completed and said plans have been accepted by the Public Works Director.

Standard engineering fees to be charged by the County for review of such plans and inspection of construction work by the Public Works Director shall be determined by resolution of the Board.

**Sec. 16.48.050 Preparation and Form of Improvement Plans**

Improvement plans shall show full details of all improvements required to be installed by the provision of these regulations, and of all other improvements proposed to be installed by the subdivider within any street, pedestrian way, easement or other public area or right-of-way. Full details shall include cross sections, profiles, estimated costs and specifications.

The form, layout, scale and other particulars of the plans, and number of copies to be provided, shall be in accordance with the requirements of the Public Works Director.

**Sec. 16.48.060 Commencement of Improvement Work**

Prior to the commencement of construction or installation of any improvements within any street, pedestrian way, easement or other public area or right-of-way, improvement plans shall have been approved by the Public Works Director and other affected

departments, or divisions. All other necessary permits to facilitate improvement work shall also be obtained prior to commencement.

**Sec. 16.48.070 Construction and Installation Standards.**

Improvements shall be constructed and installed in accordance with the approved plans and in accordance with the applicable standards, specifications and permit procedures established by these regulations, the County Code, State or Federal laws and resolutions of the Board of Supervisors.

Improvements shall be constructed and installed to permanent line and grade satisfactory to the Public Works Director.

**Sec. 16.48.080 Temporary Improvements**

In addition to permanent improvements, temporary improvements may be required to be made prior to or concurrent with permanent improvements.

**Sec. 16.48.090 Inspection of Improvement Work**

All improvements shall be constructed under the inspection of the Public Works Director and the subdivider shall cause all such improvement work to be inspected at such times as are established and required by him. Subdivider shall pay County a fee to defray County's costs in making such inspection, the rate of which shall be determined by resolution of the Board.

**Sec. 16.48.100 Conditions of Improvement Work**

All work and improvements contemplated by and performed under the provisions of these regulations shall be accomplished so as to minimize interference with and coordinate with other construction activities or developments of or on behalf of the County and nearby private development.

**Sec. 16.48.110 Improvements Waived**

If it is determined by the Public Works Director that the subdivision has been submitted only for the purpose of clarifying records by consolidating existing lots and metes and bounds parcels, or for the purpose of absorbing vacated streets or alleys by reversion to acreage, or both, the Board of Supervisors may, upon recommendation of the Public Works Director, waive all or a portion of the improvements which otherwise would be required.

**Sec. 16.48.120 Specific Improvement Requirements**

The improvements required by this Chapter shall be in accordance with Subsections 16.48.121 through 16.48.129.

**Sec. 16.48.121 Public Sewage Disposal**

- A. When any part of a subdivision is located within 1,000 feet of an available public sanitary sewer to which the subdivision may legally be connected, said subdivision shall be required to be sewerred and be connected thereto.
- B. Construction of the system, or assurance of completion satisfactory to the County Board of Supervisors, and any necessary district formation, or formation of other legal entities must be completed prior to he request for final subdivision approval.
- C. In the case of subdivisions included in an existing and operating district, the subdivider shall design and install the sewage system and appurtenances in conformance with the standards established by the district. The subdivider shall furnish a letter from the district certifying that the improvement design is to their standards prior to submission of the final map.
- D. In the case of a subdivision not in an existing and operating district, the subdivider shall have construction plans prepared by an engineer licensed in the State of California submitted for review to the County Health Officer, Sanitary Engineering Branch and the North Coast Water Quality Control Board (NCRWQCB) at least thirty (30) days prior to consideration of the final map by the Board of Supervisors.
- E. Treatment and disposal facilities shall be designated in conformance with standards approved by the County Health Officer, Sanitary Engineering Branch and NCRWQCB.
- F. A competent inspector, approved by the County Board of Supervisors, shall be hired to inspect the installations for compliance with approved plans. The cost, hourly rate, mileage and expense of the inspector, shall be paid by the subdivider.
- G. The subdivider shall be responsible for compliance with all local, County and State standards and for the stability of all improvements and shall replace any portions which have become displaced due to carelessness or negligence on his part or to damages resulting from natural causes until 50% buildout or two (2) years from final approval, whichever comes first.
- H. When the required improvements have been installed, the subdivider shall request the inspector, in writing, for a final inspection of said improvements. The subdivider shall be advised in writing of the status of the improvements, including deficiencies . The subdivider shall correct any deficiencies so reported and shall again request a final inspection. The final inspection shall

satisfy the inspector that the improvements fully comply with local, County and State specifications.

- I. Sewer systems and appurtenances located upstream of a domestic water reservoir must be located at an elevation of at least ten (10) feet above and over 200 feet horizontal distance from the high water line. In addition, any sewage treatment facilities constructed or located in the watershed must be located at least 500 feet (horizontally) from the high water line of the reservoir.

**Sec. 16.48.122 Individual or On-site Sewage Disposal** (Ref: Ordinance No. 1168)

- A. If a subdivision of less than five (5) parcels is proposed for development on the basis of on-site sewage disposal systems, it is the responsibility of the subdivider to provide proof of the protection of water quality and the prevention of health hazards and nuisance conditions arising from the on-site discharge of wastes.

In general, the following site criteria for each parcel must be met:

- 1. Criteria for determining lot size shall include the following: (Ord. 1186)

Sewage Disposal	Water Supply	Required Minimum Usable Area (must be contiguous except as noted below) <sup>2</sup>	Minimum Lot Size <sup>1</sup>
On-site	Community	10,000 sq. ft.	10,000 sq. ft.
Community	Individual	No minimum specified	10,000 sq. ft.
On-site	Individual	One-half acre <sup>2</sup>	One acre <sup>3</sup>
Community	Community	No minimum specified	No minimum specified

<sup>1</sup> Minimum lot size shown refers to health standards only. Applicants should also consult the County Zoning Ordinance.

<sup>2</sup> Minimum usable area in this case can be located in areas no less than 10,000 sq. ft. each as long as such areas are not separated by topographical barriers such as streams,

<sup>3</sup> The one acre minimum lot size may be reduced to not less than one-half (1/2) acre if recommended by the County Health Officer, but only if documented findings can be made that both the site and the general area contain deep groundwater and that concentration of nitrates will not result from reduced lot sizes in the area. The applicant will be responsible for providing background information which shall include a study and recommendation by a civil engineer, registered geologist or registered hydrologist with documented education and experience in conducting such studies.

2. The following shall not be considered as usable acreage:
- a. Land that is swampy or has groundwater within 8 feet.<sup>4</sup>
  - b. Gravel bars, rock piles, or pervious material.
  - c. Land which has a slope greater than 30%
  - d. Land necessary or used for roads, driveways, land easements

TABLE 1

MINIMUM SETBACK REQUIREMENTS

Well <sup>1</sup>	100 ft.
Perennial Stream <sup>2</sup>	100 ft.
Ephemeral Stream <sup>3</sup>	50 ft.
Lake or Reservoir <sup>4</sup>	100 ft.
Cut Banks, Natural Bluffs, Sharp Changes in Slope and Fills	3 x h = setback in ft. (min. 25 ft., Max. 50 ft.)
Unstable Land Forms	50 ft.
Spring <sup>5</sup>	200 ft. (500 ft. in granite soils)
Property Lines	10 ft.

3. Determination of a site's suitability for percolation of effluent shall be determined by the following methods:
- a. Percolation Testing: Percolation testing shall be in accordance with methods specified in Figure 1 and conducted or supervised by a registered: engineer, soil scientist, geologist, sanitarian, or licensed land surveyor.

Percolation testing of soils within Zone 3 and Zone 4 shall be conducted during wet weather conditions.<sup>6</sup>

<sup>4</sup> Use criteria in site evaluation.

<sup>1</sup> Includes off-site wells.

<sup>2</sup> As measured from the 10-year flood line. Setbacks must be increased to 500 feet of the high-water line for streams flowing to a domestic water reservoir within the closed zone.

<sup>3</sup> As measured from the edge of the water course. Setbacks must be increased to 500 feet of the high-water line for streams flowing to a domestic water reservoir within the closed zone.

<sup>4</sup> As measured from the high-water line. Leaching systems must be placed a minimum horizontal distance of 200 feet from the high-water line of domestic water reservoir and outside the "closed zone" at the water supply intake. The "closed zone" is defined as a minimum of 500 feet from the intake works.

<sup>5</sup> As measured uphill from spring.

Percolation testing of soils falling within Zone 1 and Zone 2 may be conducted in non-wet weather conditions provided presoaking of the test hole is accomplished with (a) continuous twenty-four (24) hour presoaking, or (b) a minimum of eight (8) complete refillings beginning during the day prior to that of the conduction of the test.

A minimum of 2 percolation tests per proposed parcel shall be performed with a minimum of 2 acceptable results. The test results shall not be less than 60 minutes per inch. The depths of each test hole are indicated in Table 2.

TABLE 2

<u>Average Slope of Lot</u>	<u>Depth of Percolation Test Hole</u>
0 - 10%	3 ft.
10 - 20 %	4 ft.
20 - 30%	5 ft.

- b. Soil Analysis: Soil from the limiting soil layer observed within an excavated soil profile shall be obtained and analyzed for texture and bulk density according to methods prescribed by the NCRWQCB. The results shall be plotted on the soil textural triangle of Figure 2, as per the indicated instructions.
  - Soils within Zone 1 shall be considered to have minimal filtration capabilities, requiring increased depths to groundwater as per Table 3.
  - Soils within Zone 2 shall be considered suitable for effluent disposal.
  - Soils within Zone 3 and Zone 4 shall require percolation testing per<sup>1</sup> above to verify suitability for effluent disposal.

<sup>6</sup> Wet weather testing periods shall be (a) between January and April 30; and (b) following ten (10) inches of rain in a thirty (30) day period or after half of the seasonal normal precipitation has fallen. Extension of wet weather testing beyond the limits of the above criteria may be made by agreement of both the NCRWQCB and the County Health Officer.

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TABLE 3

Soil Texture <sup>1</sup> Percent of Silt and Clay	Depth to Groundwater
5% or less	40 ft.
6 to 10%	20 ft.
11 to 15%	10 ft.
Greater than 15% <sup>2</sup>	

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4. Soil characteristics shall be evaluated by soil profile observations. One backhoe excavation in the primary disposal field and one in the replacement area shall be required for this purpose. A third profile shall be required if the initial two profiles show dissimilar conditions.

Augured test holes shall be an acceptable alternative, upon determination of the County Health Officer or NCRWQCB: (a) where use of a backhoe is impracticable because of access, (b) when necessary only to verify conditions expected on the basis of prior soils investigations, or (c) when done in connection with geological investigations. Where this method is employed, three test holes in the primary disposal field and three in the replacement area shall be required.

The following factors shall be observed by the County Health Officer and reported from ground surface to a depth of at least five (5) feet below the proposed leachfield system (minimum overall depth is eight (8) feet.

- a. Thickness and coloring of soil layers and apparent United States Department of Agriculture (USDA) classification.
- b. Depth to and type of bedrock, hardpan or impermeable soil layer.
- c. Depth to observed ground water.

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<sup>1</sup> Must exist for a minimum of 3 continuous feet between the bottom of the leaching trench depth and groundwater.

<sup>2</sup> Or a percolation rate slower than 5 minutes per inch.

- d. Depth to soil mottling.
  - e. Other prominent soil features such as structure, stoniness, roots and pores, dampness, etc.
5. The anticipated highest level of groundwater shall be estimated:
- a. At the highest extent of soil mottling observed in the examination of soil profiles;
  - b. By direct observation of groundwater levels during wet weather conditions.<sup>1</sup>

Where a conflict in the above materials of examination exists, the direct observation shall govern.

In those areas which, because of parent materials, soils lack the necessary iron compounds to exhibit mottling, direct observation during wet weather conditions shall be required. Guidance in defining such area shall be provided by the NCRWQCB.

6. A greater number of the described tests above may be required by the County Health Officer at his discretion.
7. The soil investigation report shall be submitted to the County Health Officer and shall include but not be limited to the following:
- a. Dates of test.
  - b. Weather conditions at the time of tests.
  - c. Location of percolation test holes on a copy of the tentative map.
  - d. Depth of test holes.
  - e. Percolation test results by test hole numbers (must be submitted on Figure 1 form).
  - f. Signature on percolation test results.

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<sup>1</sup> Wet weather testing periods shall be (a) between January 1 and April 30; and (b) following ten (1) inches of rain in a thirty (30) day period or after half of the seasonal normal precipitation has fallen. Extension of wet weather testing beyond the limits of the above criteria may be made by agreement by both the NCRWQCB and the County Health Officer.



8. The required soil investigation report shall be submitted to the County Health Officer at least fifteen (15) days prior to an on-site evaluation by the Health Department. All soils work must be completed and submitted for approval to the County Health Officer at least thirty (30) days prior to final map approval.

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## PERCOLATION TEST PROCEDURES

## FIGURE 1

### NOTIFY THE HEALTH DEPARTMENT 48 HOURS IN ADVANCE OF CONDUCTING PERCOLATION TESTS

The object in conducting percolation tests of soil in which a drain field or seepage pit is to be installed, it is to determine the length of time required for the soil to absorb one inch of water when the ground has been saturated. The information obtained from these tests, together with a knowledge of the approximate amount and type of sewage to be discharged, makes it possible to determine the size of the drain field.

Holes 4 to 6 inches in diameter have been found to be the most convenient. However, this diameter is not critical, and, particularly in very loose soils, it may be easier to dig larger holes. Sides of the holes should be vertical and the depth should be approximately that of the proposed drain field. The holes (2 or more) should be approximately 30 feet apart and in the area where the drain field will be installed.

1. The sides should be roughed up to eliminate packing caused by the shovel or post hole digger, which would reduce the percolation rate. Two inches of fine gravel should be placed in the hole to prevent bottom scoring.
2. Fill the hole with clear water being careful to avoid washing down the sides of the hole. By refilling if necessary, keep at least 24 inches of water in the hole for at least 24 hours or a minimum of 8 complete refillings beginning during the day prior to the test.
3. After the above saturation, start with no more than 12 inches of water above the gravel (remove water, if necessary) and begin the measurements.
4. Select a reference point from which to measure (a board laid across the mouth of the hole is satisfactory) and measure the distance from the reference point to the level of the water. Enter the time and distance measured on the chart below.
5. Repeat the measurement at the end of 30 minutes. Continue making measurements at 30-minute intervals for the complete 4 hours.

6. If the water level drops too low for further readings, refill to the 12-inch level at the end of a 30-minute period, measure, and proceed as before. Note time(s) of refill(s) on chart below.
7. If the hole consistently drains in less than 30 minutes, make readings at 10-minute intervals for the complete 4 hours.

# EXHIBIT F

Draft Humboldt County Water Resources  
Element of the General Plan

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## Chapter 11. Water Resources Element

### 11.1 Purpose

This Element addresses water planning issues including river and stream water quality, stormwater runoff, groundwater management, water needs of fish and wildlife, water consumption, conservation and re-use methods, and state and federal regulations.

### 11.2 Relationship to Other Elements

These and other water-related topics can be found throughout the General Plan. Water availability for development is addressed in the Land Use Element. The Conservation and Open Space elements address riparian corridors, wetlands, wildlife protection, fishery resources, other biotic resources, water-oriented recreation, and soil erosion. The Community Infrastructure and Services Element addresses public water and wastewater systems.

### 11.3 Background

#### Surface and Groundwater

Abundant water resources and biologically rich watersheds are defining characteristics of Humboldt County. These resources provide local water supply, spawning habitat for fisheries, recreation opportunities, and local wealth for the fishing and tourism industries. The Eel, Trinity, and Klamath rivers extend well beyond county borders linking Humboldt to the complex regional, state, and interstate water resource and habitat management issues affecting their respective watersheds. The average annual runoff of the rivers running through the county reflects almost 30% of the state's total runoff. Significant sections of these rivers and the Van Duzen River have been designated by the California legislature as wild, scenic, or recreational under the California Wild and Scenic River System. North Coast watersheds retain some of the last viable salmon and steelhead populations in the state and are a focal point for regional, state, federal, and tribal habitat recovery efforts. Managing these water resources will be a significant challenge in the years ahead as competition between statewide water demand, habitat requirements, and local water supply intensifies.

While mean annual runoff in Humboldt County from the major rivers and streams is approximately 23 million acre feet, over 80% of this flow occurs during November through March, and the total potential annual groundwater yield of the entire county is only approximately 100,000 acre feet. Ground water has been developed for individual domestic requirements, the agricultural demands of the Eel and Mad River delta areas, and to provide supplements to municipal water supply. Potential concerns are saltwater intrusion in coastal areas and the effects of groundwater withdrawal on streams that rely on groundwater recharge to sustain flows during the dry season.

## Water Resources and Land Use

2 The General Plan can help to sustain and enhance water resources. Through its policies and standards, it is an effective tool to ensure that new development occurs without damaging water resources on an individual and cumulative basis. The Plan also serves to guide the County in its interaction with neighboring counties, state, and federal agencies and lawmakers. It also directs the County's activities and commitment of resources.

State and federal agencies through the California Water Code and Clean Water Act typically have primary jurisdiction over water resource issues, and in those cases their roles do not have to be duplicated by the County. In the event of overlapping jurisdiction or in instances where the County has interests that are distinct from the interests of state and federal agencies, the County will make independent judgments consistent with the policies of this Plan.

### Watershed Planning

Humboldt County is part of the State Water Resources Control Board's Klamath-North Coast Hydrologic Basin Planning Area 1, which includes all basins draining into the Pacific Ocean from the Oregon border southerly through the Russian River Basin. The County's 12 planning watersheds (see Table 11-A) are displayed in Figure 11-1. For water resource planning purposes and to improve coordination with state and federal agencies, the County uses watersheds as logical planning areas to consider all the activities in a watershed in relation to their affect on water supply, quality, and biological resources.

7 Controlling sedimentation, preventing further increases in water temperature and preserving flow rates are the chief watershed management challenges in Humboldt County. As of 2008, Humboldt County has 19 river segments or water bodies that require Total Maximum Daily Load (TMDL) pollution prevention plans because of their "impaired" designation under Section 303(d) of the federal Clean Water Act (see text box for a description of the TMDL rules). Major soil-disturbing activities include road building, logging, vegetation clearing, over-grazing, mining, and certain agricultural practices. Accelerated erosion and sedimentation can increase flooding and damage riparian habitat. Temperature is an important habitat requirement for salmon and steelhead. High water temperatures result from reduced flows, aggraded stream channels and removal of riparian vegetation along watercourses.

#### North Coast Basin Plan and Beneficial Uses

California's comprehensive water quality control law, the Porter-Cologne Water Quality Control Act of 1969, requires the adoption of water quality control plans (basin plans) by the state's nine Regional Water Quality Control Boards to protect water quality and beneficial uses in watersheds within their regions. Basin plans are reviewed every three years and updated as necessary. The Water Quality Control Plan for the North Coast Region, or the North Coast Basin Plan, covers Humboldt, Del Norte, Trinity, Siskiyou, Mendocino, and portions of several other counties.

An essential part of the Basin Plan is an assessment of the beneficial uses that are designated and are to be protected for each hydrologic area in the region. Beneficial uses include the use of water for public water supplies; protection and propagation of fish, shellfish, and wildlife; recreation in and on the water; agriculture; industrial; and other purposes, including navigation. Beneficial uses can either be existing or potential and are enumerated on a uniform list prepared by the State Water Board and are applied throughout all basins of the state.

Figure 11.1: Humboldt County Planning Watershed Areas



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<b>Watershed</b>	<b>Basin</b>	<b>Total Acres within County</b>	<b>Total Acres</b>
Lower Klamath	Klamath-Trinity	332,787	493,453
Lower Trinity	Klamath-Trinity	192,286	654,967
South Fork Trinity	Klamath-Trinity	73,205	596,497
Redwood Creek	Mad-Redwood	187,788	187,819
Trinidad	Mad-Redwood	83,684	83,684
Mad River	Mad-Redwood	221,337	322,143
Eureka Plain	Mad-Redwood	124,617	124,617
Van Duzen	Eel	234,899	274,083
Lower Eel	Eel	191,052	191,052
Middle Main Eel	Eel	138,509	333,345
South Fork Eel	Eel	200,395	441,213
Cape Mendocino	Mattole	311,774	319,628
<b>Total</b>		<b>2,292,332</b>	<b>4,039,132</b>

Humboldt County's watersheds typically flow with an abundance of water in the winter and spring but limited water in the summer and fall, making both flooding and low-flow shortages significant water management issues. For example, the Mattole River has a maximum-recorded winter discharge in excess of 90,000 cubic feet per second and a typical summer flow of less than 20 cubic feet per second.

Humboldt County watersheds are within the National Marine Fisheries' Southern Oregon/Northern California Coast Salmon and Steelhead Recovery Domain and are a part of Five Counties Salmonid Conservation Program (5C's Program). Recovery of Coho and Chinook salmon, and steelhead populations is a priority of numerous governmental agencies, local tribes and private businesses and organizations from forest product companies to local watershed groups. The 5C's Program has

**Total Maximum Daily Load (TMDL)**

The federal Clean Water Act (CWA) requires states to develop a list of their impaired waterbodies. Impaired waterbodies are those that do not meet water quality standards even after pollution controls for point sources of pollution are in place, such as wastewater treatment plants and industrial facilities. The CWA also requires states to establish priority rankings for waters on the 303(d) list and develop Total Maximum Daily Loads (TMDLs) for these waters based on their individual priority ranking.

A TMDL is a pollution budget for a specific waterbody (river, stream, lake, etc) that identifies the maximum amount of a pollutant (sum of allowable pollutant loads from point and nonpoint sources) that can be released without causing the waterbody to become impaired. A TMDL also must include a margin of safety to allow for any uncertainties in the scientific methods used to derive the TMDL (water quality modeling assumptions, etc.)

*Handwritten notes:*  
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implemented programs to replace culverts, reduce soil loss and erosion, and define best management practices for road maintenance. The County has replaced approximately one-third of the significant barriers to fish migration so far.

Humboldt County is also a participating member of the North Coast Integrated Regional Water Management Plan (NCIRWMP). The NCIRWMP covers a seven county area corresponding to the Regional Water Quality Control Board Region 1 boundary. This collaborative planning framework was selected because impacts to fisheries and other beneficial uses may occur from local land use decisions and actions, but the effects can be cumulative across large geographic areas, with effective solutions often requiring a watershed approach and ultimately a regional approach that can be adopted and implemented by many stakeholders. The NCIRWMP provides an organized framework for identifying local and regional issues, evaluating water management planning objectives and strategies, and implementing the most promising approaches and projects across the region. Many of policies and principles of the NCIRWMP have been integrated into this Water Resources Element.

### **Public Water Supply**

Municipal water supplies are provided primarily from surface water sources by four water service districts, along with several cities and numerous community service districts. Humboldt County generally has sufficient water resources where the majority of the population resides. The Humboldt Bay Municipal Water District provides water to seven municipal agencies, the Evergreen Pulp Mill and has water rights and capacity to provide up to 20 million gallons of untreated water per day beyond current demand. This additional supply is an asset for the area and could support new agricultural and industrial development. Protection of water quality in the watersheds that are sources for municipal water is important to maintaining these supplies. Threats include discharge from sewage treatment plants, failing septic systems, non-point source urban pollution, and turbidity from sediment discharge.

Rural water supplies are provided by private water associations or from on-site surface and groundwater sources. Some rural parcels have been created that cannot support residential usage based on on-site water availability, so availability must be determined on a case-by-case basis. Another concern is the cumulative effects of surface and groundwater withdrawals in rural areas where allowed land uses, if fully developed, would require more water than what is locally available during low-flow periods.

Water storage and water conservation techniques can be solutions to the extremes of water availability. Increased municipal storage in urbanized areas and off-channel water storage in rural areas can increase water security and maintain essential flows for habitat purposes.

### **Water Exports**

The amount of water exported from North Coast watersheds is perhaps the county's most significant water resource policy issue. Diversions of water on the Trinity, Klamath, and Eel rivers have significantly affected water quality, quantity, and beneficial uses within Humboldt County. As a County of origin, the County of Humboldt has certain rights pursuant to state water law. Water Code Section 10505 provides that no water right will be released or assigned for any application that would deprive the County of



origin of any water necessary for the development of the County. Section 11460 provides that state water projects must meet standards that protect existing beneficial needs of the watershed. Because of the importance of river flows to the county's economy and environment, the General Plan includes policies that actively pursue reductions in water exports from the Klamath, Trinity and Eel rivers and provide standards for the protection of water quality, fisheries, and habitat for any proposed new water export projects.

## Stormwater

Communities with County stormwater infrastructure include McKinleyville; the areas surrounding Eureka, such as Cutten, Ridgewood, Pine Hill, and Humboldt Hill; and also Garberville and Shelter Cove. Other areas with minor amounts of drainage infrastructure include Redway, Manila, King Salmon, Fields Landing, Loleta, and Willow Creek. McKinleyville is designated as an "urbanized area" in the 2000 Census and contains a municipal separate storm sewer system (MS4), the County operated storm drainage network. Discharges of storm water from MS4s in urbanized areas are considered "point sources" of potential pollution and as a result, the County is required to prepare a Storm Water Management Program (SWMP) under Phase II of the National Pollutant Discharge Elimination System program (NPDES) of the Clean Water Act. The intent of the SWMP is to reduce the discharge of pollutants to the maximum extent practicable, protect water quality, and satisfy other requirements of the Clean Water Act. During the planning period of this General Plan, the County may be required to prepare SWMPs for other communities within the unincorporated area.

## 11.4 Goals and Policies

### Goals

- WR-G1. Water Supply, Quality, and Beneficial Uses.** High quality and abundant surface and groundwater water resources that satisfy the water quality objectives and beneficial uses identified in the Water Quality Control Basin Plan for the North Coast Region.
- WR-G2. Water Resource Habitat.** River and stream habitat capable of supporting abundant salmon and steelhead populations.
- WR-G3. Planning, Coordination, and Advocacy.** A system of local coordination and intra-regional cooperation to advance local, regional, and state water management priorities and objectives.
- WR-G4. Watershed Planning Framework.** Land use decision making that makes use of watersheds as a planning, management, and coordinating framework to cooperatively manage water and other natural resources with local communities, neighboring counties, and state and federal agencies.
- WR-G5. Watershed Management.** A system of water resource management that recognizes watersheds as natural systems producing multiple economic, social, and environmental benefits that can be optimized with sound data, cooperative public processes, adaptive management, and leadership.

- WR-G6. Public Water Supply.** Public water systems able to provide adequate water supply to meet long-term community needs in a manner that protects other beneficial uses and the natural environment.
- WR-G7. Effective Conservation Strategies.** Effective application of conservation, water re-use, and storage strategies in meeting year-round water supply needs in water supply limited areas.
- WR-G8. Restoration of River Flows.** Sufficient water flows in the Trinity, Klamath and Eel rivers to meet all beneficial use, including support of salmon and steelhead recovery plans, recreation activities, and the economic needs of river dependent communities and no additional upper or mid-level watershed exports from rivers flowing through the county.
- WR-G9. Storm Drainage.** Storm drainage utilizing natural drainage channels and watersheds and the minimum possible erosion, runoff from new development, and interference with surface and groundwater flows.

## Policies

### Water Resources and Land Use

- WR-P1. Sustainable Management.** Ensure that land use decisions conserve, enhance, and manage water resources on a sustainable basis to assure sufficient clean water for beneficial uses and future generations.
- WR-P2. Protection for Existing Surface and Groundwater Uses.** Impacts on existing beneficial water uses shall be considered and mitigated during discretionary review of land use permits that are not served by municipal water supplies. Compliance measures for un-permitted development not served by municipal water supplies shall include mitigations for surface or groundwater resource impacts.
- WR-P3. Proactive Protections.** Focus regulatory attention in specified watersheds where limited water supply or threats to water quality have potentially significant cumulative effects on the availability of water for municipal or residential water uses or the aquatic environment.
- WR-P4. Critical Municipal Water Supply Areas.** The Board of Supervisors shall designate all or portions of watersheds as "Critical Water Supply Areas" if cumulative impacts from land uses within the area have the potential to significantly impact the quality or quantity of municipal water supplies. Water resources within Critical Water Supply Areas shall be protected by the application of specific standards for such areas.
- WR-P5. Critical Watershed Areas.** The Board of Supervisors shall designate all or portions of watersheds as "Critical Watersheds" if cumulative impacts from land uses within the area have the potential to create significant environmental impacts to threatened or endangered species, including Coho salmon or steelhead habitat. Water resources within Critical Watersheds shall be protected by the application of specific standards for such areas to avoid the take of threatened or endangered species.

- WR-P6. Subdivisions.** Subdivision approval shall be conditioned to require evidence of sufficient water supply during normal and multiple-dry years to meet the projected demand associated with the proposed subdivision. Sufficient water supply shall include the requirements of the proposed subdivision and existing and planned future uses. Written service letters from a public water system written in conformance with this policy is sufficient evidence. Subdivisions to be served through on-site water supplies or private water systems must provide evidence of sufficient water supply to the County Department of Environmental Health.
- RD-P7. Cumulative Impacts of Rural Subdivision.** Cumulative impacts of water withdrawal from surface and groundwater sources and sewage disposal shall be assessed during the zoning and subdivision of all areas designated for Rural Development.
- WR-P8. Erosion and Sediment Discharge.** Ministerial and discretionary projects requiring a grading permit shall comply with performance standards adopted by ordinance and/or conditioned to minimize erosion and discharge of sediments into surface runoff, drainage systems, and water bodies consistent with best management practices, adopted Total Maximum Daily Loads (TMDLs), and non-point source regulatory standards.
- WR-P9. County Facilities Management.** Design, construct, and maintain County buildings, roads, bridges, drainages, and other facilities to minimize erosion and the volume of sediment in stormwater flows.
- WR-P10. Project Design.** Development should be designed to compliment and not detract from the aesthetics and function of rivers, streams, ponds, wetlands, and their setback areas.
- WR-P11. Small Hydroelectric.** Encourage small hydroelectric development when impacts to surface water flows and habitat are in conformance with state and federal standards.
- WR-P12. Groundwater Quality Protection.** Commercial and industrial discretionary uses shall be evaluated for their potential to contaminate groundwater resources, and mitigated as necessary.
- WR-P13. Saltwater Intrusion.** For discretionary projects involving municipal or large-scale agricultural groundwater withdrawals in proximity to coastal areas, ensure that groundwater will not be adversely affected by saltwater intrusion.
- WR-P14. Pathogen and Nutrient Discharge from Septic Systems.** Support programs to reduce coliform bacteria and nitrate discharges from septic systems that do not meet operational standards established the North Coast Regional Water Quality Control Board. Work cooperatively with Environment Health to assess the need for land use controls in areas where septic discharge threatens public health or beneficial uses.
- WR-P15. Nutrient Discharge from Agricultural Operations.** Support programs that reduce nutrient discharge from agricultural operations, such as the voluntary manure management programs supporting local dairies.

**WR-P16. State and Federal Regulation.** Encourage state and federal agencies to maintain responsibility for water resources supply and water quality management. The County shall not accept administrative responsibility for state or federal regulatory programs unless sustainable funding sources are secured.

### **Watershed Planning**

**WR-P17. Watershed Planning.** Use watersheds as the geographic planning framework for water resource planning and coordination with other regional, state, and federal planning, implementation, and funding efforts. Maintain relevant land use data on watershed basis to support watershed based management and decision-making processes. Encourage and support continued research, investigation, and analysis of the County's water resources by federal and state water resource agencies. Encourage compilation of data on a watershed basis.

**WR-P18. Watershed and Community Based Efforts.** Support the efforts of local community watershed groups to protect water resources and work with local groups to ensure decisions and programs take into account local priorities and needs.

**WR-P19. Regional Water Management Planning.** Work on a regional basis through the North Coast Integrated Regional Water Management Plan (NCIRWMP) to ensure coordination and adaptive management between statewide water resource planning efforts, regional priorities, and local needs. The goals and objectives of the NCIRWMP shall be considered in establishing County water resource priorities and policy positions.

**WR-P20. State and Federal Watershed Initiatives.** Support implementation of state and federal watershed initiatives such as the Total Maximum Daily Loads (TMDLs), the North Coast Regional Water Quality Control Board's (NCRWQCB) Watershed Management Initiative, and the California Non-Point Source Program Plan.

### **Public Water Supply**

**WR-P21. Sufficient Water Supply.** Support the actions and facilities needed by public water systems to supply the water demands projected in this Plan.

**WR-P22. Critical Water Supply Areas.** Coordinate with public water systems in the designation and regulation of water resources in Critical Water Supply areas.

**WR-P23. Conservation and Re-use Strategy.** Promote the use of water conservation and re-use as a strategy to lower the cost, minimize energy consumption, and maximize the overall efficiency and capacity of public water systems. Encourage and support conservation for agricultural activities that increase the efficiency of water use for crop irrigation and livestock. Support the use of treated water for irrigation, landscaping, parks, public facilities, and other appropriate uses and coordinate with cities and other wastewater treatment entities in planning uses and minimizing impacts for treated water in

unincorporated areas. Avoid water reuse that could adversely affect the quality of groundwater or surface water.

### Water Exports

- WR-P24. Restoration of Flow Rates.** The County shall advocate for reductions in water exports and improved flow release schedules from existing reservoirs on the Trinity, Klamath and Eel rivers to enhance fisheries, natural sediment transport, and recreational opportunities.
- WR-P25. Compliance with Water Code Export Law.** Water export projects will not be approved or supported unless the specific requirements of California Water Code Section 10505 protecting development rights and Section 11460 protecting beneficial uses of the watersheds are met and substantiated through a scientifically based public process.
- WR-P26. Impact Analysis.** All new export proposals and renewal of licenses for existing water exports shall include a full assessment of impacts on the environment, economy, and water supply needs of the county.
- WR-P27. County Needs.** Any consideration of exporting additional water resources shall place primary priority upon the benefit of and need for the water resources in the county and shall ensure that water needed by water users and natural resources will not be exported outside the county.
- WR-P28. Public Trust Resources and Interests.** The County shall advocate that dam relicensing projects effectively balance development values (electric power, flood control, and water supply) with non-developmental values (environmental resource protection, habitat restoration, and water quality), and other values that best reflect the public interest.
- WR-P29. Public Input.** The County shall advocate for the relicensing applicant to sponsor a participatory process involving all affected stakeholders prior to the submittal of a final relicensing application to the Federal Energy Regulatory Commission.

### Stormwater Drainage

- WR-P30. Natural Stormwater Drainage Courses.** Natural drainage courses, including ephemeral streams, shall be retained and protected from development impacts which would alter the natural drainage courses, increase erosion or sedimentation, or have a significant adverse effect on flow rates or water quality. Natural vegetation within riparian and wetland protection zones shall be maintained to preserve natural drainage characteristics consistent with the Biological Resource policies. Storm water discharges from outfalls, culverts, gutters, and other drainage control facilities that discharge into natural drainage courses shall be dissipated so that they make no contribution to additional erosion and, where feasible, are filtered and cleaned of pollutants.
- WR-P31. Downstream Peak Flows.** Peak stormwater discharge shall not exceed the capacity limits of off-site drainage systems or cause downstream erosion, flooding, habitat destruction, or impacts to wetlands and riparian areas.

- WR-P32. New Drainage Facilities.** Where it is necessary to develop additional drainage facilities, they shall be designed to be as natural in appearance and function as is feasible. All drainage facilities shall be designed to maintain maximum natural habitat of streams and their streamside management areas and buffers. Detention/retention facilities shall be managed in such a manner as to avoid reducing streamflows during critical low-flow periods.
- WR-P33. Restoration Projects.** The County shall encourage restoration projects aimed at reducing erosion and improving existing habitat values in Streamside Management Areas and wetlands.
- WR-P34. Commercial and Industrial Activities.** Commercial and industrial activities shall minimize, and eliminate to the extent possible, facility-related discharges to the stormwater system. As required by state codes and local ordinances, commercial and industrial stormwater discharge must be routed to a wastewater collection system; for example, minimizing runoff from vehicle maintenance yards, car washes, restaurants cleaning grease, contaminated mats/carts into storm drains, and other wash practices that result in materials other than plain water entering the storm drain system.
- WR-P35. Oil/Water Separation.** Parking lot storm drainage shall include facilities to separate oils from stormwater in accordance with Public Works requirements and the recommendations of the Stormwater Quality Association's California Stormwater Best Management Practices Handbooks or their equivalent.
- WR-P36. Erosion and Sediment Control Measures.** The following erosion and sediment control measures shall be incorporated into development design and improvements:
- A. Minimize soil exposure during the rainy season by proper timing of grading and construction;
  - B. Retain natural vegetation where feasible;
  - C. Vegetate and mulch denuded areas to protect them from winter rains;
  - D. Divert runoff from steep denuded slopes and critical areas with barriers or ditches;
  - E. Minimize length and steepness of slopes by benching, terracing, or constructing diversion structures;
  - F. Trap sediment-laden runoff in basins to allow soil particles to settle out before flows are released to receiving waters;
  - G. Inspect sites frequently to ensure control measures are working properly and correct problems as needed; and
  - H. Allow for the construction of public roads, trails, and utilities, when properly mitigated.
- WR-P37. Storm Drainage Design Standards.** Drainage design standards for new development shall be adopted by ordinance. The design standards shall

ensure that storms of specified intensity, frequency, and duration can be accommodated by engineered drainage systems and natural drainage courses.

- WR-P38. Storm Drainage Impact Reduction.** Develop storm drainage development guidelines with incentives to encourage low-impact development standards to reduce the quantity and increase the quality of stormwater runoff from new developments.
- WR-P39. Reduce Toxic Runoff.** Minimize chemical pollutants in stormwater runoff such as pesticides, household hazardous wastes, and road oil by supporting education programs, household hazardous waste and used oil collection, street and parking lot cleaning and maintenance, use of bio-swales and other urban stormwater best management practices described in the California Stormwater Best Management Practices Handbooks or their equivalent.
- WR-P40. Fish Passage Designs.** Work with federal and state agencies to retrofit existing drainage and flood control structures and design new structures to facilitate fish and other wildlife passage in partnership with federal and state agencies.

## 11.5 Standards

### Water Resources and Land Use

- WR-S1. Designation of Critical Water Supply and Watershed Areas.** The designation by the Board of Supervisors of Critical Water Supply and Watershed Areas shall be a public process, involving a recommendation from the Planning Commission and input from the public, affected water providers, and state and federal agencies.
- WR-S2. Development within Critical Water Supply Areas.** Ministerial land use development proposed within Critical Water Supply areas shall comply with performance standards adopted by ordinance. Discretionary development shall comply with performance standards and supplemental permit conditions. Standards and permit conditions shall require: 1) demonstrating that no risk of contamination to the water supply would occur due to the development activity; and 2) avoiding degradation of municipal water supplies by reducing cumulative impacts to surface water quality and water quantity during low-flow periods to below levels of significance.
- WR-S3. Development within Critical Watershed Areas.** Ministerial land use development proposed within Critical Watershed Areas shall comply with performance standards adopted by ordinance. Discretionary development shall comply with performance standards and supplemental permit conditions. Standards and permit conditions shall avoid take of endangered or threatened species by reducing cumulative impacts to aquatic habitat to below levels of significance.
- WR-S4. Protection of Groundwater Recharge Areas.** Ministerial and discretionary development in Critical Water Supply or Watershed Areas where maintenance of groundwater recharge is determined to be necessary to maintain sustainable groundwater demands or surface water flows shall maintain or

increase the site's pre-development absorption to recharge groundwater or be conditioned to reduce effects to water supplies to below levels of significance.

- WR-S5. Surface Water Withdrawal Permitting.** Ministerial and discretionary permits for land use development that include development of new in-stream water sources or other streambed alterations subject to California Fish and Game Code Section 1602 shall provide evidence of, or be conditioned to obtain a Streambed Alteration Agreement from the Department of Fish and Game.
- WR-S6. Subdivisions Demonstration of Sufficient Water Supply.** Demonstration of sufficient water supply shall include the requirements of the proposed subdivision, existing uses, and planned future uses. Subdivisions subject to state requirements of SB 610 and SB221 shall make the appropriate demonstrations consistent with regulations (as amended) established by these acts. Written service letters from a public water system written in conformance with this policy is sufficient evidence. Subdivisions to be served through on-site water supplies or private water systems must provide evidence of sufficient water supply to the County Department of Environmental Health.
- WR-S7. Total Maximum Daily Loads (TMDLs) Implementation.** Discretionary development within watersheds containing impaired water bodies as defined under Section 303(d) of the federal Clean Water Act and governed by TMDL pollution prevention plans shall be conditioned to reduce or prevent further impairment consistent with applicable TMDLs.
- WR-S8. Erosion and Sediment Discharge.** Ministerial and discretionary projects shall conform to grading ordinance standards for erosion and sediment control.
- WR-S9. County Facilities Management.** The design, construction, and maintenance of County roads, bridges, drainages, and other facilities shall minimize erosion and discharge of sediments by following best management practices in accordance with the Five County Water Quality and Stream Habitat Protection Manual for County Road Maintenance in Northwestern California Watersheds (5C's Manual) or its equivalent.
- WR-S10. Projects in Proximity to Wild and Scenic Rivers.** Projects located within state designated wild, scenic, or recreational river basins shall be consistent with the guidelines in the State Wild and Scenic Rivers Act as amended.
- WR-S11. Small Hydroelectric.** Development of small run-of-the-river hydroelectric projects on privately owned lands are considered accessory to allowed uses if they are sized and designed to meet the electrical demands of the subject property only.



## Water Exports

**WR-S12. Water Export Projects on Humboldt County Rivers.** The Humboldt County Board of Supervisors, prior to giving its approval and support to export projects on county rivers, will require following information to demonstrate the export project's adherence to the requirements of California Water Code Section 10505 protecting development rights and Section 11460 protecting beneficial needs of the watersheds. The analysis of the export project shall include:

- A. Effects on in-stream flows including flood events.
- B. Assessment of the environmental impact of the proposed project using appropriate ecological studies by a team of independent experts, qualified to conduct such studies, funded by the project sponsor and completed before project authorization.
- C. Effects on fisheries and native wildlife habitat and restoration efforts. Analysis of the sustainability of any proposed fisheries and wildlife habitat mitigations.
- D. Impacts to Native American communities, including cultural and archaeological resources, economies, fisheries, and water supplies.
- E. Water supplies necessary to meet the ultimate future development needs of residential, agricultural, municipal, industrial, and recreational users and to promote environmental protection and fisheries habitat restoration.
- F. Cost and benefits to recreation.
- G. Water quality impacts and provisions for enhancement of any impaired water bodies (Section 303(d) of the federal Clean Water Act.
- H. Property tax and other fiscal or economic losses to local entities.
- I. Public infrastructure and service demands and costs including roads and recreation facilities.
- J. Public cost and benefits on statewide, regional, county, and local scales including the monetized value of impacted ecological services.

**WR-S13. Minimizing Effects of Water Exports.** The County shall require that exports not damage the county's environmental and economic setting by ensuring that "no unreasonable effect" occurs in the transfer and withdrawal of water resources pursuant to Section 1810 of the State Water Code.

County standards for defining "no unreasonable effect" include actions that will not:

- A. Contribute to a decline in the population of any sensitive or protected plant, fish, or wildlife species.

- B. Reduce water levels in any existing public or private groundwater wells to levels that preclude withdrawal by existing users or would substantially increase the costs of such withdrawal.
- C. Contribute to any impacts on water quality that reduces water quality below health standards or federal or state water quality standards.
- D. Contribute to effects on water quality that would result in a deficiency by the water treatment agency's ability to treat water to appropriate standards.
- E. Reduce available groundwater or surface water resources to levels that would make access and/or use of these waters uneconomical for development planned in accordance with this General Plan.
- F. Directly or indirectly discharge contaminants into surface or groundwater resources.

### Stormwater Drainage

**WR-S14. Storm Water Management.** All commercial, industrial, multi-family, quasi-public, and public parking facilities shall, whenever possible, provide stormwater treatment for parking lot runoff using bio-retention areas, filter strips, and/or other practices that be integrated into required landscaping areas and traffic islands. In all other cases, oil/water separators shall be required. A maintenance plan for oil/water separators shall be required.

## 11.6 Implementation Measures

### Water Resources and Land Use

- WR-IM1. Critical Water Supply and Watershed Area Ordinance.** Prepare and adopt an ordinance to implement Critical Water Supply and Watershed Area policies.
- WR-IM2. Critical Water Supply and Watershed Area Designation.** Identify and designate Critical Water Supply and Watershed Areas through a zoning overlay process using best available scientific data, consultation with municipal water suppliers and resource agencies, and public outreach and input.
- WR-IM3. Require Restoration of Degraded Areas.** Require replanting of vegetation and remediation of erosion conditions in conjunction with related discretionary land use approvals, especially those including roads and grading on steep slopes.
- WR-IM4. County Facilities.** The Department of Public Works shall manage and conduct internal reviews of County construction and maintenance activities to ensure conformance with adopted best management practices for erosion and sediment control.
- WR-IM5. Septic Systems.** Actively pursue the abatement of failing septic systems that have been demonstrated to represent a health and safety hazard.

**WR-IM6. Permitting Coordination.** The County shall maintain efficient and timely procedures for project referral to the North Coast Regional Water Quality Control Board for review and consultation.

**WR-IM7. Basin Plan Septic Requirements.** Update and amend existing County septic regulations to reflect the latest Basin Plan standards for design and maintenance of on-site wastewater systems.

### **Watershed Planning**

**WR-IM8. Watershed Planning.** The County shall maintain relevant land use data on watershed basis to support watershed based management and decision-making processes.

**WR-IM9. North Coast Integrated Regional Water Management Planning.** The County shall participate in the continued update and implementation of the North Coast Integrated Regional Water Management Plan.

**WR-IM10. Total Maximum Daily Loads (TMDLs).** Map impaired water bodies as defined under Section 303(d) of the federal Clean Water Act with associated impairment parameters, water quality objectives, and pollution budgets contained in TMDL pollution prevention plans.

**WR-IM11. Watershed Data.** Seek and secure funding to evaluate the quality and quantity of water resources in each of the watershed basins. Support studies that correlate the quality and quantity of water captured, stored, and contained within watersheds to the needs of beneficial water uses by residents, local industry, agriculture, and the natural environment.

**WR-IM12. Groundwater Management Plans.** Support the development of Groundwater Management Plans (California Water Code Section 10750 - 10756) for Critical Water Supply and Watershed Areas or in other areas where maintenance of groundwater recharge is determined to be necessary to maintain sustainable groundwater demands. The Board shall consider serving as the local public agency as defined by California Water Code Section 10752, in areas within the County not served by a water service provider.

**WR-IM13. Water Planning and Coordination.** Actively encourage and participate in local and state water resource planning efforts that have the potential to achieve Water Resource Element goals.

**WR-IM14. Watershed Planning with Public Land Managers.** Participate in the planning activities of federal and state land management agencies to advocate for watershed-based planning and management approaches and policies and projects that are consistent with Water Resource Element policies.

**WR-IM15. Coordinate and Support Watershed Efforts.** Seek funding and work with land and water management agencies, community-based watershed restoration groups, and private property owners to implement programs for maintaining and improving watershed conditions that contribute to improved water quality and supply.

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**WR-IM16. Basin Plan.** Work cooperatively with the North Coast Regional Water Quality Control Board and other interested parties in the update and implementation of Basin Plan policies and programs.

**WR-IM17. Water Resources Funding.** Work with public water suppliers, utility districts, stakeholder groups, and interested parties to seek and secure outside funding sources to implement this Element.

**WR-IM18. Facility Construction.** Coordinate with public water suppliers in the planning, development, and construction of the storage and transmission facilities needed to supply water pursuant to this Plan's policies, urban water management plans, water supply agreements, municipal service reviews, and programs to mitigate identified water quantity conditions, where applicable.

### Public Water Supply

**WR-IM19. Water Facilities Consistency with the General Plan.** Pursuant to the requirements of California Government Code, Sections 65400-65402, require public water suppliers—including cities, county-dependent districts, special districts, and other local public agencies—to consult with the County prior to acquiring a site or developing any well or facilities for public water supplies in the unincorporated area, by requesting a determination of the proposal's consistency with the General Plan.

**WR-IM20. Technical Assistance Water Supply and Quality.** Assist public water suppliers in the assessment of available water supplies and protection of water quality.

**WR-IM21. Long-term Water Supply Planning.** Work with Humboldt Bay Municipal Water District and other public water suppliers in the development and implementation of long-term plans for water supply, storage, and delivery necessary to first meet existing water demands and, secondly, to meet planned growth within the designated service areas, consistent with the sustainable yield of water resources.

**WR-IM22. Promoting Water Conservation and Re-use.** Maintain information resources for permit applicants on:

- A. Water-conserving design and equipment in new construction.
- B. Water conserving landscaping measures.
- C. Water conserving retrofit options for existing buildings.
- D. Residential water re-use options including grey-water systems.
- E. Off-stream water storage systems

**WR-IM23. Urban Water Management Plans.** Review and comment on Urban Water Management plans (California Water Code Sections 10610–10656) prepared by urban water suppliers.

**Importing and Exporting**

**WR-P24. Restoration of Flow Rates.** The County shall actively participate in decision-making processes that affect water flows in the Trinity, Klamath, Eel, Mad and Van Duzen rivers to advocate for the goals and policies of this Plan.

**Storm Drainage**

**WR-IM25. Drainage Ordinance.** The County shall develop and maintain an ordinance that regulates stormwater drainage consistent with the policies and standards of the Element.

**WR-IM26. Low Impact Development Methods.** Encourage discretionary projects to utilize best management practices for Low Impact Development to meet surface water run-off standards.

**WR-IM27. Nutrient Discharge from Agricultural Operations.** Seek funding and support voluntary dairy manure management programs.

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# EXHIBIT G

Trinity County Grand Jury Report on Water



Superior Court of California  
County of Trinity

P.O. Box 1258  
Weaverville CA 96093

ELIZABETH W. JOHNSON  
*Presiding Judge*

MICHAEL B. HARPER  
*Judge*

MEMORANDUM

**TO:** Board of Supervisors  
Trinity County CAO  
Trinity County Waterworks Dist. 1  
Trinity County Planning Dept  
Trinity County Environmental Health Director  
Trinity County Code Enforcement Officer

**FROM:** Staci Holliday, Jury Commissioner *SH*

**DATE:** June 24, 2016

**RE:** 2015-2016 Trinity County Grand Jury Report  
*SDR 2015-2016-001 – Water Committee*

This report is being provided to your department pursuant to Section 933.05 of the Penal Code relative to grand juries. Penal Code § 933.05(f) requires that grand juries, **following approval by the Superior Court Presiding Judge and at least two working days prior to the public release of the report**, shall furnish each respondent a copy of the report which pertains to the respondent. No respondent shall disclose any contents of the report prior to the public release of the final report.

This report will become a matter of public record on **June 30, 2016**. Sections 933 and 933.05 require you to respond in writing to the findings and recommendations pertaining to matters under the control of you or your department. Your original response should be addressed to Michael Harper, Judge of Trinity Superior Court **with a copy to the County Administrative Office “Clerk of the Board”**.

Enclosure

**RECEIVED**

JUN 23 2016

TRINITY COUNTY  
SUPERIOR COURT

# Water Committee SDR 2015-2016-001

## Final Report

Approved June 16<sup>th</sup>, 2016

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MBH  
6/23/16



# **WATER COMMITTEE**

**2015-2016-001**

## **Final Report**

### **SUMMARY**

Water is a crucial resource of Trinity County. We need it for safe drinking water and normal household uses. It is also important for agricultural uses, crops and domestic animals. It is a source of recreation and associated income from rivers and lakes. It supports fisheries and wildlife. It sustains our forests which are so essential to healthy watersheds. This 2015-2016 Trinity County Grand Jury has looked at practices, policies, and procedures dealing with water and what effects these can have on our future. Trinity County is in a much better situation than most of California, but we cannot afford to get into an untenable situation. While ultimately weather patterns determine how much fresh water comes from the sky, we should do the best we can to preserve and responsibly utilize what is made available to us.

Water is a commodity and has been for a long time. Trinitarians have been slow to accept that notion, partly because we have generally had sufficient water and partly because we have become complacent.

A laissez-faire approach is not effective. We must find the means and the will to study each water source, the present and future demands thereon, and ways and means to insure sustainability in the future.

### **BACKGROUND**

Some of California's most important and reliable water has come from Trinity County. Until a few years ago, Trinity County's supply seemed a given. Not anymore.

Drought has come to the state and to us. Some say the rains that came at the end of 2015 (including snow accumulations in our mountains) mark the end of drought. Most experts argue otherwise; drought is not the anomaly, El Nino is.

Sometimes flooding, too much water too quickly, creates its own problems and is something for which we also need to plan.

The Grand Jury found widespread agreement that water issues need attention, but a greater sense of urgency is necessary.

## METHODOLOGY

The Grand Jury studied:

- California's new water laws
- Trinity County laws, policies, procedures, and practices
- Issues through studying printed and digital documents
- Several water districts and other Water Providers
- Public media including local newspapers

The Grand Jury interviewed:

- Trinity County officials in key County departments
- Several water districts and other Water Providers
- Experts with insights in economics and hydrology

## DISCUSSION

We looked at various major water concerns and issues ranging from drinking water to sustainable practices.

Contracts with the State entered into sixty or more years ago bind the County to allow much of its water to be sent southward to the rest of the state, leaving us with little or no control over that portion of water. Many well owners and riparian owners choose to think of their water use as having no impact on others, although it does. Demands for water, often from questionable agricultural activities, gradually exceed the capacity of the aquifers and streams, until they fail.

### Clean Drinking and Household Water

Water supplies in our county take several forms. Roughly half of the households have wells or draft from streams and rivers. The other half obtains water from private or public water suppliers. Generally speaking, these sources have worked well for most of us in the past. A number of households regularly have serious water shortage problems during the usual dry summer months. It is certainly a distressing situation to turn on the faucet and get either no or bad water.

Providing water is by any definition a municipal activity. Part of the reason is the continuity of a municipal provider. Half of the residents of our county are served by special water districts which fit that broad definition of a "municipality." However, in our county there are some Water Providers that are not-for-profit corporations, most of them small. This is entirely legitimate. But with the drought have come supply problems and treatment responsibilities that have impacted these small private concerns even harder than the special districts.

A number of serious situations present themselves.

1. Water from private wells is not regularly tested unless by the owners. Water from Water Providers is consistently checked and regulated by the State. Water Providers is defined by this Grand Jury as a business or organization that provides a reticulated water supply, irrigation water, reused or recycled water, or a bulk water supply service. Water Providers may be government or private and often operate water storage, purification and supply services. They may also provide sewerage or drainage services.

2. A proliferation of wells has affected the water supply of others. For example, five years ago the County issued 35 well permits while in 2015 the County issued more than 300 (see chart). Drilling a new well requires a permit, and many property owners obtain a permit before commencing. But there appears to be no examination or testing to determine how the drilling will affect others. Whether this is due to custom and practice or lack of regulation is unclear. The County has issued well permits as if it were a matter of right requiring no regulation.

3. Streams that have reliably produced domestic water have dried up early or have been polluted upstream by unregulated agricultural activities. Many of these streams are on State or Federal property and beyond the jurisdiction of the County. But these same streams are part of the watersheds that all Water Providers and users take from. Protecting the purity of our watersheds will require cooperation with Federal, State, and County enforcement officials.

4. A growing business in transporting and selling water from private and public Water Providers has arisen, creating a number of issues:

a. Water delivered to otherwise dry properties have enabled large grows of marijuana that was impossible before.

b. Water that is transported has no apparent use regulations such as those imposed on users in the district or company boundaries from which the water is obtained.

c. At least some of the Water Providers have charters stating that the water provided shall be for use of residents of the area served by the provider. Yet, these Water Providers sell water they know, or should know, is transported outside the boundaries of the provider.

5. The County and the Water Providers are out of sync regarding who should be able to obtain water, transport it, for what purpose, and in what amount. The County has adopted rules limiting or regulating cultivation of marijuana. The Water Providers that sell water without apparent regulation for transport within and without their service areas enable cultivation of marijuana on properties that otherwise would not sustain agricultural use. The conflict of policies is obvious.

6. All the Water Providers we interviewed appear to be operated by competent managers who are properly credentialed and well intentioned. However, while some of the Water Providers conduct business in ways that are open and transparent, others are more opaque. The latter Water Providers seem not to have embraced obligations arising out of the Brown Act and rules for disclosure and production of public records.

7. Excessive groundwater and stream extraction can cause overdraft, failed wells, deteriorated water quality, environmental damage, and irreversible land subsidence that damages infrastructure and diminishes the capacity of aquifers to store water for the future. Groundwater, as defined by <http://www.groundwater.org/> is the water found underground in the cracks and spaces in soil, sand and rock. It is stored in and moves slowly through geologic formations of soil, sand, and rocks called aquifers.

### **Recreational and Associated Income**

Water in lakes and rivers is a major source of recreation and associated income in Trinity County. The beauty of the county is included in its mountains, forests, streams, and lakes. Hikers and campers are attracted to areas with water.

Trinity River supports fishing, swimming, camping, kayaking, rafting, picnicking, and such for both world-wide visitors and local residents. Visitors buy meals and stay in lodging, providing an important income to the County.

Trinity Lake also is a wonderful recreational area, when there is enough water in it. Trinity Lake was created in the early 1960s. After the dams were constructed, a substantial amount of the water above the dams was diverted to the Central Valley disrupting the natural processes that keep the river healthy. The Trinity River lost much of its ability to support salmon, steelhead and other species that depended upon it. This was partially corrected in a 2000 Record of Decision that authorized restoration flows to the Trinity River. In the summer the Trinity River flows released from the dams are reduced to what are approximately the average flows in summer before the dams were built.

Ruth Lake is the only reservoir on California's Mad River. The dam was built in 1962 primarily for domestic and industrial water supply to Eureka and other communities around Humboldt Bay. The summer resort community of Ruth developed to expand recreational use of the reservoir. There are cabins and campgrounds. Boating and fishing are popular.

Both Ruth and Trinity Dams have hydroelectric plants. The Trinity Public Utilities District produces electrical power from Trinity Dam. Of course, this requires sufficient water to turn the generating turbines. Like with water from the dams, most of the power generated is distributed outside of the County.

### **Forests, Wildlife, and Fish**

Water also supports fisheries and wildlife. For us this provides recreational fishing and hunting and other outdoor recreation as well as commercial ventures. The trees in the forests consume water, but provide income as timber, as well as recreational areas. They support many species of

plant and animal life. The forests are the caretakers of our watersheds. Without healthy forests we do not have healthy watersheds.

A watershed, as defined by <http://www.watershedatlas.org/> “carries water *shed* from the land after rain falls and snow melts. Drop by drop, water is channeled into soils, ground waters, creeks, and streams, making its way to larger rivers and eventually the sea. Water is a universal solvent, affected by all that it comes in contact with: the land it traverses, and the soils through which it travels. The important thing about watersheds is: what we do on the land affects water quality for all communities living downstream.”

As water passes through a watershed, it will pick up fertilizer, pesticides, herbicides, and other chemicals. This affects life forms in the area possibly killing fish and wildlife. Worse, dissolved contaminants could enter human water sources, contaminants that may not be “tested for”.

Beside the quality of the water, even the amount of water collected in the watershed is affected by the health of the forest. Studies are being made on whether thinning forests overgrown with thickets of small trees will yield more water for rivers and reservoirs.

Forest fires can produce large amounts of sediment in rivers and lakes. Another big source of sediments is grading for roads or clearing patches of forest. Sediments are carried by, but not dissolved into, the water, creating cloudy or muddy water.

### **Sustainability and the Future**

The Grand Jury has found no evidence that the County has been managing water resources for sustainability; that is, satisfying current needs without compromising the future. We found no significant efforts to map or analyze water resources. We found few regulations protecting riparian exposures from pollution. The County’s well regulations appear very outdated. Particularly when the number of wells drilled in Trinity County has risen from 35 a year to 300 a year during the last five years and the majority of the wells have been drilled in areas where marijuana cultivation is the primary activity. Some regulations that exist are antiquated or not enforced.

### **Sustainable Water Management**

Sustainability is using water and other resources at levels that can be sustained each year without causing an undesirable result. The emphasis is on managing all water resources in Trinity County.

### **Old Water Laws and their Weaknesses**

The history of California is linked to the history of water rights. Whoever controls the water controls the wealth, and therefore it is a history of struggle in the legislature, in the courts, and in the field. The struggle continues each year, seeking balance between exclusive individual rights versus the need to reserve access to water for everyone.

Problems with weak, inconsistent water laws were not new when amid high hopes the legislature passed laws in 2001 to strengthen the California Environmental Quality Act (CEQA). CEQA, enacted in 1970, requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. Among the provisions were requirements that municipalities approving a new development project would evaluate the water supply and forecast that it would be sufficient for 20 years.

### **The New Water Law and its Potential**

In 2014, the State of California amended its Water Code section 10720 et seq. to require sustainable groundwater management and enforcement. There is a question whether this new law affects any part of Trinity County at this time as local aquifers are small. The extent to which the new law imposes any immediate or long term obligations on Trinity County remains to be seen.

Although the new water law is already in place, many of the provisions follow a time line that stretches out for ten years and longer. Sustainable water management becomes more difficult every year that we disregard it.

The legislation passed in 2014 is widely understood to provide the strongest groundwater management law that California has ever had.

The new law:

- adopts a goal that all groundwater use be sustainable
- mandates counties to establish local agencies responsible for sustainable water use
- grants authority to the local agencies to enforce sustainable use
- grants authority to fund the local agencies

The local agencies are called Groundwater Sustainability Agencies (GSA). Each GSA is responsible for a careful analysis of an aquifer and how it is being used, in the form of a groundwater sustainability plan consistent with criteria established in the law. The GSA is responsible for preparing the plan and making it work on a sustainable yield basis. Initially, the mandates apply to the most critical aquifers, those with high and medium priorities for action, assigned by the California Department of Water Resources (DWR). It is unlikely that the new law will resolve all water concerns, or indeed that it will go unchallenged in the courts. But it provides a fresh framework with new powers around which the community can gather cooperatively to obtain more rational, equitable water management results than before. And while the law deals primarily with the management of groundwater resources, it is clearly tied to the management of surface waters as well.

The point of the legislation is to require Water Providers and water users to work together in the quest for sustainability.

Trinity County has a large number of public and private Water Providers, but there has been little or no contact between them and the County. So far as the written record is concerned, there has been little or no work with stakeholders (people with vested interests) throughout the county to identify how their interests pertaining to water can be managed, and by whom.

Trinity County has not been mapped into an aquifer basin by the United States Geological Service (USGS) and affirmed by the DWR. So far, no basin in Trinity County has been singled out by DWR as medium priority basins selected for early attention, for a combination of reasons that include the overlying population, its projected growth, irrigated acreage, reliance on groundwater, and impacts such as overdraft and subsidence.

This mapping is an important step toward sustainability because there still is not enough information to complete a good model. Most well owners don't report basic information such as how much water they pump and what the water depth is. Existing groundwater management plans are voluntary agreements between stakeholders about collecting more such information. In the future, there will be more data. As information improves, water models and management decisions will also improve.

When properly managed, water resources will help protect communities, farms, and the environment against prolonged dry periods and climate change, preserving water supplies for existing and potential beneficial use. Failure to manage water to prevent long-term overdraft infringes on all of our water rights. A water sustainability plan needs to consider all factors that affect the balance of the water system, with collegial management of surface water and groundwater resources. While good data are available for water used by water districts within the county, considerably less is known about water use in areas outside those limits – where most of the individual wells, streams, springs, and most of the county's agriculture are located. Data collection and monitoring will need to be early goals of the new water management bodies.

### **Cooperating to Get the Most Benefit Out of the New Law**

Sharing the water in an underground aquifer or on a stream can work well as long as everyone follows a "good neighbor" policy and cooperates. Some aquifers and streams and watersheds, however, serve many neighbors and it is not always easy to get the needed cooperation. The new sustainability approach would provide a structure for cooperation and a way to accomplish common goals.

### **Getting Started Now with Water Sustainability Management**

Actions should be taken timely, to preserve local control.

Frequent remarks such as "it is a workload issue", "it requires significant staff", and "it requires Brown Act adherence" are not valid excuses or reasons for not being proactive.

In fact, there is an important advantage in moving ahead promptly, well ahead of the deadlines. Authority is vested in local agencies in the 2014 law to interpret and apply the mandates as long as mandates are met. In default, the State will take over.

## **An Idea for Going Forward**

Carrying capacity has to do with how many people can be supported indefinitely with the available resources and services. A study of carrying capacity is an opportunity to bring many ideas and people together in search of balance and consensus. In the broadest sense, water is only one important part of that picture. For purposes of water management, carrying capacity includes available resources, population, agricultural uses, and per capita consumption.

The County should conduct a carrying capacity study to consider how an economic part, a social part, and an environmental part come together to make up community. Carrying capacity should be studied broadly across the entire county through an independent team representing resources, disciplines, stakeholders, and other interests.

Some of this may be difficult to accept after years of unregulated water use, but easier to accept than a well or stream or watershed going dry when a property owner is relying on it—or a whole water basin that is no longer available to anyone. Water is essential to life and our enjoyment of life. Groundwater and surface water sustainability management is an essential step in making sure water is available to us and to those who follow us.



## FINDINGS

- F1. Recent changes in California water law mandates managing water as a long-term sustainable resource.
- F2. The County needs a cross-discipline study of carrying capacity in Trinity County that projects what population and agricultural activities the water and other resources in Trinity County are capable of supporting.
- F3. Water Providers of all types within Trinity County need to sufficiently educate water users about their responsibilities for sharing water resources, potential limitations on water use, and the advantages of making sure, through sustainability, that water will be available in the future for their own use.
- F4. Most governmental entities in Trinity County — departments, and other agencies — have yet to adopt sustainability provisions in their mission statements, goals, and programs, or to coordinate those efforts with other government entities.
- F5. Trinity County has not participated significantly in preparations for sustainable water management, including failure to regulate grading.
- F6. Residential water is most important. Any agricultural or other use that interferes with residential use must be well and carefully regulated.
- F7. Policies of Water Providers and the County conflict. Transport of water out of District boundaries has opened up agriculture in areas, and to an extent, not anticipated or desired by County policies.
- F8. Some Water Providers are reluctant to provide information and disclosure of public records as required by the Brown Act.
- F9. Water quality tests of drinking water are recognized as an expense. Most Water Provider organizations do only the State required tests. Individual owners do not have such requirements and are likely not to do any tests except at property transfer.
- F10. Water was plentiful during the last century. Water in saturated soil beneath the surface of the earth could be easily pumped for use and its availability fostered urban and agricultural growth. Riparian (land adjacent to rivers or other bodies of water) demands did not overwhelm streams. As demand for water increased, effective management became critical to protecting the future availability and quality of the supply.
- F11. Excessive sediment loads to creeks and the river can negatively impact salmon and steelhead populations. For Trinity County there is concern about Coho and other Salmon or Steelhead of becoming legally endangered, as that can cause serious economic repercussions. Even just one species, such as Coho, on the endangered list would seriously impact any recreational or commercial fishing.
- F12. The Grand Jury has found no evidence that the County has been managing water resources for sustainability; that is, satisfying current needs without compromising the future.
- F13. The County and Water Providers have not met in a meaningful and productive way.

## RECOMMENDATIONS

- R1. All Water Providers should examine their minutes, resolutions, bylaws, charters, enabling legislation, and statutes to determine what authority they have, if any, to sell or otherwise provide water to any person or property that is not within the boundaries served by the provider. If these practices do not comply, Water Providers should take immediate steps to change their practices to reflect this Recommendation.
- R2. All Water Providers should meet with County officers and elected officials to examine and resolve the conflicting customs and practices described in this report regarding sale and transportation of bulk water for agricultural purposes.
- R3. The Trinity County Board of Supervisors should immediately review its resolutions, ordinances, and practices, as well as State law, regarding regulating, managing, and permitting wells. If they do not comply, they should take immediate steps to change their practices.
- R4. The Trinity County Board of Supervisors should examine and act on ways to protect its watersheds and aquifers from unauthorized or damaging incursions.
- R5. The Grand Jury recommends that the Trinity County Board of Supervisors and all Water Providers in Trinity County take prompt action to establish goals that include sustainability and recognize water sustainability as a specific goal.
- R6. The Grand Jury recommends that the Trinity County Board of Supervisors and all Water Providers and all stakeholders assign a high priority to and participate in conducting a county-wide study of carrying capacity. The study should also consider additional public and private water storage opportunities.
- R7. The Grand Jury recommends that the Trinity County Board of Supervisors acknowledge the real issues of water sustainability in Trinity County and establish, fund and support a GSA or similar entity and related laws and enforcement.
- R8. All the Water Providers should examine their minutes, resolutions, bylaws, charters, enabling legislation, and statutes regarding open meeting and public records. If they do not comply, they should take immediate steps to change their practices.
- R9. Regular testing of well water quality and quantity should be done. An incentive program would help.
- R10. The Board of Supervisors should promptly adopt a grading ordinance.

## REQUEST FOR RESPONSES

### Required Responses

Pursuant to Penal Code section 933.05, the Grand Jury requests responses as follows:

#### Trinity County Board of Supervisors

- Recommendation R2 is supported by Findings F3, F7, F11, and F12
- Recommendation R3 is supported by Findings F6, F9, and F10
- Recommendation R4 is supported by Findings F10 and F11
- Recommendation R5 is supported by Findings F3, F4, F5, F12, and F13
- Recommendation R6 is supported by Findings F2, F3, and F13
- Recommendation R7 is supported by Findings F1, F3, F4, F5, F12, and F13
- Recommendation R10 is supported by Finding F11

The following Water Providers under the Grand Jury purview

#### Trinity County Waterworks District #1

#### Weaverville Community Services District

- Recommendation R1 is supported by Finding F7
- Recommendation R2 is supported by Findings F3, F7, F11, and F12
- Recommendation R5 is supported by Findings F3, F4, F5, F12 and F13
- Recommendation R6 is supported by Findings F2, F3, and F13
- Recommendation R8 is supported by Finding F8

#### Trinity County Planning Department

- Recommendation R2 is supported by Findings F3, F7, F11, and F12
- Recommendation R9 is supported by Findings F3, F6, and F9

#### Trinity County Environmental Health Director

- Recommendation R4 is supported by Findings F10 and F11
- Recommendation R9 is supported by Findings F3, F6, and F9
- Recommendation R10 is supported by Finding F11

#### Trinity County Code Enforcement Officer

- Recommendation R2 is supported by Findings F3, F7, F11, and F12
- Recommendation R9 is supported by Findings F3, F6, and F9

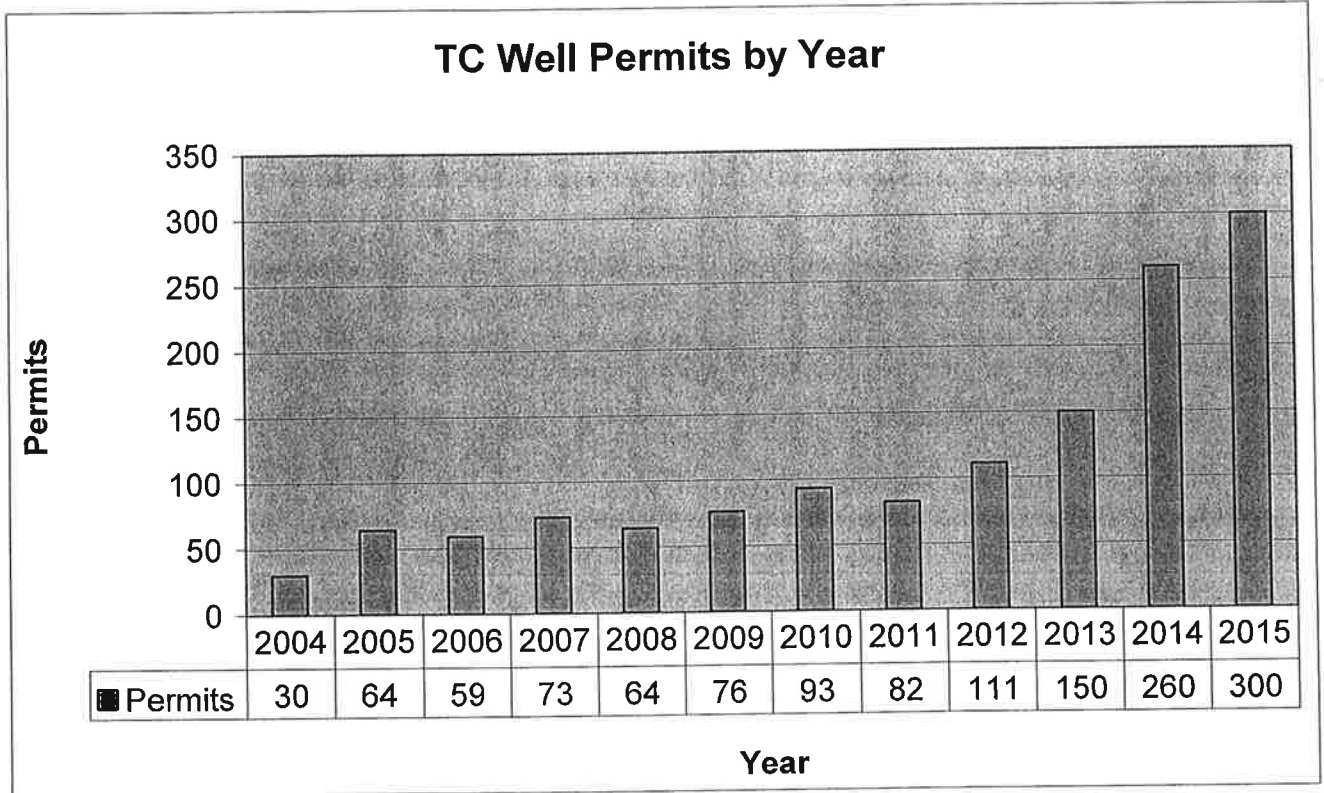
#### Trinity County Administrative Officer

- Recommendation R2 is supported by Findings F3, F7, F11, and F12
- Recommendation R9 is supported by Findings F3, F6, and F9

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**APPENDIX**



#### Some facts about water

1 Acre-foot is 43,560 cubic feet (meters often read cubic feet).

1 Acre-foot is also 325,851 gallons.

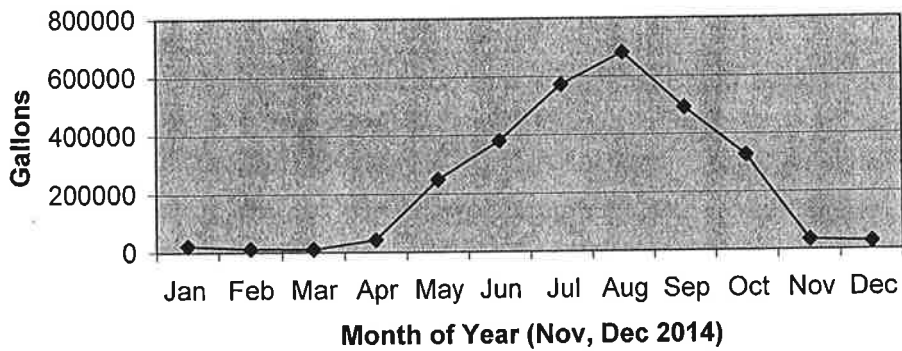
1 MG (Million Gallons) = 133,690 Cubic Feet

Average consumption is about 76 GPCD (gallons per capita daily).  
 "Outdoors" water usage can greatly exceed this amount in the summer months.  
 This means 1 Acre-Foot satisfies 11.7 people for a whole year.

A gallon of water weighs about 8.34 pounds.  
 A one-ton truck could carry 241 gallons

Water trucks with capacity of 2000-5000 gallons weigh 8.34 to 20.8 tons.

**WCSD Water Hauler Data 2015**



**TCWD#1 Trucked / Piped Water Sales**

