County of Santa Cruz

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Resource Protection Policy
for Evaluation of Well Applications to Minimize Resource Impacts

This policy specifies the level of review of proposed well applications and requirements to minimize potential impacts on water resources, public trust resources, and other wells; (SCCC 7.70.110 (C-G)), and coastal, biotic and cultural resources (SCCC 7.70.030(C)). This policy addresses the following issues:

- Water use efficiency measures to prevent waste and minimize overdraft;
- Influence on groundwater levels and production of nearby wells;
- Influence on surface water and public trust resources;
- Evaluation of wells that encounter karst;
- Consistency with groundwater sustainability plans;
- Applicability of environmental and coastal review and assessment of biotic and cultural resources;
- Metering and reporting for non-de minimis wells; and
- Additional requirements in groundwater extraction concern areas.

1. Definitions:

(1) "Community Well" means a water well used to supply water for domestic purposes in public water systems or state small water systems as defined in Section 116275 of the Health and Safety Code.
(2) "De Minimis Well" means a water well used to supply water for domestic needs of up to four individual primary residences using a total of less than 2 acre-feet per year. An approved accessory dwelling unit is not considered a separate primary residence for this purpose. De minimis domestic use may include up to one half acre of non-commercial residential irrigated landscaping and gardening per primary unit.
(3) "Groundwater Extraction Concern Area" means an area designated by the Health Officer where groundwater availability is limited due to inadequate supply or poor quality, or where construction of additional wells may cause significant adverse impacts on groundwater levels, surface water flow, or seawater intrusion. These areas are shown in the County's Geographic Information System.
(4) "Impermeable Layer" means a material layer that limits the downward movement of groundwater and will be identified based on information on local geology or nearby well logs, and will be confirmed by the well log of the newly installed well.
(5) "New Well" means a well that will serve a new or expanded use, which represents a significant increase in extraction of groundwater.
(6) "Non-De Minimis Well" means a well that is not a de minimis well: it serves a non-domestic use, or serves more than 4 separate primary dwelling units.
(7) "Replacement Well" means a well that will serve an existing use or change of use with no significant increase in water use as defined below and will replace an existing water source such as a spring or a well that is to be destroyed.

(8) “Significant Increase in Water Use” means a new use or change of use in the area served by the well that will result in an increase in the maximum annual amount of water extracted in the past 5 years.

(9) “Stream” means a perennial stream fed by groundwater. Streams are those that are mapped as perennial streams as shown on a USGS map, the County Geographic Information System (GIS), or that are identified in the field. Required setbacks from streams shall be measured horizontally from the mean rainy season flowline. These standards shall apply to wells near streams or reaches of streams that are hydraulically connected to groundwater more than 5% of the time. (This does not include lower Valencia Creek, lower Corralitos Creek, upper East Soquel Creel, and Rider Creek. Specific reach designations and other exempt streams may be added.)

(10) “Supplemental Well” means a well that that will support an existing use, including a change of use, with no significant increase in total water use as described above. The existing source could be a shared well or other well that will be maintained as a backup source.

(11) “Tier” means the type of well application and the level of review and conditions that will be needed for approval based on the proposed volume of pumping, type of water use, proposed increase in water use, the aquifer characteristics and the potential for impact on streams, nearby wells, groundwater sustainability, and/or the environment. Each application for a new, supplemental, or replacement well shall be evaluated and specific measures may be required as a condition of approval to ensure that the well will not have significant adverse impacts on groundwater sustainability, nearby wells, surface water, or the environment. The level of evaluation and required measures will depend on the Tier in which the well falls, based on the type of well, the location, and the aquifer characteristics. The Health Officer shall establish specific criteria and procedures for assigning the Tier and the extent of required evaluation and protective measures. Such criteria shall be adopted by the Board of Supervisors by resolution. The Health Officer may deny applications for Tier 4 wells that will have a significant adverse impact on groundwater sustainability, nearby wells, surface water, or the environment.

(a) Tier 1 will include de minimis wells and non-domestic wells using less than 2 acre-feet per year that do not require any discretionary review under other chapters of the SCCC and meet the minimum standards for preventing impacts on streams and nearby wells based on aquifer characteristics, well characteristics, depth of well seal, and location.

(b) Tier 2 will include supplemental and replacement non-de minimis wells with no significant increase in water use that meet the minimum standards for preventing impacts on streams and nearby wells based on aquifer characteristics, well characteristics, depth of well seal, and location.

(c) Tier 3 will include new non-de minimis wells serving new uses that will pump less than 50 acre-feet per year and wells originally considered Tier 1 or Tier 2 wells that are unable to meet those requirements. Tier 3 wells must also meet the minimum Tier 3 requirements for stream depletion and nearby well drawdowns as described below.

(d) Tier 4 will include wells that do not meet the Tier 1, 2, or 3 requirements, are in a Tier 4 Groundwater Extraction Concern Area (non-de minimis), or are wells that could adversely affect the sustainability of a groundwater basin.

(12) “Tier 4 Groundwater Extraction Concern Area” means a specific area of the county designated in Table 9 in which the extraction and use of groundwater from new, supplemental, or replacement wells could cause significant adverse impacts on groundwater sustainability, nearby wells, surface water, or the environment.

2. Requirements for Minimizing Impacts on Stream, Public Trust Resources, Groundwater Dependent Ecosystems, and Groundwater Sustainability

a. No well will be approved in the Pure Water Soquel Control Zones or Aquifer Storage and Recovery (ASR) Control Zone, or other designated control zone, unless it can be shown that the well will not impact or be impacted by the injection and/or extraction program.

b. Tier 1: (New and replacement de minimis wells, non-domestic wells using less than 2 acre-feet per year)

1) All wells located within 1000 ft of perennial stream as mapped on a USGS map, County GIS or as identified in the field shall meet the following standards for minimizing impact on streamflow unless that stream is designated as exempt by the Health Officer.
   a) Wells shall be located a minimum of 50 ft from the streambank, outside riparian woodland, and outside the 100 year floodplain, whichever distance is greater. If a 50 ft setback cannot be attained due to the size of the property, steep slopes, setbacks from onsite wastewater treatment systems, or other factors, the setback shall be the maximum attainable and shall not be less than the existing well if the proposed well is a replacement or supplemental well.
   b) The minimum depth of the well seal shall be 100 ft or into first Impermeable Layer, whichever is less.
   c) No well shall be completed in alluvium deposited into a known and definite channel with a direct hydraulic connection to surface water.
2) Additional measures, as outlined in the *'Groundwater Extraction Concern Table'* below*,* may be required for proposed Tier 1 wells located within a designated groundwater extraction concern area.

c. Tier 2: (Replacement/supplemental non-de minimis wells, with no increase in water use)

1) All wells located within 2000 ft of perennial stream as mapped on a USGS map, County GIS or as identified in the field shall meet the following standards for minimizing impact on streamflow unless that stream is designated as exempt by the Health Officer.
   a) Wells shall be located a minimum of 100 ft from the streambank, outside riparian woodland, and outside the 100 year floodplain, whichever is greater. If a 100ft setback cannot be attained due to the size of the property, steep slopes, setbacks from onsite wastewater treatment systems, or other factors, the setback shall be the maximum attainable and shall not be less than the existing well.
   b) The minimum depth of the well seal shall be 200 ft or into first Impermeable Layer, whichever is less.
   c) No well shall be completed in alluvium deposited into a known and definite channel with a direct hydraulic connection to surface water.
2) Replacement or supplemental wells in the Pajaro Groundwater Protection Zone that are proposed to draw from a deeper formation than the existing well and that may threaten basin sustainability as determined by the Pajaro Valley Water Management Agency may be treated as Tier 3 or 4 wells and require more extensive evaluation.
3) Additional measures, as outlined in the *'Groundwater Extraction Concern Table'* below*,* may be required for proposed Tier 2 wells located within a designated groundwater extraction concern area.

d. Tier 3 (Wells that do not meet Tier 1 or 2 requirements and new non-de minimis wells that will not pump more than 50 acre-feet per year or more than a daily average of 100 gallons per minute and are consistent with local Groundwater Sustainability Plans):

1) All wells located within 2000 ft of perennial stream as mapped on a USGS map or as identified in the field shall meet the following standards for minimizing impact on streamflow unless that stream is designated as exempt by the Health Officer.
2) The minimum depth of the well seal shall be 200 ft or into first Impermeable Layer, whichever is less.
3) The well shall be located and designed so that a calculation of projected streamflow depletion shall not cause exceeding the allowable additional cumulative depletion percentage of the 10th percentile dry season flow in an affected fish-bearing stream after 10 years of pumping, as calculated by Environmental Health staff based on well characteristics, water usage, aquifer characteristics using the most appropriate streamflow depletion model (e.g. Reeves, 2008; Hunt, 1999 ; Hunt, 2003, Li et. al. 2022, Bakker 2013). 10th percentile dry season flow shall be the observed flow, if available, or the calculated natural flow as indicated in the most recent version of the California Unimpaired Flow Database (Zimmerman, et.al, 2023). Environmental Health staff will utilize the Critical Stream Table and will develop additional resource and streamflow information for the specific location of the proposed well as needed.
4) Consideration will be given for mitigating flow depletion impacts through increased groundwater recharge, use of summer storage, limitations on water use, or other methods of reducing impact on flow or associated public trust resources.
5) Additional measures, as outlined in the *'Groundwater Extraction Concern Table'* below*,* may be required for proposed Tier 3 wells located within a designated groundwater extraction concern area.

e. Tier 4 (Wells that do not meet Tier 1, 2, or 3 requirements, are wells that could adversely affect the sustainability of a groundwater basin, are in specified Tier 4 Groundwater Extraction Concern Areas (non-de minimis) (Table 9), or are new Public Water System wells serving 200 or more connections):

1) An analysis of the projected impacts on groundwater levels, streamflow, and groundwater dependent ecosystems in the groundwater basin and watershed where the well will be located shall be conducted by a certified hydrogeologist or other approved licensed/certified professional with demonstrated competency, taking into account specific aquifer characteristics, well characteristics, cumulative impacts of existing groundwater and surface water withdrawals, the presence and lifecycle needs of protected species in affected surface waters, and the potential impact on public trust resources.
2) Consideration will be given for mitigating flow depletion impacts through increased groundwater recharge, use of summer storage, limitations on water use, or other methods of reducing impact on flow or associated public trust resources.
3) This analysis will be required for any proposed Tier 4 well located within a half mile of a stream that is not exempt or anywhere within the watershed of a critical Level 1 stream (e.g., Scott Creek, San Vicente Creek, Laguna Creek, Bean Creek, Zayante Creek, East Branch Soquel Creek). Critical Streams are indicated in the critical stream table and additional streams may be added as additional information on habitat value and/or extent impairment becomes available.
4) An analysis of potential impacts will be required for any non- de minimis well located in a designated Tier 4 seawater intrusion area or any Tier 4 well located within or near a groundwater

basin where the Groundwater Sustainability Agency has determined that the well may threaten achieving groundwater sustainability pursuant to the Groundwater Sustainability Plan.

5) Tier 4 wells are subject to discretionary review and evaluation under the California Environmental Quality Act (CEQA).
6) Specific construction and/or operating measures may be required as a condition of approval and the application may be denied if the project would result in significant adverse impacts on groundwater resources, control zones, surface water, and/or public trust resources.

Table 2

Proposed Level of Review and Mitigation Required for Various Types of Well permit Applications					
Tier	**Criteria**	**Average Number of Permits/year**	**CEQA Review Required?***	**Connected Stream Setback**	**Nearby Well Setback**
Tier 1	De Minimis, domestic < 5 connections; Non-de minimis <2 AFY	44	Ministerial	>50 ft and 100 ft deep seal within 1000 ft of stream**	>50 ft
Tier 2	Non-De minimis Replace/Supplemental	11	Ministerial	>100 ft or not less than existing, and 200 ft deep seal within 2000 ft of stream**	>50 ft, or not less than existing
	Public Water system replace/supplemental	1			
Tier 3	New Non-De minimis wells that are consistent with GSPs, meet Tier 3 calculated setbacks, and will pump less than 50 afy/100gpm	1	Ministerial	If within 2000 ft of stream, Using depletion model, 10th percentile dry season flow shall not be reduced by more than allowed % after 10 years of pumping ***	Calculated minimum setback so that drawdown at nearby well is less than 5 feet****
	Wells that do not meet Tier 1 or 2 minimum setbacks, but do meet Tier 3 calculated setbacks	?			
Tier 4	Wells that do not meet Tier 1,2,or 3 requirements; or located in a control zone or Tier 4 gw concern area	?	Yes	Analysis, including cumulative effect on streamflow in overall basin	Analysis and mitigation
	New Public Water System Serves > 199 connections	<1			

Notes:	
*	Well permit is discretionary if other discretionary permits are requried by other sections of County Code.
**	Deep Seal is specified depth or first impermeable layer, whichever is less.
***	Allowed depletion is function of stream value and current impairment, as shown in Critical Stream Table
****	Use modified Theis Non-Equilibium Equation (Cooper-Jacob), with proposed well parameters and regional aquifer properties. Calculated drawdown at proposed distance of nearby well should not exceed 5 foot after 180 days of pumping.
Water use efficiency measures are required for all wells; metering and reporting is required for all non-de minimis wells; other mitigation measures may be required.	

3. Critical Streams:

Table 3.a

Allowable Additional Cumulative Flow Depletion				
Current Depletion	**>20%**	**10-20%**	**5-10%**	**<=5%**
Resource Value				
Coho Core-1	1%	1%	5%	10%
Coho Recovery-2	1%	5%	5%	10%
Steelhead high intrinsic=3	1%	5%	5%	10%
Steelhead/Other Fish-4	1%	5%	10%	15%

Table 3.b

Stream	Resource Value	All years 10th Percentile Dry Season Unimpaired Flow - NFD	Local Estimates of Dry Seaon Unimpaired Flow	All Years 10th Percentile Dry Seas. Observed Flow	Data Sources Observed Flow, Local Estimates	Current Estimated Depletion	Data Sources Estimated Depletion	Allowed Additional Depletion *	Allowed Depletion cfs*
Lower Soquel @USGS	2	2.44		0.84	A	65%	B,G,H,G	1%	0.008
E. Branch Soquel @ W. Branch	1	1.23	0.25	0.1	B,D,E,G	60%	B,D,E,G	1%	0.001
W. Branch Soquel @ E. Branch	2	0.63	0.95	0.81	B,D,E,F	15%	B,D,E,F	5%	0.041
Moore's Gulch	4	0.05	0.2	0.15	E,F	17%	E,I	5%	0.008
Other Soquel Tribs	4					10-20%	E	5%	
Aptos ab Valencia	2	0.46	0.7	0.66	D,E,G	<=5%	D,E	10%	0.046
Valencia	4	0.11		0.02	D,E,G	82%	D,E	1%	0.001
Upper Corraltios	4	0.63		0.3	D, E	50%	D,E	1%	0.006
Browns Valley Cr.	4	0.22		0.2	D, E	>20%	D,E	1%	0.002
SLR @ Big Trees (Felton, mainstem)	2	15.2		12	A,C,G,H	30%	C,D,E,G,H	1%	0.120
Branciforte	2	0.34	0.66	0.5	C,D,E,F	25%	C,D,E	1%	0.003
Bean	1	0.5	2.8	2.3	C,D,F,G	21%	C,F,G,H	1%	0.023
Zayente ab Bean	1	1.19	1.65	1.53	A,D,E,G,H	5-10%	C,D,E,G	5%	0.077
Bear	2	1.12	0.66	0.63	C,D,E,F	<=5%	C,D,E	10%	0.063
Kings	2	0.58	0.25	0.2	A,C,E,F	<=5%	C,E	10%	0.058
Boulder Creek	3	0.89	1.4	1.1	A,C,D,E,F	25%	C,D,E	1%	0.011
SLR Other Tribs	4				C,E	5-10%	C,E	10%	
Laguna	1	0.5	1.1	0.9	A,E,G	>10%	E,F,G	1%	0.009
Majors	2	0.22	0.9	0.71	A,E,G	>10%	E,F,G	5%	0.036
San Vicente	1	0.85			A	>10%	E	1%	0.009
Scott	1	1.99			A	>10%	E	1%	0.020
Other County Streams	4				E	5-10%	E	10%	

Notes:

* Allowed depletion for Tiers 1-3. Additional Analysis would be required for Tier 4.

Data Sources (See Notes for more information)

A-California Natural Flows Database

B-RCDSCC-TU surface diversion info

C- San lorenzo River Watershed Plan

D-JSSH September Flow Summary-cbec

E - Judgement and observations

F-Flow Measurements

G-Gage data, current

H-Numerical Basin Model

I - Calculated Water Budget

4. Minimizing Impact on Nearby Wells

a. Tier 1 and 2: The minimum setback from existing wells shall be 50 ft. If this cannot be met, the setback shall not be less than the setback of the existing well to be replaced. Minimum setbacks will not be required for wells located on the same parcel or an adjacent parcel owned by the same owner.
b. Tier 3: The minimum setback to a nearby well shall be calculated using the modified Theis Non-Equilibrium Equation (Cooper-Jacob), with proposed well parameters and regional aquifer properties. Calculated drawdown at the proposed distance of nearby well shall not exceed 5 feet after 180 days of pumping.
c. Tier 4: A geohydrologic analysis shall be required for Tier 4 wells that will evaluate the projected effect on nearby wells and shall demonstrate that the new well will not cause significant and unreasonable impacts on nearby wells. If projected impacts are found to be significant and unreasonable, the well applicant must implement a monitoring plan with possible mitigation measures to address observed impacts.

5. Karst Areas

a. For non-de minimis wells, if a well is proposed in a known karst area or if karst is encountered during the drilling process, further drilling shall be suspended, and the Health Officer shall evaluate whether a well can be completed without causing adverse impacts on groundwater resources, surface waters, or other water users. The Health Officer may require analysis at the expense of the applicant by a professional geologist familiar with the occurrence and movement of water in karst landscapes. The analysis shall take into account the potential effect of the proposed well on nearby wells, springs, and streams in terms of flow, water temperature, and water quality. Recommendations may include depth of casing, perforations and seal, or procedures for destroying the borehole without adversely affecting subsurface conditions.
b. For de minimis wells that are proposed in karst or that may encounter karst, the Health Office shall be notified prior to completion, and additional protective measures may be required.
c. Known karst areas and outcrops of marble or limestone are shown on the map of Groundwater Extraction Concern Areas, but other unmapped areas of karst may be encountered during drilling, particularly within mapped metasedimentary formations.

6. Compliance with California Environmental Quality Act and Protection of Coastal, Biotic and Cultural Resources

a. Tier 1, 2, and 3 wells that meet the requirements for those tiers may be approved ministerially. unless the issuance of the well permit requires one or more discretionary approvals pursuant to SCCC Chapter 13.20, 16.20, 16.30, 16.32, 16.40, or 16.42. Tier 4 wells are subject to discretionary review and evaluation under the California Environmental Quality Act (CEQA), pursuant to state and local environmental review guidelines.

b. Wells within the Coastal Zone require a coastal development permit (CDP) and are subject to evaluation under CEQA unless they qualify for an exemption, exclusion, or de minimis waiver under SCCC Chapter 13.20:

1) The following wells are exempt from coastal permit requirements: Replacement well on Park land (SCCC 13.20.064) or serving an existing single-family dwelling (including ADU) or other existing legal structure where there will be no increase or expansion of the use and where the well or access road will not encroach into a sensitive biotic habitat.
2) A well can qualify for a coastal exclusion under the following circumstances:
   a) The well is for agriculture on lands designated for agriculture on a parcel greater than 10 acres, the well location is greater than 100 feet from a stream or waterbody, and is not between the coast and the first public through road paralleling the coast (typically Hwy 1, or San Andreas Rd)
   b) The well will serve a proposed single-family dwelling (including ADU) and is not located in a sensitive habitat, urban services line, rural services line, appealable area, or in an area subject to saltwater intrusion or groundwater emergency.
   c) If a well meets the above requirements, a notice of coastal exclusion must be completed and sent to the Coastal Commission. These forms must be completed by staff in the Community Development and Infrastructure Department (CDI).
3) In some cases, the CDI Director may waive the requirement for a CDP through a de minimis CDP waiver in compliance with a written determination that the well meets all of the criteria and procedural requirements set forth in SCCC 13.20.051.
4) In all other cases, the well is subject to Coastal Development Permit Requirements, and the applicant must submit their permit application to CDI. In some cases, an emergency coastal permit may be obtained, but the applicant will still need to go through the process to obtain a CDP.

c. When a well application is submitted, County staff will assess the presence and potential impact on mapped resources, including, sensitive habitat (SCCC Chapter 16.32), riparian corridors (SCCC Chapter 16.30), native American cultural sites (SCCC Chapter 16.40), and historic resources (SCCC Chapter 16.42). Where the proposed well location may impact any of those resources, further analysis, additional requirements, and/or discretionary review may be required prior to well permit approval. Any site disturbance required for the well construction must be in compliance with the County Grading ordinance (SCCC Chapter 16.20), and as such may require further discretionary review and permitting.

7. Metering and Reporting

a. For all newly installed non-de minimis wells that are not already required by a GSA to install a meter and report to them, a meter shall be installed to measure water use and usage shall be reported annually to the Health Officer, according to procedures established by the Health Officer. The cost of meter installation and reporting shall be borne by the well owner(s).
b. The Health Officer may require the property owner to provide information to confirm that any required water use efficiency measures are being maintained. If such information is not provided or water usage is not being reported, the Health Officer may conduct an inspection to observe the meter and/or verify that /water use efficiency measures are being maintained. Inspections shall be

conducted at reasonable times and the inspector shall first make a reasonable effort to contact the owner or occupant of the premises. If the inspection requires the entry into a building or an area that is designed for privacy, then prior permission shall be obtained from the owner or occupant. If permission is denied, then an inspection warrant shall be obtained by County staff.

c. If the usage information or the results of a site inspection show that the well owner is not in compliance with Chapter 7.70 or with the requirements of the permit, the Health Officer shall require that corrective measures be taken.

8. Water Use Efficiency

a. SCCC 7.70.110(D) requires that as a condition of approval of a well permit, it is demonstrated that groundwater will be put to beneficial use and will not be wasted. To that end, each non-de minimis well permit application shall be accompanied by supplemental water use efficiency information as specified by the Health Officer. De minimis users are required to complete a water efficiency checklist and ensure that irrigated areas do not exceed 0.5 acre. The checklist requires that a water efficiency evaluation be performed, with reasonable recommendations for improved efficiency implemented. Following are the elements to be addressed in the water use efficiency audit.

   Water Use Efficiency Audit for Non-Agricultural Uses

   1) Measure showerhead flow rates and install low flow showerheads, if needed.
   2) Measure faucet flow rates and install faucet aerators for kitchens and bathrooms, if needed.
   3) Check toilet for leaks and install tank displacement devices or retrofit, if needed.
   4) Evaluate the efficiency of the irrigation system.
   5) Identify and correct irrigation leaks, broken or mismatched sprinkler heads, high pressure, and other common problems.
   6) Evaluate any other water uses in the home or business for efficiency.
   7) Institute measures for dispersal and infiltration of stormwater where feasible, ensuring slope stability is not compromised.

b. SCCC 7.70.110(D)(2) allows the installation of standard conservation measures in lieu of performing an audit. In this case, the following measures would be required. Some optional measures could be substituted to offset high water use landscaping.

   Conservation Measures (** - Mandatory Measures)

   1) Install ultra-low flow toilets (<1.2 gal/flush)** (retrofit waived if 1.6 gal/flush toilet is already in use)
   2) Install low-flow showerheads (<2.0 gpm)**
   3) Retrofit Clothes Washer
   4) Audit for leaks**
   5) Audit for irrigation efficiency**
   6) Use xeriscape landscaping
   7) Utilize drip irrigation if feasible. (Required for agricultural use if feasible)
   8) Evaluate water use and water savings by installation and use of a water meter

c. Water Use Efficiency Measures for Agricultural Uses: Groundwater pumped for agricultural uses shall be used efficiently and not wasted. Supplemental information documenting that agricultural water use efficiency practices are implemented shall be required, as specified in the supplemental information forms developed by the Health Officer. Irrigation efficiency evaluation reports completed by another qualified party may be accepted in lieu of these forms, at the discretion of the Health Officer. Examples of efficient agricultural water use practices include but are not limited to variable frequency pump drives, irrigation systems operating at the optimal pressure, uniform water application, immediate repair of leaks, precise water application methods, soil moisture monitoring, and matching water applications to crop demand. Additional efficiency measures may be required to prevent unnecessary water waste.

9. Groundwater Extraction Concern Areas

Additional measures may be required for new non-de minimis wells and some replacement/supplemental wells in designated groundwater extraction concern areas:

Table 9:

Type of Concern:	Karst	Limited Yield	Elevated Nitrate/ TDS/Cl	Seawater Intrusion
Protective Measure:				
Geohydrologic Evaluation	x			x
Modified Yield test observed by County		x		
Discretionary CEQA Review	x			x
Tier 4 Groundwater Extraction Concern Area	x*			x*
Water Quality Testing			x	x
Seal Design	x		x	x
Treatment/Deed Recordation			x	
Well Interference Evaluation?		x		
Water Conservation/ Recordation		x		

Notes:

* Tier 4 Groundwater Extraction Concern Areas are limited to the areas mapped in GISWEB as the Seawater Intrusion zone and, within the "Karst Areas" layer, only those areas symbolized as "High (marble)." Areas symbolized as "Moderate (Metasedimentary rocks)" are not included.

a. Limited Yield Areas: These are areas of the county known to provide limited amounts of groundwater due to the presence of non-water-bearing formations, with limited fractures. These areas have a history of dry holes and/or wells going dry during the summer or dry years. Wells proposed to serve a new or expanded use (including an accessory dwelling unit) in these areas will require a yield test that includes observation of a sustained pumping rate over a four-hour period that meets the requirements of SCCC Chapter 7.73 and concurrent observation of groundwater level in the well to show the level is stable and that it recovers at least 90% within 24 hours after the pump test is completed. Tier 2, 3 and 4 wells will also require concurrent observation of groundwater levels in existing wells within 1000 ft of the new well, subject to authorization by the affected well owners, who will also be required to stop pumping their wells during the test period.

If the yield test does not meet standards, the well may still be considered acceptable if it meets the minimum yield criteria under SCCC 7.73.050 and 7.73.060, including alternate standards based on total water volume over 24 hours. In such cases, additional water efficiency measures may be required, a notice may be recorded on the deed to note the limitations of the well, and a minimum of 10,000 gallons of onsite water storage shall be installed. If the alternate standards along with additional requirements are not met, then it may result in denial of well completion approval.

b. Elevated Water Quality Concern: Areas of the county are known to have elevated levels of contaminants. Water quality testing is required for all newly constructed wells irrespective of proposed use for nitrate, total dissolved solids, chloride, and hexavalent chromium (South of Valencia Creek). Stricter water quality testing is required for wells used for drinking water. In water quality concern areas, this testing must be completed and submitted to the Health Officer for review and approval prior to well completion. If constituents are found to exceed drinking water standards, or may degrade nearby groundwater quality, the Health Officer may require additional testing, electronic logging, evaluation by a qualified professional, specific completion and sealing measures, treatment, complete destruction and sealing of the borehole, and/or other measures necessary to protect groundwater quality and ensure the water quality is suitable for the proposed use. If treatment is required to meet drinking water standards, a notice will be recorded on the deed, pursuant to SCCC Chapter 7.73.

c. Seawater Intrusion Areas: Some areas of the county are experiencing seawater intrusion that is not currently being controlled by implementation of groundwater sustainability plans. In these areas, continued or expanded pumping may further threaten groundwater quality. Any new, supplemental, or replacement non-de minimis well in these areas require and electronic log (e-log), and may require an evaluation by a qualified professional to evaluate the likely impact of that well on seawater intrusion and groundwater quality, also taking into account the potential effects of sea level rise and climate change. The Health Officer may deny drilling of a non-de minimis well in these areas if such well is expected to worsen seawater intrusion.