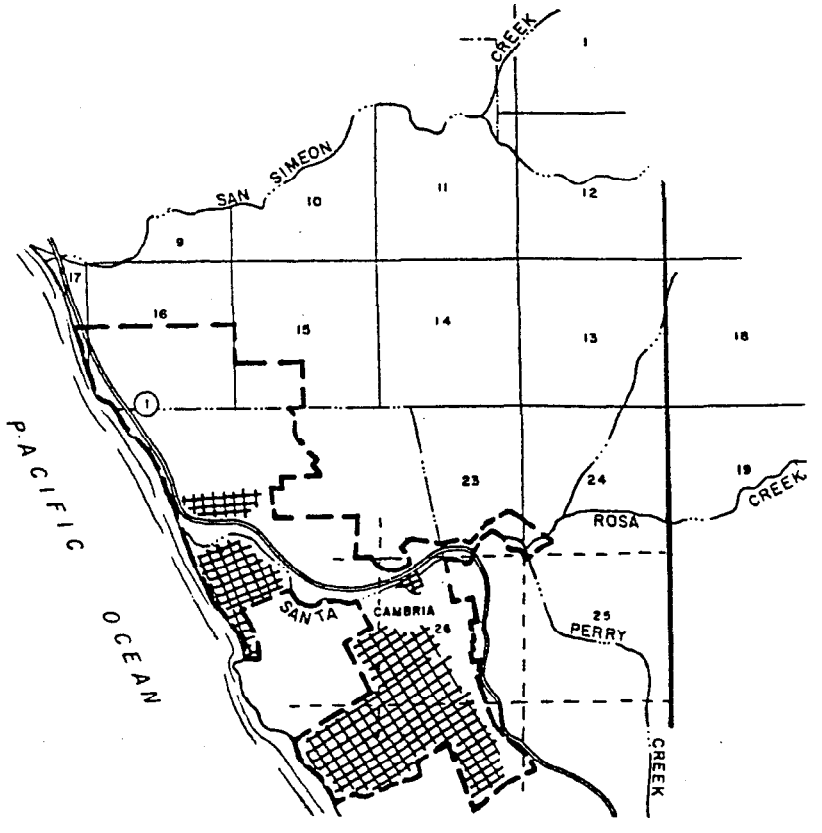
CAMBRIA COMMUNITY SERVICES DISTRICT
APPLICATION 28158
SANTA ROSA CREEK UNDERFLOW

DECISION 1624



APRIL 1989

STATE WATER RESOURCES CONTROL BOARD

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In the Matter of Application 28158,	DECISION 1624
CAMBRIA COMMUNITY SERVICES DISTRICT,	
Applicant,	SOURCE: Santa Rosa Creek
	COUNTY: San Luis Obispo
DEPARTMENT OF FISH AND GAME, RANCHO PACIFICA, LAWRENCE MOLINARI et al.,	
Protestants.	

DECISION APPROVING ISSUANCE OF PERMIT
SUBJECT TO SPECIFIED CONDITIONS

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STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

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DECISION APPROVING ISSUANCE OF PERMIT
SUBJECT TO SPECIFIED CONDITIONS

BY THE BOARD:

1.0 **INTRODUCTION**

The Cambria Community Services District (District or CCSD) having filed Application 28158 to appropriate unappropriated water from the Santa Rosa Creek underflow, protests having been filed; a public hearing having been held on May 19, 1987 by the State Water Resources Control Board (Board); the applicant, protestants, and an interested party having appeared and presented evidence; legal briefs having been submitted; the evidence in the record having been duly considered; the Board finds as follows:

2.0 BACKGROUND

The Cambria Community Services District provides the water supply for the community of Cambria. The District was formed in 1977, and the District and its predecessors historically have obtained the community's water supply from the underflow of Santa Rosa Creek by means of extraction wells. The District claims a pre-1914 right to divert from the Santa Rosa Creek underflow, but, due to the disputed nature of its claim, it filed Application 28158 in 1984. The District has acknowledged that any appropriation of water pursuant to Application 28158 would be inclusive of, and not in addition to, any water to which the District may be entitled under its claim of pre-1914 appropriative rights. (T,III,456:12-17; T,III,576:6-16.)[1]

The presence of high levels of iron and manganese in Santa Rosa Creek underflow, together with limitations on the quantity of water available in prolonged dry periods, led the District to apply for a permit to appropriate water from San Simeon Creek in 1976. Since 1979, San Simeon Creek has been the primary source of

1 Citations to the hearing transcript are indicated by a "T" followed by the volume number, the page number and the line numbers. Citations to exhibits in the record are indicated by the abbreviation of the party submitting the exhibit, the exhibit number, and the number of the page, table or figure within the exhibit.

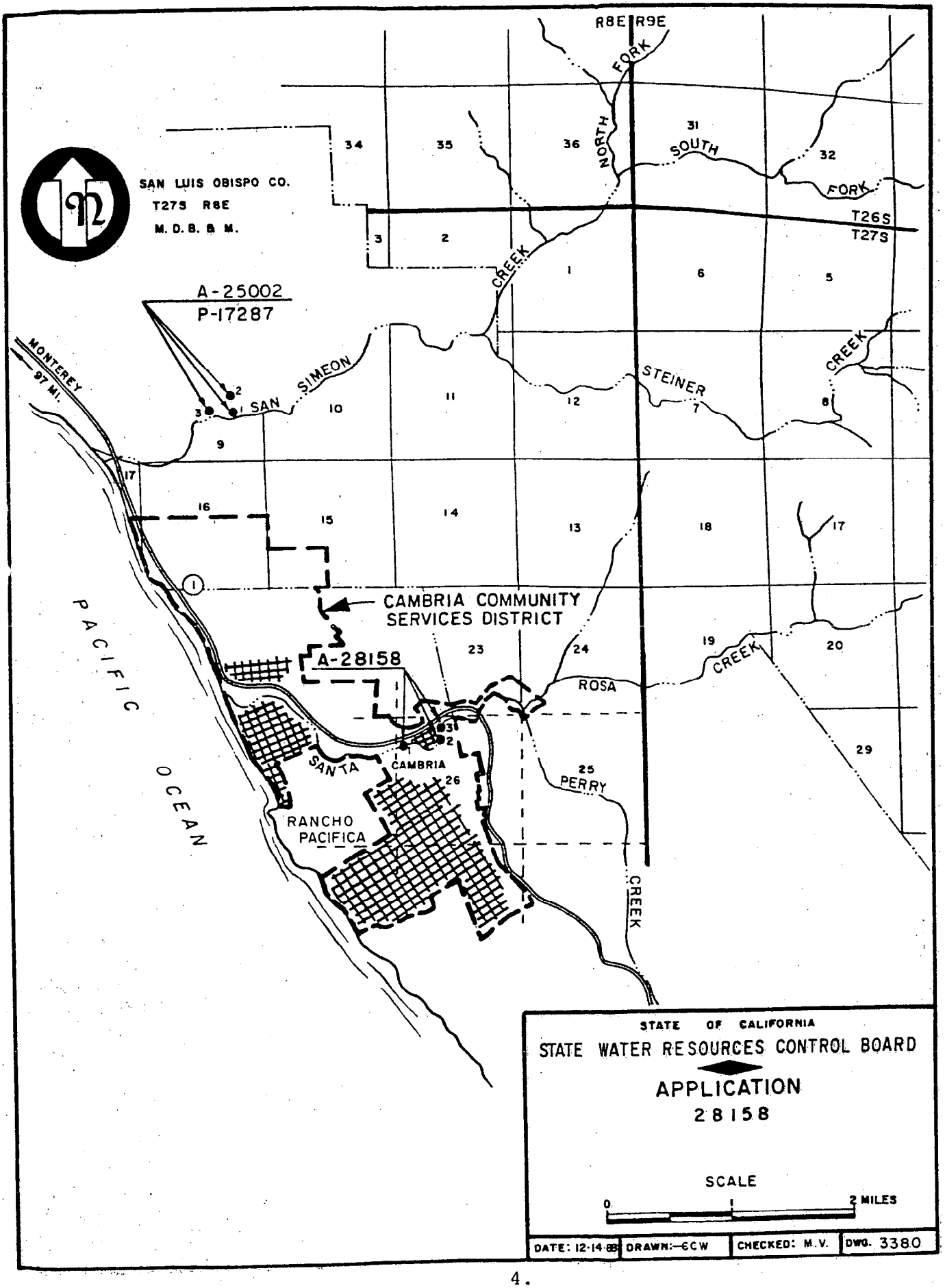
District water with Santa Rosa Creek viewed as a supplemental source. No supplemental water from Santa Rosa Creek was needed from 1979 until 1984. The District has constructed an iron and manganese removal plant, which became operational in 1985, to treat Santa Rosa Creek water. The District's boundaries and the location of District production wells under Application 28158 and permitted Application 25002 are shown on Figure 1.

3.0 SUBSTANCE OF APPLICATION

Application 28158, as noticed, proposes to appropriate 2.67 cubic feet per second by direct diversion from January 1 through December 31 of each year, not to exceed 1,338 acre-feet. The water is to be used for municipal purposes within Cambria Community Services District. It is to be diverted from the Santa Rosa Creek underflow by means of extraction wells. One well is located within the SW1/4 of the NW1/4 of projected Section 26, T27S, R8E, and two other wells are located within the NE1/4 of the NW1/4 of projected Section 26, T27S, R8E, MDB&M.

In what was termed an "Administrative Final Environmental Impact Report" dated April 1987, the District proposed to reduce the total annual amount to an overall limit of 1230 acre-feet, including the

FIGURE 1


R8E
R9E
NORTH FORK
SOUTH FORK
SAN LUIS OBISPO CO.
T27S R8E
M. D. B. & M.
T26S
T27S
A-25002
P-17287
SAN SIMEON CREEK
STEINER CREEK
MONTEREY
97 MI.
CAMBRIA COMMUNITY SERVICES DISTRICT
A-28158
ROSA CREEK
SANTA CAMBRIA
RANCHO PACIFICA
PERRY CREEK
PACIFIC OCEAN
STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
APPLICATION
28158
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quantity of water diverted from San Simeon Creek under permitted Application 25002. The Administrative Final EIR also proposed to limit the appropriation from Santa Rosa Creek to 260 acre-feet from May 1 through October 31.

At the hearing, the District proposed to amend the application to be subject to the limitations described above and to include an annual diversion limitation of 518 acre-feet. The District's proposal, however, was conditioned upon withdrawal of all protests against the application. Since the protests were not withdrawn, the hearing proceeded on the basis of the application as noticed.

Following the hearing, the District adopted Resolution 32-87 certifying the adequacy of the Final EIR for the Santa Rosa Creek project. The resolution approved the project as modified to incorporate the following mitigation measures:

1. reduction of the proposed appropriation to 518 acre-feet,

2. development and adoption of a Groundwater Basin Management Plan;

3. withdrawal rate limitations as follows:

a. withdrawals at the maximum rate of 147 acre-feet per month only if average daily flow at the lower gage exceeds 10 cubic feet per second;

b. withdrawals shall not exceed 60 acre-feet per month during November through April when the average daily flow at the lower gage is between 2.5 and 10 cubic feet per second; and

c. total withdrawals shall not exceed 260 acre-feet during May through October or 43 acre-feet per month in any other month when flow at the lower gage is less than 2.5 cfs.

In accordance with Section 761(e) of Title 23 of the California Code of Regulations, the Board takes official notice of Cambria Community Services District Resolution 32-87 certifying the Final EIR. In effect, this resolution amends the project proposed by Application 28158 and the Board's analysis and directives set forth in this order are based upon the additional diversion limitations proposed in the Final EIR as certified by the District.

4.0 PROTESTS

A total of 23 protests were filed against Application 28158, all of which are unresolved.

4.1 Injury to Prior Rights

Seventeen protests were filed which allege injury to prior rights. The protests are summarized in Table 1 with the protestants listed in order of the nearest to the furthest upstream from the District's wells for those who have filed a Statement of Water Diversion and Use in accordance with Water Code Section 5100 et seq. Protestants who have not filed a Statement of Water Diversion and Use are listed at the end of Table 1. The District did not challenge or contest diversions by any protestants under claim of riparian or pre-1914 appropriative rights.

TABLE 1

PROTESTS BASED ON INJURY TO PRIOR RIGHTS

PROTESTANT	BASIS OF ALLEGED RIGHT	STATEMENT OF WATER DIVERSION AND USE	EXTENT/AMOUNT OF ANNUAL USE
Lloyd & Faye Junge	Riparian	S12977	About 36 af for irrigation, domestic & stockwatering uses.
Joyce Bretz & Tony Williams	Riparian	S11414	About 25 af from March through September for irrigation.
Taylor Brothers	Riparian	S11448	About 90 af from March through November for irrigation.
Taylor Brothers	Riparian	S13123	About 175 af from April through October for irrigation. Stockwatering year-round.
James & Larry Fiscalini	Riparian	S11432	About 160 af from January through November for irrigation.

Gary Silveira, Alfred Fiscalini, & Elmer Berri	Riparian	S11415	About 130 af mostly from March through September for irrigation.
Bianchi Estate	Riparian & pre-1914	S11416	About 140 af mostly during dry periods for irrigation. Domestic & stockwatering year-round.
Lawrence Molinari	Riparian & pre-1914	S11446	About 5 af for stockwatering.
Rosalie Rhoades	Riparian & pre-1914	S11434	About 60 af mostly during dry periods for irrigation. Domestic & stockwatering year-round.
William. C. & Pearl M. Gruber	Riparian	S11433	About 65 af for irrigation, stockwatering & domestic uses.
Sterling & Mae R. Rhoades	Riparian & pre-1914	S11447	About 150 af from May through September for irrigation. Stock-watering & domestic use year-round.
Richard I. & Pat A. Humphreys	Riparian	S11435	About 8 af for domestic use.
Keith L. Chamblin	Riparian	S11394	About 2.5 af for domestic use.
Rancho Pacifica	Riparian & pre-1914	None on file	About 180 af from February through November for irrigation.
John & Maureen Linn	Riparian	None on file	About 20 af mostly from April to December for irrigation. Domestic & stockwatering year-round.
Paul A. Ricard & Sons	Riparian	None on file	About 4 af for domestic & stock-watering, and about 25 af for future irrigation.
Walter Warren	Riparian	None on file	About 80 af from May through October for irrigation.
Swiss Okie Cattle Co.	Riparian	None on file	About 77 af mostly from May through November for irrigation. Domestic & stockwatering year-round.

With the exception of Rancho Pacifica and Swiss Okie Cattle Co., the protestants listed above were represented by an attorney making a joint presentation on their behalf. In this decision, those protestants

are jointly referred to as Molinari et al., or simply Molinari. Although there was some variation among the conditions specified by individual protestants, the protest dismissal conditions specified by the parties listed above can be summarized as follows:

1. Acknowledgment of protestant's prior rights.

2. Demonstration by independent study that surplus water exists in Santa Rosa Creek.

3. No diversion during the dry period.

4. Guarantee that no claim of intervening public use will be made.

5. Provide alternate water supply whenever protestants wells go dry.

4.2 Protests Based on Environmental and Public Interest Grounds

The Department of Fish and Game, Joanne Warren and Joan Schleicher protested Application 28158 based on the allegations that the appropriation will have an adverse environmental impact and will not best conserve the public interest.

The following parties also protested on environmental and public interest grounds, in addition to alleging that the amount of water applied for exceeds the amount allowed by the applicant's Coastal Commission permit:

> Keith L. Chamblin; Joyce Bretz & Tony Williams; Gary Silveira, Alfred Fiscalini & Elmer Berri; Bianchi Estate; James & Larry Fiscalini; Rosalie Rhoades; Richard I. & Patricia A. Humphreys; William C. & Pearl M. Gruber; Lawrence Molinari; Sterling & Mae R. Rhoades; Taylor Brothers; John & Maureen Linn; Paul A. Ricard & Sons; Walter Warren; Swiss Okie Cattle Co.; Lloyd & Faye Junge; John Booth; David Warren; and Edwin Walter & Dorothy Filos.

With regard to diversion limitations in the District's Coastal Commission permit, the Hearing Officer advised all parties that, for purposes of this proceeding, the subject of diversion limitations would be considered to be a matter within the Board's jurisdiction rather than the jurisdiction of the Coastal Commission. (T,III,464:24-467:21)

The key condition specified by the protestants for dismissal of the protests based on environmental and

public interest grounds was that the applicant prepare an Environmental Impact Report.

5.0 AVAILABILITY OF UNAPPROPRIATED WATER

5.1 Watershed Description

Santa Rosa Creek is about 13 miles in length and drains approximately 47 square miles on the westside of the Santa Lucia Mountains. The main stem of the creek originates on the upper slopes of the range between Cypress and Black Mountains and flows westerly through the community of Cambria to the Pacific Ocean. A major tributary, Perry Creek, and its tributaries, Green Valley and Harmony Creeks, rise on slopes intermediate to lower in elevation south and west of the main stem and flow westerly and then northwesterly, entering Santa Rosa Creek near the high school in Cambria. (CCSD,18,V-2)

Annual rainfall varies from an average of approximately 16 inches at the southern corner of the drainage basin, to approximately 45 inches at Cypress Mountain near the north corner of the basin. Average annual rainfall for the entire basin has been estimated to be approximately 25 inches. Over 90 percent of the annual precipitation normally occurs during the months of November through April. The remainder of the year, May through October,

is commonly referred to as the summer season or dry period. (CCSD,18,V-2) (CCSD,Appendix B)

5.2 Water Usage

The District presented evidence indicating that the Santa Rosa Creek basin is naturally divided into upper and lower subbasins as shown in Figure 2 and discussed in Section 5.5. The only recorded diversions in the record from either subbasin are the District's water production totals from March 1966 through December 1988. (CCSD,5) (CCSD,18,V-10) (STAFF,20)

5.2.1 Upper Subbasin

All diversions from upper subbasin underflow are under claim of riparian and pre-1914 appropriative rights. Based on information provided on the Statements of Water Diversion and Use and protests to Application 28158, these parties estimate their current annual diversions to be about 1,150 acre-feet. Most of this water is for irrigation use and is diverted between mid-spring and mid-fall. (STAFF,1) (STAFF,3)

Based on an October 1985 aerial photograph of the area, the District determined that the existing irrigated agricultural use consists of about 200 acres of vegetables, 260 acres of grass and pasture and 40 acres of orchards. Allowing for double and triple cropping of

vegetables, the District estimates the total irrigation demand in the upper subbasin as 2,100 acre-feet of which about 1,500 acre-feet would be withdrawn during the summer season. (CCSD,18,V-9 to V-11)

No other information was provided relative to diversions from the upper subbasin. Based on the above estimates, it appears that summer season diversions from upper subbasin underflow are somewhere between 800 acre-feet and 1,500 acre-feet.

5.2.2 Lower Subbasin

There are three diverters, other than CCSD, who have been, or are, withdrawing water from the lower subbasin under claim of riparian or pre-1914 appropriative rights. These parties are protestants Bretz & Williams, Junge, and Rancho Pacifica.

The combined diversions of Bretz & Williams and Junge have historically totaled about 60 acre-feet per annum with most the water being diverted during the spring to fall months for irrigation. (T,III,581:23-582:5) (CCSD,18,V-11) (STAFF,1)

Approximately 50 to 60 acres of the property now owned by Rancho Pacifica, formerly the Fiscalini Ranch, was historically irrigated with an estimated 180 to 200

acre-feet per annum of lower subbasin underflow. The property is located outside CCSD boundaries as shown in Figure 1. The property was purchased by Rancho Pacifica in 1979 and taken out of agricultural production with the intent of developing a residential subdivision. Development had not commenced as of the time of hearing on Application 28158 and the proposed plan is considered obsolete. Rancho Pacifica states that its intent is to resume farming operations on approximately 30 to 40 acres of this land, at least for the near future. (T,III,693:8-695:4) (T,III,696:18-21) (T,III,697:18-698:2)

It appears that Rancho Pacifica's claim of pre-1914 appropriative rights may have been lost through five-years or more of non-use. With regard to future use under riparian claim, the Board's established position has been that anticipated or prospective expansion in riparian use of water is not a sufficient basis to deny or limit an application to appropriate water. Any appropriative water right permit so issued, however, would normally be subject to future use under a valid riparian claim. (T,III,692:14-26)

Table 2 shows the May through October diversions and the annual diversions of Santa Rosa Creek underflow by CCSD since 1966. From 1979 through 1983, the

District's May to October water supply was pumped exclusively from San Simeon Creek. The maximum annual amount of water diverted from Santa Rosa Creek underflow by CCSD was 518 acre-feet in 1976, the first year of the extreme two-year drought of 1976-77. The District's maximum May to October diversion of 304 acre-feet also occurred in 1976 though an unmeasured amount of this water, estimated at 17 to 18 acre-feet per month was supplied from the upper subbasin from early September 1976 through late summer 1977. Based on CCSD water production records, at least 226 to 242 acre-feet was pumped from the lower subbasin between May and early September 1976. (T,III,487:5-26) (T,III,502:1-503:3) (CCSD,5) (CCSD,18, V-8 to V-9)

5.3 Priority of Rights

The District's position is that the District will recognize the prior rights of the riparians. In acknowledging that nearby wells could be affected by CCSD diversions, the District stated that any such damage would be mitigated by a substitute water supply. (T,III,462:21-23) (T,III,505;22-506:3) (T,III,545:5-546-14) (T,III,580:22-581:4)

The only nearby wells identified in the record are those of Bretz & Williams, Junge and Rancho Pacifica. In view of the extent to which CCSD diversions appear

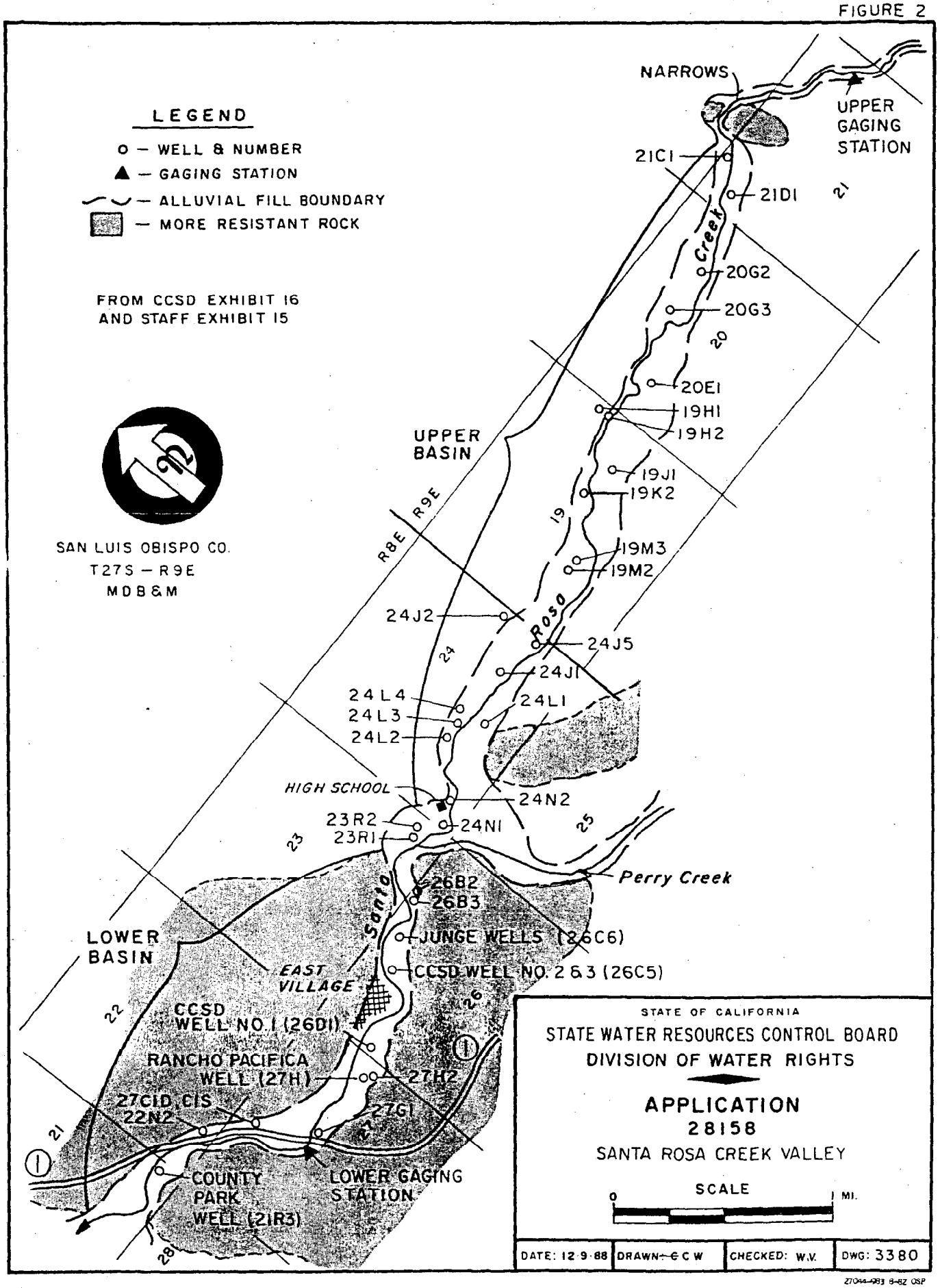
to impact water levels in the Santa Rosa Creek alluvium (Section 5.5.4), the Board concludes that any permit issued on Application 28158 should be conditioned to require the District to provide an alternate water supply for valid riparian uses from nearby wells, including any future increases in reasonable use, at such times that CCSD diversions render these wells unusable.

5.4 Hydrologic Data

The USGS and the County of San Luis Obispo have measured surface flow in Santa Rosa Creek since 1958 at a gaging station approximately 5 miles upstream of Cambria. Since 1976, surface flow has also been measured at a gage located at the Highway 1 bridge in Cambria. These stations, referred to as the upper and lower gages, are located as shown in Figure 2. (CCSD,18,V-2)

In most years, the upper reach of Santa Rosa Creek is a seasonal stream and only flows during the wet season which varies from year to year. During the period of the year when there is no surface flow, the available water supply is limited to the quantity of water in channel storage with no recharge occurring until surface flow resumes. Table 2 includes a tabulation of the annual flow at both gages, for their respective

FIGURE 2


LEGEND
o — WELL & NUMBER
▲ — GAGING STATION
— ALLUVIAL FILL BOUNDARY
— MORE RESISTANT ROCK
FROM CCSD EXHIBIT 16
AND STAFF EXHIBIT 15
SAN LUIS OBISPO CO.
T27S — R9E
MDB&M
NARROWS
UPPER GAGING STATION
21C1
21D1
Santa Rosa Creek
20G2
20G3
20E1
19H1
19H2
19J1
19K2
19M3
19M2
UPPER BASIN
R8E
R9E
24J2
24J5
24J1
24L1
24L4
24L3
24L2
HIGH SCHOOL
24N2
23R2
23R1
24N1
Perry Creek
26B2
26B3
JUNGE WELLS (26C6)
CCSD WELL NO. 2 & 3 (26C5)
LOWER BASIN
EAST VILLAGE
CCSD WELL NO. 1 (26D1)
RANCHO PACIFICA WELL (27H)
27H2
27CID, CIS
22N2
27G1
COUNTY PARK WELL (21R3)
LOWER GAGING STATION
STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS
APPLICATION
28158
SANTA ROSA CREEK VALLEY
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periods of record, as well as the length of time that there was no recorded surface flow at the gage. With very few exceptions, once surface flow ceases in a given year at the upper gage, the streambed remains dry until seasonal flow resumes in the fall or winter. Similarly, once flow resumes, it is continuous until ceasing again in the following spring or summer. (CCSD,18,Appendix C)

TABLE 2

SANTA ROSA CREEK RECORDED FLOWS AND CCSD DIVERSIONS

YEAR	UPPER GAGE		LOWER GAGE		CCSD DIVERSIONS IN ACRE-FEET	
	Annual Flow in af (Water Year)	Days of No Flow (Calendar Year or Season)	Annual Flow in af (Water Year)	Days of No Flow (Calendar Year or Season)	May through October	Annual
1958	16,110	0	---	---	---	---
1959	1,520	175	---	---	---	---
1960	3,570	116	---	---	---	---
1961	1,020	161	---	---	---	---
1962	11,000	43	---	---	---	---
1963	11,180	0	---	---	---	---
1964	1,780	116	---	---	---	---
1965	6,960	87	---	---	---	---
1966	4,560	134	---	---	176	---
1967	14,360	0	---	---	191	310
1968	846	143	---	---	228	355
1969	21,910	0	---	---	200	340
1970	6,340	30	---	---	222	388
1971	5,010	112	---	---	254	395
1972	1,250	148	---	---	262	412
1973	18,176	0	---	---	252	406
1974	17,517	31	---	---	279	435
1975	6,765	21	---	---	295	483
1976	321	226	160E		304	518
1977	244	246	1	[585]	169	333
1978	13,573	22	45,564	0	268	447
1979	5,455+	54	15,306+	0	0	91
1980	13,769+	0	30,398	0	0	0
1981	4,188	143	20,208+	0	0	0
1982	13,035	0	26,599	0	0	0
1983	21,300+	0E	64,728	0	0	0
1984	4,766+	82	10,087	158	101	114
1985	3,593	---	3,713	---	43	53
1986	---	---	---	---	68	91
1987	---	---	---	---	128	168
1988	---	---	---	---	183	254

E = Estimated --- = Data Not Available

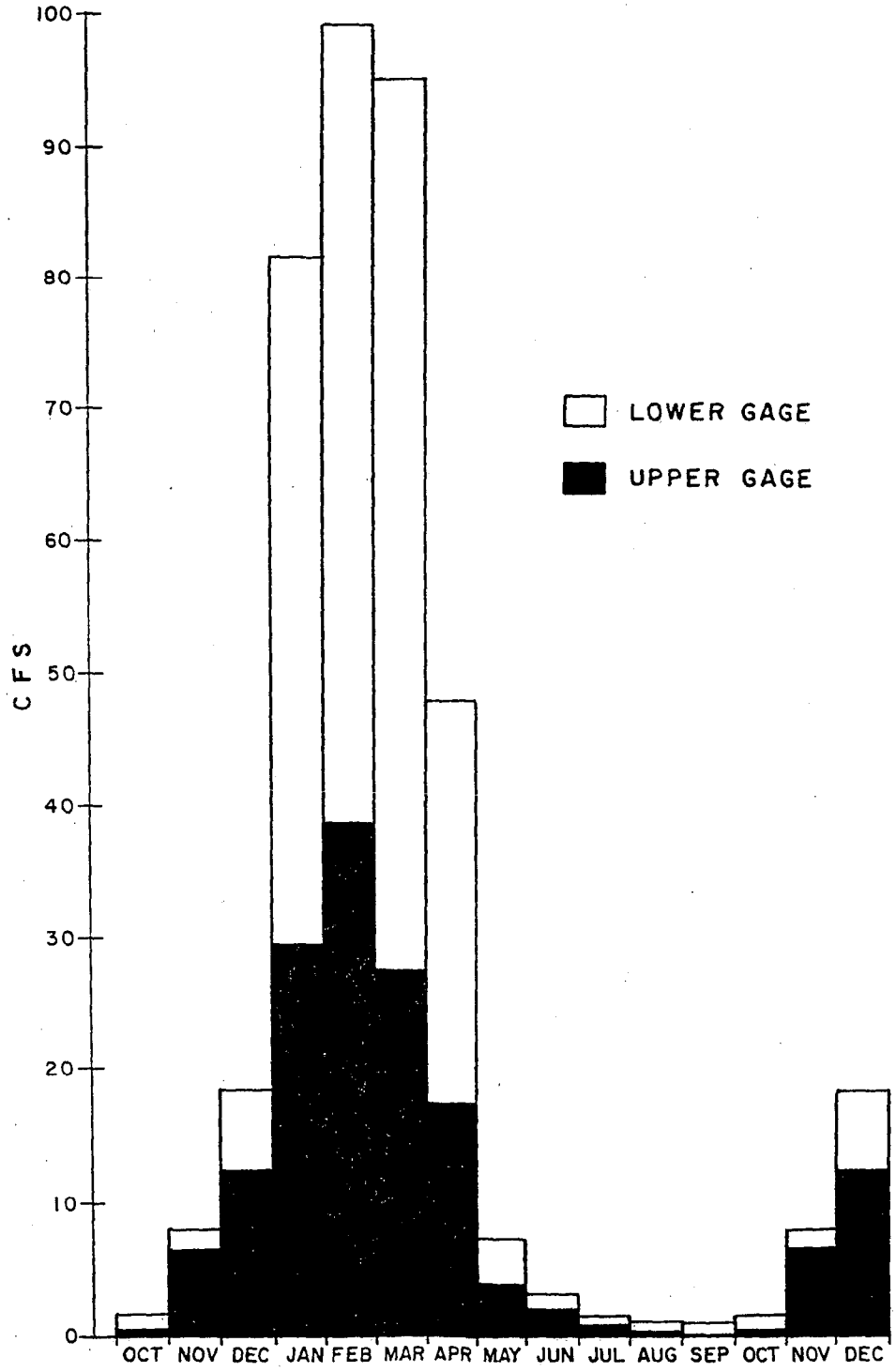
In approximately one out of three years of the period of record for the upper gage, there was year-round flow. It is primarily these years that are responsible for the mean monthly flow rates for May through October, as shown in figure 3.

There was no disagreement among the parties to this proceeding that when there is surface flow in Santa Rosa Creek, or within a short period after surface flow begins, the channel alluvium is normally full. Molinari contends, however, that the start of the dry period is triggered by the beginning of seasonal drawdown of the water table in the alluvium even though there still may be a nominal amount of surface flow. (T,III,547:23-26) (T,III,650:24-651:9) (T,III,652:16-653:3)

5.5 Geologic and Subsurface Hydrologic Data

No new geologic or subsurface hydrologic studies were conducted for the purpose of this application. Rather, the applicant, protestants and interested party relied on the very limited existing data. The testimony and two exhibits from the hearing record contain general descriptions of the geologic and subsurface hydrologic characteristics of the basin. The testimony also contains a discussion of a chemical analysis related to sea water intrusion but does not contain the analysis

FIGURE 3



A-28158
SANTA ROSA CREEK
Mean Monthly Flow at Cambria (Lower Gage)
Dec. 1976 - Sept. 1985
Mean Monthly Flow near Cambria (Upper Gage)
Aug. 1957 - Sept. 1985

DWG 3380

itself as an exhibit. Basic data include hydrographs for five wells and geologic logs for some of the wells in the basin. (T,III,480:15-482:23) (T,III,492:20-495:21) (T,III,501:11-26) (CCSD,18,V-2 to V-6) (CCSD,23) (Molinari,14,6-8)

The U. S. Geological Survey, in cooperation with San Luis Obispo County, is in the process of conducting a detailed geohydrologic study in the Cambria area. The investigation is titled "Geohydrologic Study of Alluvial Stream-Aquifer Systems in the Cambria-San Simeon Area, San Luis Obispo County, California". The study is expected to provide quantification of water production from all major riparian irrigation wells in the Santa Rosa Creek basin, quantification of the storage capacity of the alluvium, a better understanding of the hydrologic characteristics of the alluvium, and a better understanding of the relationship between underflow withdrawal and water levels in the alluvium.

The Board takes official notice of the fact that this study is in progress. The Board will reserve jurisdiction to reduce the amount of water authorized for diversion under the permit issued pursuant to Application 28158 upon a showing that water in the

amount and season covered by the permit is not normally available for diversion by the permittee.

Following notice and the lack of objection by any party to the proceeding, the record was augmented in February 1989 with certain data from the USGS study. The data include water-level records and hydrographs for 23 wells for the period March to December 1988 (STAFF,18) (STAFF,19), and hydrologic and geologic longitudinal profiles of Santa Rosa Creek Valley. (STAFF,16) (STAFF,17)[2]

Santa Rosa Creek basin is described in the record as having a lower and an upper subbasin. The confluence of Perry Creek and Santa Rosa Creek is the approximate boundary between the upper and lower subbasins (Figure 2). The subbasins differ in their geologic and hydrologic characteristics but have an unknown degree of hydraulic connection. An extensive clay layer in the near surface part of the upper subbasin may cause locally confined or semi-confined conditions in the

2 A location map of the wells was also added. (STAFF,15) The conclusions in this decision which rely on the U. S. Geological Survey data are conclusions of the Board and not the U. S. Geological Survey. The record was also augmented with monthly and total water production data from CCSD wells for 1987-88 which were provided by the District. (STAFF,20)

upper subbasin. (T,III,481:1-482:16) (CCSD,18,V-2 to V-6) (Molinari,14,6-8)

The following concerns were raised by the protestants and interested party as a possible basis for limiting the availability of unappropriated water from the underflow of Santa Rosa Creek:

1. The storage capacity of the lower subbasin is significantly less than CCSD's estimate of 1280 acre-feet. (T,III,600:8-602:9)

2. CCSD's dry period appropriation should be based on the availability of water during drought conditions similar to 1976-77. (T,III,648:26-651:19)

3. District pumping may cause sea water intrusion into coastal areas of the alluvium. (T,III,492:20-495:21)

4. District pumping may impact the availability of underflow to riparian pumpers. (T,III,624:18-625:3) (T,III,647:10-21)

5. District pumping may induce ground deformation. (T,III,702:16-706:12)

These subjects are addressed in the sections below.

5.5.1 Storage Capacity of the Lower Subbasin

The District estimated the basin-full storage capacity of the lower subbasin to be 1280 acre-feet. CCSD assumed a rectangular geometry for the subbasin cross section, and a specific yield value of 16 percent (an appropriate value for sand and gravel). Molinari estimated that the storage capacity of the lower subbasin could be as low as 320 acre-feet based on a triangular geometry for the subbasin cross section, and a specific yield value of 8 percent (an appropriate value for a clayey aquifer). Rancho Pacifica also estimated lower subbasin storage capacity using the same approach but with different assumptions. This latter analysis, however, was not admitted into evidence since it was not submitted in accordance with the hearing notice requirements regarding pre-submittal of exhibits. (T,III,600:8-602:9) (T,III,698:12-24) (CCSD,18,V-6)

The estimated values of storage capacity presented by the District and by Molinari are based on relatively untested assumptions on the geometry and specific yield of the basin. The different assumptions used in the calculations result in significantly different estimates of storage capacity. The Board

concludes that both estimates should be considered simplistic approximations and neither should be used as a basis for making specific conclusions on the availability of unappropriated water. Upon completion, the USGS study should produce a more reliable determination of the storage capacity of the lower subbasin.

5.5.2 Dry Period Appropriation

Molinari admits that the District's requested appropriation of 43 acre-feet per month is available during the dry period for most years. Molinari argues, however, that to plan their water supply prudently CCSD should base its request for dry period appropriation on anticipated conditions similar to the 1976-77 drought. Molinari suggests that a compromise appropriation of 30 acre-feet per month is a "reasonable safe yield" for dry period appropriations. (T,III,648:26-651:19)

Reducing the District's dry season appropriation to Molinari's estimated safe yield would result in less than full utilization of the available water supply in most years. In order to allow for maximum reasonable utilization of available water, determination of the quantity of water available to the District during the dry season should be based upon the amount available to the District in a normal year. This was the position

taken by the Board in Order WR 88-14 on San Simeon Creek.

Additionally, Molinari's estimated value of 30 acre-feet per month safe yield is not considered reliable because it is based on very limited hydrologic data, and on an extremely generalized empirical relationship between cumulative total daily flow at the upper gage and cumulative average drawdown in District wells 1 and 3. Therefore, Molinari's estimate of 30 acre-feet per month as the safe yield of the basin, is considered to be a gross approximation which should not be used as a basis for reaching specific conclusions on the availability of unappropriated water. (T,III,600:8-602:9) (T,III,615:19-624:1) (Molinari,15)

5.5.3 Sea Water Intrusion

Water levels in well 21R3, the westernmost well in the basin, have been interpreted by the District as showing no sea water intrusion in the lower subbasin. The hydrograph for well 21R3 shows that none of the 17 measurements taken from 1965 through 1977 were below five feet above mean sea level. This includes the summer of 1976 when the water level in the CCSD well field was below sea level for six months. The District presented testimony regarding a chemical analysis of water from well 21R3 which showed no increased chloride

content or conductivity of the well water associated with drawdown of the water table from CCSD pumping. Although the evidence in the record is limited, it shows that, historically, District pumping has not caused a sea water intrusion problem in the lower subbasin. (T,III,493:8-495:21) (CCSD,17)

Sea water intrusion is a problem which normally develops slowly as the water table is depressed annually below sea level for longer and longer periods of time. For the protection of water quality in the coastal parts of the lower subbasin, the water table in the vicinity of well 21R3 should be maintained at least five feet above mean sea level. Since electrical conductivity and chloride content are indicators of sea water intrusion, the Board also concludes that these parameters should be monitored in the vicinity of well 21R3.

The District should cease diversions if the water table in the vicinity of well 21R3 falls below five feet above mean sea level, or if the electrical conductivity of the well water exceeds 1,600 micromhos/ centimeter, or if the chloride content of the well water exceeds 250 parts per million. These values are the upper limit for electrical conductivity and the recommended limit for chloride content of drinking

water as recommended in the California Drinking Water Standards.[3]

This requirement should protect the lower subbasin from vertical seepage of low quality lagoon water, and from further lateral migration of ocean water into the alluvium. If District and riparian pumping does not exceed historic levels, this requirement should not significantly limit District diversions in the amount requested in Application 28158 as amended.

Reliable water level measurements and chemical analysis depend on good monitoring well construction. For the purposes described above, a monitoring well should fully penetrate the alluvium, have a 20-foot surface seal, and be perforated from below the surface seal to the bottom of the casing. Well 21R3 is not suitable as a monitoring well because the exact depth and construction of the well are unknown. The District also stated that the well may not have a surface seal or may have a corroded casing. (T,III,495:4-8) Therefore, for sea water intrusion monitoring purposes, a new well should be constructed in the vicinity of well 21R3.

3 Use of the "upper" limit on electrical conductivity is appropriate in this case because the conductivity of subsurface water in the lower subbasin naturally exceeds the "recommended" standard of 800 micromhos/centimeter. (CCSD 18, Appendix F.)

5.5.4 Impacts of CCSD Diversions on Water Levels

Molinari believes that the pumping depression in the District well field causes the upper subbasin to drain more rapidly. This is because pumping causes the gradient of the water table to steepen around the well field increasing the rate of subsurface flow toward the well field. The hydrologic longitudinal section provided in Staff Exhibit 16 shows that below well 24L3, District pumping increased the water table gradient from March to November of 1988 resulting in an increased rate of subsurface flow towards the District well field. Between well 24L4 and 19H1 the water level gradient increased from 42.2 to 44.3 feet per mile for the same time period. Therefore, the rate of subsurface flow probably did not change much. Above well 19H2, the gradient actually decreased, slowing the rate of subsurface flow from the upper subbasin. These gradients are associated with District pumping of 199.7 acre-feet from March through October 1988. (T,III,624:18-625:3) (T,III,647:10-21) (STAFF,16) (STAFF,18) (STAFF,20)

The Board concludes that the pumping depression around the District well field impacts water levels in wells westward to the coast and eastward to well 24L2. From well 24L3 to well 19H2 the impact, if any, of District

pumping is unclear. East of well 19H2, District pumping appears to have no impact.

As discussed in Section 5.3, the District acknowledged that nearby wells could be affected by District diversions and stated that any such damage would be mitigated by providing a substitute water supply.

5.5.5 Ground Deformation

Fractures in structures and road surfaces, and breaks in water, sewer, and gas lines occurred in Cambria in 1976. In a study dated February 1980, geologist George B. Cleveland of the California Division of Mines and Geology attributed the fractures and breaks to the ground deformation that was measured in the District well field during the summer of 1976. Cleveland believes that the deformation resulted from dewatering of the alluvium in the well field. Dewatering of alluvium has caused ground deformation in other parts of California, most notably the San Joaquin Valley. (Molinari,11)

Cleveland linked the ground deformation to dewatering of the alluvium because the onset and cessation of both events coincided in time. Ground deformation began just after the water table in the CCSD well field had declined to record levels. The deformation generally

slowed or ceased as the water table recovered. In some areas, the ground actually rebounded horizontally but not vertically. (Molinari,11)

Cleveland concluded that "a critical threshold existed in the depth of the ground water level below which any drop in the level led to ground deformation at the surface." Based on this conclusion, the Coastal Residents United argued that water withdrawals resulting in a 30-foot decline of the water table should be considered the safe yield of the basin. (T,III,700:22-702:12) (Molinari,11,33,35)

Using a 30-foot decline of the water table as a basis for limiting District pumping in order to avoid ground deformation cannot be supported for two reasons. First, the 1980 study referred to above concluded that a decline between 30 and 50 feet initiated the deformation. This range indicates that the author of the study believed there was some uncertainty in predicting the onset of deformation. The second problem with limiting future withdrawals to a 30-foot decline in the water table is that, based on Figures 4 and 5 of Cleveland's study, the vertical deformation which occurred in 1976 appears to be permanent. Therefore, the critical threshold which would induce further ground deformation would be a decline in the water

table to a level below the record low level reached in the summer of 1976. (Molinari,11,29)

In view of the limited information regarding the mechanics of ground deformation in the Santa Rosa Basin, a 30-foot decline in the water table does not provide an acceptable basis for regulating withdrawals. However, further ground deformation may result if the water level declines below the record low level of 1976, which corresponds to an elevation of approximately 18 to 20 feet below mean sea level. Ground deformation potentially could result in damage to surface structures and the permanent loss of storage capacity in the lower subbasin. (CCSD,17)

In order to protect against ground deformation, the Board concludes that the District should establish a ground deformation monitoring program and that District diversions from Santa Rosa Creek underflow should cease if ground deformation occurs. Thereafter, no diversion should be permitted any time the water table is at or below the level at which the ground deformation occurred. The Board will reserve jurisdiction to take action to impose such further requirements on District diversions as are appropriate to prevent ground deformation and loss of storage capacity in the lower subbasin of Santa Rosa Creek.

5.6 Conclusions on Availability of Underflow

The evidence in the record shows that CCSD's historic May to October diversions from Santa Rosa Creek underflow, as shown in Table 2, have not resulted in injury to riparian diverters except for nearby lower basin wells during the two-year drought of 1976-77. During that period, the lower reach of Santa Rosa Creek was dry for an abnormally long period of 585 days. Based on the evidence discussed above, the Board concludes that unappropriated water is normally available to the District in the amount and season requested in Application 28158 as amended.[4]

Based on the limited hydrologic and geologic evidence in the record, however, it is unknown how increased diversions under senior rights, particularly from riparians in the lower basin, would impact availability of water to the District. Thus, the District is cautioned against considering Santa Rosa Creek as a reliable source of water for development purposes at this time. The District should also recognize that, even in the absence of additional water use by other

4 The amount and season of water requested in "Application 28158 as amended" refers to the reduced quantities proposed for diversion in the Final EIR as certified by District Resolution 32-87. (See Section 3.0.)

diverters, the quantity of water available for diversion by the District in dry years may be less than the quantity specified in Application 28158. More information regarding the quantity of water available in the Santa Rosa Creek basin during the dry period should be available upon completion of the USGS study.

6.0 ENVIRONMENTAL AND PUBLIC TRUST ISSUES

6.1 Biological Resources

Santa Rosa Creek is a typical coastal stream composed of three main sections: (1) the headwaters, which has a steep gradient and predominantly bedrock channel; (2) the middle elevation section, which has a moderate gradient, slower flow and sand and gravel streambed; and (3) the river mouth, which has a lagoon with varying salinity levels, and which forms a sandbar between the ocean and the lagoon during periods of low flow. Santa Rosa Creek has a significant though interrupted band of riparian vegetation along its banks that provides excellent wildlife habitat. The lower reach supports a well-developed riparian woodland. The middle reach is generally surrounded by agricultural development with intermittent riparian woodlands. The upper reach is generally wooded. The riparian woodlands support diverse species of mammals, birds, amphibians and reptiles. (STAFF,1,Kline,1976)

Steelhead trout are an important fishery resource and are the primary concern regarding aquatic life within Santa Rosa Creek. The lower reaches of the stream provide a migration corridor to and from the ocean for the smolts and adult steelhead. The upper reaches provide excellent spawning and rearing habitat. A study conducted through California Polytechnic State University compared various streams in the central coastal area and concluded that Santa Rosa Creek is the most productive stream in the region. (T,III,552:8-13) (STAFF,11) (CCSD,18,V-22)

The steelhead require unimpeded passage from the ocean to the middle and upper reaches of the creek from November through May. The adult steelhead migrate upstream from the ocean from November to February and spawn as late as March. The smolts (generally one or two year old juveniles) move down to the ocean by the first part of May. For the upstream and downstream movement of steelhead, it is important to maintain adequate flow in the lower reaches of the stream and to keep the sandbar open from November to the first part of May. (T,III,557:14-23)

6.2 Potential Effects of Project Upon Instream Resources

Adequate volumes of surface flow at various times of the year in Santa Rosa Creek are critical to the

survival of the steelhead. District pumping of the underflow could influence the amount of surface flow, the length of the dewatered area and the duration of the dry period. The major potential environmental impact from District pumping would be the reduction of stream dependent fish and wildlife resources. The District's Environmental Impact Report recognizes that the project could "reduce the amount of riparian vegetation by decreasing water availability" and that it also could "accelerate the dewatering of the stream, thereby reducing (steelhead) spawning success and increase in-stream mortality." (CCSD,18,V-25)

Historically, the creek normally goes dry in the summer in the reach between the two gages, with or without pumping by the District. (Section 5.4) In low water years, pumping caused the creek to go dry earlier in the spring and to stay dry longer in the fall. Upstream and downstream migration of steelhead could be delayed or prevented due to low or no flow in Santa Rosa Creek. Riparian vegetation and associated wildlife may be reduced in the area due to a lowering of the water table during the dry season.

The sandbar across the mouth of the creek opens or closes depending on flows in Santa Rosa Creek. The District presented testimony that streamflow of at

least 10-20 cubic feet per second is required to keep the sandbar open. The sandbar probably closes within a month or two to several months after the flow in the creek ceases. In most years, this probably occurs during the summer months and therefore would not impede steelhead migration. (T,III,536:21-25) The critical flow data necessary to evaluate effects on the steelhead fishery are: (1) the flow rate necessary to breach the bar at the mouth of the creek; (2) the flow rate necessary to maintain the bar opening; and (3) the flow rate necessary to provide adequate depth over the shallower riffles to allow upstream migration of adults. (Molinari,10,J-47)

The District presented testimony that runoff from Santa Rosa Creek and its tributaries, together with pumping, control flow duration particularly in the lower part of the creek where the District's wells are located. The District also presented testimony that the creek has flowed almost continuously for the last few years and does not go dry every year, particularly when there is little pumpage in the part of the basin below the Main Street Bridge. (T,III,537:2-5) (T,III,537:24-26) (T,III,538:1-9) Although the District and its predecessors have been pumping underflow from Santa Rosa Creek from the early 1900s through 1979 and from 1984 until the present, there has been no determination

of the degree of impact of such pumping on surface flows. Due to the lack of data at the lower gaging station and lack of monthly water level data, CCSD stated that a quantitative estimate of the relationship between pumping and streamflow and water levels cannot be made. (CCSD,18,Appendix I,D-1)

The major concern of the Department of Fish and Game is that the section of Santa Rosa Creek that would be affected by CCSD pumping is a migration corridor for steelhead and that it supports riparian vegetation which is high quality wildlife habitat. (T,III,553:14-18) The Department contends that the lower section of Santa Rosa Creek goes dry quite frequently, leaving only isolated pools which are maintained by subsurface flow, and in some years those pools have disappeared. (T,III,552:8-19) The Department considers any reduction in the steelhead population to be a significant impact which should be avoided. (T,III,567:13-16) The Department's ultimate goal is to work toward restoration of the run. (T,III,568:3-22) Although the Department is concerned that pumping by the District not be allowed to reduce the streamflow below the quantity needed for fish migration, the specific flow amount was never established. (T,563:24-564:2)

In commenting on the EIR, the Department of Fish and Game stated that the reduced withdrawal (518 af) "would be less detrimental to the fish and wildlife resources (than 1,230 af). This alternative is acceptable ... if all the additional mitigation measures ... are made conditions of any permits issued." (CCSD,18, Appendix I) The Department indicated that its protest could be dismissed if any permit which is issued includes the restrictions proposed by CCSD together with the additional restrictions that: (1) CCSD forego the exercise of any claimed pre-1914 water right to divert in excess of the 518 acre-feet diverted under Application 28158 and (2) withdrawals from May through October be limited to 260 acre-feet. (T,III,552:23-553:2)

In response to the draft EIR, Board staff requested information on the effect of the water withdrawals on the anadromous fishery as well as riparian vegetation. The District responded that "the proposed project would not affect the existing trout population any greater than it did in the historic recent past..." (CCSD,18,Appendix I,D-2) The proposed annual diversion limitation of 518 acre-feet, however, is equal to the maximum (rather than the average) historic level of District diversions from Santa Rosa Creek underflow. Consequently, the effect of diverting 518 acre-feet on

an annual basis may be greater than the effect of District diversions in the past.

6.3 Environmental Mitigation Measures

The EIR recommended that the following mitigation measures be taken to protect the instream resources, the steelhead trout fishery and riparian vegetation:

1. Withdrawals at maximum permitted rate (147 acre-feet per month) are allowed only when average daily flow at the lower gage exceeds 10 cubic feet per second.

2. Withdrawals shall not exceed 60 acre-feet per month during November through April when the average daily flow at the lower gage is between 2.5 and 10 cubic feet per second.

3. Total withdrawals shall not exceed 260 acre-feet during May through October or 43 acre-feet per month in any other month when flow at the lower gage is less than 2.5 cubic feet per second.

The mitigation measures as proposed in the EIR do not appear to be a workable means of protecting the fishery or other instream resources. For example, mitigation measure No. 2 above proposes to limit withdrawals to 60

acre-feet per month during November through April based on the average daily flow for that month. The average daily flow for the month, however, would not be known until the month was over, thereby providing no basis for adjusting withdrawal rates in time to avoid adverse impacts to instream resources. In order to provide effective protection to instream resources, the second and third mitigation measures identified above should be modified in order to provide for adjustments to the rate of withdrawal on a daily basis.[5]

The District stated that the mitigation proposals specified in the EIR were developed by an environmental consulting firm in consideration of the Department of Fish and Game's concerns, especially the concern regarding the transition period from flow to no-flow periods. (T,III,507:7-13) (T,III,530:10-13) Neither the fishery biologist from the Department of Fish and

5 The first mitigation measure proposed in the EIR (which restricts monthly diversions to 147 acre-feet per month when the flow exceeds 10 cubic feet per second) is unnecessary and should not be included as a permit condition. Flows exceeding 10 cubic feet per second are likely to occur only in the wet months. Subtracting the dry season total withdrawal limitation of 260 acre-feet from the annual withdrawal limit of 518 acre-feet leaves only 258 acre-feet which could be diverted during the entire wet season. It is extremely unlikely that in any one month the District ever would pump 147 acre-feet of their entire wet season allotment of 258 acre-feet. It appears probable that the proposed limitation was developed to regulate diversion under the application as originally submitted with an annual diversion limit of at least twice the present proposal.

Game who was familiar with the project nor the environmental specialist for the District's consulting firm were present at the hearing to explain the basis for the proposed mitigation measures. In addition, no technical papers, field data, or other evidence in support of the measures was presented. The Department of Fish and Game requested that the State Board reserve jurisdiction on any permit issued pursuant to Application 28158 in order to further evaluate potential impacts on the steelhead fishery as a result of the project. (T,III,569:17-25)

As discussed in Section 6.2 above, the affected reach of the stream is normally part of the steelhead migration corridor in the wet season from November through April. Although past diversions from Santa Rosa Creek by the District provide some evidence of the potential effect of diversions as requested under Application 28158, there was no conclusive link established between the flow levels proposed in the District mitigation measures and the instream flow requirements of steelhead. Therefore, the Board concludes that the District should conduct an instream flow study and monitoring program in cooperation with the Department of Fish and Game which is sufficient to identify the critical stream reach or riffle for steelhead migration and to determine the minimum flow

required for successful steelhead migration during the months of November through April. The District should also be required to monitor the sandbar at the mouth of Santa Rosa Creek for a minimum of three years in order to determine when and at what level of flows the sandbar opens and closes.

The Board agrees with the Department of Fish and Game that jurisdiction should be reserved to further evaluate effects on the steelhead fishery and to impose additional restrictions on the District's diversion of water, if necessary, to protect the steelhead fishery. An instream flow study and monitoring program of the type described will provide the data from which it can be determined if any additional or modified restrictions should be imposed.

7.0 COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

As the lead agency pursuant to the requirements of the California Environmental Quality Act, the Cambria Community Services District is responsible for the preparation of appropriate environmental documents for the project. On December 2, 1986, the District completed a draft Environmental Impact Report (EIR) on the project and circulated it through the State Clearinghouse for public review. Comments were

received from the Board and other parties. The District responded to the comments received and prepared an "Administrative Final EIR" in April 1987 prior to the Board water right hearing. After the hearing, CCSD certified the final EIR and filed a Notice of Determination with the San Luis Obispo County Clerk on December 14, 1987.

In accordance with its functions as a responsible agency under Section 15096 of the CEQA Guidelines, the Board has reviewed the final EIR. The Board has considered the final EIR and Notice of Determination in deciding whether to approve the project and in deciding what specific terms or conditions should be included in any permit issued on Application 28158. The final EIR identified potentially significant adverse effects of the project on the steelhead trout fishery in Santa Rosa Creek, riparian vegetation, and water levels in the basin which in turn would reduce the quantity of water available to other users. The Board finds that the changes and alterations which have been incorporated into the project by the District, together with the permit conditions specified in this order, will substantially mitigate the potentially significant adverse effects on the fishery, riparian vegetation and the water supply available to other water users.

To the extent that the project may result in diversion of water in excess of the average District diversions in past years, the potential adverse effects on the fishery and aquatic resources cannot be fully evaluated until completion of the instream flow study and monitoring program discussed in Section 6.3. Following completion of the study, the Board's reservation of jurisdiction would allow for imposition of additional mitigation measures if appropriate. The Board finds that, in the interim period, the need for water for municipal purposes overrides the potential adverse environmental effects which could result from the diversion of water as authorized in this decision.

8.0 CONCLUSION

Based on the foregoing findings, the Board concludes that the purposes of use specified in Application 28158 are beneficial and that Application 28158 should be approved subject to the terms and conditions specified in the order which follows.

ORDER

IT IS HEREBY ORDERED that Application 28158 be approved and a permit be issued subject to prior rights and subject to standard permit terms 6 and 10 through 13.[6] In addition, the permit

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6 A copy of the Board's standard permit terms is available upon request.

issued on Application 28158 shall be subject to the following terms and conditions:

1. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 2.67 cubic feet per second to be diverted from January 1 through December 31 of each year. The maximum amount diverted under this permit shall not exceed 260 acre-feet from May 1 through October 31 of each year nor shall it exceed 518 acre-feet per calendar year.

2. Complete application of the water to the authorized use shall be made by December 31, 1999.

3. The total quantity and rate of water diverted and used under this permit and under permittee's claimed pre-1914 right for the place of use specified in the permit shall not exceed the quantity and rate of diversion and use, respectively, specified in this permit. If the permittee's claimed right is quantified at some later date as result of an adjudication or other legally binding proceeding, the quantity and rate of diversion and use allowed under this permit shall be the net of the face value of the permit less the amounts of water available under the claimed right.

Permittee shall forfeit all rights under this permit if permittee transfers all or any part of the claimed existing right for the place of use covered by this permit to another place of use without the prior approval of the SWRCB.

4. The equivalent of the continuous flow allowance for any seven-day period may be diverted in a shorter time, provided there be no interference with other rights and instream beneficial uses; and provided further that all terms or conditions protecting instream beneficial uses be observed.

5. For the protection of water quality from increased salinity due to sea water intrusion in the lower subbasin of Santa Rosa Creek, permittee shall:

   a. Construct a monitoring well in the vicinity of well 21R3, suitable for water quality sampling and water level monitoring, within six months of the issuance of this permit.

   b. Measure the water level in the monitoring well, and analyze well water for electrical conductivity and chloride content on a monthly basis and on a weekly basis when the water level in permittee's well 1 is below mean sea level.

c. Cease diversions under this permit if the water level in the monitoring well falls below 5.00 feet above mean sea level, or if the electrical conductivity measurement exceeds 1,600 micromhos/centimeter, or if the chloride content exceeds 250 parts per million.

d. Follow water sampling protocol as approved by the Chief of the Division of Water Rights and have water samples analyzed for electrical conductivity and chloride content in a laboratory certified by the State of California.

6. To prevent any significant ground deformation in the lower subbasin of Santa Rosa Creek from occurring due to diversion of water under this permit, permittee shall:

a. Develop and submit for approval by the Chief of the Division of Water Rights a ground deformation monitoring program within six months of the issuance of this permit.

b. Monitor for vertical ground deformation on a weekly basis when the static water level in well 1 or 3 falls below 15 feet below mean sea level.

c. Cease diversions under this permit when vertical ground deformation exceeds the limit to be established in the ground deformation monitoring program.

7. This permit is specifically subject to the diversion of water from the lower subbasin wells of Lloyd and Faye Junge, Joyce Bretz and Tony Williams, and Rancho Pacifica and their successors in interest under valid claim of riparian right.

At such time as permittee is diverting water authorized under this permit and the water level in the Junge, Bretz & Williams, or Rancho Pacifica wells reaches a depth which renders the well unusable, permittee shall:

a. Deliver water from its point of diversion to the riparian place of use served by the well or;

b. take other action to provide an alternate supply of water as is mutually agreeable to the permittee and Junge, Bretz & Williams, or Rancho Pacifica or their successors in interest.

Any water supplied for satisfaction of riparian rights shall not be considered as water appropriated under this permit.

In the event that permittee opts to deliver water to the riparian place of use of any of the above wells, the riparian diverter shall be liable for the estimated costs which the riparian would have incurred to pump water from the affected

well. In the absence of an agreement between the parties relative to pumping costs, the costs shall be based on an average amount per acre-foot for pumping water from the affected well during the month in question over the prior three years. Permittee shall pay the cost of installing and maintaining any water conveyance facilities needed to deliver water to the riparian point of diversion or place of use.

8. For the maintenance of riparian vegetation, fish and aquatic resources, permittee shall limit diversion to:

   a. A maximum of 2.0 acre-feet per day from November 1 through April 30 when the average daily surface flow at the Highway 1 gage is between 2.5 and 10.0 cubic feet per second;

   b. A maximum of 1.4 acre-feet per day from November 1 through April 30 when the average daily surface flow at the Highway 1 gage is less than 2.5 cubic feet per second.

9. Upon request of the Chief of the Division of Water Rights, permittee shall submit:

   a. Records of the average daily stream flow from the upper and lower gages on Santa Rosa Creek;

b. Records of permittee's daily water withdrawals from Santa Rosa Creek underflow.

10. Within six months of the issuance of this permit, permittee shall initiate an instream flow study approved by the Department of Fish and Game, to determine:

a. The critical riffle for steelhead in the reach of Santa Rosa Creek affected by the permittee's diversion;

b. The volume of streamflow required to pass upstream and downstream migrating steelhead through the affected reach.

A report on the findings of the instream flow study shall be submitted to the Chief of the Division of Water Rights within two years of the issuance of this permit or such further time as may be approved by the Chief of the Division of Water Rights.

11. Permittee shall, until December 31, 1993, monitor the sandbar at the mouth of Santa Rosa Creek. Permittee shall record the week and the average daily flows at the Highway 1 gage during that week that the sandbar opens and closes. The sandbar will be considered open when there is a measurable continuous

surface flow from Santa Rosa Creek to the ocean. By June 1, 1994, the permittee shall submit a report of the monitoring records to the Chief of the Division of Water Rights.

12. The State Water Resources Control Board reserves jurisdiction over the permit for the following purposes:

a. To reduce the amount of water authorized for appropriation if the U. S. Geological Survey investigation titled "Geohydrologic Study of Alluvial Stream Aquifer Systems in the Cambria - San Simeon Area, San Luis Obispo County, California", provides evidence that water is not normally available in the amount and season as authorized in this permit.

b. To limit the permissible water table decline in permittee's well field should diversion under this permit result in ground deformation and loss of storage capacity in the lower subbasin of Santa Rosa Creek.

c. To modify, in the public interest, the terms and conditions of this permit, including imposition of requirements to alter project operation and to modify instream flow bypass terms in the event of unforeseen adverse impact to fish and aquatic resources.

Any action to reduce the amount of water authorized for appropriation or to modify the terms and conditions of this permit will be taken only after notice to interested parties and opportunity for hearing.

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on April 20, 1989.

AYE:	W. Don Maughan Darlene E. Ruiz Edwin H. Finster Eliseo M. Samaniego Danny Walsh
NO:	None
ABSENT:	None
ABSTAIN:	None

Maureen Marche'
Administrative Assistant to
the Board

STATE WATER RESOURCES CONTROL BOARD
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