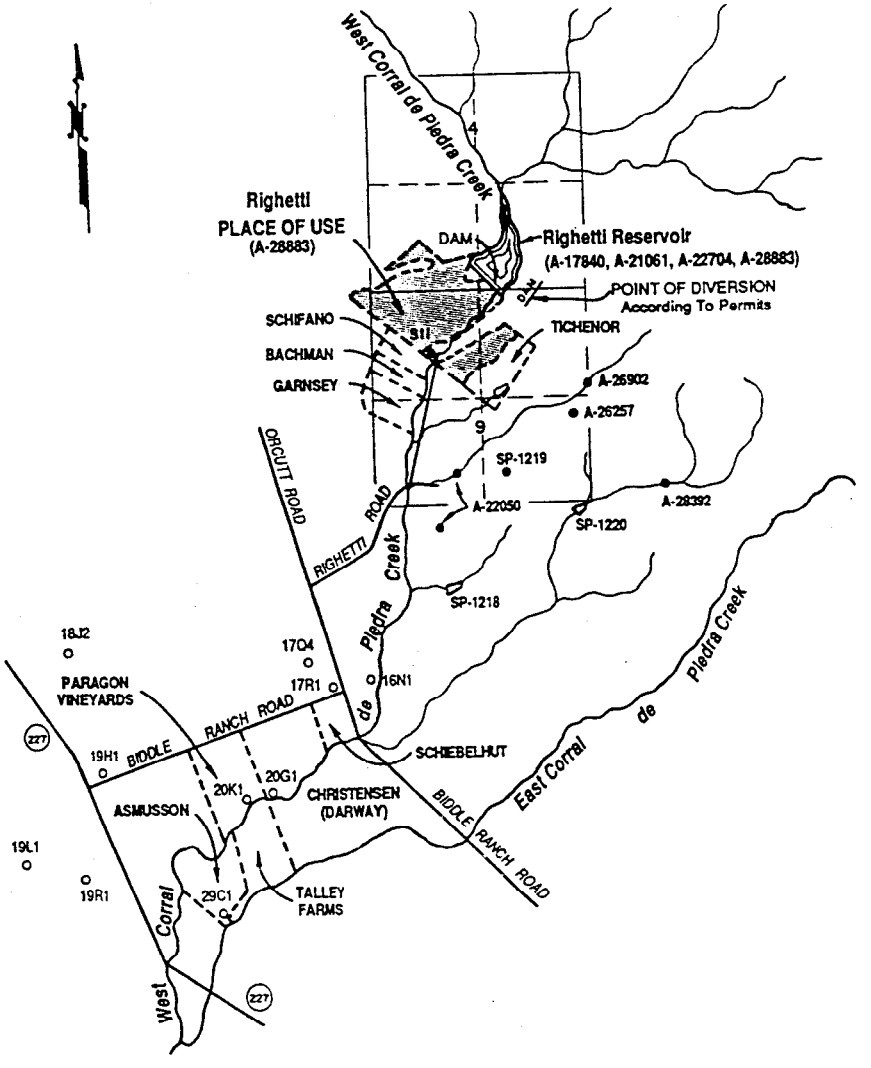


ERNEST RIGHETTI & SONS APPLICATION 28883

DECISION 1627

NOVEMBER 1990

WATER RESOURCES CONTROL BOARD
STATE OF CALIFORNIA

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In the Matter of Application 28883, ERNEST RIGHETTI & SONS, Applicants, FREDRIC AND LAVONNE RIGHETTI, PARAGON VINEYARD CO., CHRIS DARWAY, JOHN CHRISTENSEN, CLARENCE AND LEONA ASMUSSEN, ROBERT AND ANN SCHIEBELHUT, TALLEY FARMS PROFIT SHARING TRUST, Protestants.	DECISION 1627 SOURCE: West Corral de Piedra Creek COUNTY: San Luis Obispo

DECISION APPROVING ISSUANCE OF PERMIT
SUBJECT TO SPECIFIED CONDITIONS

BY THE BOARD:

1.0 INTRODUCTION

Ernest Righetti & Sons (applicants), having filed Application 28883 for a permit to appropriate unappropriated water from West Corral de Piedra Creek; protests having been filed; a hearing having been held on January 11, 1990 by the State Water Resources Control Board (Board); the applicants, protestants, and interested parties having appeared and presented evidence; the evidence in the record having been duly considered; the Board finds as follows:

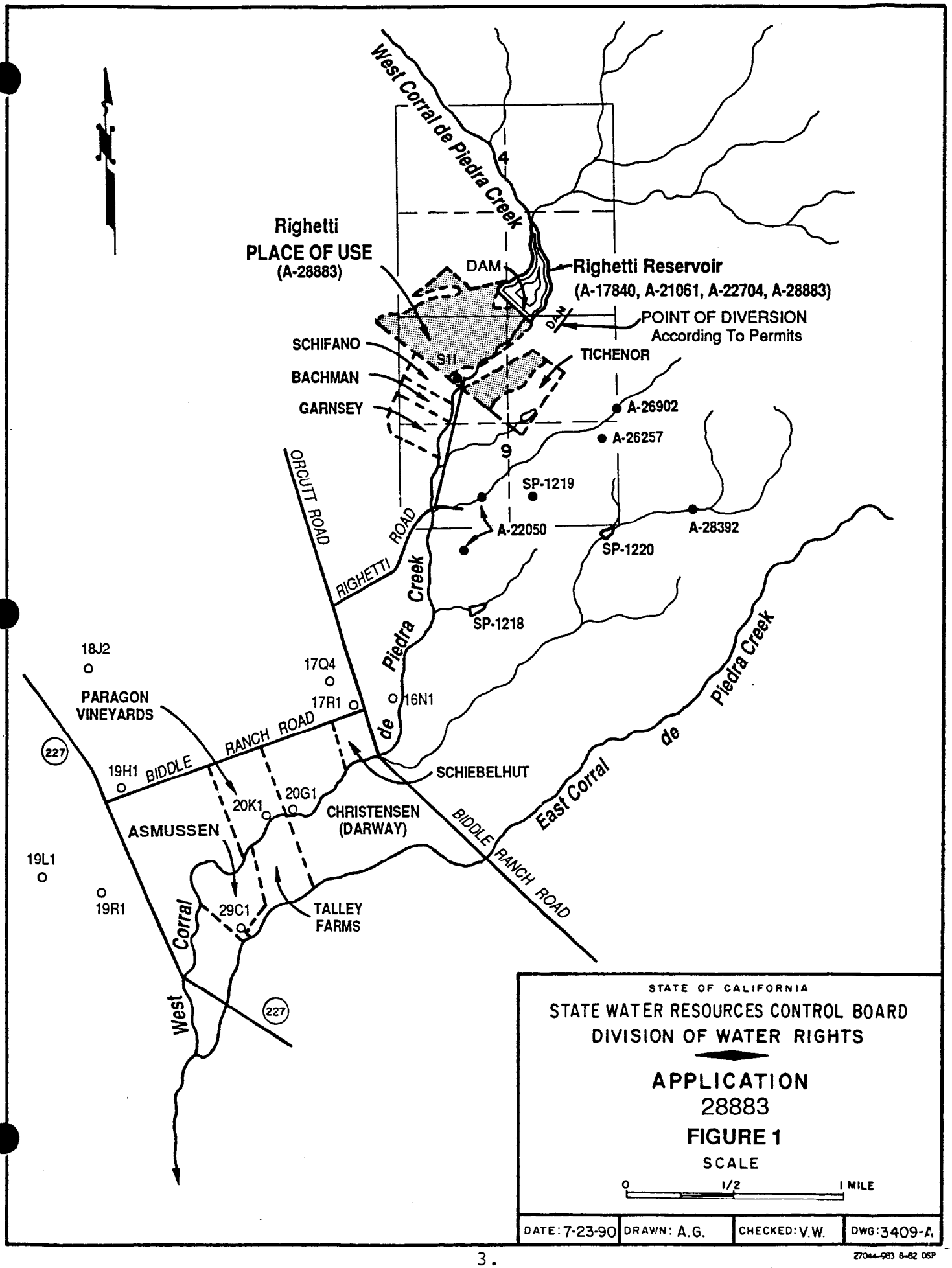
2.0 SUBSTANCE OF APPLICATION

Application 28883 proposes to divert up to 400 acre feet per annum (afa) to storage from West Corral de Piedra Creek tributary to Pismo Creek in San Luis Obispo County during the season December 1 to May 31. The water would be used for irrigation, stockwatering, recreation, wildlife enhancement, and fire protection. The water would be stored in an existing onstream reservoir which is located approximately five miles upstream from the point where West Corral de Piedra Creek and East Corral de Piedra Creek converge to form Pismo Creek within the NE 1/4 of the NE 1/4 of Section 9, T31N, R13E, MDB&M. The place of use of the water would be the onstream reservoir and 153 acres located within Sections 4, 8, and 9, T31S, R13E, MDB&M. (See Figure 1.)

3.0 EXISTING RIGHTS AND PROJECT DESCRIPTION

Ernest and Susan Righetti are the owners of water right Permits 12887, 14086, and 15444 (Applications 17840, 21061, and 22704) which authorize the diversion of water from West Corral de Piedra Creek to storage at the onstream reservoir described in Section 2.0 above.

- Permit 12887 (Application 17840) authorizes the diversion of up to 500 afa to storage between



December 1 and May 31. The water is used for stockwatering purposes and irrigation of up to 153 acres of avocados.

- Permit 14086 (Application 21061) authorizes the diversion of up to 64 afa to storage between December 1 and May 31. The water is used for stockwatering and irrigation of up to 153 acres of avocados.

- Permit 15444 (Application 22704) authorizes the diversion of up to 27 afa to storage between December 1 and May 31. The water is used for irrigation of up to 153 acres of avocados as well as stockwatering, recreation and fish culture.

All three permits include a flow bypass term requiring that a minimum flow of 1.5 cubic feet per second (cfs), or the natural surface and subsurface streamflow above the point of diversion, whichever is less, be bypassed from December 1 through May 31.

Water from the reservoir is used to irrigate 153 acres. Water is also used at the reservoir for stockwatering, recreational, and fish culture purposes. The applicants currently use more than 200 afa to irrigate

their avocado trees. In some years they may use up to 100 af from storage during the storage season. Therefore, although they propose to increase the storage capacity of the existing onstream reservoir by 300 af, Application 28883 is for an additional 300 af of storage and 100 af of restorage (400 af total). Application 28883 is intended to ensure an adequate water supply for irrigation during a three-year drought. The existing project provides two years of carry-over storage.

The applicants also have three irrigation wells that supply water to the reservoir. The wells are drilled 360 feet deep into a sandstone formation. Ground water is pumped from fractures in the bedrock and diverted into the reservoir where it is commingled with water from West Corral de Piedra Creek and then pumped from the reservoir for irrigation use on the avocado orchard.

4.0 PROTESTS

Seven protests were filed against Application 28883, all of which are unresolved. The protestants are Fredric and LaVonne Righetti, John Christensen, Chris Darway, Clarence and Leona Asmussen, Robert and Ann Schiebelhut, Tally Farms Profit Sharing Trust, and Paragon Vineyard Company, Inc.

All of the protestants have wells which divert water from the underflow of West Corral de Piedra Creek or percolating ground water from the Upper Pismo Ground Water Basin. All of the protests allege that the applicants' project would result in injury to the protestants' vested rights. The protestants further allege that the applicants are not in compliance with their existing permits and that the method of irrigation used by the applicants results in a waste of water.

In addition to the above allegations, the protestants allege that the modifications or reconstruction of the dam as proposed by the applicants would threaten them and their properties. The structural integrity of the dam is under the jurisdiction of the Department of Water Resources, Division of Safety of Dams and is not addressed in this decision. Standard Permit Term 48 should be included in any permit issued under Application 28883 in order to ensure that the plans and specifications for the enlarged dam will be approved by the Division of Dam Safety.

5.0 COMPLAINTS

Following the close of the protest period, complaints against the permittees' operation of the reservoir were

received from Rudolph and Anne Bachmann, Judith Garnsey, Colin and Marjorie Wells, and G.J. and M.J. Schifano. The complainants allege that the permittees are not complying with the bypass flow conditions which are contained in the existing permits. As a result of the complaints, a compliance inspection was conducted in August of 1989. Compliance with the existing permits is discussed in Section 12.0 below.

6.0 PROCEEDINGS IN LIEU OF HEARING

The applicants and the protestants stipulated to an "in lieu" proceeding pursuant to Title 23, California Code of Regulations, Section 760. A field investigation was conducted and a draft staff analysis (draft) was prepared. Copies of the draft were distributed to the parties. The draft did not adequately address the issues and the conclusions in the draft were not supported by the evidence in the record. A hearing was necessary in order to obtain evidence on the unresolved issues which were raised during the "in lieu" proceeding and during the compliance inspection (23 CCR Section 760(a)(5), Water Code Section 183).

7.0 HEARING ISSUES

A hearing on Application 28883 was held on January 11, 1990 in San Luis Obispo, California. The purpose of

the hearing was to receive evidence regarding the following issues:

"1. Is there unappropriated water available for appropriation?

"2. Will legal downstream water users be injured by the proposed project?

"3. Will the proposed project have unreasonable effects on instream beneficial uses?

"4. Will the proposed project have unreasonable adverse environmental impacts?

"5. Is water being diverted under the existing permits outside of the approved place of use?

"6. Is it reasonable for Mr. Righetti to replace his existing drip irrigation system with a sprinkler system?

"7. Is the applicant in compliance with existing water rights permits for the project?

"8. Should the terms of Permits 12887, 14086, and 15444 (Applications 17840, 21061, and 22704) be revised?

"9. Will the project adversely affect public trust uses? Should the application be denied or should permit conditions be imposed to protect public trust uses if such actions conform to the standard of reasonableness under Article X, Section 2 of the California Constitution?"

8.0 APPLICABLE LAW

In order to issue a permit, the Board must find that unappropriated water is available to supply the applicant (Water Code Section 1375(d)). Unappropriated water includes water that has not been either previously appropriated or diverted for riparian use (Water Code Section 1202). The owner of land overlying a ground water basin, which is fed by percolation from a surface watercourse, possesses rights analogous to a

riparian owner (Peabody v. Vallejo (1935) 2 Cal.2d 351, 372, 40 P.2d 486). Consequently, water is not available for appropriation from a watercourse which feeds a ground water basin if the appropriation would materially damage the rights of the overlying landowners (see Id. at 374; Lodi v. East Bay Municipal Utility Dist. (1936) 7 Cal. 2d 316, 339, 60 P.2d 439).

Pursuant to Water Code Section 1253, the Board may subject appropriations to such terms and conditions as it finds are necessary to best develop, conserve, and utilize the water in the public interest. The Board has authority to enforce these terms and conditions.

The Board also has continuing authority under Article X, Section 2 of the California Constitution; Water Code Sections 100 and 275; Title 23, California Code of Regulations Section 780(a); and the public trust doctrine to amend existing water right permits and licenses to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water and to protect public trust uses of water (United States v. State Water Resources Control Board (1986) 182 Cal.App.3d 82, 227 Cal.Rptr. 161; National Audubon Society v. Superior Court (1983) 33 Cal.3d 419, 189 Cal.Rptr. 346).

When acting as a lead agency, the Board must prepare and consider appropriate environmental documents pursuant to the California Environmental Quality Act (CEQA, Public Resources Code Section 21000, et seq.). Further, the Board is required to mitigate or avoid, when feasible, significant project impacts (Public Resources Code Section 21002.1).

9.0 AVAILABILITY OF UNAPPROPRIATED WATER

9.1 Watershed Description

West Corral de Piedra Creek originates in the Santa Lucia Range and flows in a southwesterly direction until it joins with East Corral de Piedra Creek to form Pismo Creek. The watershed ranges in elevation from approximately 220 feet at the confluence of West Corral de Piedra Creek and East Corral de Piedra Creek to approximatley 2,863 feet at Piney Ridge. West Corral de Piedra Creek drains an area of approximately 5,270 acres with approximately 2,990 acres (57 percent) above Righetti Dam. Natural vegetation in the area generally consists of annual grasses and riparian species along the stream channels which include willows, tules, sycamores, and blackberries.

9.2 Climate

The climate of the project area is typical for the central coastal area and is characterized by long,

warm, dry summers and relatively cool, wet winters. Most precipitation in the area results from Pacific storms. More than 85 percent of the annual precipitation occurs between November and March. Climatological data for the project area is collected at the San Luis Obispo Cal Poly Gage approximately five miles northwest of the project and at the Lopez Reservoir Gage approximately eight miles southeast of the project. The applicants' dam is located on the same isohyet (line drawn on a map connecting points receiving equal rainfall) as these two gaging stations and has an average annual precipitation of between 20 and 25 inches.

9.3 Geology and Hydrology

Bedrock in the West Corral de Piedra Creek drainage area consists of Franciscan Formation in the upper part of the watershed and Paso Robles Formation in the lower part of the watershed. Overlying the bedrock formations throughout the drainage area are deposits of Holocene age alluvium. The surface channel of West Corral de Piedra Creek bottoms in these alluvial deposits for a distance of at least one-half mile upstream of the Righetti reservoir.

Although wells produce limited amounts of water from fracture zones in rocks of the Franciscan Formation,

generally these rocks are considered to be non-waterbearing. The Paso Robles Formation and the alluvium are the principal water bearing units in the area. Most domestic wells tap only the alluvium while deeper irrigation wells may tap both units.

The aquifer system is called the Upper Pismo Ground Water Basin. The Paso Robles Formation, however, extends to the north and forms a subsurface connection between the Upper Pismo Ground Water Basin and the San Luis Ground Water Basin. Recharge to the Upper Pismo Ground Water Basin is supplied by seepage from streams, precipitation, and irrigation return flow. Ground water is discharged by pumping, evapotranspiration, effluent discharge to streams, and possibly interbasin underflow.

9.4 Water Usage

Upstream of the applicants' project, the watershed is undeveloped and is used primarily for range cattle. The major water use is for stockwatering. The applicants have filed Statement of Water Diversion and Use No. 11. In addition, the Board has on file those post-1914 appropriative water rights and claims of riparian or pre-1914 appropriative rights summarized in Table I and located as shown on Figure 1.

Table I

Appropriations and Claimed Non-Jurisdictional Water Rights on File with the Board

Statements of Water Diversion & Use:

Claimant	Statement No.	Quantity Claimed	Purpose of Use*
E. Righetti	11	500 afa	S, I, N
Bello	10414	600 gpd	S
Bello	10415	0.033 cfs	I
Paragon Vineyards	13102	0.370 cfs	I
Paragon Vineyards	13103	0.790 cfs	I
Tally Farms	13147	0.340 cfs	I
F. Righetti	13338	275 gpm 15 gpm 15 gpm	I D D
Bachmann & Schifano	**	**	**

Applications/Permits/Licenses:

	Application No.	Permit/License No.	Purpose of Use*	Amount		Place of Use (acres)
Ernest & Susan S. Righetti	17840	P12887	I,S	500 afa	Storage	153
Ernest & Susan S. Righetti	21061	P14086	I,S	64 afa	Storage	153
Lionel L. & Betty E. Middlecamp	22050	L10893	I,R,S	50 afa	Storage	18
Ernest & Susan S. Righetti	22704	P15444	H,I,R,S	27 afa	Storage	153
Robert B. Lorance	23892	L11380	I,R,S	14 afa	Storage	21
Alex & Joann Quagliano	26257	L12178	I,R	2 afa	Storage	15
Alex & Joann Quagliano	26902	L12177	I,R	13 afa	Storage	25
Marian V, Hanson et al	27224	P18646	S	4	Direct Diversion	na
Ernest Righetti & Sons	28883		E,I,R,S,W	400 afa	Storage	153

Stockpond Certificates:

Owner	No.	Amount
Lionel H. & Betty E Middlecamp	1217	1.7 afa
	1218	0.2 afa
	1219	0.2 afa
	1220	0.3 afa

* D=Domestic, I=Irrigation, R=Recreation, S=Stockwatering, E=Fire Protection, H=Fish Culture, W=Fish and Wildlife Protection and/or Enhancement N=Frost Protestion

**Bachmann & Schifano have submitted a Statement of Water Diversion and Use, however it has not yet been assigned a number.

9.5 Availability of Water and Impacts to Downstream Users

Regarding the initial project (Application 17840), the applicants and protestants agreed that the project would only divert the surface flow that otherwise flowed out of the basin and into the ocean. Bypass terms designed to achieve this result were included in the permits (T,331:25-332:2; STAFF,1, Transcript of Hearing on Application 17840, pp. 7-8, p. 20).

The protestants are currently experiencing water shortages. They report that the water table in the basin from which they pump has declined so much that well yields are low and some wells are unpumpable (STAFF,1f; T,335:15-20). The protestants allege that the applicants never installed the measuring devices required by their permits, or kept records of inflow to and outflow from the reservoir. The protestants therefore are concerned that the applicants have exceeded the permitted diversions and failed to bypass water as required by their permits. This issue is addressed in Section 12.0 below. Also, the protestants are concerned that, if approved, the expanded project will divert water that would otherwise recharge the basin and be available to them to pump.

A witness for the applicants testified that the reservoir is a benefit to the watershed because of the return flow to the basin when the water is applied for irrigation during the summer (T,185:7-23). The applicants' witnesses testified that the protestants' diminished well yields resulted from three successive drought years and increased pumping in the basin, not because of the applicants' water storage and irrigation practices (T,59:13-15; T,216:7-16; T,217:24-218:5).

Further, a witness for the applicants testified that in wet years, water is available to appropriate under Application 28883, but that surplus water is not available every year (T,27:7-12; T,28:4-11). Any permit issued pursuant to Application 28883 should, therefore, restrict the storage of water to wet years only. Since wet years cannot be predicted in advance of the storage season, the applicants should be required to release water diverted to storage during each year that is subsequently determined to be a dry year.

Restricting the storage of water to wet years and requiring the release of stored water in dry years requires that quantitative definitions of wet and dry years be established. The hearing record contains no such definition and provides no basis for developing

such a definition. Typically, the classification of a year as wet or dry depends on annual runoff volumes which are estimated from annual precipitation totals, antecedent conditions, and other factors. This approach cannot be used here because the data needed to establish the relationship between runoff and precipitation for the West Corral de Piedra Creek watershed are not in the hearing record. In addition, the volume of runoff needed to recharge the basin is not known.

Because the relationship between precipitation, runoff, and ground water recharge is unknown, we cannot determine whether there is water available for appropriation using conventional methods. The impact of the proposed project on downstream water users is closely related to the quantity of water available in the stream. Therefore, we will analyze the effects of the proposed appropriation on downstream water users in order to determine the availability of water for appropriation. If the proposed appropriation would not adversely affect the downstream water users, then, in this case, there is water available for appropriation within the meaning of Water Code Sections 1201 and 1202. Most of the water users in the West Corral de Piedra Creek watershed who claim rights senior to

the applicants' rights, pump underflow of the creek or are overlying users of the Upper Pismo Ground Water Basin.

Quantitative data in the hearing record are limited to precipitation records of the Cal Poly Gage and Lopez Reservoir Gage, and water level records of several wells in the basin (STAFF,1b; Righetti,3; Righetti,4; Righetti,5). Although annual precipitation is not the only factor affecting water availability, the applicants' witness testified that water level changes in wells correlate with changes in annual precipitation (T,32:25-33:1; T,46:6-10; T,47:20-21; T,55:23-56:7). Water level records were therefore compared to precipitation records to determine how much annual rainfall is needed for water levels to recover in the basin.

For this decision, a year is defined as the period from July 1 to June 30. This definition of a water year is also used by San Luis Obispo County. Historic water levels in the Upper Pismo Basin were compared to annual rainfall totals measured at the Cal Poly Gage in San Luis Obispo (Righetti,3). There are 119 years of record for this gage. The applicants' witness testified that the assumption that the Cal Poly Gage

record is representative of rainfall at the applicants' reservoir is reasonable because both Cal Poly and the reservoir lie between the same isohyets (T,22:1-9; Righetti,13). Lopez Reservoir also lies between the same isohyets but this record was not used because there are only 22 years of precipitation recorded (Righetti,3; Righetti,13). A comparison of the Lopez record with the Cal Poly record revealed that both show the same trend of wet and dry years.

Selecting the water level in a well that represents full basin recovery is subjective considering that the storage capacity of the basin and the quantity of water pumped from wells are not known. Hydrographs prepared from water level records of ten wells in the Upper Pismo Basin were reviewed. For the purpose of our analysis, good recovery of the water level in a well is defined as a spring water level that is higher than the highest fall level of record. (STAFF,1b; Righetti,4; Righetti,5). The locations of the wells (identifed as 16N1, 17Q4, 17R1, 18J2, 19H1, 19L1, 19R1, 20G1, 20K1, 29C1) are shown in Figure 1.

Using this definition, we then compared the number of water levels that indicated good recovery (spring levels above the highest fall levels) with levels that indicated poor recovery (spring levels below the

highest fall levels) for the different annual precipitation totals. Good recovery is demonstrated in almost all of the wells measured when annual precipitation exceeded 23 inches. Poor recovery occurs frequently when precipitation is less than 23 inches.

During the 119 years of record for the Cal Poly Gage, there was one year with at least 26 inches of rainfall between each consecutive dry year event 17 out of 19 times. Assuming that the Cal Poly Gage record is representative of precipitation patterns, a 26 inch standard should give the applicants the desired carry-over storage for protection against most consecutive dry year events while ensuring that water is available to downstream water users during normal or near normal rainfall years.

Accordingly, the applicants should be allowed to store water only in years when annual precipitation exceeds 26.0 inches at the Cal Poly Gage. This standard can be implemented by allowing the applicants to divert the water in any year, but requiring the release of the water collected to storage on July 1 if annual precipitation at the Cal Poly Gage is less than 26.0 inches in the preceding year. When it is necessary to release the water collected to storage because the annual precipitation is less than

26.0 inches, the water should be released at a rate of 2 cfs in addition to inflow. This rate will result in the release of up to 300 af of stored water prior to the beginning of the succeeding diversion season and will assure a continuous flow of water for instream use during the dry season.

To ensure that water is available for instream uses, any permit issued pursuant to Application 28883 should contain the same bypass flow requirements as existing Permits 12887, 14086, and 15444.

The California Department of Water Resources (DWR), in cooperation with San Luis Obispo County Flood Control and Water Conservation District, is in the process of conducting a detailed geohydrologic study of the Pismo Ground Water Basin. The study is expected to provide a better understanding of the geology and hydrology of the basin and a model which will include a safe yield estimate for the basin (T, 37:5-18). The Board takes official notice that this study is in progress. The Board should reserve jurisdiction to modify the criteria for allowing the appropriation of water to storage based on the results of the DWR study.

10.0 WASTE AND UNREASONABLE USE

Article X, Section 2 of the California Constitution requires that all uses of water be reasonable and beneficial, and prohibits the waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water. Beneficial uses of water are defined in Title 23, California Code of Regulations, Sections 659-672. Allegations of waste or unreasonable use must be assessed on a case by case basis. In order to determine reasonableness, it is necessary to examine competing uses of water, best available technologies for irrigation, and area management practices for growing avocados.

Irrigation is a beneficial use of water as defined by 23 CCR 661. The diversion of water to storage as proposed by Application 28883 is reasonable if: (1) the bypass terms and conditions contained in the existing permits are included in any permit issued on this application; and (2) the applicants are prohibited from diverting water to storage unless the annual precipitation at the Cal Poly Gage is equal to or greater than 26.0 inches. Although the downstream water users have alleged that their water supply has been adversely impacted by the applicants' existing

project, no evidence was presented at the hearing to establish either a causal relationship or to quantify the alleged injury.

Within the applicants' 153 acre place of use, approximately 120 acres are planted with avocado trees (T,109:4-5). Several of the protestants and complainants expressed concern regarding the applicants' method of irrigation. Of the 120 acres planted by the applicants, 20 acres are irrigated by overhead sprinklers, 45 acres are irrigated by a drip irrigation system and 55 acres are irrigated by one-gallon per minute sprinklers (T,97:16-98:7; T,147:2-12). The applicants apply between two and three acre-feet of irrigation water per acre per year (T,99:1-2). The consumptive use of avocados in the San Luis Obispo area is approximately two to three and one-half acre-feet per acre per year (STAFF,1, Contact Report, January 8, 1990).

The applicants testified that they have not replaced their drip system with a sprinkler system, instead they re-engineered the drip system because it was inadequate (T,147:10-14; T,264:8-12). The applicants' engineer testified that the efficiency of drip irrigation systems is equivalent to that of low-head sprinklers

(T,194:20-22). The efficiency of an irrigation system depends more on its management than on the method used (T,165:1-7; T,200:22-201:7; STAFF,1, Contact Report, January 8, 1990).

The applicants testified that they use many different management practices to ensure that they maximize their use of water. Tensiometers and visual inspection of soil columns are used to determine soil moisture. The hills have been terraced to provide a greater depth of topsoil. Weeds are controlled by pruning and application of herbicides to reduce the competition for water. The frequency and duration of irrigation are scheduled to insure that over-watering does not occur. The appearance of the trees is visually assessed to determine whether they are water-stressed (T,262:11-264:20).

As avocado trees mature, it is necessary to expand the water distribution system because of the expanding root system (STAFF,1, Contact Report, January 8, 1990). The applicants testified that avocados have a shallow root system which requires application of water over a larger soil surface area than a drip system is capable of covering.

Irrigation by both sprinkler and drip systems is an accepted agricultural practice for avocado orchards. The applicants manage their irrigation system to ensure that their duty of water is within the acceptable range for avocados grown in the central coastal region of California. Therefore, we find that the applicants' use of water is not wasteful and is reasonable and beneficial.

In order to ensure that water appropriated under any permit issued pursuant to Application 28883 is used for the stated purpose of carry-over storage, the permit should include a permit term limiting maximum seasonal withdrawal from the reservoir.

11.0 ENVIRONMENTAL AND PUBLIC TRUST ISSUES

11.1 Impacts on Fish Habitat

Testimony by DFG shows that although the existing dam presents a barrier to passage of steelhead trout to upstream spawning habitat, the existing dam spillway allows some upstream migration of steelhead trout whenever the reservoir is spilling. Steelhead trout are currently found in the watershed above the reservoir (DFG,2; T,278:2-8; T,280:2-10). DFG is concerned that the applicants' proposal to raise the

dam another nine feet will eliminate steelhead trout access to the upper watershed due to less frequent spilling of the reservoir and the increased steepness and height of the new spillway. Therefore, DFG recommends that the new spillway be designed to provide passage of fish over the enlarged dam and stated that in previous discussions with applicant Ernest Righetti, Mr. Righetti indicated a willingness to cooperate with DFG in incorporating a suitable fish ladder into the new spillway design (DFG,2; T,282:4-11).

The record establishes that:

1. Mr. Righetti has agreed to cooperate with DFG in developing an appropriate fish ladder into the new spillway design (T,303:11-24);

2. the applicants are required to enter into a streambed alteration agreement with DFG pursuant to Fish and Game Code Section 1603 in order to modify the existing dam (T,294:20-24); and

3. one of the conditions of the required streambed alteration agreement will be incorporation of a suitable fish ladder design into the new spillway (T,295:1-4).

A term should be included in any permit issued for Application 28883 to ensure that the project will not adversely affect passage of steelhead trout over the dam.

With regard to fish habitat below the dam, DFG testified that they observed a large amount of silt in the creek below the reservoir outlet pipe. They expressed concern because large amounts of silt degrade fish habitat through increased turbidity of the water and siltation of the streambed (DFG,2; T,279:9-13; T,282:17-25). The siltation is due to reservoir releases being made when the water level in the reservoir is low enough to allow accumulated sediments on the bottom to be drawn into the outlet pipe. DFG also observed dead and dying catfish in the creek below the dam. It appeared that catfish from the reservoir were being drawn into the discharge pipe. Consequently, DFG requests that a vertical standpipe be installed in the reservoir with an intake at least five feet above the bottom in order to prevent accumulated sediments from being discharged to the stream channel below and also to protect fish in the reservoir (DFG,2; T,283:1-8).

Mr. Ernest Righetti admitted that accumulated silt in the reservoir had been discharged through the bottom

outlet when the water level in the reservoir was low, but that steps were being taken to prevent such discharges in the future by extending the outlet intake in the reservoir ten feet vertically (T,125:12-25). We find that the applicants' proposed action to prevent further discharges of silt to the stream will adequately resolve the water quality issue raised by DFG. Accordingly, a term should be included in any permit issued for Application 28883 to ensure that water quality downstream of the dam will not be degraded by discharges of silt to the stream.

As described in Section 3.0, the three permits for the existing dam (numbers 12887, 14086, and 15444) include a flow bypass term which specifies that a minimum flow of 1.5 cfs, or the natural surface and subsurface streamflow above the point of diversion, whichever is less, shall be bypassed from December 1 through May 31. This flow bypass term was accepted by DFG, as protestants in prior Board proceedings on the existing water rights, as sufficient to maintain adequate flow conditions for steelhead trout and other fishlife in the stream below the dam during the diversion season (STAFF,1). At the hearing on the pending application, however, DFG testified that although in 1958 the DFG accepted the 1.5 cfs flow bypass level as adequate to protect fishlife below the dam, DFG now questions

whether this flow level is sufficient to allow for upstream migration of adult steelhead trout (DFG,2). The reasons given by DFG for this concern are that (1) DFG does not have any written records showing how the 1.5 cfs flow level was calculated in 1958, (2) DFG priorities and methods for estimating the needs of fish have changed since 1958, and (3) the proposed enlarged dam will mean that the reservoir will spill less often (DFG,2; T,280:19-23, T,290:6-19, T,291:5-25).

DFG recommends that a wintertime flow study be conducted using contemporary study methods to determine the minimum flow requirements for upstream movement of adult steelhead below the reservoir (DFG,2; T,281:21-25; T,286:1-21). Further, DFG recommends that the record be held open until the flow study is completed, that the study results be incorporated into the Board's CEQA document, and that the Board develop new flow bypass terms based on the results of the proposed study (DFG,2).

We find DFG's request for such a flow study to be unreasonable for the following reasons:

1. DFG was unable to present any evidence at the hearing to demonstrate that the 1.5 cfs flow bypass level is inadequate.

2. The fact that current DFG biologists apparently have no records of how previous DFG biologists made the determination that 1.5 cfs was adequate neither invalidates DFG's previous recommendations nor justifies further Board delay in acting on this application until DFG develops the documentation it seeks.

3. DFG was provided notice of the pending application over two years prior to this hearing and could have protested and requested such a study at that time, but did not (T,292:11-17).

4. We do not consider the probable change in frequency of spillage of the reservoir to have a direct bearing on the adequacy of the 1.5 cfs bypass flow term since the term was established with the intent of providing minimum acceptable flow conditions for fish below the dam at times when the reservoir was not spilling. The issue of providing steelhead trout access to habitat above the dam when the reservoir is spilling has been addressed above.

11.2 Impacts on Wildlife Habitat

DFG testified at the hearing that riparian vegetation in the stream channel below the dam and near the perimeter of the existing reservoir is considered

critical riparian wetland wildlife habitat which is used extensively by a large variety of wildlife species (DFG,2; T,277:7-18). DFG testified that upon a recent inspection of the project site, it was discovered that a considerable amount of this riparian vegetation was being destroyed and removed from the stream channel below the dam on the applicants' property (DFG,2; T,283:9-18; T,295:12-296:6). Further, DFG expressed concern that, due to the proposed raising of the dam, riparian vegetation around the perimeter of the existing reservoir would be lost by inundation (DFG,2; T,276:20-277:4).

DFG recommends that appropriate steps be taken to ensure that riparian vegetation in the project area is restored and maintained (DFG,2; T,283:19-284:10). We concur with this recommendation.

Since one of the stated purposes of the proposed project is wildlife enhancement, Mr. Ernest Righetti explained the steps he was taking to protect and enhance wildlife, and admitted that he had been destroying existing riparian vegetation and should have obtained permission from DFG to do so as part of the required streambed alteration agreement (T,301:16-303:10). Mr. Righetti further testified that he is willing to cooperate with DFG to develop a program to

restore, maintain and, where possible, to enhance riparian vegetation for wildlife habitat both around the perimeter of the enlarged reservoir and in the stream channel below the dam on the applicants' property (T,302:16-303:10). Therefore, a term should be included in any permit issued for the project to ensure not only that potential impacts on riparian vegetation are mitigated but to achieve the stated purpose of providing a reasonable degree of wildlife enhancement.

12.0 COMPLIANCE WITH EXISTING PERMITS

Because the same project is involved for all permits and this application, the applicants should demonstrate compliance with existing water rights permits before a permit is issued on Application 28883. The protestants testified that the measuring devices required by the existing permits were never installed at the reservoir and that the permittees are therefore in violation of their existing permits (T,306:23-25; T,359:7-10). They further allege that the permittees cannot demonstrate compliance with bypass flow requirements because no records of bypass flows were kept (T,112:21-25; T,121:4-7).

The permittees admitted that they had not installed permanent measuring devices, but that they estimated inflow to the reservoir and appropriate bypass flows by diverting surface flow upstream of the dam through a pipe such that it could be measured volumetrically (T,143:11-144:4). The amount to be bypassed was equal to double the surface flow. Surface flow was doubled to account for subsurface flow which could not be measured (T,78:13-18; T,79:1-12). The actual bypassed flow was not measured but was estimated using a trajectory method called the California Pipe Method (T,84:15-21).

12.1 Measuring Devices

The Division found the permittees in noncompliance with the existing permits in 1969, 1972, 1975, 1981, and 1989 for failing to have measuring devices in place at the reservoir (STAFF,1, Reports of Inspection for those years). Most recently, the permittees were informed of their noncompliance by letter dated November 2, 1989, (STAFF,1) and were told to install flow meters on the outlet pipe to measure bypass flows and to install a device capable of measuring surface inflow to the reservoir. The Division concluded that subsurface inflow to the reservoir could not be measured with a standard device (STAFF,1, Reports of Inspection 1981, 1989). The permittees were therefore given the option

of bypassing a constant 190 gallons per minute (gpm) to account for subsurface inflow to the reservoir, or of constructing observation wells so that the subsurface inflow could be more accurately estimated (STAFF,1, Letter dated November 2, 1989).

The permittees testified that three flow meters have been installed on the outlet pipe to the reservoir. The meters are capable of measuring flows from 0 to 1.5 cfs (T,85:25-88:2). The permittees have drilled two observation wells upstream of the reservoir to measure the hydraulic gradient of the subsurface flow (T,86:3; T,174:24-25). The permittees have more accurately measured the subsurface channel geometry in the vicinity of the observation wells using the seismic refraction method (T,174:1-9). The permittees plan on using this information to better estimate subsurface inflow to the reservoir (T,178:10-19).

The letter dated November 2, 1989 also instructed the permittees to install a device by May 1, 1990 to measure surface inflow to the reservoir. The permittees have a V-notch weir in place in the streambed above the reservoir that can be used to measure surface inflow (STAFF,1, Reports of Inspection 1981, 1989). Although the permittees' engineer testified that the weir was properly designed for

measuring flows up to 1.5 cfs (T,168:5-10), both the permittees and their engineer stated that the weir is impractical because it must be cleaned out or dug out after high stream flows (T,84:1-4; T,167:17-168:1; T,170:14-17). The permittees testified that they are investigating an alternative method for measuring surface flow (T,168:11-12). The permittees may use the V-notch weir as a surface measuring device or install an alternative device satisfactory to the Chief of the Division of Water Rights.

12.2 Bypass Flows

Because the permits did not require recording or reporting of reservoir operations, the permittees did not keep records of bypass flows or their estimates of inflow to the reservoir (T,112:21-25; T,121:2-7).

The maximum possible subsurface inflow to the reservoir is estimated to be 190 gpm (STAFF,1,1989 Report of Inspection). This estimate was derived from assumed maximum values of alluvium depth, hydraulic gradient, and hydraulic conductivity of the alluvium in the creek channel above the reservoir. At the 1969, 1975, and 1981 compliance inspections, the permittees were bypassing 900 gpm, 360 gpm, and 260 gpm respectively. These values are all higher than the sum of the measured surface inflow and the 190 gpm maximum

possible subsurface inflow. Therefore, the permittees complied with bypass flow requirements at the time of the 1969, 1975, and 1981 inspections (STAFF,1, Reports of Inspection, 1969, 1975, 1981, 1989).

Compliance with the bypass flow requirements cannot be determined for the 1989 inspection and there are no data for the 1972 inspection. At the time of the 1989 inspection, the permittees were bypassing 16 gpm and the surface inflow to the reservoir was zero. However, the bypass flow was less than the estimated maximum subsurface inflow of 190 gpm. Because subsurface inflow could not be measured directly, the Division could not determine if the permittees were complying with bypass flow requirements (STAFF,1, Reports of Inspection, 1972, 1989).

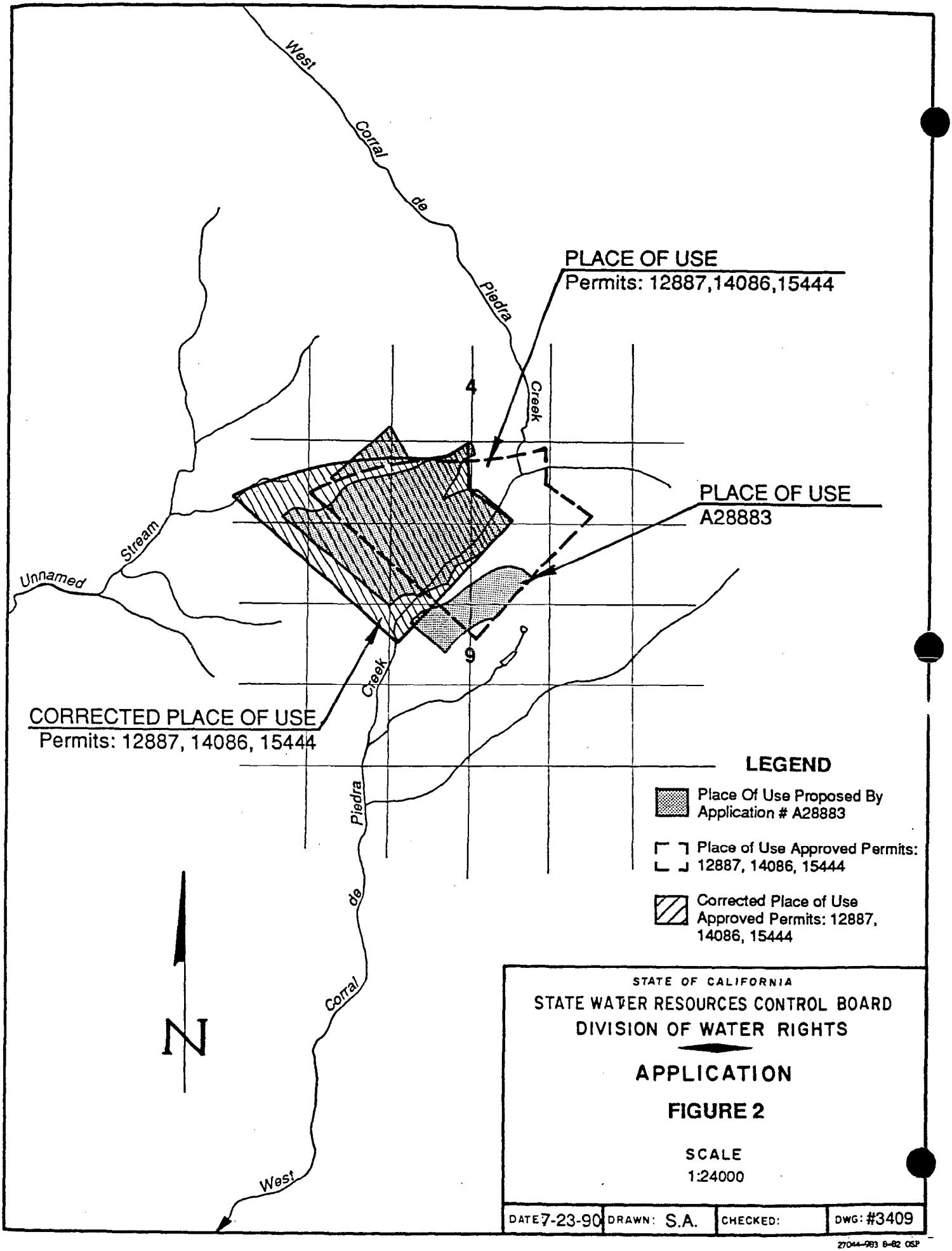
12.3 Place of Use

In addition to the 120 acres that the permittees irrigate within their present property lines, they have agreed to serve water to an adjacent 40 acre parcel which they previously owned (T,116:21-25). At issue is whether the adjacent property (shown as the Tichenor Property on Figure 1) is within the approved place of use. The permittees do not know whether the 40 acre parcel is included in the place of use approved by Permits 12887, 14086, and 15444 (T,117:7-9).

The place of use is in an unsurveyed area of San Luis Obispo County. Pursuant to instructions for the filing of applications, a legal description of the place of use was given as if public survey lines were extended by the engineer for the permittees into the unsurveyed area. The place of use approved by Permits 12887, 14086, and 15444 is shown on Figure 2.

As shown on Figure 1, it appears that the point of diversion and the place of use relative to the point of diversion are incorrectly described by the permits. Therefore, the described point of diversion and place of use have been shifted to the southwest on Figure 2 to show the correct locations. The permittees should submit a corrected legal description of both the point of diversion and of the place of use. Upon receipt of the corrected description, an administrative correction to the permits should be made by the Division of Water Rights. The place of use under Application 28883 is also shown on Figure 2.

Although the property owned by the Tichenors was previously irrigated by the permittees, it is not within the place of use authorized by the existing permits. Nor is it within the place of use proposed by Application 28883. As shown on Figure 2, portions of the proposed place of use are not within the corrected


West
Corral
de
Piedra
PLACE OF USE
Permits: 12887,14086,15444
Creek
4
PLACE OF USE
A28883
Stream
Unnamed
9
Creek
CORRECTED PLACE OF USE
Permits: 12887, 14086, 15444
LEGEND
Place Of Use Proposed By Application # A28883
Place of Use Approved Permits: 12887, 14086, 15444
Corrected Place of Use Approved Permits: 12887, 14086, 15444
Piedra
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STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS
APPLICATION
FIGURE 2
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place of use. The applicants testified that the place of use under the pending application is the same as the place of use under the existing permits (T,109:17-18); therefore, they should file a petition to change the place of use with the Board.

Until either an order approving a change in place of use under the existing permits is approved or a permit approving Application 28883 is granted, the permittees are not authorized to irrigate those areas that are not within the approved place of use as shown on Figure 2 with water appropriated from West Corral de Piedra Creek.

The portions of the areas that are not within the approved place of use which are riparian to West Corral de Piedra Creek may be irrigated with water diverted under claim of riparian right as long as a proper riparian use is made. The Tichenor's property is not riparian to West Corral de Piedra Creek (it is riparian to an unnamed tributary to the creek) and therefore may not be irrigated with water from the reservoir under claim of riparian right. The Tichenor's property may be irrigated from percolating ground water pumped into the reservoir as an appropriation to non-overlying

lands. The appropriation of percolating ground water to non-overlying lands is subject to the paramount rights of overlying users.

13.0 COMPLIANCE WITH CEQA

A Draft Negative Declaration (draft) and supporting Initial Study were prepared pursuant to CEQA. The draft concluded that the project has the potential to cause significant environmental impacts to fish and wildlife habitat, but that such potential impacts will be avoided if certain specific permit terms and conditions are imposed upon the project as mitigation measures (STAFF,1).

The Draft Negative Declaration was circulated through the State Clearinghouse for public review in December 1989. Comments on the Draft Negative Declaration were received from only one party, DFG, in a memorandum dated December 27, 1989 (STAFF,1). The issues raised in DFG's comments on the Draft Negative Declaration were substantially the same as the issues raised by DFG at the hearing. The draft contains proposed mitigation measures which address the concerns of DFG. These measures are included in the terms and conditions specified in the order as Standard Permit Term No. 63 and conditions 2, 9, 10, and 11.

We have considered the Draft Negative Declaration for Application 28883 and conclude that these terms provide adequate mitigation of the adverse impacts which would be caused by the proposed project. These terms will be included in any permit issued for Application 28883.

14.0 CONCLUSION

Application 28883 should be approved subject to the terms and conditions specified in the order which follows.

ORDER

IT IS HEREBY ORDERED that Application 28883 be approved and that a permit be issued subject to prior rights and subject to standard permit terms 5i, 6 through 13, 43, 48, 50, 62, and 63. In addition, the permit issued on Application 28883 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 400 acre-feet per annum to be collected from December 1 of each year to May 31 of the succeeding year.

2. For the protection of fish and wildlife habitat, permittee shall during the period from December 1 through May 31 bypass a flow of 1.5 cubic feet per second or the natural flow, whichever is less, to the natural stream channel immediately

below the dam. The natural flow is the total subsurface and surface flow in the creek immediately above the reservoir. The natural flow shall be bypassed whenever permittee demonstrates, through streamflow measurements acceptable to the Chief of the Division of Water Rights, that mean daily flow is less than 1.5 cfs.

3. Maximum withdrawal from storage under this permit and permits 12887, 14086, and 15444 during the period from June 1 of each year to May 31 of the succeeding year shall not exceed 450 acre-feet.

4. Permittee shall install and properly maintain in the reservoir a staff gage or similar device satisfactory to the Chief of the Division of Water Rights for the purpose of determining the volume of water in the reservoir.

5. Permittee shall install and maintain measuring devices satisfactory to the Chief of the Division of Water Rights for the purpose of measuring total surface and subsurface inflow to the reservoir and outflow from the reservoir.

6. Permittee shall:

   (a) measure and record weekly the rate of subsurface inflow to the reservoir,

(b) measure and record daily the rate of outflow through the outlet pipe from the reservoir,

(c) from December 1 of each year to May 31 of the succeeding year, measure and record daily the rate of surface inflow to the reservoir when the mean daily flow is less than 1.5 cfs,

(d) from June 1 to November 30 of each year, measure and record daily the rate of surface inflow to the reservoir.

The permittee shall submit a written monitoring report containing the records required in this term for the preceding calendar year to the Chief of the Division of Water Rights. This monitoring report shall be submitted with the annual Progress Report of Permittee.

7. Permittee shall allow the protestants to this application, and all successors in interest, or a designated representative, reasonable access to the reservoir for the purpose of verifying reservoir inflow and outflow measurements. Such persons shall exercise reasonable caution to not adversely affect the horticultural activities of the permittee.

8. Beginning July 1, the permittee shall release all water stored in the preceding storage season under this permit unless the total rainfall at the Cal Poly Gage

for the period of July 1 of the previous year to June 30 of the current year is greater than or equal to 26.0 inches. Releases shall be made at the rate of 2 cubic feet per second. In the event that the total rainfall is no longer measured and/or recorded at the Cal Poly Gage, the permittee shall correlate the equivalent of 26.0 inches at the Cal Poly Gage to an alternative gage acceptable to the Chief of the Division of Water Rights. Upon written approval by the Chief of the Division of Water Rights, the correlated rainfall at the alternative gage will be the standard for determining whether water is available for storage.

The State Water Resources Control Board reserves jurisdiction to modify this permit term based on the findings of the Department of Water Resources' study of the hydrology of the Pismo Ground Water Basin and the Edna Valley.

9. For the protection of riparian wildlife habitat, permittee shall develop a specific written plan in cooperation with the Department of Fish and Game (DFG) for the restoration, maintenance, and enhancement of appropriate riparian wildlife habitat around the perimeter of the reservoir and in the natural stream channel below the dam on property controlled by the permittee. The plan shall receive prior approval by the DFG and shall be submitted to the Chief of the Division of Water Rights within 6 months of the date of any permit issued pursuant to this order. The plan shall be fully

implemented within two years following the date of approval by the Chief of the Division of Water Rights. Thereafter, no modifications of riparian wildlife habitat, stream channel, or reservoir perimeter shall be conducted without prior written approval by the DFG through the issuance of a streambed alteration agreement.

10. For the protection of downstream water quality for fishlife, permittee shall install and maintain a standpipe in the reservoir with an intake at least five feet above the base, or the equivalent, for the purpose of preventing the discharge of accumulated sediment into the stream channel through the outlet pipe.

11. For the protection of fish migration over the dam, permittee shall not modify the existing dam spillway until after construction plans for the modified spillway receive written approval from the Department of Fish and Game that the plans contain appropriate fish passage facilities. Thereafter, such spillway modifications shall be carried out only in accordance with the construction plans approved by DFG.

IT IS FURTHER ORDERED that Permits 12887, 14086, and 15444 shall be revised to include Standard Terms 5i, 6, 10-13, 43, 48, 50, 60, 62 and 63 and terms 3-7 listed above. If any of these terms conflict with terms currently contained in the permits, the permit terms shall be revised to be consistent with the terms contained in any permit issued on Application 28883. In order to

ensure that the permittee does not divert water to areas outside the authorized place of use, Permits 12887, 14086, and 15444 shall also include the following term:

Permittee shall keep a monthly record of the following totals:

(a) volume of non-jurisdictional water (percolating ground water, water diverted under claim of riparian right or pre-1914 appropriative right) pumped into the reservoir,

(b) volume of non-jurisdictional water taken from the reservoir and applied to acreage outside of the approved place of use,

(c) volume of non-jurisdictional water taken from the reservoir and applied to acreage within the approved place of use,

(d) volume of water appropriated under Permits 12887, 14086, and 15444 which is applied to acreage within the approved place of use,

(e) volume of water in the reservoir on the last day of each month.

The permittee shall submit a written monitoring report containing required monthly measurements for the preceding 12 months to the

Chief of the Division of Water Rights. The written monitoring report shall be submitted with the annual Progress Report of Permittee.

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 November 27, 1990.

AYE: W. Don Maughan
Darlene E. Ruiz
Eliseo M. Samaniego
John Caffrey

NO: None

ABSENT: Edwin H. Finster

ABSTAIN: None

Maureen Marché
Administrative Assistant to
the Board