



S015574%S%2005

2003, 2004, 2005

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

If the information below is inaccurate, please line it out in red and provide current information.
 Notify this office if ownership or address changes occur during the coming year.

Please Complete and Return This Form by **JULY 1, 2005**. *2006*

*If the mail recipient's name, address or phone No. is wrong or missing, please correct.

Owner of Record: ORRADRE RANCH;

STATE OF CALIFORNIA
 DIVISION OF WATER RIGHTS
 SACRAMENTO
 2006 JUL 17 PM 1:46

PRIMARY CONTACT OR AGENT FOR MAIL & REPORTING:

ORRADRE RANCH

Michel & Mary Orradre
 67100 Sargents Road
 San Ardo, CA 93450

STATEMENT NO.: S015574
 CONTACT PHONE NO.:

(831) 627-2339

Source Name: SALINAS RIVER SUBTERRANEAN

Tributary To: PACIFIC OCEAN

County: Monterey

Year of First Use: 1775

Diversion Within: SW1/4 of SE1/4 Section 04, T23S, R10E, MB&M

Parcel Number: 422141047

A. **Water is Used Under:** Riparian claim Pre-1914 right Other (explain): see attached

B. **Year of First Use:** (Please provide if missing above) _____

C. **Amount of Use:** Enter the amount (or the approximate amount) of water used each month, using the table below.

Amounts below are in: Gallons _____ Million Gallons (MG) _____ Acre-feet (AF) Other _____

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total Annual
2003													8.4
2004													8.4
2005													8.4

D. **Purpose of Use** – Specify number of acres irrigated, stock watered, persons served, etc.

Irrigation acres; Stockwatering ; Domestic ;

Other (specify) _____

E. **Changes in Method of Diversion** – Describe any changes in your project since your previous statement was filed.
 (New pump, enlarged diversion dam, location of diversion, etc.) see attached

F. Please answer only those questions below which are applicable to your project.

1. Conservation of water

a. Are you now employing water conservation efforts? YES NO
 Describe any water conservation efforts you have initiated: _____

b. If you are claiming credit for water conservation under section 1011 of the Water Code for your claimed pre-1914 appropriative right, please show the amount of water conserved:

Reduction in Diversions:

Year 2003 99345.436 (AF/MG) Year 2004 99317.267 (AF/MG) Year 2005 99259.726 (AF/MG)

Reduction in consumptive use:

Year _____ (AF/MG) Year _____ (AF/MG) Year _____ (AF/MG)

I have data to support the above surface water use reductions due to conservation efforts. YES NO

The above discussion is provided for general information. For more specific information concerning water rights, please contact an attorney or write to this office. We have several pamphlets available. They include: (1) Statements of Water Diversion and Use, (2) Information Pertaining to Water Rights in California, and (3) Appropriation of Water in California.

Statements of Water Diversion and Use must be filed by riparian and pre-1914 appropriative water users as set forth in Water Code section 5100 with specific exceptions. The filing of a statement (1) provides a record of water use, (2) enables the State to notify such users if someone proposes a new appropriation upstream from their diversions, and (3) assists the State to determine if additional water is available for future appropriators.

An appropriative right is required for use of water on non-riparian land and for storage of water. Generally, appropriative rights may be exercised only when there is a surplus not needed by riparian water users. Since 1914, new appropriators have been required to obtain a permit and license from the State. Appropriative rights can be granted to waters "foreign" to the natural stream system.

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A riparian right enables an owner of land bordering a natural lake or stream to take and use water on his riparian land. Riparian land must be in the same watershed as the water source and must never have been severed from the sources of supply by an intervening parcel without reservation of the riparian right to the severed parcel. Generally, a riparian water user may share the water supply with other riparian users. Riparian rights may be used to divert the natural flow of a stream but may not be used to store water for later use or to divert water which originates in a different watershed, water previously stored by others, return flows from use of groundwater, or other "foreign" water to the natural stream system.

There are two principal types of surface water rights in California. They are riparian and appropriative rights.

GENERAL INFORMATION PERTAINING TO WATER RIGHTS IN CALIFORNIA

ITEM CONTINUATION

If there is insufficient space for your answers, please use the space provided below.

DATE: 7-11, 2006 at San Bruno, California

SIGNATURE: Michael J. Speade

PRINTED NAME: Michael J. Speade (first name) J. (middle initial) Speade (last name)

COMPANY NAME: Speade Ranch

I declare that the information in this report is true to the best of my knowledge and belief.

I understand that it may be necessary to document the water savings claimed in "F" above if credit under Water Code sections 1010 and 1011 is sought in the future.

2. Water quality and wastewater reclamation
 - a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility or water polluted by waste to a degree, which unreasonably affects such water for other beneficial uses? YES NO
 - b. If you are claiming credit due to the substitution of reclaimed water, desalinated water or polluted water in lieu of a claimed pre-1914 appropriative right under section 1010 of the Water Code, please show amounts of reduced diversions and amounts of substitute water supply used:

Amount of reduced diversion: _____ (AF/MG) Year _____ (AF/MG) Year

State the type of substitute water supply: _____

Amount of substitute water supply used: _____ (AF/MG) Year _____ (AF/MG) Year

I have data to support the above surface water use reductions due to the use of a substitute water supply. YES NO
3. Conjunctive use of surface water and groundwater
 - a. Are you now using groundwater in lieu of surface water? YES NO
 - b. If you are claiming credit due to the substitution of groundwater for a claimed pre-1914 appropriative right under section 1011.5 of the Water Code, please show the amounts of groundwater used:

Year _____ (AF/MG) Year _____ (AF/MG) Year _____ (AF/MG) Year _____ (AF/MG)

I have data to support the above surface water use reductions due to the use of groundwater. YES NO

Supplement to Statement of Water Diversion and Use

B. Claimant is claiming water use based on Pre-1914 Rights and Riparian Rights including but not limited to the underflows of the Salinas River and its tributaries based on the current definitions of the SWRCB most recently stated in the Carmel River Decision of the SWRCB being Decision No. 1632 and the letter of David Sabiston of the SWRCB dated June 3, 1969 (SVP Exhibit 23 at the hearing on Application 30532). Their pre-1914 Water Rights are based on the Treaty of Guadalupe Hidalgo and Claims filed pursuant to Civil Code section 1410-1422 (1872 Act). However, if at some later date the SWRCB or a Court changes the definition of a Riparian right including but not limited to the underflows of the Salinas River and its tributaries vs. an overlying right the Claimant will then claim overlying rights to the water to the extent it is not riparian. If the Claimant had the data within the possession of the MCWRA which SWRCB in decision D 1642 refused to give the Claimant the Claimant would be able to better define what water it is entitled to use under its various rights. If there is a change in current definition of riparian right including but not limited to the underflows of the Salinas River and its tributaries, the claimant reserves its right to amend Section 3 a and b of this statement. All of the various water rights of the claimant are more particularly described in a letter dated May 5, 2000 to Kevin Long of Division of Water Rights SWRCB from the law offices of Cressey Nakagawa and Patrick J. Maloney. The letter was written in response to a letter Dated March 27, 2000 by Lewis Moeller, Chief, Hearing Unit SWRCB. Copies of these letters are attached hereto with enclosures. The letters and the enclosures can be found in the File of Application 30532. In connection with the hearing on said application the following documents were offered as evidence at the hearing on said application. SVP Exhibits 27-47 and Staff Exhibit 2. See also the Paso Robles Groundwater Basin Study defining the "Paso Robles Groundwater Basin Study" prepared in 2001 by the San Luis Obispo County Public Works Division Utility Division (Available at <http://slocountywater.org/>) and the Final Report "Evaluation and Proposed Redesign of the Salinas Valley Ground Water Monitoring Network" prepared for the Monterey County Water Resources Agency and prepared by Geomatrix Consultants.

F. Water is diverted two ways: A>Water is diverted from Well like facilities tapping the underflow of the Salinas River or its tributaries directly into irrigation systems or stock ponds. B> Water is diverted from well like facilities tapping the underflow of the Salinas River or its tributaries directly into canals and from the canals into regulatory ponds then the water is pumped from the regulatory ponds into the irrigation systems.

I. The water is used for irrigation and cooling. The water is also used for Frost Protection. This has been defined in the Central Valley as a non-consumptive use of water. It is probably a non-consumptive use in the Salinas Valley as well. The amount of water used for frost protection depends on the amount of frost. The amount of water used for frost protection does not appear to have any impact on the amount of water needed for irrigation.

F>

1. A>The water systems for vineyards are constantly being modified and upgraded as more is learned about how water can be used in the growing the Grapes. Over the last 35 years the application of water per acre has been reduced considerably.

B>The Claimant is constantly making analysis of the nature of consumptive use. Before this question can be answered, the Claimant needs a better definition of consumptive use. Exhibit A describes what the MCWRA considers appropriate consumptive use for various crops in the area.

3. As set forth in the original Statement of Water Diversion and Use the Claimant is claiming water use based on Pre-1914 Rights and Riparian Rights including but not limited to the underflows of the Salinas River and its tributaries based on the current definitions of the SWRCB most recently stated in the Carmel River Decision of the SWRCB being Decision No. 1632 and the letter of David Sabiston of the SWRCB dated June 3, 1969 (SVP Exhibit 23 at the hearing on Application 30532). Their pre-1914 Water Rights are based on the Treaty of Guadeloupe Hidalgo and Claims filed pursuant to Water Code Sections 1410-1422 (1872 Act). However, if at some later date the SWRCB or a Court changes the definition of a Riparian right including but not limited to the underflows of the Salinas River and its tributaries vs. an overlying right the Claimant will then claim overlying rights to the water to the extent it is not riparian. If the Claimant had the data within the possession of the MCWRA which SWRCB in decision 1642 refused to give the Claimant the Claimant would be able to better define what water it is entitled to use under its various rights. If there is a change in current definition of riparian right including but not limited to the underflows of the Salinas River and its tributaries, the claimant reserves its right to amend Section 3 a and b of this statement. All of the various water rights of the claimant are more particularly described in a letter dated May 5, 2000 to Kevin Long of Division of Water Rights SWRCB from the law offices of Cressey Nakagawa and Patrick J. Maloney. The letter was written in response to a letter Dated March 27, 2000 by Lewis Moeller, Chief, Hearing Unit SWRCB. Copies of these letters are attached hereto with enclosures. The letters and the enclosures can be found in the File of Application 30532. In connection with the hearing on said application the following documents were offered as evidence at the hearing on said application.

There are 20,312.71 acres in the Ranch. The Ranch's Water Entitlement is 101,563.55 acre feet. The Ranch's water entitlement is based on a reasonable water use of 5 acre feet per acre. The APNS of Monterey County covering the Ranch are as follows:

422141047
422141048
422141049
422141053
422161002
422161027
422161043
422161061
423081010
423081016
423081017
423081018
423081020
423081021
423081023
423081024
423081025
423081042
423081044
423081045
423081046
423081048
423081049
423081050
423081052
423091011
423091012
423091013
423091014
423091015
423091016
423091017
423091046
423101001
423101010
423101011
423101012
423101014
423101015
423101016
423101023
423101024
423101025
423101026
423101027
423101028
423101029
423101030
423101032

423111001
423111002
423111003
423111004
423111005
423111017
423111018
423111019
423111021
423111022
423111023
423121001
424101001
424101007
424101011
424101012
424101018
424101020
424101028
424101029
424101030
424351001
424351006
424351039
424351047
424351048
424351049
424361001

Exhibit A

MEMORANDUM

Comments on Consumptive Use

The definition of "consumptive use" needs to be spelled out in more detail. The term "consumptive use" is equivalent to evapotranspiration, ET, (*Water-Resources Engineering*, Linsley et. al., McGraw Hill, 1992); this is the total amount of water that a plant "uses." Some of this total use comes from "effective rainfall" (i.e. rainfall occurring when the plant can use the water) and from applied irrigation water. That part of applied water which is consumptively used is called the "consumptive use of applied water" (CUAW). Any documents or data tables should clearly identify this distinction in definition. An additional distinction needs to be made with respect to averaging. ET or "consumptive use" varies from year to year for any given crop because of changes in the weather (temperature, etc.). The CUAW also varies both because ET varies and because the "effective rainfall" may vary even if total rainfall were to remain the same. Thus, often both ET and CUAW are often presented as "average annual" where the average is over the recent climate or hydrological record. While farmers have readily available changes in irrigation quantities, the variation in ET and thus CUAW requires substantially more analysis.

Since the calculation of consumptive use of applied water for different crops in different subareas was necessary to determine the average annual consumption use of applied water for each region in the HBA, a summary of these preliminary calculations should be released. There should be no reason to withhold this data as it is not proprietary or privacy protected since it is regionally averaged by subarea by crop. In addition, the related data of average annual ET by crop by region was released in Table 2-1 of the HBA Appendix A. This data is only necessary for current conditions (i.e. current multi-cropping patterns and current deficit irrigation practices). This data would provide a check for individual landowners to investigate their specific estimates of the same data.

The definitional issue of consumptive use also has specific importance with respect to irrigation practices/technologies and seawater intrusion in the Salinas Valley. When water is pumped from the aquifers and applied to crops, the CUAW generally refers to the net amount of water that is removed from the aquifer once return percolation flows have been subtracted from total quantity pumped. There are, however, important exceptions that need to be considered with respect to the confined or semi-confined "pressure" aquifers found within the Pressure area. This exception is best expressed by a statement in the *Salinas Valley Seawater Intrusion Study* (Leedshill-Herkenhoff, 1985): "Conservation has some value in the coastal areas overlying the pressure aquifers, because excess applied water does not return to the groundwater in this area." Other references to this issue include Bulletin 52, 1946; Yates 1988, and White Paper 1995.

Since in the Pressure area north of Spreckels there is no effective return percolation to the 180-foot aquifer and north of Gonzales there is no effective return percolation to the 400-foot aquifer, the definition of the CUAW needs to take this effect into account. All pumping in the 400-foot aquifer north of Gonzales is consumptive use with respect to that aquifer, and all pumping in the 180-foot aquifer north of Spreckels is consumptive use with respect to that aquifer. Therefore the CUAW with respect to these aquifers in the areas identified is actually best estimated by the total amount pumped. [If any minor vertical transport to the 180 or 400-foot aquifers can be quantified, then the previous statements would have to be modified to the extent that agricultural runoff induces *increased* vertical transport.] This geographical distinction in CUAW indicates the particular importance of improving irrigation efficiencies through changing irrigation technologies and practices in this region. Given that pumping in this area has the greatest impact on seawater intrusion, this distinction in CUAW should be addressed in all related analyses.

References:

(*Bulletin 52*, p. 46) The ground water in the water-bearing formations in the commercial zones of pumping in the Pressure Area is largely supplied by ground water flow from the Forebay Area. With the exception of a pocket of free water table in the Quail Creek area, the aquifers are partially confined. The confinement appears to effectively prevent percolation directly from precipitation and from the river channel to the aquifers between Gonzales and Monterey Bay.

(*Bulletin 52*, p. 60) The precipitation over the valley floor probably is largely consumed through evaporation and plant transpiration in years of normal precipitation with the exception of the area in the vicinity of Castroville. The unconsumed portion of the precipitation in this area largely goes to surface runoff due to the high perched water table. There is no contribution to ground water in the commercial zone of pumping generally over the Pressure Area, at any time, due to an impervious blue clay stratum between the sub-soil and the water-bearing formations, with the exception of a limited area in the vicinity of Quail Creek. Due to the high perched water table, the unconsumed portion of precipitation over the Pressure Area finds its way to the natural channels and drainage canals and contributes to surface outflow.

(Leedshill-Herkenhoff, 1985, p. 3-3) "North of Gonzales the 400-foot aquifer is confined by a clay layer in the pressure area. Recharge occurs in the Forebay area and there is virtually no recharge from the valley floor north of Gonzales, except for lateral recharge from the Aromas red sands. ... The shallow aquifer in the Pressure area is termed the 180-foot aquifer and consists of about 150 feet of interbedded gravel, sand, silt and clay. The aquifer is confined in most of the Pressure area by a clay layer known as the Salinas aquiclude. The clay layer is continuous between Salinas and Castroville and discontinuous between Salinas and Chualar. Recharge is primarily in the Forebay area, with only minor recharge occurring north of Chualar."

Yates (1988) maps the "confining layer of subsurface clay overlying the '180-foot' aquifer."

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