

4. PURPOSE OF USE, DIVERSION/STORAGE AMOUNT AND SEASON

a. PURPOSE OF USE (irrigation, domestic, etc.)	DIRECT DIVERSION				STORAGE		
	AMOUNT		SEASON OF DIVERSION		AMOUNT	SEASON OF COLLECTION	
	Rate (cfs or gpd)*	Acre-feet per annum	Beginning date (month & day)	Ending date (month & day)	Acre-feet per annum	Beginning date (month & day)	Ending date (month & day)
Irrigation					49	11-1	5-31
	Total afa		Total afa		49		

See Attachment No. ____ * If rate is less than 0.025 cubic feet per second (cfs), use gallons per day (gpd).

b. Total combined amount taken by direct diversion and storage during any one year will be 49 acre-feet.

c. Reservoir storage is: onstream offstream underground (If underground storage, attach Underground Storage Form.)

d. County in which diversion is located: Sonoma County in which water will be used: Sonoma

5. SOURCES AND POINTS OF DIVERSION/REDIVERSION

a. Sources and Points of Diversion (POD)/Points of Rediversion (PORD):

- POD / PORD # Unnamed stream tributary to Matanzas Creek thence Santa Rosa Creek thence Laguna de Santa Rosa thence Mark West Creek thence Russian River tributary to _____
- POD / PORD # _____ thence _____ tributary to _____
- POD / PORD # _____ thence _____ tributary to _____
- POD / PORD # _____ thence _____ tributary to _____

If needed, attach additional pages, check box below and label attachment

See Attachment No. ____

b. State Planar and Public Land Survey Coordinate Description:

POD/PORD #	CALIFORNIA COORDINATES (NAD 83)	ZONE	POINT IS WITHIN (40-acre subdivision)	SECTION	TOWN-SHIP	RANGE	BASE AND MERIDIAN
1	N1,905,303 E6,387,719	2	NW ¼ of SW ¼	2	6N	7W	MD
			¼ of ¼				
			¼ of ¼				
			¼ of ¼				

If needed, attach additional pages, check box below and label attachment

See Attachment No. ____

c. Name of the post office most often used by those living near the proposed point(s) of diversion: _____

N1,905,248
E6,387,780

6. WATER AVAILABILITY

- a. Have you attached a water availability analysis for this project? YES NO
 If NO, provide sufficient information to demonstrate that there is reasonable likelihood that unappropriated water is available for the proposed appropriation: If needed, attach additional pages, check box below and label attachment.

See Attachment No. 2

- b. Is your project located on a stream system declared to be fully appropriated by the State Water Resources Control Board (State Water Board) during your proposed season of diversion?
 YES NO
- c. In an average year, does the stream dry up at any point downstream of your project? YES NO
 If YES, during which months? Jan Feb Mar Apr May Jun Jul Aug Sep Oct
 Nov Dec
- d. What alternate sources of water are available if a portion of your requested diversion season must be excluded because water is not available for appropriation? (e.g., percolating groundwater, purchased water, etc.) If needed, attach additional pages, check box below and label attachment
 N/A

See Attachment No. _____

7. PLACE OF USE

USE IS WITHIN (40-acre subdivision)	SECTION*	TOWNSHIP	RANGE	BASE & MERIDIAN	IF IRRIGATED	
					Acres	Presently cultivated?
SW ¼ of NW ¼	2	6N	7W	MD	5	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
NW ¼ of SW ¼	2	6N	7W	MD	7	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
NE ¼ of SW ¼	2	6N	7W	MD	2	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SW ¼ of SW ¼	2	6N	7W	MD	7	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SE ¼ of SW ¼	2	6N	7W	MD	4	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
¼ of ¼						<input type="checkbox"/> YES <input type="checkbox"/> NO
¼ of ¼						<input type="checkbox"/> YES <input type="checkbox"/> NO
¼ of ¼						<input type="checkbox"/> YES <input type="checkbox"/> NO
Total Acres:					25	

*Please indicate if section is projected with a "(P)" following the section number.

- See Attachment No. _____ Please provide the Assessor's Parcel Number(s) for the place of use:
APN 055-010-031

8. PROJECT SCHEDULE

- a. Project is: proposed. Year construction will begin: _____
 partially complete. Extent of completion: _____
- complete. Year completed: *
- b. Year of first use: 1953 Year water will be used to the full extent intended: 2003

9. JUSTIFICATION OF AMOUNTS REQUESTED

- a. IRRIGATION: Maximum area to be irrigated in any one year: 25 acres.

* Reservoir was built in 1953 and was used for stockwater and irrigated pasture. Vineyard was developed in 1998. Project was complete and fully developed in its current configuration when Applicant purchased property in 2003.

CROP	ACRES	METHOD OF IRRIGATION (sprinklers, flooding, etc.)	WATER USE (Acre-feet/Yr.)	SEASON OF WATER USE	
				Beginning date (month & day)	Ending date (month & day)
Vineyard	25	Drip	49	4-15	10-31

See Attachment No. _____

b. DOMESTIC: Number of residences to be served: _____ Separately owned?
 YES NO Number of people to be served: _____ Estimated daily use per person is:
 _____ gallons per day Area of domestic lawns and gardens: _____ square feet
 Incidental domestic uses: _____

(dust control area, number and kind of domestic animals, etc.)

c. STOCKWATERING: Kind of stock: _____ Maximum number: _____
 Describe type of operation: _____
 (feedlot, dairy, range, etc.)

d. RECREATIONAL: Type of recreation: Fishing Swimming Boating Other _____

e. MUNICIPAL:

POPULATION List for 5-year periods until use is completed		MAXIMUM MONTH		ANNUAL USE		
Period	Population	Average daily use (gallons per capita)	Rate of diversion (cfs)	Average daily use (gallons per capita)	Acre-foot (per capita)	Total (acre-feet)
Present						

See Attachment No. _____

Month of maximum use during year: _____
 Month of minimum use during year: _____

f. HEAT CONTROL: Area to be heat controlled: _____ net acres
 Type of crops protected: _____
 Rate at which water is applied to use: _____ gpm per acre
 Heat protection season will begin _____ and end _____
 (month and day) (month and day)

g. FROST PROTECTION: Area to be frost protected: _____ net acres
 Type of crops protected: _____
 Rate at which water is applied to use: _____ gpm per acre
 The frost protection season will begin _____ and end _____
 (month & day) (month & day)

h. INDUSTRIAL: Type of industry: _____
 Basis for determination of amount of water needed: _____

i. MINING: Name of the claim: _____ Patented Unpatented

Nature of the mine: _____ Mineral(s) to be mined: _____
 Type of milling or processing: _____

After use, the water will be discharged into _____ (watercourse)
 in _____ 1/4 of _____ 1/4 of Section _____, T _____, R _____, B. & M. _____

j. POWER: Total head to be utilized: _____ feet
 Maximum flow through the penstock: _____ cfs Maximum theoretical horsepower capable of
 being generated by the works (cfs x fall + 8.8): _____ kilowatts at: _____ % efficiency
 Electrical capacity (hp x 0.746 x efficiency): _____ (watercourse)
 After use, the water will be discharged into _____ B&M. FERC No.: _____
 in _____ 1/4 of _____ 1/4 of Section _____, T _____, R _____

k. FISH AND WILDLIFE PRESERVATION AND/OR ENHANCEMENT: List specific species and
 habitat type that will be preserved or enhanced: _____

l. OTHER: Describe use: _____
 Basis for determination of amount of water needed: _____

10. DIVERSION AND DISTRIBUTION METHOD

a. Diversion will be by gravity by means of: _____ Dam
 (dam, pipe in unobstructed channel, pipe through dam, siphon, weir, gate, etc.)

b. Diversion will be by pumping from: _____ (sump, offset well, channel, reservoir, etc)

Pump discharge rate: _____ cfs or gpd Horsepower: _____
 Pump Efficiency: _____

c. Conduit from diversion point to first lateral or to offstream storage reservoir:

CONDUIT (pipe or channel)	MATERIAL (type of pipe or channel lining; indicate if pipe is buried or not)	CROSS-SECTION (pipe diameter, or ditch depth and top and bottom width) (inches or feet)	LENGTH (feet)	TOTAL LIFT OR FALL		CAPACITY (cfs, gpd or gpm)
				feet	+ or -	

See Attachment No. _____

d. Storage reservoirs: (For underground storage, complete and attach underground storage form)

RESERVOIR NAME OR NUMBER	DAM				RESERVOIR		
	Vertical height from downstream toe of slope to spillway level (feet)	Construction material	Length (feet)	Freeboard: dam height above spillway crest (feet)	Surface area when full (acres)	Capacity (acre-feet)	Maximum water depth (feet)
1	21	Earth	280	4	3.9	49	18

See Attachment No. _____

e. Outlet pipe: Complete for storage reservoirs having a capacity of 10 acre-feet or more.

RESERVOIR NAME OR NUMBER	OUTLET PIPE				
	Diameter in inches	Length in feet	Fall: Vertical distance between entrance and exit of outlet pipe in feet	Head: Vertical distance from spillway to entrance of outlet pipe in feet	Dead Storage: Storage below entrance of outlet pipe in acre-feet
1	Reservoir is existing. Dewatering will be accomplished by pumping.				

See Attachment No. ____

e. If water will be stored and the reservoir is not at the point of diversion, the maximum rate of diversion to off-stream storage will be _____ cfs. Diversion to offstream storage will be made by:
 Pumping Gravity

11. CONSERVATION AND MONITORING

a. What methods will you use to conserve water? Explain.
 Drip Irrigation

b. How will you monitor your diversion to be sure you are within the limits of your water right and you are not wasting water? Weir Meter Periodic sampling Other (describe)
 Staff Gage

12. RIGHT OF ACCESS

a. Does the applicant own all the land where the water will be diverted, transported and used?
 YES NO
 If NO, I do do not have a recorded easement or written authorization allowing me access.

b. List the names and mailing addresses of all affected landowners and state what steps are being taken to obtain access:

See Attachment No. ____

13. EXISTING WATER RIGHTS AND RELATED FILINGS

a. Do you claim an existing right for the use of all or part of the water sought by this application?
 YES NO
 If YES, please specify: Riparian Pre-1914 Registration Permit License
 Percolating groundwater Adjudicated Other (specify) _____

b. For each existing right claimed, state the source, year of first use, purpose, season and location of the point of diversion (to within quarter-quarter section). Include number of registration, permit, license, or statement of water diversion and use, if applicable.

See Attachment No. ____

c. List any related applications, registrations, permits, or licenses located in the proposed place of use or that utilize the same point(s) of diversion.

See Attachment No. ____

14. OTHER SOURCES OF WATER

Are you presently using, or do you intend to use, purchased water or water supplied by contract in connection with this project? Yes No If yes, please explain: _____

15. MAP REQUIREMENTS

The Division cannot process your application without accurate information showing the source of water and location of water use. You must include a map with this application form that clearly indicates the quarter/quarter, section, township, range, and meridian of (1) the proposed points of diversion and (2) the place of use. A copy of a U.S.G.S. quadrangle/topographic map of your project area is preferred, and can be obtained from sporting goods stores or through the Internet at <http://topomaps.usgs.gov>. A certified engineering map is required when (1) appropriating more than three cubic feet per second by direct diversion, (2) constructing a dam which will be under the jurisdiction of the Division of Safety of Dams, (3) creating a reservoir with a surface area in excess of ten acres or (4) appropriating more than 1,000 acre-feet per annum by underground storage. See the instruction booklet for more information.

See Attachment No. 3

ENVIRONMENTAL INFORMATION

Note: Before a water right permit may be issued for your project, the State Water Board must consider the information contained in an environmental document prepared in compliance with the California Environmental Quality Act (CEQA). This form is not a CEQA document. If a CEQA document has not yet been prepared for your project, a determination must be made of who is responsible for its preparation. If the State Water Board is determined to be responsible for preparing the CEQA document, the applicant will be required to pay all costs associated with the environmental evaluation and preparation of the required documents. Please answer the following questions to the best of your ability and submit with this application any studies that have been conducted regarding the environmental evaluation of your project.

16. COUNTY PERMITS

a. Contact your county planning or public works department and provide the following information:

Person contacted: www.sonoma-county.org/PRMD Date of contact: 12-4-2008

Department: Permit & Resource Management Dep Telephone: (_____) _____

County Zoning Designation:
55-010-031 C1A B7 Z BR SR

Are any county permits required for your project? YES NO If YES, check appropriate box below:

- Grading permit
- Use permit
- Watercourse
- Obstruction permit
- Change of zoning
- General plan change
- Other (explain): _____

b. Have you obtained any of the required permits described above? YES NO
If YES, provide a complete copy of each permit obtained.

See Attachment No. ____

17. STATE/FEDERAL PERMITS AND REQUIREMENTS

- a. Check any additional state or federal permits required for your project:
 Federal Energy Regulatory Commission U.S. Forest Service U.S. Bureau of Land Management
 U.S. Corps of Engineers U.S. Natural Res. Conservation Service Calif. Dept. of Fish and Game
 State Lands Commission Calif. Dept. of Water Resources (Div. of Safety of Dams)
 Calif. Coastal Commission State Reclamation Board Other (specify)

b. For each agency from which a permit is required, provide the following information:

AGENCY	PERMIT TYPE	PERSON(S) CONTACTED	CONTACT DATE	TELEPHONE NO.

See Attachment No. ____

- c. Does your proposed project involve any construction or grading-related activity that has significantly altered or would significantly alter the bed, bank, or riparian habitat of any stream or lake? YES NO
 If YES, explain:

See Attachment No. ____

- d. Have you contacted the California Department of Fish and Game concerning your project?
 YES NO If YES, name, telephone number and date of contact:

18. ENVIRONMENTAL DOCUMENT

- a. Has any California public agency prepared an environmental document for your project?
 YES NO
- b. If YES, submit a copy of the latest environmental document(s) prepared, including a copy of the notice of determination adopted by the California public agency. Public agency: _____
- c. If NO, check the appropriate box and explain below, if necessary:
 The applicant is a California public agency and will be preparing the environmental document.*
 I expect that the State Water Board will be preparing the environmental document.**
 I expect that a California public agency other than the State Water Board will be preparing the environmental document.* Public agency: _____
 See Attachment No. ____

* **Note:** When completed, submit a copy of the final environmental document (including notice of determination) or notice of exemption to the State Water Board, Division of Water Rights and proof of payment of the State Clearinghouse filing fee. Processing of your application cannot be completed until these documents are submitted.

** **Note:** CEQA requires that the State Water Board, as Lead Agency, prepare the environmental document. The information contained in the environmental document must be developed by the applicant and at the applicant's expense under the direction of the State Water Board, Division of Water Rights.

19. WASTE/WASTEWATER

- a. Will your project, during construction or operation, (1) generate waste or wastewater containing such things as sewage, industrial chemicals, metals, or agricultural chemicals, or (2) cause erosion, turbidity or sedimentation? YES NO
 If YES, or you are unsure of your answer, explain below and contact your local Regional Water Quality Control Board for the following information (See instruction booklet for address and telephone no.):

See Attachment No. ____

- b. Will a waste discharge permit be required for your project? YES NO
 Person contacted: _____ Date of contact: _____

- c. What method of treatment and disposal will be used? _____

See Attachment No. ____

20. ARCHEOLOGY

- a. Have any archeological reports been prepared on this project? YES NO
- b. Will you be preparing an archeological report to satisfy another public agency? YES NO
- c. Do you know of any archeological or historic sites located within the general project area?
 YES NO If YES, explain:

See Attachment No. ____

21. ENVIRONMENTAL SETTING

Attach **two complete sets of color photographs**, clearly dated and labeled, showing the vegetation that exists at the following three locations:

- Along the stream channel immediately downstream from the proposed point(s) of diversion.
- Along the stream channel immediately upstream from the proposed point(s) of diversion.
- At the place(s) where the water is to be used.
- See Attachment No. 4

SUBMITTAL FEES

Calculate your application filing fee using the "Water Right Fee Schedule Summary" that was enclosed in the application packet. The "Water Right Fee Schedule Summary" can also be viewed at the Division of Water Rights' website (www.waterrights.ca.gov).

A check for the application filing fee, payable to the "Division of Water Rights" and an \$850 check for the Streamflow Protection Standards review fee [Pub. Resources Code § 10005(a)], payable to the "California Department of Fish and Game," must accompany this application. All applicable fees are required at the time of filing. If the application fees are not received, your application will not be accepted and will be returned to you. Please check the fee schedule for any fee changes prior to submitting the application.

Attachments to Accompany
Water Right Application
Jemrose, LLC

Attachment #1

3. Project Description

This project consists of the collection and storage of water in an existing onstream reservoir, having a capacity of no more than 49 acre-feet located on the Applicant's property. Water will be used for irrigation of 25 acres of existing vineyard (see location on Attachment 3). The reservoir was built by the previous land owner in 1953 and stores water collected from its naturally tributary drainage area; it was originally used for stockwatering and irrigated pasture. The existing vineyard was later developed in 1998. Neither the reservoir nor place of use has changed from the time that the applicant purchased the property in 2003. No further development is requested.

As stated above, the project proposed under this Application involves no changes to the existing reservoir at Point of Diversion #1 and no changes to the requested place of use or water diversion relative to historical conditions for this project. Accordingly, this Application qualifies for a Categorical Exemption under Title 14, California Code of Regulations, Section 15301, Existing Facilities, which states the following:

"Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination."

Based on the foregoing, we are requesting that the State Water Board grant a Categorical Exemption to this Application and proceed with further processing as necessary for permit issuance.

Attachment #2

6. Water Availability
See separate attachment.

Attachment #3

15. Map
See separate attachment.

Attachment #4

21. Environmental Setting (Photographs)
See separate attachment.

ATTACHMENT 2

**Estimate of Water Availability to Accompany Water Right Application
by Jemrose, LLC**

California Water Code Section 1260(k) requires that every application for a permit to appropriate water shall include "sufficient information to demonstrate a reasonable likelihood that unappropriated water is available for the proposed appropriation." This narrative and accompanying calculations provide the required information.

The subject Application includes a point of diversion (POD) on an unnamed stream tributary to Matanzas Creek thence Santa Rosa Creek thence Mark West Creek thence the Russian River in Sonoma County (see attached map). According to State Water Resources Control Board Order WR 98-08, the Santa Rosa Creek watershed is fully appropriated from June 1 to October 31. The Application proposes a diversion season of November 1 to May 31, which conforms to Order WR 98-08. The following describes the methodology used to demonstrate a *reasonable* likelihood that water is physically available for the proposed appropriation.

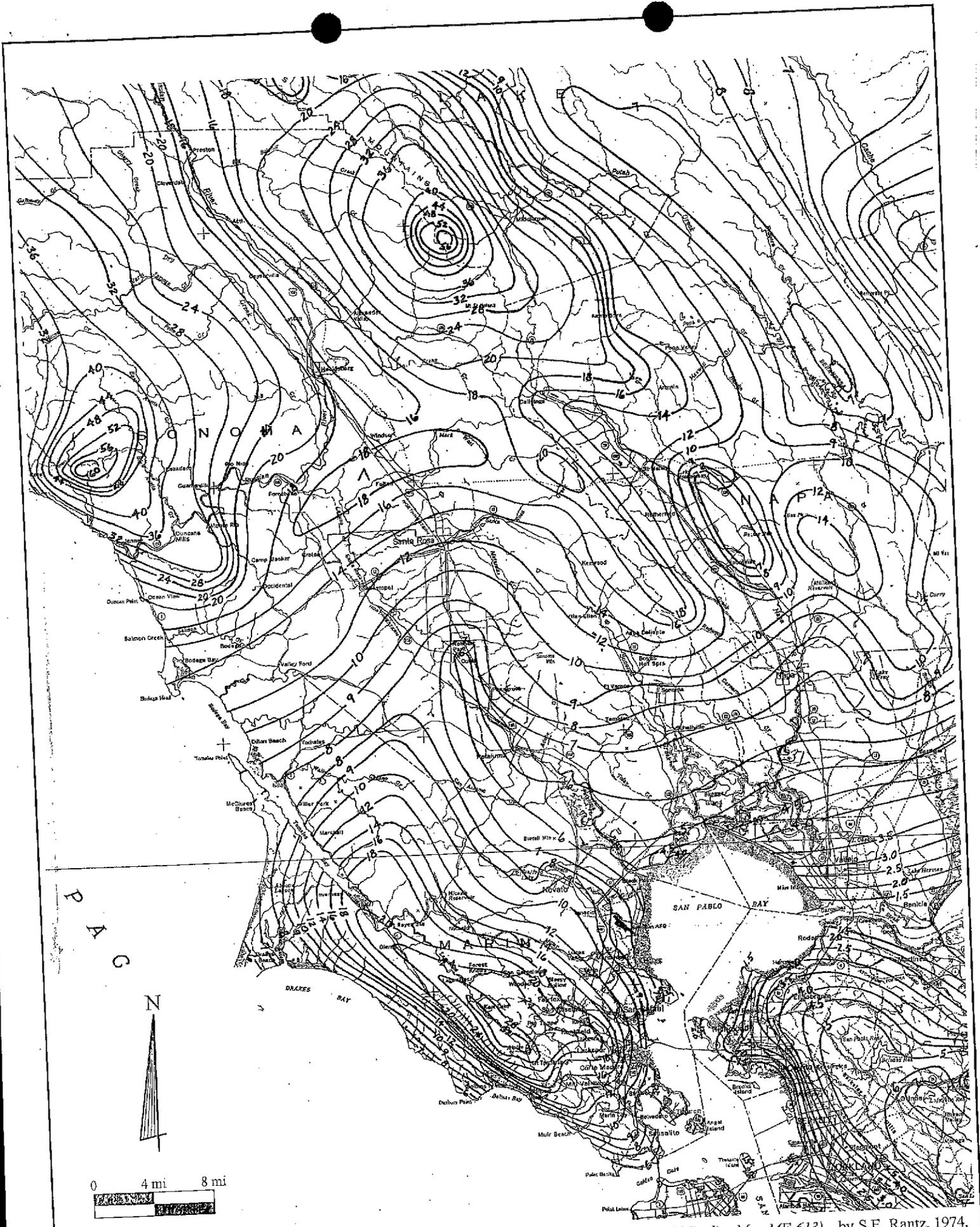
The attached map shows the proposed point of diversion and the watershed area tributary thereto. The map also shows lines of equal mean annual runoff as shown on the map included with the document entitled *Mean Annual Runoff in the San Francisco Bay Region, California, 1931-70* by S.E. Rantz, 1974.¹ An excerpt of this map is attached (Rantz map).

The weighted mean annual runoff for the watershed tributary to POD #1 was computed based on the Rantz map. Mean *seasonal* runoff for the subject watersheds was estimated by adjusting the mean annual runoff assuming that the ratio of seasonal to annual runoff is identical to the ratio of seasonal to annual mean precipitation. The Santa Rosa precipitation station was used for this purpose. The resulting seasonal runoff value was adjusted by deducting the *face value* of any senior water rights in the watershed above the proposed points of diversion.

Calculations for the foregoing methodology are attached. These calculations show that in an average water year, approximately 116.6 acre-feet would accrue to POD #1. This would be ample to fill the 49 acre-foot reservoir at POD #1, leaving about 67.6 acre-feet of runoff remaining. Accordingly, it is reasonable to conclude that water is available for the subject Application.

JR0SH005.doc

¹ USGS Miscellaneous Field Studies Map MF-613, prepared in cooperation with the California Department of Water Resources.



Mean Annual Runoff in the San Francisco Bay Region, California, 1931-70 (Miscellaneous Field Studies Map MF-613), by S.E. Rantz, 1974.

Water Right Application by Jemrose, LLC
Estimate of Water Availability

Point of Diversion #1

Monthly Precipitation⁽¹⁾

SANTA ROSA, CALIFORNIA

<u>Month</u>	<u>Mean Precipitation (in)</u>
October	1.70
November	3.73
December	5.78
January	6.16
February	5.19
March	4.11
April	2.09
May	0.87
June	0.27
July	0.03
August	0.09
September	0.32
Annual	30.35

Mean Precipitation for requested diversion season (11/1 - 5/31):	27.93 in
Precipitation during requested diversion season as a percentage of total precipitation:	92.03%
Mean Annual Runoff: ⁽²⁾	11.5 in
Estimated Mean Seasonal Runoff: ⁽³⁾	10.6 in
Watershed Area for Point of Diversion #1:	132.0 ac

Total Estimated Mean Seasonal Runoff at Point of Diversion #1:	116.6 ac-ft
Senior Diverters of Record within subject watershed (face value):	0.0 ac-ft
Subtotal water available:	116.6 ac-ft
Requested diversion amount:	49.0 ac-ft
Total seasonal amount remaining in stream after diversion:	67.6 ac-ft

Notes:

⁽¹⁾ Source: California Climate Data Archive website (<http://www.calclim.dri.edu/ccda/data.html>) accessed December 1, 2008.

⁽²⁾ Mean Annual Runoff in the San Francisco Bay Region, California, 1931-70 (*Miscellaneous Field Studies Map MF-613*), by S.E. Rantz, 1974.

⁽³⁾ Estimated mean seasonal runoff is computed by multiplying mean annual runoff by percent seasonal precipitation.

SANTA ROSA, CALIFORNIA
Monthly Total Precipitation (inches)
-47965

File last updated on May 4, 2006

*** Note *** Provisional Data *** After Year/Month 200601

a = 1 day missing, b = 2 days missing, c = 3 days, ...etc.,

z = 26 or more days missing, A = Accumulations present

Long-term means based on columns; thus, the monthly row may not
sum (or average) to the long-term annual value.

MAXIMUM ALLOWABLE NUMBER OF MISSING DAYS : 5

Individual Months not used for annual or monthly statistics if more than 5 days are missing.

Individual Years not used for annual statistics if any month in that year has more than 5 days missing.

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1931				3.48 e	1.87	2.94	0.49	0.9	0.67	0	0	0	-
1932	1.4	2.27	11.29	3.45	1.49	1.21	1.43	1.65	0	0	0	0	24.19
1933	0.08	1.69	4.06	6.4	1.51	4.64	0.12	2.23	0	0.02	0	0.17	20.92
1934	2.02	0	8.14	1.75	4.69	1.13	0.73	1.39	1	0	0	0.03	20.88
1935	2.28	5.19	3.45	7.36	3.5	6.31	6.87	0	0	0	0.12	0.23	35.31
1936	1.02	1.47	2.95 a	7.77	11.81	1.58	1.86	0.61	0.8	0	0.03	0	29.9
1937	0.22	0.02	2.9	4.92	8.59	6.31	1.87	0.19	1.28	0.05	0	0	26.35
1938	1.06	7.46 a	5.4	4.77	9.66	8.03	2.45	0.06	0	0.02	0	0.38	39.29
1939	2.18	2.22	2.14	3.36	1.61	2.41	0.14	1.12	0	0	0	0.08	15.26
1940	0.52	0.46	2.88	10.87	12.31	7.14	1.84	1.96	0.07	0	0	0.5	38.55
1941	1.82	2.59	13.56	11.02	8.22	5.59	6.71	1.84	0.3	0	0	0.13	51.78
1942	1.53	3.58	9.12	6.5	8.65	3.78	5.58	1.67	0	0.02	0	0.15	40.58
1943	1.23	5.75	5.8	9.28	2.73	4.85	2.67	0.05	0	0.03	0	0	32.39
1944	0.68	1.16	2.38	5.07	7.66	2.25	2.15	1.58	0.28	0	0	0.02	23.23
1945	2.45	5.9	4.22	3.13	4.92	5.82	0.33	1.39	0	0	0	0	28.16
1946	2.91	4.23	10.37	2.32	2.98	2.2	0.1	0.47	0	0.2	0	0.06	25.84
1947	0.28	4.08	3.66	0.76	3.82	4.94	0.65	0.4	1.63	0	0	0	20.22
1948	5.28	1.55	1.22	4.18	1.51	5.57	7.61	1.03	0.25	0.06	0	0.13	28.39
1949	0.85	1.87	4.67	1.39	3.32	6.83	0.08	0.74	0	0.05	0.04	0.02	19.86
1950	0.02	2.12	2.79	10.12	5.15	3.29	1.31	0.56	0.06	0	0	0	25.42
1951	3.46	7.19	9.38	5.14	2.84	1.25	1.27	1.48	0	0	0.01	0.04	32.06
1952	2.68	6.26	8.01	10.19	2.88	4.62	0.84	0.57	1.38	0.04	0	0.05	37.52
1953	0.08	2.73	14.72	6.74	0.08	3.17	3.91	0.57	0.97	0	0.17	0	33.14
1954	1.31	4.15 j	0.96	7.8	3.19	5.74	3.23	0.37	0.26	0	1.35	0	28.36
1955	0.9	5.64	4.43	3.63	1.22	0.6	3.68	0.01	0	0	0	0.45	20.56
1956	0.51	3.28	17.89	11.78	6.15	0.31	2.48	1.28	0.1	0	0	0.17	43.95
1957	2.28	0.23	0.38	3.85	5.57	2.49	2.32	3.93	0.08	0	0	2.16	23.29
1958	6.16	0.93	3.99	7.18	11.94	6.87	5.43	0.45	0.44	0.01	0.01	0.03	43.44
1959	0.15	0.29	1.96	7.75	6.24	1.6	0.25	0.16	0	0	0	3.16	21.56
1960	0.14	0.08	1.8	5.65	8.46	6.05	1.38	0.8	0 a	0	0	0.01	24.37
1961	0.71 d	3.81	4.5	5.22	3.29	4.6	1.07	0.77	0.16	0	0.03	0.57	24.73
1962	0.17	2.88	3.93 c	2.02	8.79	4.34	0.51 a	0.06	0	0	0.08	0.36	23.14
1963	9.47	0.95	4.64	3.75	4.22	4.94	6.57	0.66	0	0	0.01	0.09	35.3
1964	2.61	7.53	0.81	5.19	0.33	1.97	0.33	0.4	1.1	0	0.02	0	20.29
1965	2.31	6.12	8.64	6.63	1.24	0.97	5.04	0	0	0.01	0.5	0 z	-
1966	0.23	6.11	3.74	8.62	3.3	0.97	1.31	0.21	0.13	0	0.12	0.35	25.09
1967	0.01	7.61	6.55	12.42	0.58	5.86	6.72	0.17	1.94	0	0	0.07	41.93
1968	0.86	2.68	4.01	7.63	4.82	4.2	0.48	0.26	0	0	1.68	0.02	26.64
1969	2.07	3.39	9.09	13.25	8.23	1.79	3.23	0.03	0.04	0	0	0.03	41.15
1970	2.42	1.19	11.79	15.89	3.17	3.44	0.07	0	0.44	0	0	0	38.41
1971	2.24	8.97	10.78	3.13	0.19	4.05	1.22	0.24	0.05	0	0.03	0.34	31.24
1972	0.49	2.39	5.49	1.89	3.49	1.02	1.79	0.09	0.13	0.05	0.11	0.66	17.6
1973	3.47	6.87	5.12	15.38	7.17	3.48	0.65	0.03	0	0	0	0.74	42.91
1974	2.37	13.23	5.33	6.48	3.54	6.67	2.87	0.09	0	1.61	0	0	42.19
1975	1.27	1.2	3.8	1.98	9.88	7.84	1.71	0.02	0.1	0	0.21	0.02	28.03
1976	6.44	1.58	0.89	0.39	2.61	0.92	2.62	0	0.03	0	0.78	0.66	16.92

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1977	0.46	1.76	1.15	2.01	1.93	2.65	0.23	1.43	0	0	0	1.16	12.78
1978	0.65	0.03	5.22	9.81	2.44 d	0 z	2.29	0.08	0	0	0	1.38	-
1979	0	0 z	0.41	0 z	0 z	0 z	0 z	0 z	0 z	0.01	0	0.09	-
1980	4.14	5.99	7.71	7.09	8.82	1.52	2	0.19	0.27	0	0	0	37.73
1981	0.38	0.5	6.6 a	7.81	2.6	3.58	0.2	0.63	0	0.02	0	0.24	22.56
1982	2.76	8.91	11.29	8.72	5.23	6.5	4	0	0.03	0	0	0.97	48.41
1983	4.3 a	8.44	3.61	8.39	9.83	15.74	3.46	0.92	0	0	0.75	0.24	55.68
1984	1.2	11.21	11.33	0.65	2.45	2.25	1.18	0.11	0.13	0	0.17	0.09	30.77
1985	2.36	10.92	2.6	1.87	3.01	4.61	0.2	0.04	0.02	0.03	0	1.18	26.84
1986	1.4	4.5	3.72	6.64	15.94	5.9	0.83	0.82	0	0	0	2.75	42.5
1987	0.55	0.2	2.65	5.01	5.45 a	4.83	0.16	0.08	0.01	0.01	0	0	18.95
1988	1.37	4.45	6.11 a	6.99	0.4	0.02	1.53	0.73	0.49	0	0	0	22.09
1989	0.11	4.89	4.07	1.47	1.53 a	10.22	1.22	0.13	0.22	0	0.04	2.72	26.62
1990	2.65	1.71	0	5.74	3.27	2.03	0.24	5.46	0.01	0	0	0.27	21.38
1991	0.62	0.44	1.16	0.75	4.72	13.74	0.33	0.13	0.72	0	0.05	0.01	22.67
1992	1.74	1.15	2.91	2.03	9.34	4.69	1.64	0	0.79	0	0	0	24.29
1993	3.65	0.31	8.73	11.48	5.58 b	3.44	1.6	1.43	1.06	0	0	0.01	21.39
1994	3.06	3.39 a	3.94	3.38	4.8	0.34	1.56	0.89	0	0.02	0	0	47.29
1995	1.02	7.21	3.37 a	17.08	1.54	11.52	3.01	1.78	0.76	0	0	0.05	38.37
1996	0	0.41	9.38	8.94	9.43	2.58	3.89	3.69	0	0	0	0.46	33.86
1997	0.89	3.47	11.83	11.4	0.86	1.37	1.28	0.87	0.42	0	1.01	0.05	-
1998	1.48	7.42	3.29	10.7	19.42	3.89	0 z	4.04	0	0	0	0.17	32.65
1999	1.06	5.88	1.35	5.12	12.37	4.29	2.13	0.13	0.15	0	0	0.54	-
2000	0.99	3.59	0.7	5.44	11.65	3.07	0 z	0 z	0.25	0	0.01	0.13	-
2001	3.45	1.65	0.86	5.27	5.94	0 z	0 z	0 z	0.48	0	0	0	32.51
2002	0.96	9	11.49	5.02	1.84	2.43	0.64	1.13	0	0	0	0.07	34.88
2003	0	3.48	16.18	3.7	2.18	2.81	4.89	1.48	0.05	0.03	0.01	0.11	29.35
2004	0.04	3.22	11.42	3.44	9.24	1.14	0.68	0.03	0	0.02	0.01	0	37.83
2005	3.27	1.81	10.46	4.12	4.29	5.75	1.61	5.55	0.95 a	0	0.02	0	45.66
2006	1	2.47	17.65	5.36	3.63	9.97	5.05	0.49	0.02	0.02	0	0.05	20.83
2007	0.57	3.66	5.46	0.57	7.1	0.31	2.58	0.36	0	0.17	0	0.03	-
2008	3.26	0.81	5.06	11.21	3.09	0.32	0.3	0.03	0 z	0	0	-	-
2009	0.78	2.42 y	0 z										

1931-2009 Period of Record Statistics

MEAN	1.70	3.73	5.78	6.16	5.19	4.11	2.09	0.87	0.27	0.03	0.09	0.32	30.51
MAX	9.47	13.23	17.89	17.08	19.42	15.74	7.61	5.55	1.94	1.61	1.68	3.16	55.68
MIN	0.00	0.00	0.00	0.39	0.08	0.02	0.07	0.00	0.00	0.00	0.00	0.00	12.78
NO YRS	75	73	75	75	75	73	72	72	74	75	75	74	68

Water Right Application by Jemrose, LLC
Calculation of Weighted Mean Annual Runoff in POD Watershed

Watershed	Area (ac)	Mean Annual Runoff (in)	Volume (ac-in)
POD 1	<u>132</u>	11.5	<u>1,518</u>
Total	132		1,518
Weighted Average		11.5	