

TYPE OR PRINT
IN BLACK INK
(For instructions, see
booklet: "How to File an
Application to Appropriate
Water in California")



California Environmental Protection Agency

State Water Resources Control Board
Division of Water Rights

P.O. Box 2000, Sacramento, CA 95812-2000
Tel: (916) 341-5300 Fax: (916) 341-5400

www.waterrights.ca.gov

APPLICATION NO. _____

(leave blank)

APPLICATION TO APPROPRIATE WATER

SECTION A: NOTICE INFORMATION

1. APPLICANT/AGENT

a.

	APPLICANT	ASSIGNED AGENT (if any)
Name	Marin Country Club, INC:	Wagner & Bonsignore
Mailing Address	500 Country Club Drive	444 North Third Street
City, State & Zip	Novato, CA 94949	Sacramento, CA 95814
Telephone		916-441-6850
Fax		916-448-3866
E-mail		ryans@wagner-engrs.com

2. OWNERSHIP INFORMATION (Please check type of ownership.)

- Sole Owner Limited Liability Company (LLC) General Partnership*
 Limited Partnership* Business Trust Husband/Wife Co-Ownership
 Corporation Joint Venture Other _____

*Please provide a copy of your partnership agreement.

3. PROJECT DESCRIPTION (Provide a detailed description of your project, including, but not limited to, type of construction activity, area to be graded or excavated, and how the water will be used.)

For continuation, see Attachment No. 1

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 year	Beginning date (month & day)	Ending date (month & day)	Acre-feet per year	Beginning date (month & day)	Ending date (month & day)
Irrigation					13	10-1	6-30
Industrial							
Incidental Recreation & Fire Protection							

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 13 acre-feet.

c. Reservoir storage is: onstream offstream underground (If underground storage, attach Form APP-UGSTOR.)

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

e. Assessor's Parcel Number(s): 160-010-75, 160-040-24, 160-420-08

5. SOURCES AND POINTS OF DIVERSION/REDIVERSION

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

- POD / PORD # 6-7 Arroyo San Jose tributary to Novato Creek
 thence San Pablo Bay
 POD / PORD # _____ : _____ tributary to _____
 thence _____
 POD / PORD # _____ : _____ tributary to _____
 thence _____
 POD / PORD # _____ : _____ tributary to _____
 thence _____

See Attachment No. _____

b. State Planar and Public Land Survey Coordinate Description:

POD/ POD/ #	CALIFORNIA COORDINATES (NAD 27)	ZONE	POINT IS WITHIN (40-acre subdivision)	SECTION	TOWN -SHIP	RANGE	BASE AND MERIDIAN
			¼ of ¼				
			¼ of ¼				
			¼ of ¼				
			¼ of ¼				

See Attachment No. 2

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

* A single WAA will be prepared for both Marin Country Club Applications.

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:

See Attachment No. 3

b. Is your project located on a stream system declared to be fully appropriated by the State Water Resources Control 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.)

Ground water, purchased water

See Attachment No.

7. PLACE OF USE

USE IS WITHIN (40-acre subdivision)	SECTION*	TOWNSHIP	RANGE	BASE & MERIDIAN	IF IRRIGATED	
					Acres	Presently cultivated?
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
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
¼ of ¼						<input type="checkbox"/> YES <input type="checkbox"/> NO
¼ of ¼						<input type="checkbox"/> YES <input type="checkbox"/> NO
Total:						

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

See Attachment No. 4

8. PROJECT SCHEDULE

a. Project is:

proposed. Year construction will begin: _____

partially complete. Extent of completion: Reservoir #6 is proposed.

Every other aspect of the project is complete.

complete. Year completed: _____

b. Year of first use: 1957 Year water will be used to the full extent intended: 2015*

* Approximately 5 years after issuance of permit.

SECTION B: MISCELLANEOUS DIVERSION INFORMATION

1. JUSTIFICATION OF AMOUNTS REQUESTED

a. IRRIGATION: Maximum area to be irrigated in any one year: 95 acres.

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)
Golf Course	95	Sprinklers	13	4-1	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		MAXIMUM MONTH		ANNUAL USE		
List for 5-year periods until use is completed						
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 & day) (month & 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: Golf Course=Cart Washdown, Shop use, Dust Control
 Basis for determination of amount of water needed: Use is incidental to irrigation

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 _____ ¼ of _____ ¼ 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): _____
 Electrical capacity (hp x 0.746 x efficiency): _____ kilowatts at: _____ % efficiency
 After use, the water will be discharged into _____ (watercourse)
 in _____ ¼ of _____ ¼ of Section _____, T _____, R _____, B. & M. FERC No.: _____

k. FISH AND WILDLIFE PRESERVATION AND/OR ENHANCEMENT: List specific species and habitat type that will be preserved or enhanced in Item 7a of Section C.

l. OTHER: Describe use: Incidental Fire Protection and Recreation at Reservoirs
 Basis for determination of amount of water needed: Use is incidental to irrigation

2. DIVERSION AND DISTRIBUTION METHOD

- a. Diversion will be by gravity by means of: #6-7: Dam
(dam, pipe in unobstructed channel, pipe through dam, siphon, weir, gate, etc.)
- b. Diversion will be by pumping from: N/A
(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 form APP-UGSTOR)

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)

See Attachment No. 5

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

RESERVOIR NAME OR NUMBER	OUTLET PIPE				
	Diameter (inches)	Length (feet)	Fall: vertical distance between entrance and exit of outlet pipe (feet)	Head: vertical distance from spillway to entrance of outlet pipe (feet)	Dead Storage: storage below entrance of outlet pipe (acre-feet)
6	Reservoir #6 is	proposed to be less	than 10 acre-feet.		
7	Reservoir #7 is	less than 10 acre-feet.			

See Attachment No. _____

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

3. CONSERVATION AND MONITORING

- a. What methods will you use to conserve water? Explain. _____

- 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) Meter on discharge line from Reservoir #1 staff gages in reservoirs with a capacity of 10 acre-feet or greater.

4. 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. _____

5. 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. _____

- 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. _____

6. 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: Water purchased on an as required basis and as available from North Marin Water District.

7. 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 township, range, section and quarter/quarter section 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 cfs 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 1000 acre-feet per annum by underground storage. See the instruction booklet for more information.
 See Attachment No. 6

SECTION C: ENVIRONMENTAL INFORMATION

Note: Before a water right permit may be issued for your project, the State Water Resources Control Board (SWRCB) 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 SWRCB 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.

1. COUNTY PERMITS

- a. Contact your county planning or public works department and provide the following information:
 Person contacted: Paul Bickner Date of contact: 3/27/2007
 Department: Novato Community Development Dept. Telephone: (415) 899-8989
 County Zoning Designation: P.D.
 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. _____

2. 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) RWQCB
- These entities will be contacted as part of the environmental review process.
 b. For each agency from which a permit is required, provide the following information:

AGENCY	PERMIT TYPE	PERSON(S) CONTACTED	CONTACT DATE	TELEPHONE NO.
US ACOE	Section 404			
DFG	1600 Streambed Alteration Agreement			
RWQCB	Water Quality Certification			

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: Construction of a proposed onstream reservoir located immediately downstream of an existing reservoir and immediately upstream of five existing reservoirs.

See Attachment No. ____

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

3. ENVIRONMENTAL DOCUMENTS

- a. Has any California public agency prepared an environmental document for your project? YES NO

c. 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: _____

- d. 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 SWRCB will be preparing the environmental document.**

I expect that a California public agency other than the State Water Resources Control 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 SWRCB, Division of Water Rights. Processing of your application cannot proceed until these documents are submitted.

** Note: CEQA requires that the SWRCB, 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 SWRCB, Division of Water Rights.

4. 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. ____

5. 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. ____

6. ENVIRONMENTAL SETTING

Attach **three 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. 7

SECTION D: 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 environmental review fee, payable to the "California Department of Fish and Game," must accompany this application. All applicable fees are required at the time of filing. Your application will be returned to you if it is not accompanied by all required fees.

SECTION E: DECLARATION AND SIGNATURE

I declare under penalty of perjury that all information provided is true and correct to the best of my knowledge and belief. I authorize my agent, if I have designated one above, to act on my behalf regarding this water right application.

	<i>GENERAL MANAGER</i>	<i>3-13-03</i>
Signature of Applicant	Title or Relationship	Date

Signature of Co-Applicant (if any)	Title or Relationship	Date



"APPLICATION TO APPROPRIATE WATER" CHECKLIST

Before you submit your application, be sure to:

- Answer each question completely in Sections A, B, and C.
- Number and include all necessary attachments.
- Include a legible map that meets the requirements discussed in the instruction booklet (Item B6).
- Include the Water Availability Analysis or sufficient information to demonstrate that there is reasonable likelihood that unappropriated water is available for the proposed appropriation (Item A6).
- Include three complete sets of color photographs of the project site (Item C6).
- Enclose a check for the required fee, payable to the Division of Water Rights, as specified in Section D.
- Enclose a \$850 check for the environmental review fee, payable to the Department of Fish and Game, as specified in Section D.
- Sign and date the application in Section E.

Send the original and one copy of the entire application to:

State Water Resources Control Board
Division of Water Rights
P.O. Box 2000
Sacramento, CA 95812-2000

Attachments to Accompany
Water Right Application
Marin Country Club, Inc.

Section A

Attachment #1

3. Project Description

Two Water Right Applications are being filed to cover the storage of water in six existing and one proposed onstream reservoirs for the Marin Country Club. Water is used for irrigation and aesthetic features of an existing golf course. The reservoirs are located on Arroyo San Jose on the Applicant's property in Marin County.

This project has been divided into two separate Water Right Applications to be in compliance with Water Code Section 687(c). Reservoirs #1-#5 are named in one application and Reservoirs #6 & #7 are named in the other application. Reservoirs at POD #1-#5 and #7 were built in the early 1950's. The Applicant understands that Reservoir #1 was constructed by the Army Corps of Engineers and Reservoirs #2-#5 and #7 were originally constructed as stockwatering ponds. Reservoir #1 has a capacity of 20 acre-feet, Reservoir #2 has a capacity of 9 acre-feet, Reservoir #3 has a capacity of 15 acre-feet, Reservoir #4 has a capacity of 16 acre-feet, Reservoir #5 has a capacity of 12 acre-feet and Reservoir #7 has a capacity of 9 acre-feet. All reservoirs collect water from their tributary watersheds. Proposed Reservoir #6 will have a capacity of 4 acre-feet and will also collect water from its tributary watershed. A total of 85 acre-feet of water is requested under both Marin Country Club Applications.

Water will be used for irrigation of 95 acres of existing golf course fairways, greens and roughs. Water will also be used for industrial purposes for dust control. Shop use, golf cart washing and at the club house for landscape watering. ~~Water will also be used for incidental recreation and fire protection purposes at the reservoir sites.~~

The existing place of use (golf course) was developed in 1957 and is currently irrigated from the existing Reservoirs #1-#5 & #7. Water is also purchased from North Marin Water District. Prior to the development of the golf course, the property had historically been used as pasture and grazing lands since the early 1900's.

New development will be required for the development of the proposed Reservoir at Point of Diversion #6. Construction of the proposed reservoir will require the removal of some trees and disturbances to the stream channel. The number and type of trees to be removed and amount of disturbance will be identified in the required environmental document. All other facilities and place of use are existing.

Attachments to Accompany
Water Right Application
Marin Country Club, Inc.

Attachment #2

5.b State Planar and Public Land Survey Description

Map
Point

Description

- | | |
|---|--|
| 6 | <u>Point of Diversion by Collection to Storage:</u> Located N.575,450 and E.1,405,250, California Coordinate System, Zone 3. Being within NW¼ of SE¼ of Projected Section 31, T3N, R6W, MDB&M. |
| 7 | <u>Point of Diversion by Collection to Storage:</u> Located N.575,500 and E.1,404,550, California Coordinate System, Zone 3. Being within NW¼ of SE¼ of Projected Section 31, T3N, R6W, MDB&M. |

Attachments to Accompany
Water Right Application
Marin Country Club, Inc.

Attachment #4

7. Place of Use

<u>Use Within</u>	<u>Projected Section</u>	<u>Township</u>	<u>Range</u>	<u>B. & M.</u>	<u>Acres</u>	<u>Previously Cultivated</u>
NW¼ of NE¼	31	T3N	R6W	M.D.	1	Yes
NE¼ of NE¼	31	T3N	R6W	M.D.	3	Yes
SW¼ of NW¼	31	T3N	R6W	M.D.	2	Yes
SE¼ of NW¼	31	T3N	R6W	M.D.	7	Yes
SW¼ of NE¼	31	T3N	R6W	M.D.	22	Yes
SE¼ of NE¼	31	T3N	R6W	M.D.	21	Yes
NW¼ of SW¼	31	T3N	R6W	M.D.	7	Yes
NE¼ of SW¼	31	T3N	R6W	M.D.	5	Yes
NW¼ of SE¼	31	T3N	R6W	M.D.	5	Yes
NE¼ of SE¼	31	T3N	R6W	M.D.	1	Yes
NW¼ of NW¼	32	T3N	R6W	M.D.	7	Yes
NE¼ of NW¼	32	T3N	R6W	M.D.	7	Yes
SW¼ of NW¼	32	T3N	R6W	M.D.	7	Yes
				<i>Total</i>	95*	

* Place of Use is identical to the other Marin Country Club Application being concurrently filed

Section B

Attachment #5

2.d Storage Reservoirs

Name or Number of Reservoir, if any	DAM				RESERVOIR		
	Vertical height From downstream Toe of slope to Spillway level (ft.)	Construction Material	Dam length (ft.)	Freeboard Dam height Above spillway Crest (ft.)	Approximate surface area when full (acres)	Approximate capacity (acre-feet)	Maximum water depth
6	8'	Earth	50'	2'	1.5	4	6
7	13'	Earth	50'	2'	1	9	13
					Total	13*	

*Total water requested by both Marin Country Club Applications is 85 acre-feet

ATTACHMENT 3

Estimate of Water Availability to Accompany Water Right Application by Marin Country Club

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 is within the watershed of Arroyo San Jose, tributary to Novato Creek in Marin County (see attached map). According to State Water Resources Control Board Order WR 98-08, there is no fully appropriated limitation on the subject watershed. The Application proposes a diversion season of October 1 to June 30, 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 points of diversion (POD) and the watershed areas tributary thereto. All 7 PODs are for an on-stream reservoir. 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). There are no other water rights of record within the Arroyo San Jose watershed, or from Novato Creek downstream of the confluence with Arroyo San Jose.

The weighted mean annual runoff for the watersheds tributary to the proposed points of diversion 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 Petaluma Fire Station 3 precipitation station was used for this purpose.

Calculations for the foregoing methodology are attached for PODs 1 through 7. These calculations show the following:

<u>Location</u>	<u>Estimated Runoff</u>	<u>Proposed Diversion</u>	<u>Net Runoff Remaining</u>
	<u>Available</u> ² (af)		<u>In Stream</u> (af)
POD 1	1,686.8	20	1,666.8
POD 2	1,659.6	9	1,650.6
POD 3	1,506.5	15	1,491.5
POD 4	1,502.2	16	1,486.2
POD 5	1,408.7	12	1,396.7
POD 6	1,397.0	4	1,393.0
POD 7	1,207.6	9	1,198.6

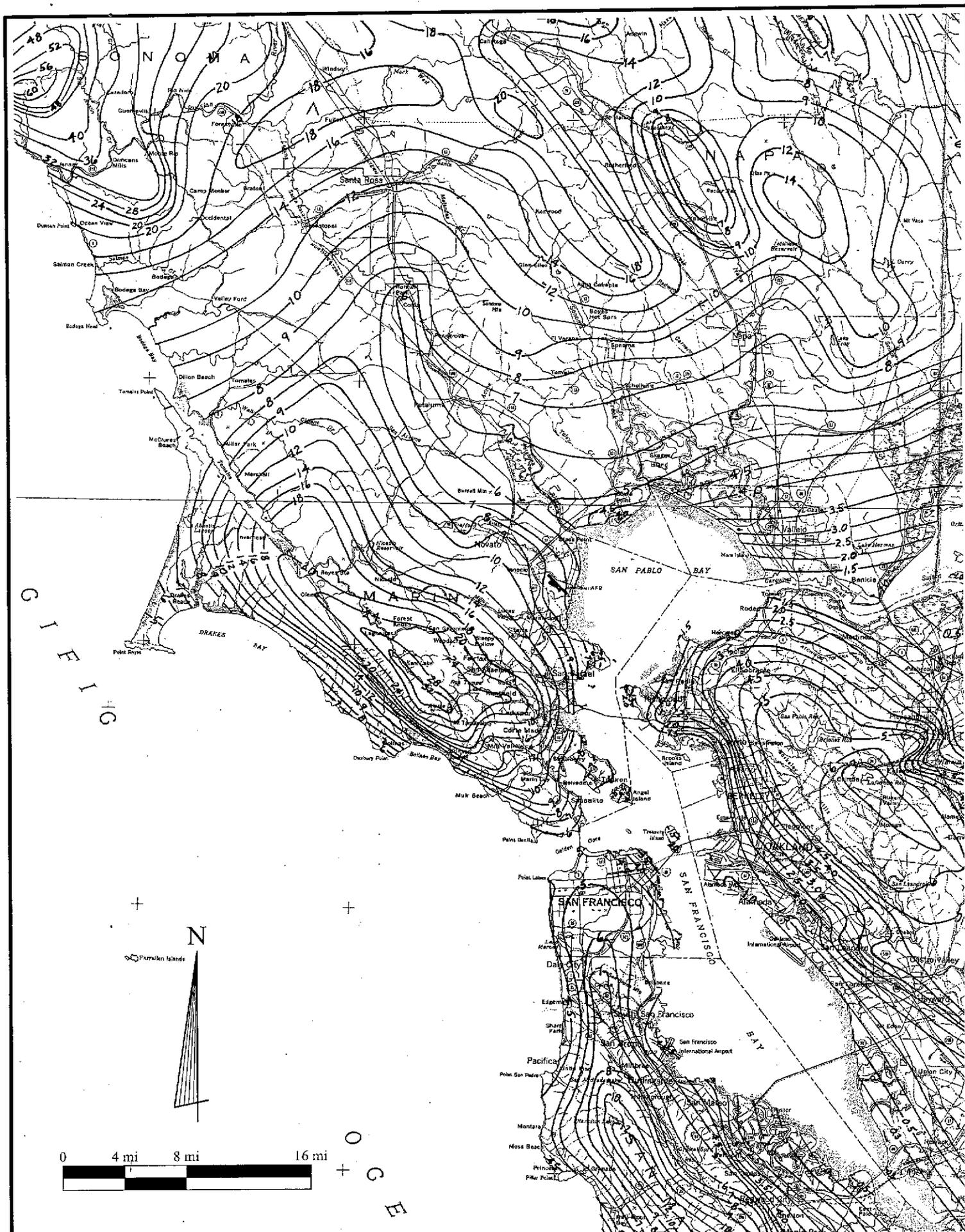
¹ USGS Miscellaneous Field Studies Map MF-613, prepared in cooperation with the California Department of Water Resources.

² After allowing for upstream diversions.

Based on the foregoing, it is reasonable to conclude that water is available for the subject Application.

* * * * *

MCCB007.doc



Mean Annual Runoff In The San Francisco Bay Region, California, 1931-70 by S.E. Rantz, 1974.

Marin Country Club
Calculation of Weighted Mean Annual Runoff in POD Watersheds

Watershed	Area (ac)	Mean Annual Runoff (in)	Volume (ac-in)
POD 1			
	146.4	9.8	1,435
	<u>1800.0</u>	11	<u>19,800</u>
Total	1946.4		21,235
Weighted Average		10.9	
POD 2			
	106.3	9.9	1,052
	<u>1800.0</u>	11	<u>19,800</u>
Total	1906.3		20,852
Weighted Average		10.9	
POD 3			
	8.0	10	80
	<u>1695.6</u>	11.1	<u>18,822</u>
Total	1703.6		18,902
Weighted Average		11.1	
POD 4			
	0.6	10	6
	<u>1680.7</u>	11.1	<u>18,656</u>
Total	1681.3		18,662
Weighted Average		11.1	
POD 5			
	1551.0	11.2	17,371
Total	1551.0		17,371
Weighted Average		11.2	
POD 6			
	1533.9	11.2	17,179
Total	1533.9		17,179
Weighted Average		11.2	
POD 7			
	1305.5	11.3	14,752
Total	1305.5		14,752
Weighted Average		11.3	

Water Right Application by Marin Country Club Estimate of Water Availability

Points of Diversion #1

Monthly Precipitation⁽¹⁾	
PETALUMA FIRE STATION 3, CALIFORNIA	
<u>Month</u>	<u>Mean Precipitation (in)</u>
October	1.31
November	3.41
December	4.42
January	5.57
February	4.50
March	3.30
April	1.58
May	0.53
June	0.18
July	0.03
August	0.08
September	0.24
Annual	25.14
<hr/>	
Mean Precipitation for requested diversion season (10/1 - 6/30):	24.78 in
Precipitation during requested diversion season as a percentage of total precipitation:	98.57%
Mean Annual Runoff: ⁽²⁾	10.9 in
Estimated Mean Seasonal Runoff: ⁽³⁾	10.8 in
Watershed Area for POD #1:	1,946.4 ac
<hr/>	
Total Estimated Mean Seasonal Runoff at POD #1:	1,751.8 ac-ft
Senior Diverters of Record within POD #1 watershed (face value):	N/A
Subtotal water available:	1,751.8 ac-ft
Deduct Diversion at POD #7:	9.0 ac-ft
Deduct Diversion at POD #6:	4.0 ac-ft
Deduct Diversion at POD #5:	12.0 ac-ft
Deduct Diversion at POD #4:	16.0 ac-ft
Deduct Diversion at POD #3:	15.0 ac-ft
Deduct Diversion at POD #2:	9.0 ac-ft
Subtotal water available:	1686.8 ac-ft
Requested diversion amount:	20.0 ac-ft
Total seasonal amount remaining in stream after diversion:	1666.8 ac-ft

Notes:

⁽¹⁾ Source: Western Regional Climate Center website, <http://www.wrcc.dri.edu/summary/climsmnca.html>

⁽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.

Water Right Application by Marin Country Club Estimate of Water Availability

Points of Diversion #2

Monthly Precipitation⁽¹⁾	
PETALUMA FIRE STATION 3, CALIFORNIA	
<u>Month</u>	<u>Mean Precipitation (in)</u>
October	1.31
November	3.41
December	4.42
January	5.57
February	4.50
March	3.30
April	1.58
May	0.53
June	0.18
July	0.03
August	0.08
September	0.24
Annual	25.14
<hr/>	
Mean Precipitation for requested diversion season (10/1 - 6/30):	24.78 in
Precipitation during requested diversion season as a percentage of total precipitation:	98.57%
Mean Annual Runoff: ⁽²⁾	10.9 in
Estimated Mean Seasonal Runoff: ⁽³⁾	10.8 in
Watershed Area for POD #2:	1,906.3 ac
<hr/>	
Total Estimated Mean Seasonal Runoff at POD #2:	1,715.6 ac-ft
Senior Diverters of Record within POD #2 watershed (face value):	N/A
Subtotal water available:	1,715.6 ac-ft
Deduct Diversion at POD #7:	9.0 ac-ft
Deduct Diversion at POD #6:	4.0 ac-ft
Deduct Diversion at POD #5:	12.0 ac-ft
Deduct Diversion at POD #4:	16.0 ac-ft
Deduct Diversion at POD #3:	15.0 ac-ft
Subtotal water available:	1659.6 ac-ft
Requested diversion amount:	9.0 ac-ft
Total seasonal amount remaining in stream after diversion:	1650.6 ac-ft

Notes:

⁽¹⁾ Source: Western Regional Climate Center website, <http://www.wrcc.dri.edu/summary/climsnca.html>

⁽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.

Water Right Application by Marin Country Club Estimate of Water Availability

Points of Diversion #3

Monthly Precipitation⁽¹⁾	
PETALUMA FIRE STATION 3, CALIFORNIA	
<u>Month</u>	<u>Mean Precipitation (in)</u>
October	1.31
November	3.41
December	4.42
January	5.57
February	4.50
March	3.30
April	1.58
May	0.53
June	0.18
July	0.03
August	0.08
September	0.24
Annual	25.14
<hr/>	
Mean Precipitation for requested diversion season (10/1 - 6/30):	24.78 in
Precipitation during requested diversion season as a percentage of total precipitation:	98.57%
Mean Annual Runoff: ⁽²⁾	11.1 in
Estimated Mean Seasonal Runoff: ⁽³⁾	10.9 in
Watershed Area for POD #3:	1,703.6 ac
<hr/>	
Total Estimated Mean Seasonal Runoff at POD #3:	1,547.5 ac-ft
Senior Diverters of Record within POD #3 watershed (face value):	N/A
Subtotal water available:	1,547.5 ac-ft
Deduct Diversion at POD #7:	9.0 ac-ft
Deduct Diversion at POD #6:	4.0 ac-ft
Deduct Diversion at POD #5:	12.0 ac-ft
Deduct Diversion at POD #4:	16.0 ac-ft
Subtotal water available:	1506.5 ac-ft
Requested diversion amount:	15.0 ac-ft
Total seasonal amount remaining in stream after diversion:	1491.5 ac-ft

Notes:

⁽¹⁾ Source: Western Regional Climate Center website, <http://www.wrcc.dri.edu/summary/climsmnca.html>

⁽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.

Water Right Application by Marin Country Club Estimate of Water Availability

Points of Diversion #4

Monthly Precipitation⁽¹⁾

PETALUMA FIRE STATION 3, CALIFORNIA

<u>Month</u>	<u>Mean Precipitation (in)</u>
October	1.31
November	3.41
December	4.42
January	5.57
February	4.50
March	3.30
April	1.58
May	0.53
June	0.18
July	0.03
August	0.08
September	0.24
Annual	25.14
<hr/>	
Mean Precipitation for requested diversion season (10/1 - 6/30):	24.78 in
Precipitation during requested diversion season as a percentage of total precipitation:	98.57%
Mean Annual Runoff: ⁽²⁾	11.1 in
Estimated Mean Seasonal Runoff: ⁽³⁾	10.9 in
Watershed Area for POD #4:	1,681.3 ac
<hr/>	
Total Estimated Mean Seasonal Runoff at POD #4:	1,527.2 ac-ft
Senior Diverters of Record within POD #4 watershed (face value):	N/A
Subtotal water available:	1,527.2 ac-ft
Deduct Diversion at POD #7:	9.0 ac-ft
Deduct Diversion at POD #6:	4.0 ac-ft
Deduct Diversion at POD #5:	12.0 ac-ft
Subtotal water available:	1502.2 ac-ft
Requested diversion amount:	16.0 ac-ft
Total seasonal amount remaining in stream after diversion:	1486.2 ac-ft

Notes:

⁽¹⁾ Source: Western Regional Climate Center website, <http://www.wrcc.dri.edu/summary/climsmnca.html>

⁽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.

Water Right Application by Marin Country Club Estimate of Water Availability

Points of Diversion #5

Monthly Precipitation⁽¹⁾

PETALUMA FIRE STATION 3, CALIFORNIA

<u>Month</u>	<u>Mean Precipitation (in)</u>
October	1.31
November	3.41
December	4.42
January	5.57
February	4.50
March	3.30
April	1.58
May	0.53
June	0.18
July	0.03
August	0.08
September	0.24
Annual	25.14
<hr/>	
Mean Precipitation for requested diversion season (10/1 - 6/30):	24.78 in
Precipitation during requested diversion season as a percentage of total precipitation:	98.57%
Mean Annual Runoff: ⁽²⁾	11.2 in
Estimated Mean Seasonal Runoff: ⁽³⁾	11.0 in
Watershed Area for POD #5:	1,551.0 ac
<hr/>	
Total Estimated Mean Seasonal Runoff at POD #5:	1,421.7 ac-ft
Senior Diverters of Record within POD #5 watershed (face value):	N/A
Subtotal water available:	1,421.7 ac-ft
Deduct Diversion at POD #7:	9.0 ac-ft
Deduct Diversion at POD #6:	4.0 ac-ft
Subtotal water available:	1408.7 ac-ft
Requested diversion amount:	12.0 ac-ft
Total seasonal amount remaining in stream after diversion:	1396.7 ac-ft

Notes:

⁽¹⁾ Source: Western Regional Climate Center website, <http://www.wrcc.dri.edu/summary/climsmnca.html>

⁽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.

Water Right Application by Marin Country Club Estimate of Water Availability

Points of Diversion #6

Monthly Precipitation⁽¹⁾	
PETALUMA FIRE STATION 3, CALIFORNIA	
<u>Month</u>	<u>Mean Precipitation (in)</u>
October	1.31
November	3.41
December	4.42
January	5.57
February	4.50
March	3.30
April	1.58
May	0.53
June	0.18
July	0.03
August	0.08
September	0.24
Annual	25.14
<hr/>	
Mean Precipitation for requested diversion season (10/1 - 6/30):	24.78 in
Precipitation during requested diversion season as a percentage of total precipitation:	98.57%
Mean Annual Runoff: ⁽²⁾	11.2 in
Estimated Mean Seasonal Runoff: ⁽³⁾	11.0 in
Watershed Area for POD #6:	1,533.9 ac
<hr/>	
Total Estimated Mean Seasonal Runoff at POD #6:	1,406.0 ac-ft
Senior Diverters of Record within POD #6 watershed (face value):	N/A
Subtotal water available:	1,406.0 ac-ft
Deduct Diversion at POD #7:	9.0 ac-ft
Subtotal water available:	1397.0 ac-ft
Requested diversion amount:	4.0 ac-ft
Total seasonal amount remaining in stream after diversion:	1393.0 ac-ft

Notes:

⁽¹⁾ Source: Western Regional Climate Center website, <http://www.wrcc.dri.edu/summary/climsmnca.html>

⁽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.

Water Right Application by Marin Country Club Estimate of Water Availability

Points of Diversion #7

Monthly Precipitation⁽¹⁾	
PETALUMA FIRE STATION 3, CALIFORNIA	
<u>Month</u>	<u>Mean Precipitation (in)</u>
October	1.31
November	3.41
December	4.42
January	5.57
February	4.50
March	3.30
April	1.58
May	0.53
June	0.18
July	0.03
August	0.08
September	0.24
Annual	25.14
<hr/>	
Mean Precipitation for requested diversion season (10/1 - 6/30):	24.78 in
Precipitation during requested diversion season as a percentage of total precipitation:	98.57%
Mean Annual Runoff: ⁽²⁾	11.3 in
Estimated Mean Seasonal Runoff: ⁽³⁾	11.1 in
Watershed Area for POD #7:	1,305.5 ac
<hr/>	
Total Estimated Mean Seasonal Runoff at POD #7:	1,207.6 ac-ft
Senior Diverters of Record within POD #7 watershed (face value):	N/A
Total water available:	1,207.6 ac-ft
Requested diversion amount:	9.0 ac-ft
Total Seasonal Amount Remaining in Stream After Diversion:	1198.6 ac-ft

Notes:

⁽¹⁾ Source: Western Regional Climate Center website, <http://www.wrcc.dri.edu/summary/climsmnca.html>

⁽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.