



**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					293	October 1	March 31
Frost Protection						November 1	March 31 (POD #4 only)
Dust Control							
Fire Protection							
Recreation							
	Total afa		Total afa		293		

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 293 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: \_\_\_\_\_

**5. SOURCES AND POINTS OF DIVERSION/REDIVERSION**

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

- POD /  PORD # \_\_\_\_\_ tributary to \_\_\_\_\_ thence \_\_\_\_\_
- POD /  PORD # \_\_\_\_\_ tributary to \_\_\_\_\_ thence \_\_\_\_\_
- POD /  PORD # \_\_\_\_\_ tributary to \_\_\_\_\_ thence \_\_\_\_\_
- POD /  PORD # \_\_\_\_\_ tributary to \_\_\_\_\_ thence \_\_\_\_\_

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

See Attachment No. 2

b. State Planar and Public Land Survey Coordinate Description:

POD/PORD #	CALIFORNIA COORDINATES (NAD 83)	ZONE	POINT IS WITHIN (40-acre subdivision)	SECTION	TOWNSHIP	RANGE	BASE AND MERIDIAN
			¼ of ¼				
			¼ of ¼				
			¼ of ¼				
			¼ of ¼				

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

See Attachment No. 2

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

Windsor

**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. 3

- 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  
none  
 See Attachment No. \_\_\_\_\_

**7. PLACE OF USE**

a.

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 Acres:						

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

See Attachment No. 4 Please provide the Assessor's Parcel Number(s) for the place of use:  
086-100-016, 015, 014, 013; 086-180-013, 012, 011, 010

**8. PROJECT SCHEDULE**

- a. Project is:  proposed. Year construction will begin: \_\_\_\_\_  
 partially complete. Extent of completion: 5 existing reservoirs, 238 acres of existing vineyard and landscaping around existing residences and winery.
- complete. Year completed: \_\_\_\_\_
- b. Year of first use: ±1950 Year water will be used to the full extent intended: ±10 years after permit is issued

**9. JUSTIFICATION OF AMOUNTS REQUESTED**

- a.  IRRIGATION: Maximum area to be irrigated in any one year: 284 acres.

CROP	ACRES	METHOD OF IRRIGATION (sprinklers, flooding, etc.)	WATER USE (Acre-foot/Yr.)	SEASON OF WATER USE	
				Beginning date (month & day)	Ending date (month & day)
Wine Grapes	278	Wine Grapes	139	May 15	Sept. 1
Landscaping	6	Landscaping	9	May 15	Sept. 1

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: 278 net acres  
 Type of crops protected: Wine Grapes  
 Rate at which water is applied to use: 55 gpm per acre (approx. 50 hrs per annum)  
 The frost protection season will begin March 31 and end May 15  
 (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 \_\_\_\_\_ 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: \_\_\_\_\_

l.  OTHER: Describe use: Dust Control on roads during summer months. Approximately 1 AFA.  
 Basis for determination of amount of water needed: \_\_\_\_\_

**10. DIVERSION AND DISTRIBUTION METHOD**

a. Diversion will be by gravity by means of: Dam (POD 2 thru 5)  
 (dam, pipe in unobstructed channel, pipe through dam, siphon, weir, gate, etc.)  
 b. Diversion will be by pumping from: Unnamed stream (POD 6)

(sump, offset well, channel, reservoir, etc)  
 Pump discharge rate: 3  cfs or  gpd Horsepower: 30  
 Pump Efficiency: 70%

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 -	
Pipe	PVC	10"	100'	10'	+	3 cfs
Pipe	PVC	10"	1,450'	80'	+	3 cfs
Pipe	PVC	10"	2,460'	40'	+	3 cfs

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)

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 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

See Attachment No. 5

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 3 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 Gages

**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. \_\_\_\_

**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: Bob Gaiser Date of contact: Jan. 8, 2009

Department: Sonoma County Planning Telephone: ( 707 ) 565-1900

County Zoning Designation: LIA (Land Intensive Agriculture)

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.
DFG	1603	DFG will be contacted during env. review		
DSOD will be contacted upon filing				

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 diversion facility in the unnamed stream will not significantly alter the bed or banks.

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.):

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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:

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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. \_\_\_\_

**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](http://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.

**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.

*[Handwritten Signature]*  
 Signature of Applicant      *Legal Counsel*      Title or Relationship      *1-27-09*      Date

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

**Applications that are not completely filled out and/or do not have the appropriate fees will not be accepted. In the event that the Division has to return the application because it is incomplete, a portion of the application submittal fee will be charged for the initial review.**

**"APPLICATION TO APPROPRIATE WATER" CHECKLIST**

Before you submit your application, be sure to:

- Answer each question completely.
- Number, label and include all necessary attachments.
- Include a legible map that meets the requirements discussed in the instruction booklet.
- Include the Water Availability Analysis or sufficient information to demonstrate that there is reasonable likelihood that unappropriated water is available for the proposed appropriation.
- Include two complete sets of color photographs of the project site.
- Enclose a check for the required fee, payable to the Division of Water Rights.
- Enclose an \$850 check for the Streamflow Protection Standards review fee, payable to the Department of Fish and Game.
- Sign and date the application.

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

## **ATTACHMENT 1 Project Description**

This application is to authorize 4 existing onstream reservoirs and a proposed offstream reservoir to support existing vineyard and other uses. The project includes a proposed diversion facility in an unnamed stream tributary to Russian River and development of +/-40 acres of new vineyard. The 4 existing reservoirs have a total capacity of 173 AF. The reservoirs are currently used for irrigation of 238 acres of existing vineyard, fire protection, dust control and landscape irrigation at the existing residences and winery. Future water use will also include frost protection of the existing and proposed vineyard; a water feature at the winery entrance; and irrigation of +/-2 acres of formal gardens and landscaping along the entry road. The proposed offstream reservoir will be located in an area currently planted to vineyard and will have a capacity of approximately 120 AF. A pump will be installed in the adjacent unnamed stream to divert water into the proposed reservoir and into 2 of the existing reservoirs as needed to supplement initial filling. The proposed vineyard will be planted in previously farmed areas.

Two of the existing reservoirs (BR40-01 and BT40-02) have irrigation pumps. Frost protection pumps will be installed in the future. Water is gravity fed from BQ40-02 to BR40-01, and water from BS40-01 is gravity fed directly into the irrigation system.

# ATTACHMENT 2

## Points of Diversion/Rediversion

- a. POD/PORD #2 Unnamed Stream tributary to Russian River
- POD #3 Unnamed Stream tributary to Russian River
- POD #4 Unnamed Stream tributary to Windsor Creek thence Mark West Creek thence Russian River
- POD/PORD #5 Unnamed Stream tributary to Russian River
- POD #6 Unnamed Stream tributary to Russian River

b.

POD PORD	NAD 83	ZONE	POINT IS WITHIN	SECTION	TOWNSHIP	RANGE	BASE AND MERIDIAN
POD/ PORD 2 BR40-01	N1,976,234 E6,329,184	2	SW 1/4 of NW 1/4	36	9N	98W	MD
POD 3 BQ40-02	N1,977,982 E6,330,482	2	NE 1/4 of NW 1/4	36	9N	98W	MD
POD 4 BS40-01	N1,973,930 E6,330,754	2	SE 1/4 of SW 1/4	36	9N	98W	MD
POD/ PORD #5 BT40-02	N1,972,622 E6,329,351	2	NW 1/4 of NW 1/4	1	8N	98W	MD
POD 6	N1,974,967 E6,328,348	2	NW 1/4 of SW 1/4	36	9N	98W	MD
POOS Proposed Resv			SW 1/4 of NW 1/4 NW 1/4 of SE 1/4	36	9N	98W	MD

Per  
annual  
debit  
3/24/09  
-M.S.S.

ATTACHMENT 3  
Water Availability

To demonstrate the reasonable likelihood that unappropriated water is available for diversion, streamflow during the requested diversion season (November 1 to March 31) is estimated at each POD by prorating USGS streamflow data at the gage on Russian River near Healdsburg (USGS 11464000). For purposes of this preliminary analysis it is assumed that precipitation above the PODs and gage are equal. The following formula is used:

$$Q_2 = Q_1 \times (A_2/A_1)$$

Where  $Q_2$  = Seasonal Flow (AF) @ POD

$Q_1$  = Seasonal Flow (AF) @ gage

$A_2$  = Watershed area (sq. mi..) above POD

$A_1$  = Watershed area (sq. mi.) above gage

Seasonal Unimpaired Flow @ POD #2:

$$Q_1 = 870,780 \text{ AF}$$

$$A_2 = 0.48 \text{ sq. mi.}$$

$$A_1 = 793 \text{ sq. mi.}$$

$$Q_2 = 870,780 (.48/793)$$

$$= 527 \text{ AF}$$

Seasonal Unimpaired Flow @ POD #3:

$$Q_1 = 870,780 \text{ AF}$$

$$A_2 = 0.12 \text{ sq. mi.}$$

$$A_1 = 793 \text{ sq. mi.}$$

$$Q_2 = 870,780 (.12/793)$$

$$= 132 \text{ AF}$$

Seasonal Unimpaired Flow @ POD #4:

$$Q_1 = 854,645 \text{ AF}$$

$$A_2 = 0.03 \text{ sq. mi.}$$

$$A_1 = 793 \text{ sq. mi.}$$

$$Q_2 = 854,645 (.03/793)$$

$$= 32 \text{ AF}$$

Seasonal Unimpaired Flow @ POD #5:

$$\begin{aligned} Q_1 &= 870,780 \text{ AF} \\ A_2 &= 0.13 \text{ sq. mi.} \\ A_1 &= 793 \text{ sq. mi.} \\ Q_2 &= 870,780 (.13/793) \\ &= 143 \text{ AF} \end{aligned}$$

Seasonal Unimpaired Flow @ POD #6:

$$\begin{aligned} Q_1 &= 870,780 \text{ AF} \\ A_2 &= 0.81 \text{ sq. mi.} \\ A_1 &= 793 \text{ sq. mi.} \\ Q_2 &= 870,780 (.81/793) \\ &= 889 \text{ AF} \end{aligned}$$

Face value rights of senior diverters above the POD are deducted from the seasonal flow to determine the amount of unappropriated water available:

POD #2 – Reservoir BQ40-02 under this application, which has a capacity of 3 AF, is upstream from the reservoir at POD #2:

$$527 \text{ AF} - 3 \text{ AF} = 524 \text{ AF available for diversion}$$

POD #3 – No senior diverters above POD #3:  
132 AF available for diversion

POD #4 – No senior diverters above POD #4:  
32 AF available for diversion

POD #5 - No senior diverters above POD #5:  
143 AF available for diversion

POD #6 – S002378 is the only upstream senior diverter and has a face value of 49 AF:  
889 AF – 49 AF = 840 AF available for diversion

Based on the above calculations it is reasonable to conclude that unappropriated water is available for diversion.

# ATTACHMENT 4

## PLACE OF USE

USE IS WITHIN	SECTION	TOWNSHIP	RANGE	BASE & MERIDIAN	ACRES	IF IRRIGATED PRESENTLY CULTIVATED?
NW 1/4 OF NW 1/4	36	9N	9.8W	MD	10.5	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
NW 1/4 OF NW 1/4	36	9N	9.8W	MD	4.5	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
NE 1/4 OF NW 1/4	36	9N	9.8W	MD	14.4	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
NE 1/4 OF NW 1/4	36	9N	9.8W	MD	14	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
SE 1/4 OF NW 1/4	36	9N	9.8W	MD	6.5	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SW 1/4 OF NW 1/4	36	9N	9.8W	MD	5	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
NW 1/4 OF NE 1/4	36	9N	9.8W	MD	17.3	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
NW 1/4 OF NE 1/4	36	9N	9.8W	MD	3.3	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
NE 1/4 OF NE 1/4	36	9N	9.8W	MD	19.5	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SE 1/4 OF NE 1/4	36	9N	9.8W	MD	18.5	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SE 1/4 OF NE 1/4	36	9N	9.8W	MD	2.5	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
SW 1/4 OF NE 1/4	36	9N	9.8W	MD	3	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
NW 1/4 OF SW 1/4	36	9N	9.8W	MD	10	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SE 1/4 OF SW 1/4	36	9N	9.8W	MD	22	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SW 1/4 OF SW 1/4	36	9N	9.8W	MD	32.5	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
NE 1/4 OF SE 1/4	36	9N	9.8W	MD	3.5	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SW 1/4 OF SE 1/4	36	9N	9.8W	MD	7	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
NW 1/4 OF NW 1/4	1	8N	9.8W	MD	7.5	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
NE 1/4 OF NW 1/4	1	8N	9.8W	MD	12.5	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SE 1/4 OF NW 1/4	1	8N	9.8W	MD	26.5	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SE 1/4 OF NW 1/4	1	8N	9.8W	MD	5	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
SW 1/4 OF NW 1/4	1	8N	9.8W	MD	25	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SW 1/4 OF NW 1/4	1	8N	9.8W	MD	7.5	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

Total Existing      238 acres

Total Proposed      40 acres

*per email  
dhd  
3/24/09.  
-m sm.*

## ATTACHMENT 5

### STORAGE RESERVOIRS

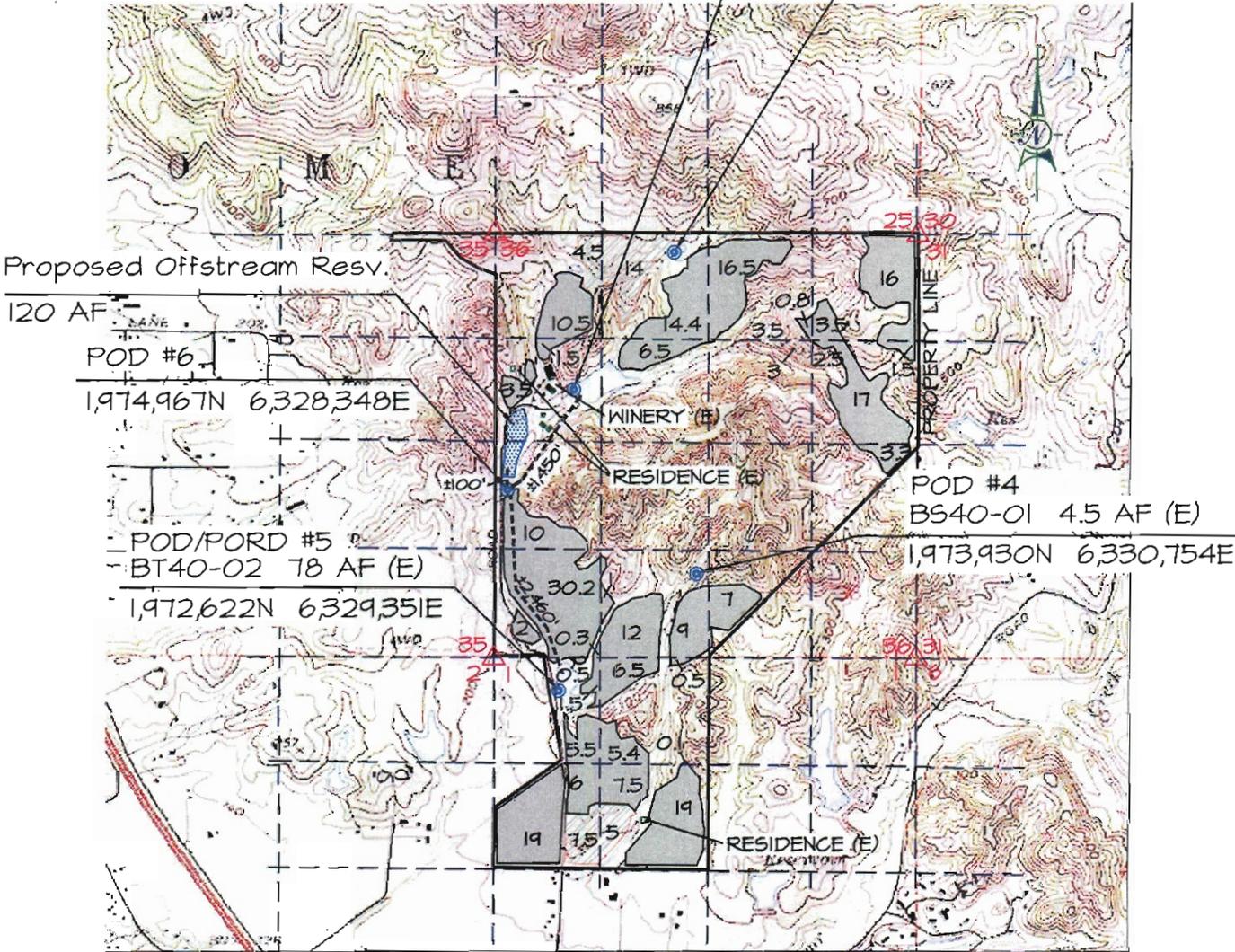
RESV. NAME	DAM				Surface area when full (ac.)	Capacity (A.F.)	Maximum water depth (ft.)
	Vertical height from downstream toe of slope to spillway level (ft.)	Construction material	Length (ft.)	Freeboard: dam height above spillway crest ((ft.)			
BQ40-02	12	earth	220	5	2.2	3	7
BR40-01	13	earth	415	8	5.6	87.5	30
BS40-01	15	earth	240	3	1.9	4.5	17
BT40-02	24	earth	340	6	4.3	78	51
Proposed offstream resv.	NA	earth	NA	NA	±5	±120	±35

### OUTLET PIPE

RESV. NAME	OUTLET PIPE				
	Diameter (in.)	Length (ft.)	Fall: Vertical distance between entrance and exit of outlet pipe (ft.)	Head: Vertical distance from spillway to entrance of outlet pipe (ft.)	Dead Storage: Storage below entrance of outlet pipe (ft.)
BQ40-02	No outlet pipe				
BR40-01	8	260	2	21	±7
BS40-01	No outlet pipe				
BT40-02	10	240	6	21	±17
Proposed offstream resv.	NA				

POD/PORD #2  
BR40-01 87.5 AF (E)  
1,976,234N 6,329,184E

POD #3  
BQ40-02 3 AF (E)  
1,977,982N 6,330,482E



Proposed Offstream Resv.

120 AF

POD #6  
1,974,967N 6,328,348E

POD/PORD #5  
BT40-02 78 AF (E)  
1,972,622N 6,329,351E

POD #4  
BS40-01 4.5 AF (E)  
1,973,930N 6,330,754E

MAP TO ACCOMPANY  
APPROPRIATIVE APPLICATION

- Acres of Existing Vineyard (1/4, 1/4 Section)
- Acres of Proposed Vineyard (1/4, 1/4 Section)
- (E) Existing Reservoir
- Point of Diversion/Rediversion
- Proposed 10" Pipeline
- Quarter/Section Lines
- Section Corner

OWNER: Windsor Oaks Associates  
WATERSHED: Russian River  
COUNTY: Sonoma  
USGS QUAD MAP: Healdsburg  
P.O.D.s within Sec. 1, T8N, R8W, MDBM  
Sec. 36, T9N, R8W, MDBM

SCALE: 1" = 2000'  
NVVE 1-8-09

*2 per email  
dtd 3/24/2009  
-msm*

BT40-02 Channel, Downstream

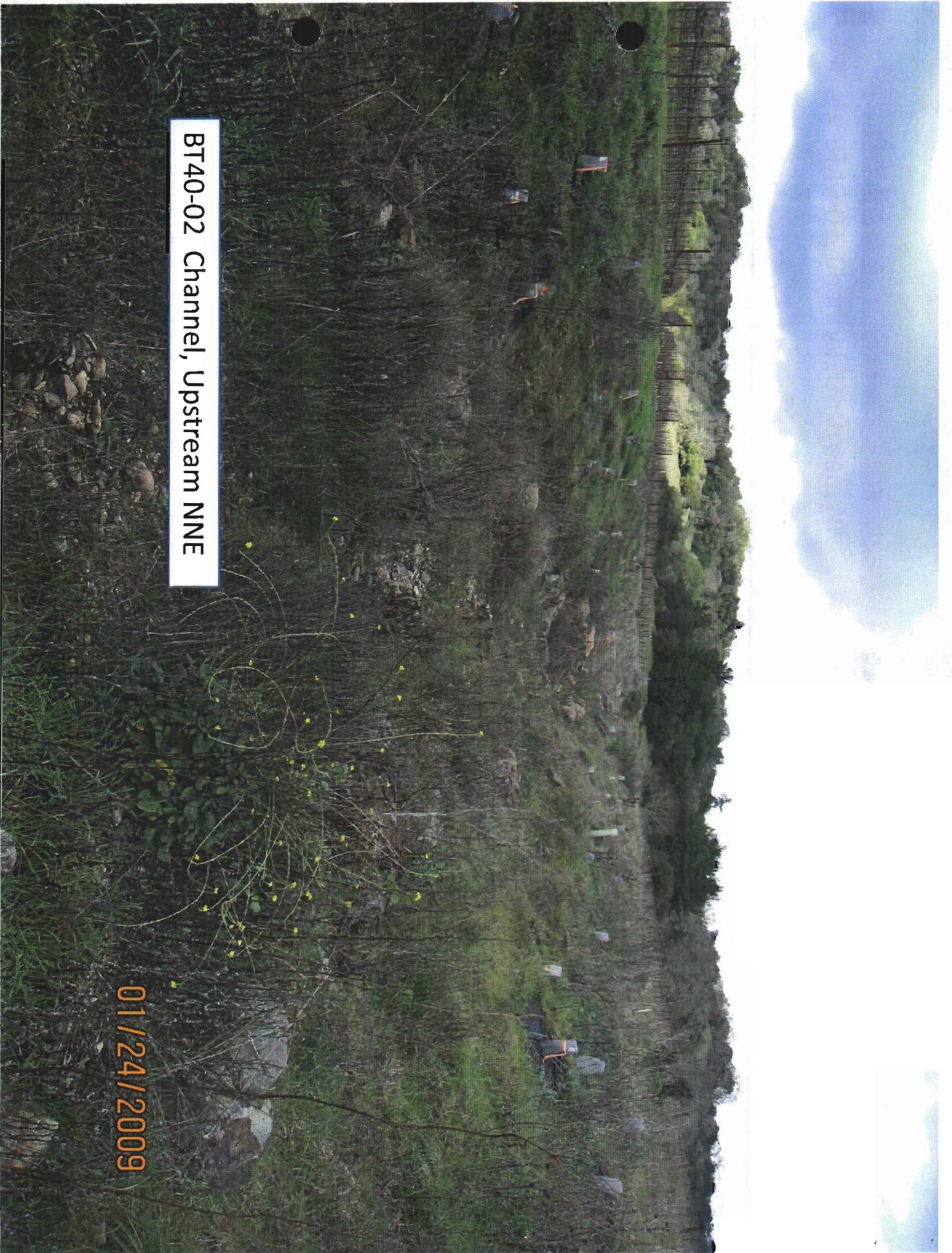
01/24/2009





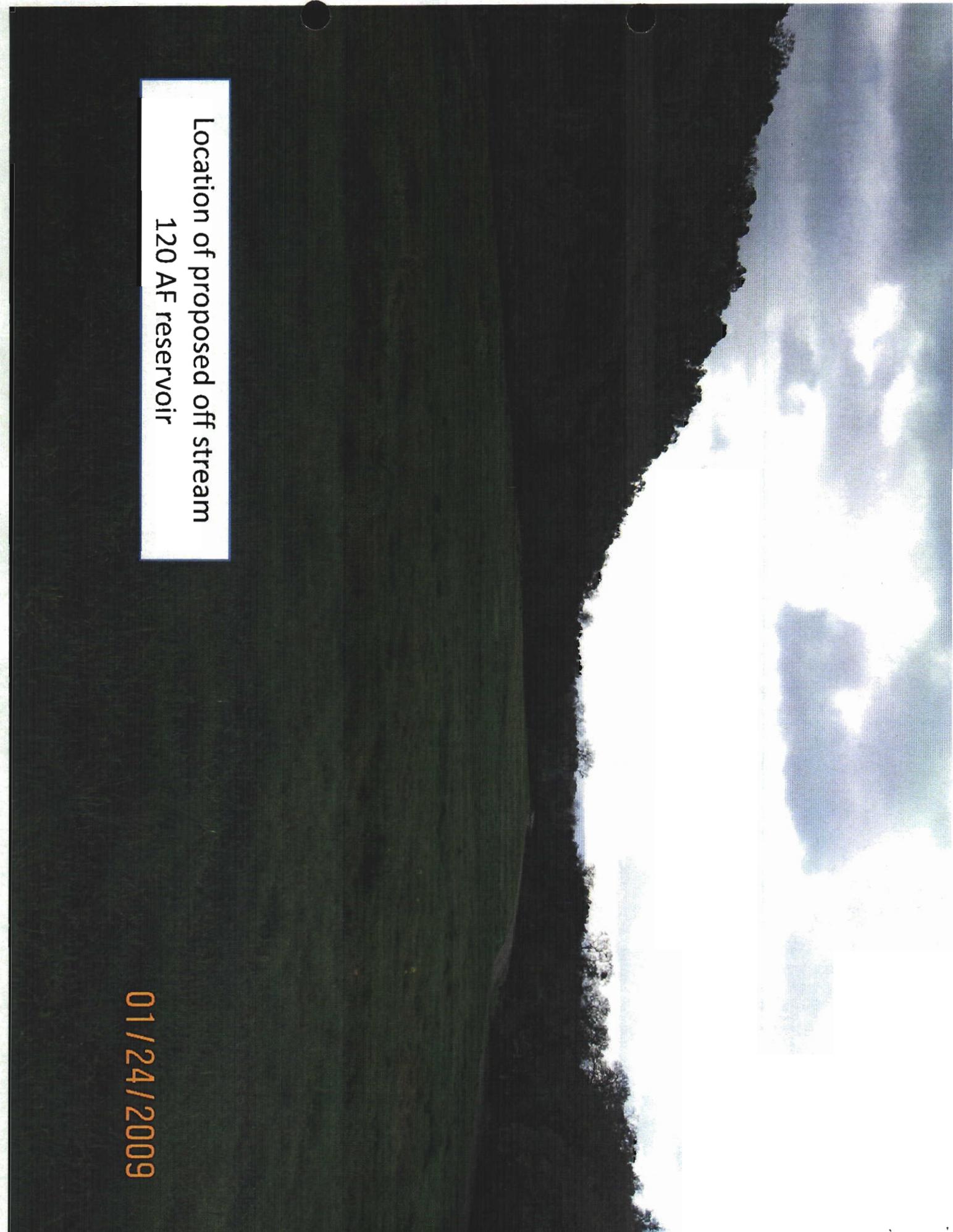
BT40-02 Channel, Upstream NE

01/24/2009



BT40-02 Channel, Upstream NNE

01/24/2009



Location of proposed off stream  
120 AF reservoir

01/24/2009

POD 6, Upstream



01/24/2009

BR40-01 Channel, Downstream



01/24/2009

BR40-01 Channel, Upstream SE

01/24/2009



BR40-01 Channel, Upstream NE

01/24/2009



BR40-01 Channel, Upstream N



01/24/2009

BT40-02 Channel, Downstream





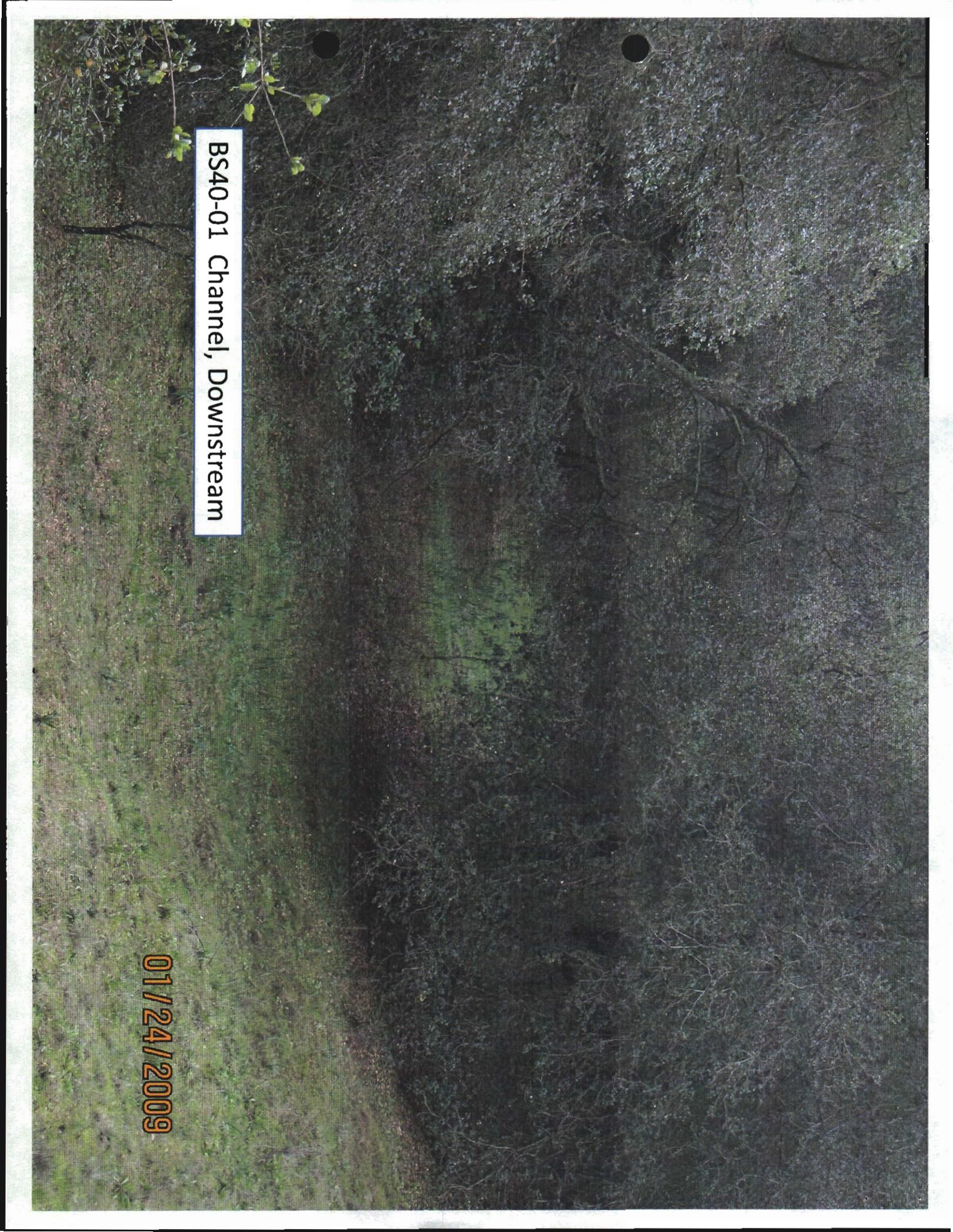
BQ40-02 Channel, Upstream

01/24/2009



BS40-01 Channel, Upstream

01/24/2009

A photograph of a stream channel, likely a small tributary or a section of a larger stream. The water is dark and reflects the surrounding dense vegetation. The banks are heavily wooded with various types of trees and shrubs, some with green leaves and others with bare branches. The overall scene is a natural, somewhat overgrown waterway.

BS40-01 Channel, Downstream

01/24/2009