



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

a. PURPOSE OF USE (irrigation, domestic, etc.) <i>per proj. desc.</i>	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)
<del>irrigation, recreation</del>	<del>0.002</del>	<del>10</del>	<del>1/01</del>	<del>12/31</del>	1.5	1/01	12/31
<del>power</del>	<del>0.02</del>	<del>12.5</del>	<del>1/01</del>	<del>12/31</del>			
Total afa		1.5	Total afa		1.5		

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 1.5 acre-feet.

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

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

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

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

- POD /  PORD # 1 McKinney Creek tributary to Klamath River thence \_\_\_\_\_
- POD /  PORD # 2 Spring 1 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. \_\_\_\_

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
<del>1</del>	<del>509574 09769 462422 73055</del>	<del>4</del>	<del>NW 1/4 of SE 1/4</del>	<del>4</del>	<del>45N</del>	<del>9W</del>	<del>Mt. Diablo</del>
21	508958 649483 4625177 21176	1	SE 1/4 of NW 1/4	4	45N	9W	Mt. Diablo
	N 2,532,368'; E 6,318.296'		1/4 pt 1/4				
			1/4 of 1/4				

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: Klamath River Post Office

Delete entire row 3/2/10

Delete entire row 3/2/10

Delete entire row 3/2/10  
NAD 83  
N 2,532,368'  
E 6,318.296'

**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  
Residential well for domestic use only

See Attachment No. \_\_\_\_\_

**7. PLACE OF USE**

a.

USE IS WITHIN (40-acre subdivision)	SECTION*	TOWNSHIP	RANGE	BASE & MERIDIAN	IF IRRIGATED	
					Acres	Presently cultivated?
1/4 of 1/4	4	45N	9W	Mt. Diablo	10	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
Total Acres:					10	

\*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:  
014-020-030

**8. PROJECT SCHEDULE**

- a. Project is:  proposed. Year construction will begin: \_\_\_\_\_  
 partially complete. Extent of completion: POD #1 McKinney Creek diversion installed for power generation with discharge returning back to an unmapped (unnamed) stream tributary to McKinney Creek. No dam or reservoir constructed on Spring 1 at POD #2.

complete. Year completed: \_\_\_\_\_

- b. Year of first use: \_\_\_\_\_ Year water will be used to the full extent intended: \_\_\_\_\_

**9. JUSTIFICATION OF AMOUNTS REQUESTED**

- a.  IRRIGATION: Maximum area to be irrigated in any one year: 10 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)
pasture	10	flooding	10	3/01	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.

*Delete  
3/26/10*

**POWER:** Total head to be utilized: 135 feet  
 Maximum flow through the penstock: 0.04 cfs Maximum theoretical horsepower capable of  
 being generated by the works (cfs x fall ÷ 8.8): 0.6  
 Electrical capacity (hp x 0.746 x efficiency): 0.33 kilowatts at: 75 % efficiency  
 After use, the water will be discharged into unmapped (unnamed) stream tributary to McKinney Creek (watercourse)  
 in \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4 of Section 4, T 45N, R 9W, ML Diablo 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: \_\_\_\_\_  
 Basis for determination of amount of water needed: \_\_\_\_\_

**10. DIVERSION AND DISTRIBUTION METHOD**

*Delete  
3/26/10*

a. Diversion will be by gravity by means of: POD #1 weir with pipe in McKinney Creek streambed, POD #2 dam on Spring 1 #1  
 (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:

*Delete  
3/26/10*

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 -	
<del>pipe</del>	<del>buried PVC</del>	<del>4 inches</del>	<del>1872 feet</del>	<del>135</del>	<del>-</del>	<del>0.04 cfs</del>

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)
Reservoir 1	14 feet	soil	100 feet	2 feet	0.25 acres	1.575 acre-feet	9 feet

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

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.

~~Delete N/A~~ Gauge on stream engine monitors McKinney Creek diversion

3/26/10 Installation of a weir to monitor reservoir bypass on Spring 1

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)

**12. RIGHT OF ACCESS**

a. Does the applicant own all the land where the water will be diverted, transported and used?

YES  NO

ITNO, 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: Greg Plucker Date of contact: 6/30/09  
 Department: Planning Department Telephone: ( 530 ) 841-2100  
 County Zoning Designation: \_\_\_\_\_

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)  
 State Water Resources Control Board

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

AGENCY	PERMIT TYPE	PERSON(S) CONTACTED	CONTACT DATE	TELEPHONE NO.
CADFG	Streambed Alteration	Kim Burns	7/16/09	(530)225-2367
ACOE	CWA section 404	Ian Liffmann	7/16/09	(415)503-6769
SWRCB	401 Water Quality	Whalen Toy	7/20/09	(916)341-5408

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:

Drainage from Spring 1 will be dammed and a 1.575 acre-foot reservoir will be created.

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:

Kim Burns, (530)225-2367, 7/16/09

**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

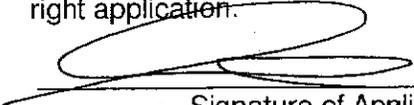
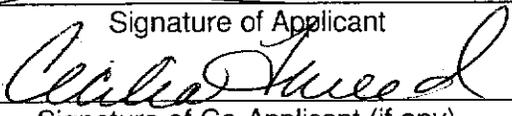
**SUBMITTAL FEES**

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](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.

	OWNER	11-10-09
Signature of Applicant	Title or Relationship	Date
	OWNER	11-10-09
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

KDM  
31802

## McKinney Creek Water Rights Application Statement

2009 MAY 16 AM 11:33

The purpose of this Statement for the Application to Appropriate Water from McKinney Creek is to show the true hydrologic conditions existing at Steven and Cecilia Tweed's property located at 5913 McKinney Creek Road, Klamath River, Siskiyou County, CA (APN 014-020-030). The project is located in Siskiyou County, approximately 9 miles southwest of the town of Klamath River. This property is a 1900's era Homestead comprised of 159 acres abutting McKinney Creek, a tributary to the Klamath River. The property is depicted on the USGS 7.5 Minute Series Horse Creek Quadrangle (1983). This quadrangle shows the local hydrologic conditions consisting of three unnamed streams all of which traverse the property and connect hydrologically to McKinney Creek.

Two thorough hydrogeographic investigations of the property conducted in June and September of 2009, revealed the emergence of four springs which were not observed connecting hydrologically to McKinney Creek, as well as an intermittent unmapped stream (unnamed) which is connected to McKinney Creek by culvert (see Attachment 2). On the Horse Creek quadrangle, the central stream depicted has a spring mapped (Spring 1) connecting to this stream; however, the watercourse shown with the spring on the quadrangle is simply the drainage of Spring 1 that is not hydrologically connected beyond the extent shown in the graphic. Uphill from spring 1, there is no established drainage flowing into the Spring 1 area. The hill is shaped such that as the only flow coming into this area would be dispersed sheet flow. After the water emerges from the Spring 1 area it follows two wide shallow watercourses draining north through the property. Just north of the northern property boundary, the drainage divides into distributary channels and disappears into an alluvial fan type structure (see Attachment 4 Photo Sheet). Sheet flow could leave this area and flow into the next established channel near the road during precipitation or snow melt events.

The Y-shaped drainage located to the southeast of Spring 1 (see Attachment 2) drains directly into an unmapped stream (unnamed) and not into the drainage of Spring 1. The unmapped stream (unnamed) connects to McKinney Creek by culvert and is labeled on Attachment 2 as "confluence". Attachment 2 differs from the Horse Creek quadrangle as we found no evidence that this unmapped stream (unnamed) connects to the Spring 1 drainage. Upon further review by ground-truthing we found that the stream flows east of Spring 1 drainage and is in no way connected to it. The well established shape of the channel of the unmapped stream (unnamed) where the stream engine discharges is further evidence that our graphic is a better representation of the actual hydrologic conditions.

An analysis of the State Water Resources Control Board's (SWRCB) Electronic Water Rights Information Management System (e-WRIMS) was conducted by Chico Environmental on June 1<sup>st</sup> 2009, to identify any water rights existing on McKinney Creek. Only one other Point of Diversion was shown to exist on McKinney Creek which was located approximately 3 miles downstream from the Tweed's property. This diversion is a Statement of Diversion and Use, Application ID# S014013. According to a records search conducted at the SWRCB Division of Water Rights Records Office on June 13<sup>th</sup> 2009, this claim is currently inactive.

McKinney Creek is declared by the SWRCB to be a Fully Appropriated Stream according to Decision No. 0381. However, the only record of this decision is a court case from January 28, 1936, concerning Application 7977. None of the Points of Diversion referred to in this case are shown to exist in the e-WRIMS database, nor were files available in the paper records of the Division.

**DECLARATION UNDER PENALTY OF PERJURY**  
**PURSUANT TO 28 USCA 1746**

I, John J. Lane, I declare under penalty of perjury that the above is true and correct to best of my knowledge and belief.

Executed on November 5, 2009.

\_\_\_\_\_  
[NAME OF DECLARANT]

## ATTACHMENT 1- PROJECT DESCRIPTION

Steven and Cecilia Tweed would like to secure proper permits for the construction of a dam and a 1.575 acre-foot reservoir on the drainage of Spring 1 on their property located at 5913 McKinney Creek Road, Klamath River, Siskiyou County, CA (APN 014-020-030). The project is located in Siskiyou County, approximately 9 miles southwest of the town of Klamath River. This property is a 1900's era Homestead comprised of 159 acres abutting McKinney Creek, a tributary to the Klamath River. Currently, the property consists of one residence and one guest cabin. Water hookups exist for both buildings and are supplied by a well. Four springs emerge within the property boundaries that are not hydrologically connected to McKinney Creek as the waters infiltrate back into the ground within or just outside the property boundaries.

The Tweed's are requesting in their application to divert a total amount of 1.5 acre-feet/yr from one point of diversion. Point of Diversion #1 would divert 1.5 acre-ft/yr from the drainage of Spring 1 by dam to store 1.5 acre-feet (af) of water into a proposed on-stream reservoir. This application requests diversion of the drainage of Spring 1 to storage for the beneficial uses of irrigation, fire suppression and recreation.

The in-stream storage reservoir proposed on the drainage of Spring 1 will be constructed with an earthen dam to store the captured water. The dam will be fitted with a spillway which is 14 feet higher than the downstream toe of the dam. The dam will be constructed with a bypass to monitor the level of the reservoir year round. The reservoir will cover 0.25 acres on the Tweed's property and will be used for flood irrigation of up to 10 acres, fire suppression, and recreation.

Attachment 1 in the application is a site map showing the location of the property along McKinney Creek, and includes the project's point of diversion (POD #1 on Spring 1 drainage).

Figure 1 in the Water Availability Analysis shows the location of the property within the McKinney Creek watershed.

# ATTACHMENT 2: WATER AVAILABILITY ANALYSIS

**TO:** Deputy Director, Division of Water Rights, State Water Resources Control Board

**FROM:** Chico Environmental Science & Planning, 333 Main St., Suite 260, Chico, CA 95928

**DATE:** March 29, 2010

**SUBJECT: WATER AVAILABILITY ANALYSIS (WAA) FOR APPLICATION TO  
APPROPRIATE WATER OF: Steven and Cecilia Tweed**

## 1.0 INTRODUCTION

The purpose of this report is to summarize the results of the water availability analysis conducted for the subject application located within the McKinney Creek watershed in Siskiyou County. The objectives of the analysis are as follows:

- To provide information required under California Water Code section 1275 (a), 1375 (d), 1243, 1243.5 and California Code of Regulations, Title 23, section 782, to demonstrate whether water is available for appropriation; and
- To determine the impact of the applications/project on streamflow in order to evaluate potential impacts to Public Trust Resources and provisions for compliance with various federal and state requirements. Examples include the California Environmental Quality Act (CEQA), the California Endangered Species Act (CESA), California Fish and Game Code and the federal Endangered Species Act (ESA).

## 2.0 PROJECT DESCRIPTION

Steve and Cecilia Tweed would like to secure proper permits for the construction of a dam and a 1.575 acre-foot reservoir on Spring 1 drainage on their property located at 5913 McKinney Creek Road, Klamath River, Siskiyou County, CA (APN 014-020-030). The project is located in Siskiyou County, approximately 9 miles southwest of the town of Klamath River. This property is a 1900's era Homestead comprised of 159 acres abutting McKinney Creek, a tributary to the Klamath River. Currently, the property consists of one residence and one guest cabin. Water hookups exist for both buildings and are supplied by a well. Four springs emerge within the property boundaries that are not hydrologically connected to McKinney Creek as the waters infiltrate back into the ground within or just outside the property boundaries.

The Tweed's are requesting in their application to divert a total amount of 1.5 acre-feet/yr from one point of diversion. Point of Diversion #1 would divert 1.5 acre-ft/yr from the drainage of Spring 1 by a proposed dam to store 1.5 acre-feet (af) of water into an on-stream reservoir. The application attached requests diversion of Spring 1 drainage to storage for the beneficial uses of irrigation, fire suppression and recreation. The in-stream storage reservoir proposed on the drainage of Spring 1 will be constructed with an earthen dam to store the captured water. The dam will be fitted with a spillway which is 14 feet higher than the downstream toe of the dam. The dam will be constructed with a bypass to monitor the level of the reservoir year round. The reservoir will cover 0.25 acres on the Tweed's property and will be used for flood irrigation of up to 10 acres, fire suppression, and recreation.

Attachment 1 in the application is a site map showing the location of the property along McKinney Creek, and includes the project's point of diversion (POD #1 Spring 1 drainage).

Figure 1 shows the location of the property within the McKinney Creek watershed.

### 3.0 METHODS

McKinney Creek is a perennial drainage beginning at an elevation of approximately 1800 meters mean sea level (msl) on the Scott Bar Mountains in Siskiyou County, and running down to an elevation of approximately 520 meters msl where it meets the Klamath River.

The McKinney Creek watershed was calculated by GIS to encompass approximately 7,289 acres (see Figure 1), and receives an average of 8.85 inches of annual cumulative precipitation according to the USFS Station CLB located 3 miles west of the project site.

Figure 1 shows the location of the McKinney Creek watershed and the project's point of diversion, POD #1 at the drainage of Spring 1.

McKinney Creek is an ungauged watercourse. Due to the lack of data, the Rainfall-Runoff Method was used to calculate runoff for the watershed. The value 0.52 was used for C (Runoff Coefficient) (Dunne and Leopold, 1978) (See Appendix A).

Monthly precipitation data was collected from 1992-2008 from USFS Collins Baldy Station (CLB) and used to determine the estimated average annual runoff (Q) in acre-ft per year.

Point of Diversion #1 receives water from a drainage which is entirely fed by Spring 1. Flow from Spring 1 was measured on June 9, 2009, as 0.001 cfs. Flow was too low to be measured during site visit on September 22, 2009.

#### 3.1 Rainfall-Runoff Method

Rainfall runoff methods use rainfall data and land use characteristics to calculate runoff for a particular watershed area. When the rate of rainfall exceeds the rate of infiltration of water into the ground, excess water (runoff) is available to supply surface waters. The rational method is typically used by engineers and hydrologists to design hydraulic structures and predict peak flood flows. However, under the assumptions discussed below, the rational method is used to estimate the average annual runoff based on the average annual precipitation. The equation is shown below:

$$Q = CiA$$

Where: Q = Estimated average annual runoff (acre-feet per month);  
C = Runoff coefficient;  
i = Average monthly precipitation (feet per month); and  
A = Tributary watershed area (acres)

The runoff coefficient "C" in the rational method equation represents the percent of water that will run off the ground surface during a storm event. The California Department of

Transportation (Caltrans) Highway Design Manual provides tables (See Appendix A) showing various values for "C" depending on soil type, relief, vegetation and surface storage<sup>1</sup>. Where multiple land uses are found within the watershed, it is customary to use an area-weighted runoff coefficient<sup>2</sup>. In addition, the runoff coefficients given in the Caltrans Highway Design Manual are applicable for storms of up to 5 or 10 year frequencies. Less frequent, higher intensity storms require adjustment<sup>3</sup>.

Since the rational method is so commonly used, it is important to note the assumptions in its development. The equation assumes that rainfall is of equal intensity over the entire watershed. Because actual rainfall rates vary over space and time, the rational method should only be used within small watershed areas where rainfall is likely to be relatively uniform.

Due to the absence of gauges within the McKinney Creek watershed, the rational method was used for the entire watershed.

**Table 1. Estimated average annual runoff**

Area	McKinney Creek Watershed 7289	Units acres	POD #1 Watershed 17*	Units acres
Jan	321.6164	acre ft/mo	0.7501	acre ft/mo
Feb	180.7815	acre ft/mo	0.4216	acre ft/mo
Mar	229.8322	acre ft/mo	0.5360	acre ft/mo
Apr	237.2641	acre ft/mo	0.5533	acre ft/mo
May	243.5812	acre ft/mo	0.5681	acre ft/mo
Jun	139.3485	acre ft/mo	0.3250	acre ft/mo
Jul	115.5664	acre ft/mo	0.2695	acre ft/mo
Aug	49.9796	acre ft/mo	0.1165	acre ft/mo
Sept	57.7831	acre ft/mo	0.1347	acre ft/mo
Oct	243.3954	acre ft/mo	0.5676	acre ft/mo
Nov	439.5982	acre ft/mo	1.0256	acre ft/mo
Dec	536.7705	acre ft/mo	1.2519	acre ft/mo
<b>Total</b>	<b>2795.517</b>	<b>acre ft/yr</b>	<b>6.5199*</b>	<b>acre ft/yr</b>

\*Estimate does not include flow from Spring 1.

<sup>1</sup> California Department of Transportation. *Highway Design Manual*, July 1, 1995.  
<http://www.dot.ca.gov/hq/oppd/hdm/hdmtoc.htm>

<sup>2</sup> Bedient and Huber. *Hydrology and Floodplain Analysis*, 2nd ed. 1992. Pg 395.

<sup>3</sup> Linsley, et al. *Water Resources Engineering*, 4<sup>th</sup> edition, 1992. Pg. 59.

**APPENDIX A**  
**Runoff Coefficient for Undeveloped Areas**

	Watershed Types			
	Extreme	High	Normal	Low
<b>Relief</b>	0.28 – 0.35  Steep, rugged terrain with average slopes above 30%	0.20 – 0.28  Hilly, with average slopes of 10 to 30%	0.14 – 0.20  Rolling with average slope of 5 to 10%	0.08 – 0.14  Relatively flat land, with average slope of 0 to 5%
<b>Soil Saturation</b>	0.12 – 0.16  No effective soil cover; either rock or thin soil mantle of negligible infiltration capacity	0.08 – 0.12  Slow to take up water; clay or loam soil of low infiltration capacity; imperfectly or poorly drained	0.06 – 0.08  Normal; well-drained, high or medium-textured soils, sandy loams, silt and silty loams.	0.04 – 0.06  High; deep sand or other soil that takes up water readily, very high level drained soils.
<b>Vegetal Cover</b>	0.12 – 0.16  No effective plant cover, bare, or very sparse cover	0.08 – 0.12  Poor to fair; clean cultivation crops, or poor natural cover, less than 20% of drainage area over good cover	0.06 – 0.08  Fair to good; about 50% of area in good grassland or woodland; not more than 50% of area in cultivated crops	0.04 – 0.06  Good to excellent; about 90% of drainage area in good grassland, woodland or equivalent cover.
<b>Surface Storage</b>	0.10 – 0.12  Negligible surface depression few and shallow; drainage ways steep and small, no marshes	0.08 – 0.10  Low; very well defined system of drainage ways; no ponds or marshes	0.06 – 0.08  Normal; considerable surface depression storage, lakes and pond marshes	0.04 – 0.06  High; surface storage high; drainage system not sharply defined, large floodplain storage or large number of pond marshes

The watershed of the project site consisting of:

Solutions:

- 1) Hilly terrain with average slope of 30%,
- 2) Well-drained gravelly loams,
- 3) Woodland, and
- 4) Low, well-defined

Relief = 0.30  
Soil infiltration = 0.06  
Vegetal Cover = 0.06  
Surface storage = 0.10

Find the runoff coefficient, C, for the above watershed.

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C = 0.52

Reference Source: California Department of Transportation, *Highway Design Manual*,

July 1, 1995, pp. 810-816