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(For explanation of entries required, see booklet "How to File an Application to Appropriate Water in California")

STATE OF CALIFORNIA
State Water Resources Control Board
DIVISION OF WATER RIGHTS
901 P Street, Sacramento
P. O. Box 2000, Sacramento, CA 95812-2000

APPLICATION TO APPROPRIATE WATER BY PERMIT

Application No. 031562
(Leave blank)

1. APPLICANT Co-Applicants:

Luchetti Children's Trust (See Attachment) () *see attachment*
(Name of applicant) (Telephone number where you may be reached between 8 a. m. and 5 p. m. - include area code)
Jim Comstock, Judy Comstock, and Lisa
Comstock, Joint Tenants in Common (See Attachment)
(Mailing address) (City or town) (State) (Zip code)

2. SOURCE

a. The name of the source at the point of diversion is #1: Putah Creek; #2: Unnamed Stream
(If unnamed, state that it is an unnamed stream, spring, etc.)
tributary to #1: Lake Berryessa; #2: Putah Creek thence Lake Berryessa
b. In a normal year does the stream dry up at any point downstream from your project? YES NO If yes, during what months is it usually dry? From See Attachment to _____
What alternate sources are available to your project should a portion of your requested direct diversion season be excluded because of a dry stream or nonavailability of water? N/A

3. POINTS of DIVERSION and REDIVERSION

a. The point(s) of diversion will be in the County of Lake

b. List all points giving coordinate distances from section corner or other tie as allowed by Board regulations i. e. California Coordinate System

Point is within (40-acre subdivision)	Section	Township	Range	Base and Meridian
1/4 of 1/4				
1/4 of 1/4				
1/4 of 1/4				

c. Does applicant own the land at the point of diversion? YES NO See Attachment
d. If applicant does not own the land at point of diversion, state name and address of owner and what steps have been taken to obtain right of access: _____

FOR0053-R2

4. PURPOSE of USE, AMOUNT and SEASON

a. In the table below, state the purpose(s) for which water is to be appropriated, the quantities of water for each purpose, and the dates between which diversions will be made. Use gallons per day if rate is less than 0.025 cubic foot per second (approximately 16,000 gallons per day). Purpose must only be "Domestic" for registration of small domestic use.*

PURPOSE OF USE (Irrigation, Domestic, etc.)	DIRECT DIVERSION				STORAGE		
	QUANTITY		SEASON OF DIVERSION		AMOUNT	COLLECTION SEASON	
	RATE (Cubic feet per second or gallons per day)	AMOUNT (Acre-feet per year)	Beginning Date (Mo. & Day)	Ending Date (Mo. & Day)	Acre-feet per annum	Beginning Date (Mo. & Day)	Ending Date (Mo. & Day)
Irrigation, Frost protection, Heat control, Domestic, Fire protection, Recreation, Industrial, Stockwatering					1500	10/1	9/30
					1500		

b. Total combined amount taken by direct diversion and storage during any one year will be 1500* acre-feet.

*Not to exceed 4,500 gallons per day by direct diversion or 10 acre-feet per annum by storage.

*See Attachment

5. JUSTIFICATION OF AMOUNT

a. IRRIGATION: Maximum area to be irrigated in any one year is 571 acres.

CROP	ACRES	METHOD OF IRRIGATION (Sprinklers, flooding, etc.)	ACRE-FEET PER YEAR	NORMAL SEASON	
				Beginning Date	Ending Date
Irrigated Pasture	471	Sprinkler	1413	5/15	10/31
Vineyard	100	Drip	100	6/1	10/31

b. DOMESTIC: Number of residences to be served is 2. Separately owned? YES NO
 Total number of people to be served is 8. Estimated daily use per person is 70
 Total area of domestic lawns and gardens is 21,000 square feet. (Gallons per day)
 Incidental domestic uses are _____
 (Dust control area, number and kind of domestic animals, etc.)

c. STOCKWATERING: Kind of stock Cattle Maximum number 200
 Describe type of operation: Range
 (Feed lot, dairy, range, etc.)

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

e. MUNICIPAL: (Estimated projected use)

POPULATION 5-Year periods until use is completed		MAXIMUM MONTH		ANNUAL USE		
PERIOD	POP.	Average daily use (gal. per capita)	Rate of diversion (cfs)	Average daily use (gal. per capita)	Acre-foot (per capita)	Total acre-feet
Present						

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

f. HEAT CONTROL: The total area to be heat protected is 100 net acres.
 Type of crop protected is vineyard
 Rate at which water is applied to use is 30 gpm per acre.
 The heat protection season will begin about 6/15 and end about 9/31
 (Date) (Date)

g. FROST PROTECTION: The total area to be frost protected is 100 net acres.
 Type of crop protected is Vineyard
 Rate at which water is applied to use is 55 gpm per acre.
 The frost protection season will begin about 3/15 and end about 5/15
 (Date) (Date)

h. INDUSTRIAL: Type of industry is Winery
 Basis for determination of amount of water needed is Estimated to be 1 AF for processing & washdown.

i. MINING: The name of the claim is _____ Patented Unpatented
 The nature of the mine is _____ Mineral to be mined is _____
 Type of milling or processing is _____
 After use, the water will be discharged into _____
 in _____ 1/4 of _____ 1/4 of Section _____, T _____, R _____, _____ B. & M.
 (40-acre subdivision) (Name of stream)

j. POWER: The total fall to be utilized is _____ feet. The maximum amount of water to be used through the penstock is _____ cubic feet per second. The maximum theoretical horsepower capable of being generated by the works is _____ kilowatts at _____ % efficiency.
 (Cubic feet per second x fall ÷ 8.8) (Hp x 0.746 x efficiency)
 After use, the water will be discharged into _____
 (Name of stream)
 in _____ 1/4 of _____ 1/4 of Section _____, T _____, R _____, _____ B. & M. FERC No. _____

k. FISH AND WILDLIFE PRESERVATION AND/OR ENHANCEMENT: YES NO If yes, list specific species and habitat type that will be preserved or enhanced in item 17 of Environmental Information form WR 1-2.
 See Attachment

l. OTHER: Describe use: Fire Protection Basis for determination of amount of water needed is Incidental Use

6. PLACE OF USE

- a. Does applicant own the land where the water will be used? YES NO Is land in joint ownership? YES NO
 (All joint owners should include their names as applicants and sign the application.)
 If applicant does not own land where the water will be used, give name and address of owner and state what arrangements have been made with the owner. _____

b.

USE IS WITHIN (40-acre subdivision)	SECTION	TOWNSHIP	RANGE	BASE & MERIDIAN	IF IRRIGATED	
					Number of acres	Presently cultivated (Y/N)
1/4 of 1/4	See Attachment					
1/4 of 1/4						
1/4 of 1/4						
1/4 of 1/4						
1/4 of 1/4						
1/4 of 1/4						

(If area is unsurveyed, state the location as if lines of the public land survey were projected, or contact the Division of Water Rights. If space does not permit listing all 40-acre tracts, include on another sheet or state sections, townships and ranges, and show detail on map.)

7. DIVERSION WORKS

- a. Diversion will be by gravity by means of #2: Dam
 (Dam, pipe in unobstructed channel, pipe through dam, siphon, weir, gate, etc.)
- b. Diversion will be by pumping from #1: Channel Pump discharge rate 10 Horsepower 170
 (Sump, offset well, channel, reservoir, etc.) (cfs or gpm)
- c. Conduit from diversion point to first lateral or to offstream storage reservoir:

#1 to #2

CONDUIT (Pipe or channel)	MATERIAL (Type of pipe or channel lining) (Indicate if pipe is buried or not)	CROSS SECTIONAL DIMENSION (Pipe diameter or ditch depth and top and bottom width)	LENGTH (Feet)	TOTAL LIFT OR FALL		CAPACITY (Estimate)
				Feet	+ or -	
Pipe	PVC	18"	5200'	80'	+	10cfs

- d. Storage reservoirs: (For underground storage, complete Supplement 1 to WR1, available upon request.)

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 (ft.)
Reservoir	42	Earth	1900'	4'	48	1500	42'

- e. Outlet pipe: (For storage reservoirs having a capacity of 10 acre-feet or more.)

Diameter of outlet pipe (inches)	Length of outlet pipe (feet)	FALL (Vertical distance between entrance and exit of outlet pipe in feet)	HEAD (Vertical distance from spillway to outlet pipe in reservoir in feet)	Estimated storage below outlet pipe entrance (dead storage)
24"	400'	2'	40'	1 AF

- 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 10 cfs. Diversion to offstream storage will be made by: Pumping Gravity

8. COMPLETION SCHEDULE

- a. Year work will start 2005 b. Year work will be completed 2014
 c. Year water will be used to the full extent intended 2015 d. If completed, year of first use N/A

9. GENERAL

- a. Name of the post office most used by those living near the proposed point of diversion is Middletown
- b. Does any part of the place of use comprise a subdivision on file with the State Department of Real Estate? YES NO
 If yes, state name of the subdivision _____
 If no, is subdivision of these lands contemplated? YES NO
 Is it planned to individually meter each service connection? YES NO If yes, When? N/A
- c. List the names and addresses of diverters of water from the source of supply downstream from the proposed point of diversion: Refer to information on file at the SWRCB.
- d. Is the source used for navigation, including use by pleasure boats, for a significant part of each year at the point of diversion, or does the source substantially contribute to a waterway which is used for navigation, including use by pleasure boats? YES NO If yes, explain: _____

10. EXISTING WATER RIGHT

Do you claim an existing right for the use of all or part of the water sought by this application? YES NO
 If yes, complete table below:

Nature of Right (riparian, appropriative, groundwater)	Year of First Use	Purpose of use made in recent years including amount, if known	Season of Use	Source	Location of Point of Diversion
Appropriative L918 (A3797)	Before 1930	Irrig. of 100ac Stockwatering & Domestic	May - Oct.	Putah Creek	Same as POD #1
Riparian	"	"	"	"	"

11. AUTHORIZED AGENT (Optional)

With respect to all matters concerning this water right application those matters designated as follows:

Wagner & Bonsignore (Name of agent) (916) 441 - 6850 (Telephone number of agent between 8 a. m. and 5 p. m.)
444 No. Third Street, #325, Sacramento, CA 95814-0228
 (Mailing address) (City or town) (State) (Zip code)

is authorized to act on my behalf as my agent.

12. SIGNATURE OF APPLICANT

I (we) declare under penalty of perjury that the above is true and correct to the best of my (our) knowledge and belief.
 Dated September 16, ~~19~~ 2003, at Middletown, California

Msx Mr. [Signature]
 Missx Mrs. _____ (Signature of applicant)
 Peter Luchetti

Msx Mr. [Signature]
 Missx Mrs. _____ (Signature of applicant)
 Jim Comstock

(If there is more than one owner of the project, please indicate their relationship.)

Additional information needed for preparation of this application may be found in the Instruction Booklet entitled "HOW TO FILE AN APPLICATION TO APPROPRIATE WATER IN CALIFORNIA". If there is insufficient space for answers in this form, attach extra sheets. Please cross-reference all remarks to the numbered item of the application to which they may refer. Send original application and one copy to the STATE WATER RESOURCES CONTROL BOARD, DIVISION OF WATER RIGHTS, P. O. Box 2000, Sacramento, CA 95812-2000, with \$100 minimum filing fee.

NOTE:
 If this application is approved for a permit, a minimum permit fee of \$100 will be required before the permit is issued. There is no additional fee for registration of small domestic.

Ms. [Signature]
 Judy Comstock

Ms. [Signature]
 Lisa Comstock

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: _____

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. _____

SECTION C: ENVIRONMENTAL INFORMATION

To Accompany Application 31562 by Luchetti and Comstock
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: Carolyn Rutter Date of contact: August 3, 2006
 Department: Lake County Planning Dept. Telephone: (707) 263-2782
 County Zoning Designation: See Attachment 1

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) _____

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

AGENCY	PERMIT TYPE	PERSON(S) CONTACTED	CONTACT DATE	TELEPHONE NO.
COE - Section 404 Permit				(916) 557-5250
DFG - Section 1600 Streambed Alteration Agreement				(707) 944-5500
DSOD - Approval Dam Plans and Specifications				(916) 227-4644

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 pumping station at POD 1 may require alteration of the bed and bank of Putah Creek. Earthwork for dam and reservoir construction at Point 2 will impact an intermittent unnamed channel.
- 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: Hidden Valley Lake CSD and Callayomi County WD
- 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. ____

**ATTACHMENT TO APPLICATION BY
LUCHETTI AND COMSTOCK**

Re: 1. Co-Applicants

Applicant: Luchetti Children's Trust
Contact: Peter Luchetti (415) 332-7053
507 Sausalito Blvd.
Sausalito, Ca. 94965

Applicant: Jim Comstock, Judy Comstock, Lisa Comstock, Joint Tenants in Common
(707) 987-3081
P.O. Box 993
Middletown, CA 95461

Re: 2.b. In a normal year does the stream dry up at any point downstream from your project? If yes, during what months is it usually dry?

<u>Map Point</u>	<u>Comment</u>
#1	No
#2	Yes, from about May through October

Re: 3.b. Points of Diversion and Rediversion

<u>Map Point</u>	<u>Description</u>
#1	<u>Point of Diversion to Offstream Storage at Point #2:</u> Located N.404,500 and E.1,851,700 California Coordinate System, Zone 2, being within the SE¼ of NE¼ of Projected Section 28, T11N, R6W, MDB&M.
#2	<u>Point of Diversion by Collection to Storage and Point of Rediversion and Storage for Water Diverted at Point #1:</u> Located N.400,400 and E.1,851,700 California Coordinate System, Zone 2, being within the SE¼ of NE¼ of Projected Section 33, T11N, R6W, MDB&M.

Re: 3.c. Ownership of points of diversion

Luchetti owns POD #1. The reservoir site at POD #2 is owned partially by Luchetti and partially by Comstock.

Re: 4.b. Purpose of Use, Amount and Season

The total amount of water diverted to storage under this application, together with that diverted to storage under a companion application filed by Hidden Valley Lake CSD and Collayomi County WD for Municipal and other uses shall not exceed 1,500 acre-feet annually.

Re: 6.b. Place of Use

<u>Use is Within</u>	<u>Section</u>	<u>Township</u>	<u>Range</u>	<u>B.&M.</u>	<u>Acres</u>	<u>Presently Cultivated</u>
SW¼ of NW¼	27	11N.	6W.	M.D.	7	Yes
NW¼ of SW¼	27	11N.	6W.	M.D.	17	Yes
SW¼ of SW¼	27	11N.	6W.	M.D.	23	Yes
SE¼ of SW¼	27	11N.	6W.	M.D.	2	Yes
NW¼ of NW¼	28	11N.	6W.	M.D.	9	Yes
NE¼ of NW¼	28	11N.	6W.	M.D.	2	Yes
SW¼ of NW¼	28	11N.	6W.	M.D.	26	Yes
SE¼ of NW¼	28	11N.	6W.	M.D.	10	Yes
SW¼ of NE¼	28	11N.	6W.	M.D.	17	Yes
SE¼ of NE¼	28	11N.	6W.	M.D.	4	Yes
NW¼ of SW¼	28	11N.	6W.	M.D.	24	Yes
NE¼ of SW¼	28	11N.	6W.	M.D.	35	Yes
NW¼ of SE¼	28	11N.	6W.	M.D.	33	Yes
NE¼ of SE¼	28	11N.	6W.	M.D.	36	Yes
SW¼ of SW¼	28	11N.	6W.	M.D.	4	Yes
SE¼ of SW¼	28	11N.	6W.	M.D.	1	Yes
SW¼ of SE¼	28	11N.	6W.	M.D.	36	Yes
SE¼ of SE¼	28	11N.	6W.	M.D.	37	Yes

SW¼ of SE¼	29	11N.	6W.	M.D.	2	Yes
SE¼ of SE¼	29	11N.	6W.	M.D.	12	Yes
NW¼ of NE¼	32	11N.	6W.	M.D.	2	Yes
NE¼ of NE¼	32	11N.	6W.	M.D.	14	Yes
NW¼ of NW¼	33	11N.	6W.	M.D.	19	Yes
NE¼ of NW¼	33	11N.	6W.	M.D.	16	Yes
NW¼ of NE¼	33	11N.	6W.	M.D.	38	Yes
NE¼ of NE¼	33	11N.	6W.	M.D.	16	Yes
SW¼ of NW¼	33	11N.	6W.	M.D.	9	Yes
SE¼ of NW¼	33	11N.	6W.	M.D.	36	Yes
SW¼ of NE¼	33	11N.	6W.	M.D.	40	Yes
SE¼ of NE¼	33	11N.	6W.	M.D.	26	Yes
NW¼ of SE¼	33	11N.	6W.	M.D.	8	Yes
NE¼ of SE¼	33	11N.	6W.	M.D.	10	Yes

TOTAL 571

**Attachment to Accompany
Environmental Information Form
for Application 31562 of Luchetti and Comstock**

Attachment 1 - County Zoning Designations

Assessor Parcel Number	Zoning Designation
014-290-008	A-FF & RR-FF
014-290-012	A-FF & RR-FF
014-300-002	A & RL
014-300-003	RL-SC
014-300-004	A & RL
014-400-003	RL-FF
014-440-004	A-FF & RL-FF

Wagner & Bonsignore
Consulting Civil Engineers, A Corporation

KDM
A031562
A031565

Nicholas F. Bonsignore, P.E.
Robert C. Wagner, P.E.
Paula J. Whealen
Andrew T. Bambauer, P.E.
David M. Houston, P.E.
Ryan E. Stolfus

August 18, 2006

STATE WATER RESOURCES
CONTROL BOARD
2006 AUG 22 PM 12:30
DIV. OF WATER RIGHTS
SACRAMENTO

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

Re: Application 31562 of Luchetti and Comstock, and Application 31565 of Hidden Valley Lake Community Services District and Callayomi County Water District – Demonstration of Water Availability

Dear Ms. Mrowka:

This is in reply to your letters of July 5 and July 20, 2006 (both letters referenced as 991:PLM:31562), requesting a demonstration of water availability as required by California Water Code Section 1260(k).

SUMMARY OF APPLICATIONS 31562 AND 31565

Application 31562 is held by Luchetti Children's Trust (Luchetti) and Jim Comstock, Judy Comstock and Lisa Comstock (Comstock). Application 31565 is held by Hidden Valley Lake Community Services District (HVLCS D) and Callayomi County Water District (CCWD). The salient provisions of these two applications are as follows:

Application 31562

Sources: Point 1 - Putah Creek, point of diversion is located within the SE¼ of NE¼ of projected section 28, T11N, R6W, MDB&M.

Point 2 - Unnamed Stream, point of diversion is located within the SE¼ of NE¼ of projected section 33, T11N, R6W, MDB&M.

Priority date: March 1, 2005

Diversion season: October 1 to September 30

Diversion amount: 1,500 acre-feet (combined with companion Application 31565)
Maximum rate of diversion to off-stream storage is 10 cfs.

Historical monthly discharge measured at the Putah Creek gage is shown in Table 1. The average annual discharge for the period of record is about 151,000 acre-feet. The following years were evaluated in the daily analysis:

USGS #11453500 Putah Creek Near Guenoc, CA
(Average Annual Discharge = 150,886 af)

Water Year	Gaged Annual Discharge (af)	Percent of Long-Term Average (%)
1959	79,922	53.0
1961	81,312	53.9
1976	15,830	10.5
1999	170,984	113.3
2000	139,341	92.3
2001	62,938	41.7
2002	119,902	79.5
2003	192,360	127.5
2004	182,555	121.0
2005	164,757	109.2

The daily flow impairment model assumes a rate of diversion to off-stream storage at POD 1 of up to 10 cfs beginning on October 1 of each year and continuing until the full 1,500 acre-feet has been diverted to storage.¹ After the reservoir has been filled to capacity the diversions are assumed to be zero. It is noted that under the terms of HVLCSD's License 13527 (Application 30049A) and Permit 20770B (Application 30049B) a minimum flow of 0.6 cfs shall be maintained at the Putah Creek gage in the month of October.² We assumed that this minimum flow requirement would be imposed on any permits issued to the subject applications, therefore, in the month of October diversions to off-stream storage were made only when gaged flows were above 0.6 cfs.

The attached daily flow hydrographs display two scenarios for each water year. Historical Putah Creek flow as measured at the gage is represented by the dark blue line. The flow at the gage considering diversions under the subject applications is represented by the light blue dashed line.

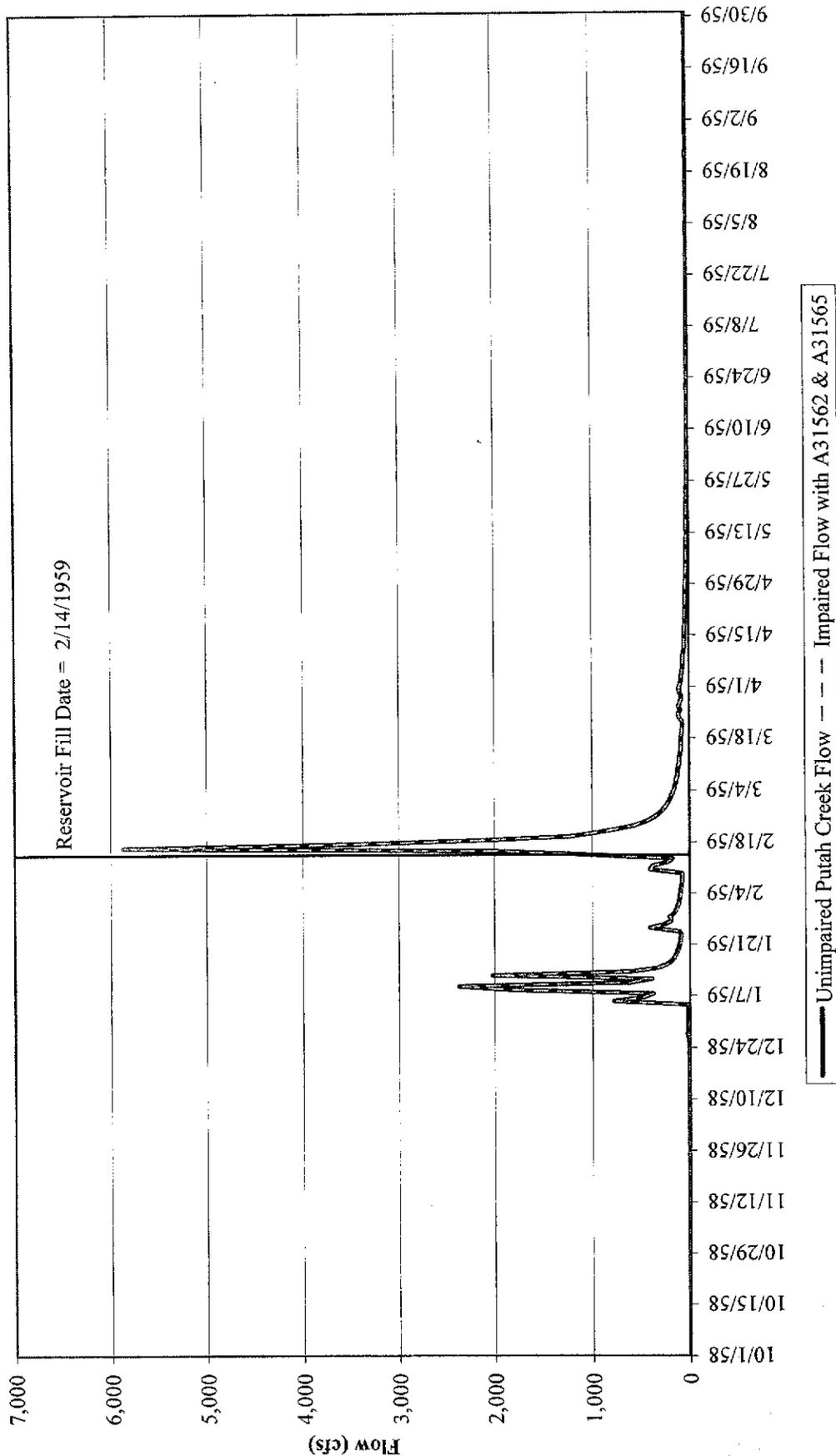
¹ The reservoir at POD 2 has a relatively small tributary drainage area, and for simplicity runoff therefrom was ignored for this analysis.

² License and Permit terms require higher minimum flows for the months of July through September, however, this analysis did not require consideration of these other months.

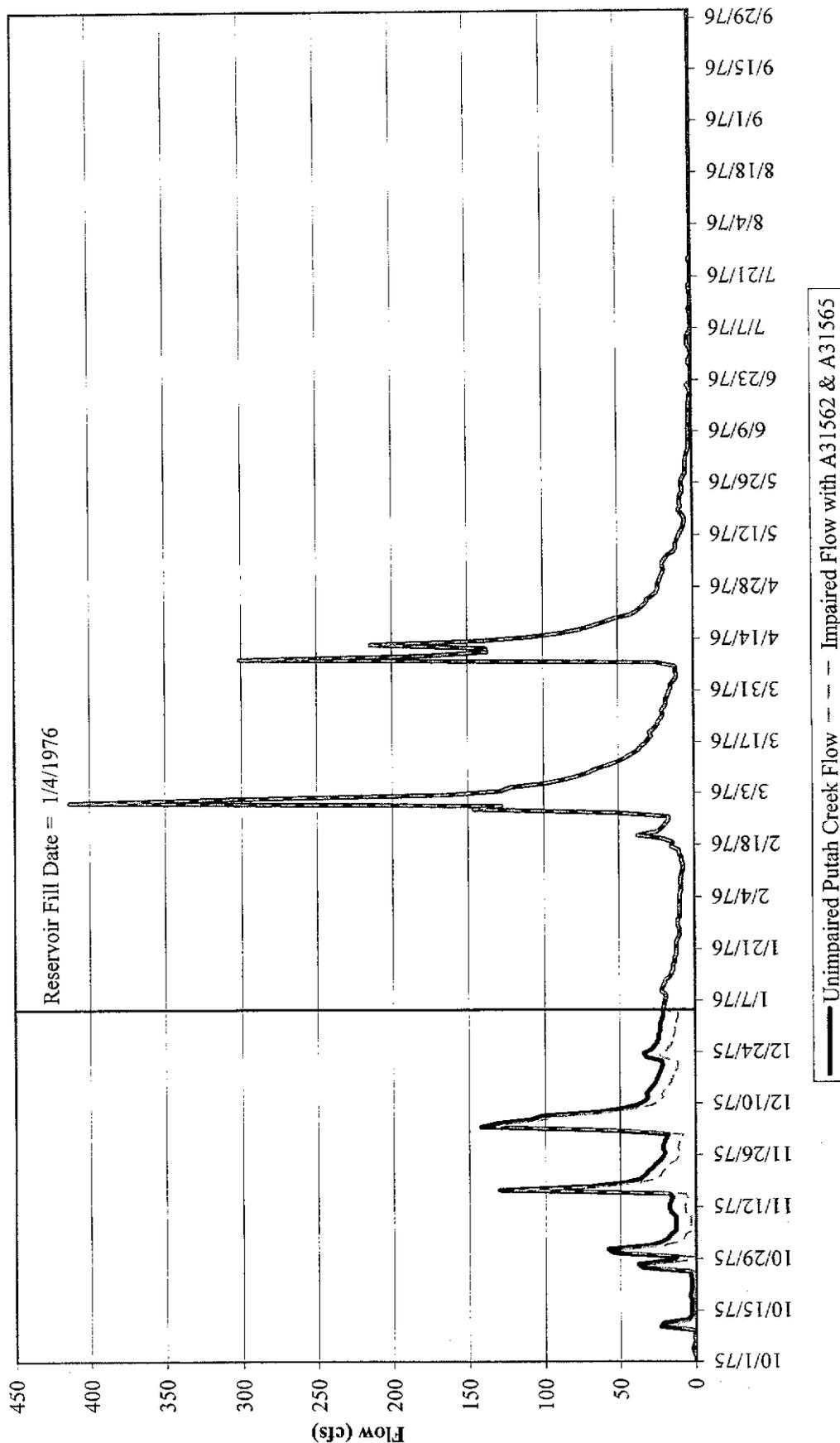
TABLE 1
USGS 11453500 Putah Creek Near Guenoc, CA

Water Year	Monthly Discharge (af)												Annual Total	Percent of Average
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		
1905	4,907	2,505	33,326	78,643	34,372	38,663	17,113	7,348	5,058	762	544	595	223,836	148.3%
1906	935	595	1,347	118,425	40,370	56,310	17,970	13,232	9,806	1,648	738	595	261,971	173.6%
1931	156	146	156	10,268	2,810	6,997	1,583	594	315	188	144	109	23,468	15.6%
1932	92	80	43,398	16,995	12,453	3,560	2,386	2,509	1,154	307	156	104	83,195	55.1%
1933	90	89	1,051	18,231	6,831	15,796	4,867	3,148	833	384	237	173	51,731	34.3%
1934	148	136	27,516	14,941	22,104	8,375	2,743	1,267	678	357	221	159	78,645	52.1%
1935	131	4,451	3,081	49,873	10,985	39,075	27,699	4,273	1,065	416	273	206	141,529	93.8%
1936	173	169	499	38,547	89,790	10,527	12,996	2,453	1,672	557	317	235	157,934	104.7%
1937	194	142	144	3,449	58,592	33,166	8,902	2,681	1,416	522	311	221	109,741	72.7%
1938	179	18,280	77,105	22,172	114,740	81,533	16,304	4,612	1,500	676	437	294	337,831	223.9%
1939	241	353	2,650	5,183	5,754	8,541	1,690	824	490	317	220	165	26,428	17.5%
1940	122	109	2,121	62,410	108,081	47,161	16,221	3,948	1,398	547	363	242	242,724	160.9%
1941	215	1,214	69,604	79,749	66,700	45,636	45,443	7,446	2,666	1,254	557	451	320,936	212.7%
1942	425	1,065	59,520	53,666	84,472	14,782	33,358	8,787	3,237	1,168	612	440	261,533	173.3%
1943	370	3,487	11,873	68,374	14,790	18,981	7,307	3,677	1,613	683	413	293	131,860	87.4%
1944	261	271	633	8,928	26,822	33,972	4,891	2,927	1,279	646	406	287	81,323	53.9%
1945	236	5,581	12,802	7,422	42,269	14,972	6,587	3,154	1,250	494	304	216	95,288	63.2%
1946	953	7,182	65,853	17,272	8,864	7,360	5,950	1,734	791	440	263	175	116,838	77.4%
1947	148	5,915	8,479	1,605	25,830	25,505	7,741	1,568	1,488	433	253	173	79,138	52.4%
1948	1,267	1,517	1,285	11,523	2,594	14,923	39,552	9,223	2,333	652	342	199	85,410	56.6%
1949	138	135	3,843	6,782	22,637	52,547	5,861	2,263	619	305	170	132	95,432	63.2%
1950	119	118	941	23,218	36,482	11,781	9,074	2,533	672	355	152	149	85,596	56.7%
1951	4,157	31,710	52,965	36,167	21,032	16,257	4,249	5,306	1,012	384	223	148	173,609	115.1%
1952	130	7,188	59,606	78,643	36,342	27,208	7,361	3,333	1,142	595	271	146	221,965	147.1%
1953	94	115	58,555	83,439	7,075	20,648	8,015	4,710	1,738	499	240	104	185,232	122.8%
1954	90	3,784	2,884	41,473	32,434	24,816	23,189	3,948	1,196	333	171	104	134,421	89.1%
1955	108	7,557	16,620	7,661	4,637	4,759	13,335	4,722	762	238	80	44	60,524	40.1%
1956	38	81	103,545	86,144	86,281	16,073	5,641	4,581	1,125	322	151	67	304,049	201.5%
1957	575	590	762	9,518	35,733	19,030	8,152	12,740	2,440	424	148	381	90,494	60.0%
1958	8,645	2,969	18,219	35,681	117,017	50,494	53,917	5,970	2,737	799	303	154	296,904	196.8%
1959	139	139	443	25,001	43,208	6,561	2,862	1,039	271	125	73	61	79,922	53.0%

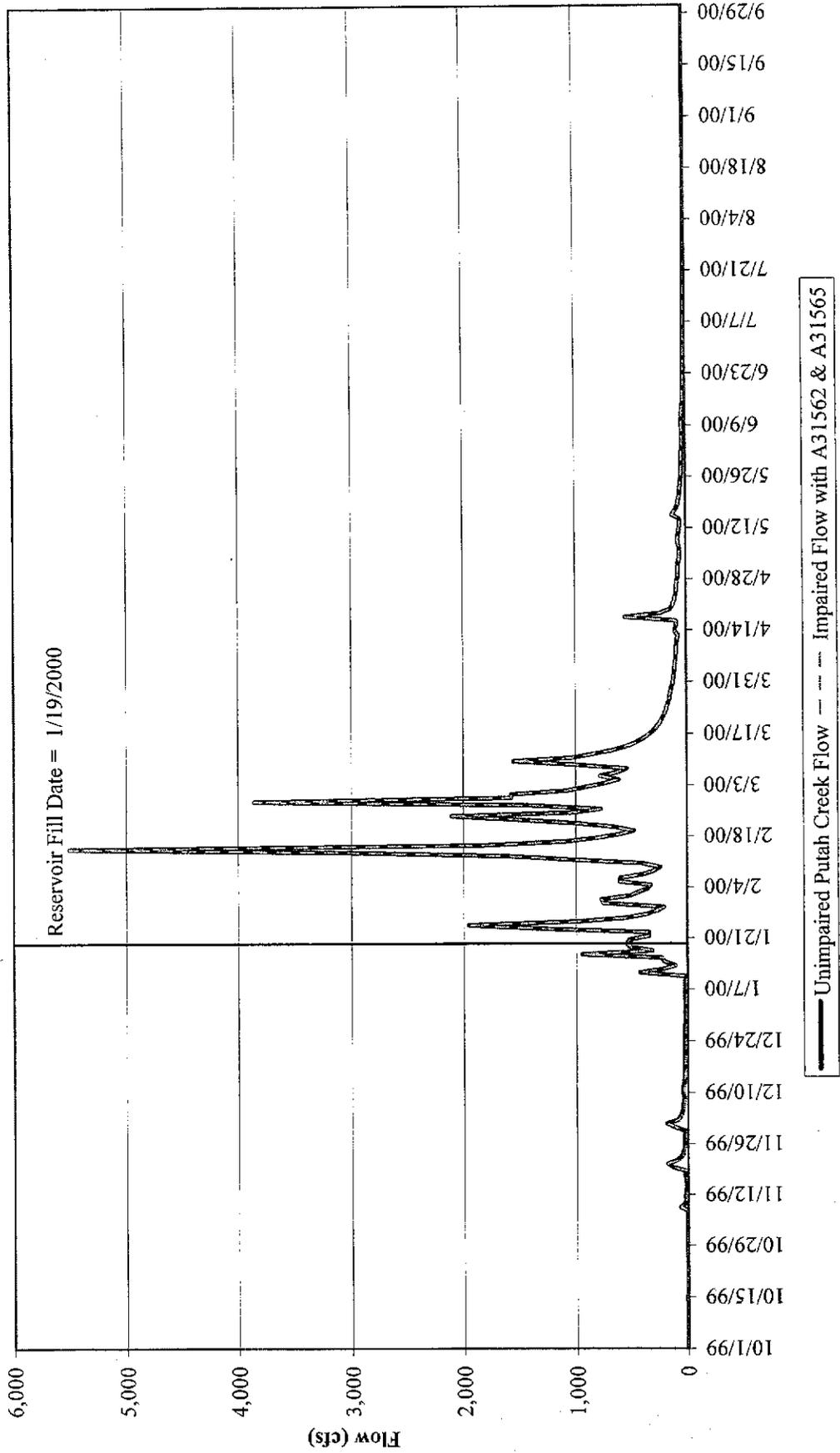
**Hidden Valley Lake CSD
Daily Flow at USGS 11453500 Putah Creek Near Guenoc, CA
October 1958 Through September 1959**



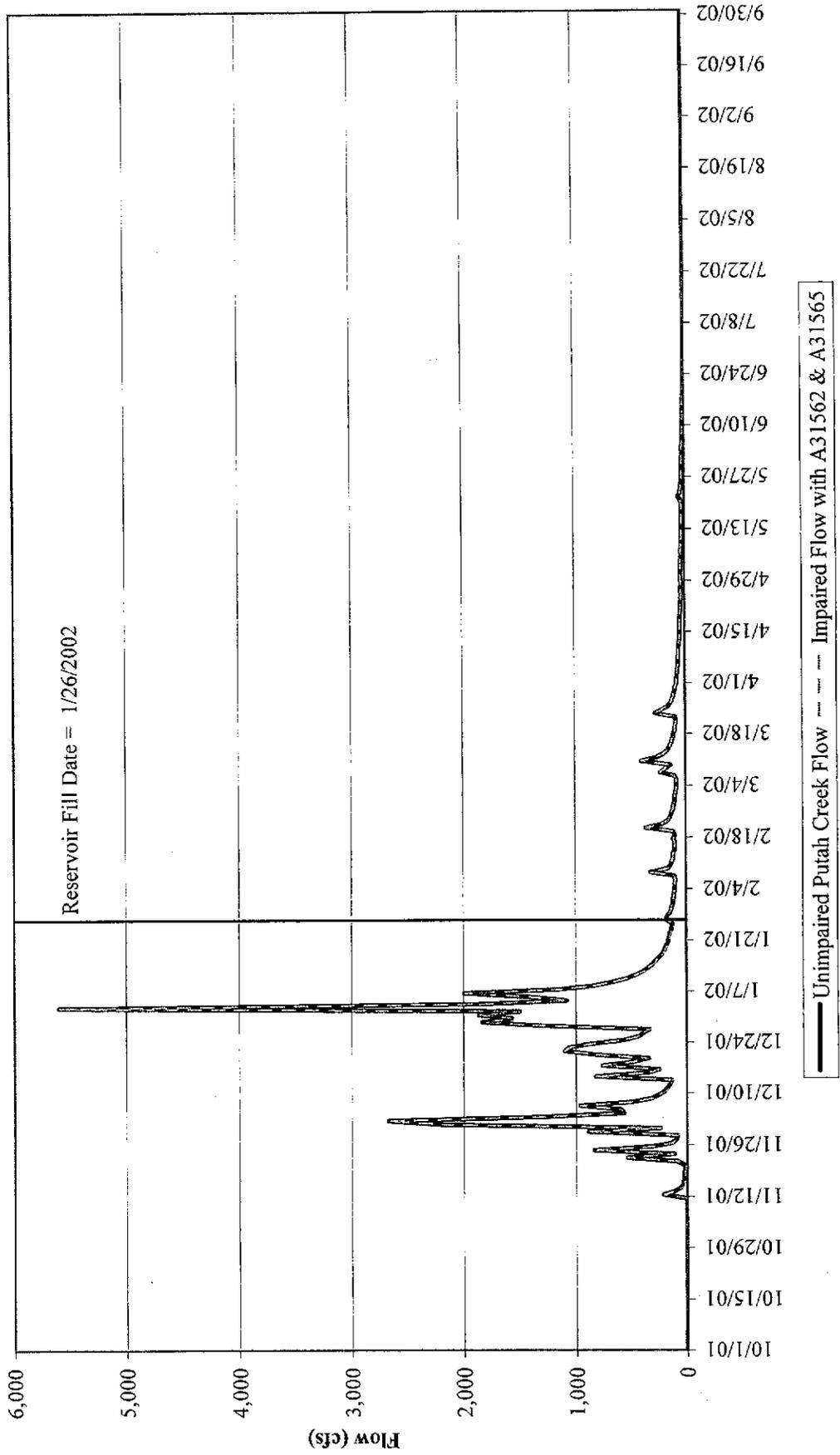
Hidden Valley Lake CSD
Daily Flow at USGS 11453500 Putah Creek Near Guenoc, CA
October 1975 Through September 1976



Hidden Valley Lake CSD
Daily Flow at USGS 11453500 Putah Creek Near Guenoc, CA
October 1999 Through September 2000



**Hidden Valley Lake CSD
Daily Flow at USGS 11453500 Putah Creek Near Guenoc, CA
October 2001 Through September 2002**



**Hidden Valley Lake CSD
Daily Flow at USGS 11453500 Putah Creek Near Guenoc, CA
October 2003 Through September 2004**

