

SCOTT A. MORRIS

June 3, 2005

Marie Davis
Davis 2d
P.O. Box 734
Georgetown, CA 95634

Re: SMUD Rubicon River Diversions

Dear Ms. Davis:

Enclosed for your review are documents regarding the SMUD Rubicon River Diversion that came from the State Water Resources Control Board file. I have marked documents that I felt were of particular interest with a blue Post-it note. If you have any questions please feel free to call me at the number listed below.

Sincerely,

KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD,
A Professional Corporation

A handwritten signature in black ink, appearing to read "Scott A. Morris", written over a horizontal line.

Scott A. Morris

SAM/sp6
Enclosures

STATE WATER RESOURCES
CONTROL BOARD

State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. BOX 2000 SACRAMENTO, CA 95812-2000
901 P ST. SACRAMENTO, CA
(916) 657-1364 FAX: (916) 657-2217



2001 JUL 23 PM 2:41

REPORT OF LICENSEE FOR

1997, 1998, 1999

DIV. OF WATER RIGHTS
OWNER OF RECORD PACIFIC GAS AND ELECTRIC COMPANY

APPLICATION: A012624

PACIFIC GAS AND ELECTRIC COMPANY
C/O MANAGER, HYDRO GENERATION
PO BOX 770000 N11C
SAN FRANCISCO, CA 94177

LICENSE: 011074

TELEPHONE NUMBER:
(415) 973-4603

IF OWNER'S NAME/ADDRESS/PHONE NO. IS WRONG OR MISSING, PLEASE CORRECT.

SOURCE:

UNNAMED STREAM

COUNTY:

EL DORADO

PURPOSE:

DIVERSION/STORAGE SEASON:

ACRES/HP:

RECREATIONAL
POWER

JAN 01 TO DEC 31 / OCT 01 TO JUL 31
JAN 01 TO DEC 31 / OCT 01 TO JUL 31

0 AC
0 AC

QUNT: 1200 CFS 226 900 AC-FT

THIS REPORT IS REQUIRED BY THE TERMS AND CONDITIONS OF YOUR LICENSE

IMPORTANT! EVERY license is subject to the conditions therein. I have currently reviewed my license: YES [X] NO []. I am complying with the conditions of my license: YES [X] NO []. Identify any noncompliance by license term number under "Remarks" on reverse side. This report is important in providing the record of use needed in maintaining your water right. It should be filled out carefully and returned promptly to the above-listed address.

THE PROJECT HAS BEEN ABANDONED, AND I REQUEST REVOCATION OF THE LICENSE: YES [].

COMPLETE FOR DIRECT DIVERSION PROJECTS

1. Have you used the full licensed amount of water each year? YES [] NO [].
2. State the quantity of water used each month in gallons or acre-feet (if not known, check months water was used).

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
1997													
1998													
1999													

COMPLETE FOR STORAGE PROJECTS

3. Did your reservoir spill this year?.....
4. If not, how many feet below spillway vertically was the water level at maximum storage?.....
5. Have you emptied the reservoir?.....
How many feet below spillway vertically was it drawn down at end of season?

	1997	1998	1999

(Continues on reverse side)

1999

DEC 11 2001

USE (COMPLETE FOR ALL PROJECTS)

(see page _____ or year of use)

7. Acreage irrigated.			
8. Stockwatering - number of stock			
9. Domestic - number of persons			
garden area, etc.			
10. Recreational - nature of use			
11. Industrial - nature of use			
12. Municipal - approximate population			
13. Power generation - K.W.			
14. Other -			

15. If no water was used in one or more years, briefly state the reason under "Remarks".

16. If the location of the point of diversion or place of use or type of use(s) has been changed and the permission of this Board has not yet been obtained, please describe nature of change under "Remarks".

PLEASE ANSWER ONLY THOSE QUESTIONS BELOW WHICH ARE APPLICABLE TO YOUR PROJECT.

(Please note that future amendments to claims below will not be accepted)

CONSERVATION OF WATER

17. Describe any water conservation efforts you may have started: _____

18. If you want to claim credit under Section 1011 of the Water Code for beneficial use of water under this license for water not used due a conservation effort, you must identify the amounts of water conservation in the spaces below. The amounts applicable to any claim shall be limited to the amounts shown for the year(s) on this report.

19 _____ (af/mg) 19 _____ (af/mg) 19 _____ (af/mg)

WATER QUALITY AND WASTEWATER RECLAMATION

19. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility or water polluted by waste to a degree which unreasonably affects such water for other beneficial uses: YES () NO ().

20. If credit toward use under this license through substitution of reclaimed water, desalinated water or polluted water in lieu of appropriated water is claimed under Section 1010 of the Water Code, please show amounts of reduced diversion and amounts of reclaimed water used: 19 _____ (af/mg) 19 _____ (af/mg) 19 _____ (af/mg)

CONJUNCTIVE USE OF SURFACE WATER AND GROUNDWATER

21. Are you now using groundwater in lieu of surface water? YES [] NO []

22. If credit toward use under this license through substitution of groundwater in lieu of appropriated water is claimed under Section 1011.5 of the Water code, please show the amounts of groundwater used:

19 _____ (af/mg) 19 _____ (af/mg) 19 _____ (af/mg)

REMARKS: (Identify the item you are explaining. Additional pages may be attached.)

SMUD has prepared the REPORT OF LICENSEE for this license in the past.

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief:

Date: **JUL 19 2001**

Sign Here:

Randal S. Livingston JLR

Licensee (or agent or designee)

STATE WATER RESOURCES
CONTROL BOARD

State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. BOX 2000 SACRAMENTO, CA 95812-2000
901 P ST. SACRAMENTO, CA
(916) 657-1364 FAX: (916) 657-2217



2001 JUL 23 PH 2:47

REPORT OF LICENSEE FOR

1994, 1995, 1996

DIV. OF WATER RIGHTS
OWNER OF RECORDS PACIFIC GAS AND ELECTRIC COMPANY

APPLICATION: A012624

PACIFIC GAS AND ELECTRIC COMPANY
C/O MANAGER, HYDRO GENERATION
PO BOX 770000 N11C
SAN FRANCISCO, CA 94177

LICENSE: 011074

TELEPHONE NUMBER:
(415) 973-4603

IF OWNER'S NAME/ADDRESS/PHONE NO. IS WRONG OR MISSING, PLEASE CORRECT.

SOURCE:

UNNAMED STREAM

COUNTY:

EL DORADO

PURPOSE:

DIVERSION/STORAGE SEASON:

ACRES/HP:

RECREATIONAL
POWER

JAN 01 TO DEC 31 / OCT 01 TO JUL 31 0 AC
JAN 01 TO DEC 31 / OCT 01 TO JUL 31 0 AC

FLOW: 1200 CFS 226 900 AC-FT

THIS REPORT IS REQUIRED BY THE TERMS AND CONDITIONS OF YOUR LICENSE

IMPORTANT! EVERY license is subject to the conditions therein. I have currently reviewed my license: YES ☒ NO ☐. I am complying with the conditions of my license: YES ☒ NO ☐. Identify any noncompliance by license term number under "Remarks" on reverse side. This report is important in providing the record of use needed in maintaining your water right. It should be filled out carefully and returned promptly to the above-listed address.

THE PROJECT HAS BEEN ABANDONED, AND I REQUEST REVOCATION OF THE LICENSE: YES ☐.

COMPLETE FOR DIRECT DIVERSION PROJECTS

1. Have you used the full licensed amount of water each year? YES ☐ NO ☐.
2. State the quantity of water used each month in gallons or acre-feet (if not known, check months water was used).

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
1994													
1995													
1996													

COMPLETE FOR STORAGE PROJECTS

3. Did your reservoir spill this year?.....
4. If not, how many feet below spillway vertically was the water level at maximum storage?.....
5. Have you emptied the reservoir?.....
How many feet below spillway vertically was it drawn down at end of season?

	1994	1995	1996

(Continues on reverse side)

1996

DEC 11 2001

USE (COMPLETE FOR ALL PROJECTS)

(see page _____ / year of use)

7. Acreage irrigated.....			
8. Stockwatering - number of stock			
9. Domestic - number of persons			
garden area, etc.			
10. Recreational - nature of use			
11. Industrial - nature of use			
12. Municipal - approximate population			
13. Power generation - K.W.			
14. Other -			

15. If no water was used in one or more years, briefly state the reason under "Remarks".

16. If the location of the point of diversion or place of use or type of use(s) has been changed and the permission of this Board has not yet been obtained, please describe nature of change under "Remarks".

PLEASE ANSWER ONLY THOSE QUESTIONS BELOW WHICH ARE APPLICABLE TO YOUR PROJECT.

(Please note that future amendments to claims below will not be accepted)

CONSERVATION OF WATER

17. Describe any water conservation efforts you may have started: _____

18. If you want to claim credit under Section 1011 of the Water Code for beneficial use of water under this license for water not used due a conservation effort, you must identify the amounts of water conservation in the spaces below. The amounts applicable to any claim shall be limited to the amounts shown for the year(s) on this report.

19 _____ (af/mg) 19 _____ (af/mg) 19 _____ (af/mg)

WATER QUALITY AND WASTEWATER RECLAMATION

19. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility or water polluted by waste to a degree which unreasonably affects such water for other beneficial uses: YES () NO ().

20. If credit toward use under this license through substitution of reclaimed water, desalinated water or polluted water in lieu of appropriated water is claimed under Section 1010 of the Water Code, please show amounts of reduced diversion and amounts of reclaimed water used: 19 _____ (af/mg) 19 _____ (af/mg) 19 _____ (af/mg)

CONJUNCTIVE USE OF SURFACE WATER AND GROUNDWATER

21. Are you now using groundwater in lieu of surface water? YES [] NO []

22. If credit toward use under this license through substitution of groundwater in lieu of appropriated water is claimed under Section 1011.5 of the Water code, please show the amounts of groundwater used:

19 _____ (af/mg) 19 _____ (af/mg) 19 _____ (af/mg)

REMARKS: (Identify the item you are explaining. Additional pages may be attached.)

SMUD has prepared the REPORT OF LICENSEE for this license in the past.

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief:

Date: JUL 19 2001 Sign Here: _____

Randal S. Livingston

Licensee (or agent or designee)

JRR

REPORT OF LICENSEE FOR 1992, 1993, 1994

OWNER OF RECORD:

PACIFIC GAS AND ELECTRIC COMPANY
C/O MANAGER, HYDRO GENERATION
PO BOX 770000 N11C
SAN FRANCISCO, CA 94177

APPLICATION: A012624

LICENSE: 011074

TELEPHONE NUMBER:
(415) 973-4603

IF OWNER'S NAME/ADDRESS/PHONE NO. IS WRONG OR MISSING, PLEASE CORRECT.

SOURCE:

UNNAMED STREAM

COUNTY:

EL DORADO

PURPOSE:

RECREATIONAL
POWER

DIVERSION/STORAGE SEASON:

JAN 01 TO DEC 31 / OCT 01 TO JUL 31
JAN 01 TO DEC 31 / OCT 01 TO JUL 31

ACRES/HP:

0 AC
0 AC

AMOUNT:

1200 CFS

226900 AC-FT

THIS REPORT IS REQUIRED BY THE TERMS AND CONDITIONS OF YOUR LICENSE.

IMPORTANT! EVERY license is subject to the conditions therein. I have currently reviewed my license: YES (X) NO ().
I am complying with the conditions of my license: YES (X) NO (). Identify any noncompliance by license term number
under "Remarks" on reverse side. This report is important in providing the record of use needed in maintaining your
water right. It should be filled out carefully and returned promptly to the above-listed address.

THE PROJECT HAS BEEN ABANDONED, AND I REQUEST REVOCATION OF THE LICENSE: YES ()

COMPLETE FOR DIRECT DIVERSION PROJECTS

1. Have you used the full licensed amount of water each year? YES () NO ()
2. State the quantity of water used each month in —gallons or acre-feet (if not known, check months water was used).

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total Annual
1992													
1993													
1994													

COMPLETE FOR STORAGE PROJECTS

3. Did your reservoir spill this year?
4. Maximum storage (in acre-feet)
5. Have you emptied the reservoir?
6. Minimum storage (in acre-feet)

	1992	1993	1994
3. Did your reservoir spill this year?			
4. Maximum storage (in acre-feet)			
5. Have you emptied the reservoir?			
6. Minimum storage (in acre-feet)			

OCT 12 2000

USE (COMPLETE FOR ALL PROJECTS)

(see page 1 for year of use)

7. Acreage irrigated.....			
8. Stockwatering - number of stock			
9. Domestic - number of persons			
garden area, etc.			
10. Recreational - nature of use			
11. Industrial - nature of use			
12. Municipal - approximate population			
13. Power generation - K.W.			
14. Other -			

15. If no water was used in one or more years, briefly state the reason under "Remarks".
16. If the location of the point of diversion or place of use or type of use(s) has been changed and the permission of this Board has not yet been obtained, please describe nature of change under "Remarks".

PLEASE ANSWER ONLY THOSE QUESTIONS BELOW WHICH ARE APPLICABLE TO YOUR PROJECT.

CONSERVATION OF WATER

17. Describe any water conservation efforts you may have started: _____
18. If credit toward beneficial use of water under this license for water not used due to a conservation effort is claimed under Water Code Section 1011, please show the amounts of water conserved (acre feet or mg.):
- 19 _____ (af/mg) 19 _____ (af/mg) 19 _____ (af/mg)

WATER QUALITY AND WASTEWATER RECLAMATION

19. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility or water polluted by waste to a degree which unreasonably affects such water for other beneficial uses: YES () NO ().
- If credit toward use under this water right through substitution of reclaimed water, desalinated water or polluted water in lieu of appropriated water is claimed under Section 1010 of the Water Code, please show amounts of reduced diversion and amounts of reclaimed water used: 19 _____ (af/mg) 19 _____ (af/mg) 19 _____ (af/mg)

REMARKS: (Identify the item you are explaining. Additional pages may be attached.)

SMUD has prepared the REPORT OF LICENSEE for this license in the past.

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief:

Date: **SEP 26 1996**

Sign Here:

Jeffrey D. Butler

Licensee (or agent or designee)



SMUD

SACRAMENTO MUNICIPAL UTILITY DISTRICT □ P. O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

October 4, 2002
DPG 02-133

Mr. Edward Anton, Chief
Division of Water Rights
P.O. Box 2000
Sacramento, CA 95812-2000

Dear Mr. Anton:

**SUBJECT: 2001 WATER YEAR ANNUAL STREAMFLOW RELEASE
COMPLIANCE REPORT – UPPER AMERICAN RIVER PROJECT**

In accordance with our compliance plan dated June 1986, enclosed are the data for the 2001 water year. No deficient releases occurred during this water year. The release schedule is based on the DWR's forecasted inflow to Folsom Reservoir. The Mar 1, Apr 1 and Jun 1 forecasts were greater than 1.00 million acft and less than 1.499 million acft. The appropriate release schedule was applied based on DWR's forecasts.

Sincerely,

Randy M. Jensen, Hydrographer
Department of Power Generation
Sacramento Municipal Utility District
riensen@smud.org

Enclosures

2001 WATER YEAR

RUBICON DAM (RUBICON RIVER BELOW RUBICON DAM)

- Minimum release requirements:

October through September

6 cfs or inflow,
whichever is less

- Inflow is determined by periodic stage observations at a rated staff gage. Discharge is measured by orifice plates in the release conduits.
- The discharge record indicates no apparent violations during the water year.
- There were no modifications to measuring devices during the reporting period.

SACRAMENTO RIVER BASIN

11427960 RUBICON RIVER BELOW RUBICON DAM, NEAR MEEKS BAY, CA

LOCATION.—Lat 38°59'20", long 120°13'20", in NW 1/4 SW 1/4 sec.9, T.13 N., R.16 E., El Dorado County, Hydrologic Unit 18020128, Eldorado National Forest, at outlet structure, on diversion dam on Rubicon River, 3.3 mi upstream from Rubicon Springs, and 6.2 mi southwest of Meeks Bay.

PERIOD OF RECORD.—October 1991 to current year (low-flow records only). Unpublished records for water years 1964–91 available in files of the U.S. Geological Survey.

GAGE.—Differential-pressure gage and orifice control in outlet pipes. Auxiliary nonrecording gage 1,300 ft downstream at different datum. Datum of gage is 6,520 ft above sea level from topographic map. Prior to Sept. 4, 1991, nonrecording gage at site 1,300 ft downstream at different datum.

REMARKS.—Records not computed above 10 ft³/s. Flow regulated by Rubicon Reservoir. Flow over the spillway bypasses this station. Most of the water is diverted through Rubicon–Rockbound Tunnel (station 11427940) to Rockbound Lake, which flows into Buck Island Lake. Water is then diverted via Buck–Loon Tunnel (station 11428300) to Loon Lake (station 11429350) for power development. See schematic diagram of Middle Fork American and Rubicon River Basins.

COOPERATION.—Records were collected by Sacramento Municipal Utility District, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	6.4	6.3	6.2	6.2	6.1	7.1	7.9	6.8	6.4	.75	.23
2	1.4	6.4	6.3	6.2	6.1	6.1	7.1	7.8	6.9	6.4	.75	.22
3	1.4	6.4	6.3	6.2	6.3	6.3	6.9	7.3	6.8	6.4	.72	.21
4	1.3	6.4	6.4	6.2	6.3	6.1	6.7	7.1	6.6	6.4	.71	.23
5	1.3	6.4	6.3	6.2	6.3	6.2	6.6	7.4	6.5	6.4	.71	.23
6	1.3	6.4	6.3	6.2	6.3	6.2	6.4	7.6	6.1	6.4	.70	.24
7	1.3	6.4	6.3	6.1	6.3	6.1	6.4	7.7	5.7	6.3	.69	.22
8	1.3	6.4	6.3	6.1	6.3	6.3	6.4	8.0	6.0	6.3	.68	.24
9	1.3	6.4	6.3	6.2	6.2	6.3	6.4	8.1	6.1	6.3	.50	.24
10	1.3	6.4	6.3	6.1	6.2	6.3	6.4	8.1	6.3	6.1	.30	.24
11	1.3	6.4	6.3	6.1	6.2	6.3	6.4	8.1	6.3	4.8	.29	.24
12	1.3	6.4	6.3	6.2	6.2	6.1	6.4	8.1	6.3	4.8	.28	.26
13	1.3	6.4	6.3	6.2	6.3	6.3	6.4	8.0	6.4	4.6	.29	.27
14	1.3	6.4	6.3	6.2	6.2	6.3	6.4	7.9	6.4	4.6	.28	.27
15	1.3	6.4	6.3	6.2	6.3	6.3	6.4	8.0	6.5	4.6	.28	.27
16	1.3	6.4	6.3	6.1	6.3	6.3	6.7	8.4	6.4	4.6	.27	.25
17	1.3	6.4	6.3	6.1	6.2	6.3	6.9	8.0	6.5	4.6	.26	.24
18	1.3	6.4	6.3	6.1	6.1	6.4	7.0	7.7	6.5	4.6	.25	.23
19	1.3	6.3	6.3	6.1	6.1	6.6	6.9	7.6	6.5	4.5	.28	.22
20	1.2	6.3	6.4	6.1	6.2	6.7	6.7	7.6	6.5	4.5	.30	.21
21	1.2	6.3	6.4	6.1	6.2	6.8	6.6	7.5	6.5	4.5	.30	.20
22	1.2	6.3	6.4	6.1	6.2	6.9	6.5	7.6	6.5	4.5	.32	.20
23	1.2	6.3	6.4	6.2	6.2	6.9	6.7	7.6	6.5	4.5	.31	.19
24	1.2	6.2	6.4	6.2	6.2	6.9	7.0	7.4	6.6	4.4	.30	.20
25	1.1	6.2	6.3	6.2	6.2	7.1	7.4	7.4	6.6	4.4	.30	.18
26	1.1	6.2	6.2	6.2	6.3	6.9	7.6	7.2	6.6	3.3	.28	.14
27	4.5	6.3	6.2	6.2	6.3	6.8	7.8	7.1	6.6	.76	.27	.14
28	6.7	6.3	6.2	6.3	6.3	6.9	7.6	7.1	6.6	.75	.26	.15
29	6.6	6.3	6.2	6.3	---	7.2	7.3	7.0	6.6	.76	.25	.16
30	6.5	6.3	6.2	6.2	---	7.1	7.6	6.8	6.5	.77	.25	.16
31	6.5	---	6.2	6.2	---	7.1	---	6.8	---	.76	.25	---
TOTAL	64.0	190.5	195.3	191.3	174.5	202.2	204.7	235.9	193.7	139.00	12.38	6.48
MEAN	2.06	6.35	6.30	6.17	6.23	6.52	6.82	7.61	6.46	4.48	.40	.22
MAX	6.7	6.4	6.4	6.3	6.3	7.2	7.8	8.4	6.9	6.4	.75	.27
MIN	1.1	6.2	6.2	6.1	6.1	6.1	6.4	6.8	5.7	.75	.25	.14
AC-FT	127	378	387	379	346	401	406	468	384	276	25	13

CAL YR 2000 TOTAL 2224.45 MEAN 6.08 MAX 8.6 MIN .95 AC-FT 4410
WTR YR 2001 TOTAL 1809.96 MEAN 4.96 MAX 8.4 MIN .14 AC-FT 3590

2001 WATER YEAR

BUCK ISLAND DAM (LITTLE RUBICON RIVER BELOW BUCK ISLAND DAM)

- Minimum release requirements:

October through September

1 cfs

- Discharge is measured by using recorded stage readings of flow over a 90 degree V-notch weir located immediately below Buck Island Dam.
- The discharge record indicates no apparent violations during the water year.
- No modifications were made to the measuring device during the period.

11428400 LITTLE RUBICON RIVER, BELOW BUCK ISLAND DAM, NEAR MEEKS BAY, CA

LOCATION.—Lat 39°00'18", long 120°15'19", in SW 1/4 NW 1/4 sec. 6, T. 13 N., R. 16 E., El Dorado County, Hydrologic Unit 18020128, Eldorado National Forest, at outlet structure on Buck Island Diversion Dam, and 7.4 mi southwest of Meeks Bay.

DRAINAGE AREA.—6.00 mi².

PERIOD OF RECORD.—October 1990 to current year (low-flow records only). Unpublished records for water years 1964–90 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder and V-notch sharp-crested weir. Elevation of gage is 6,420 ft above sea level, from topographic map. Aug. 14, 1964, to Oct. 4, 1973, nonrecording gage at site 60 ft downstream at different datum. Nonrecording gage at present site Oct. 4, 1973, to Aug. 26, 1986, at different datum and Aug. 27, 1986, to Sept. 30, 1990, at same datum.

REMARKS.—No records computed above 2 ft³/s. Flow regulated by Buck Island Reservoir. Flow over the spillway bypasses this station. Most of the water is diverted at Buck Island Reservoir via Buck-Loon Tunnel (station 11428300) to Loon Lake (station 11429350). Buck Island Lake receives water from Rubicon River via Rubicon-Rockbound Tunnel (station 11427940). See schematic diagram of Middle Fork American and Rubicon River Basins.

COOPERATION.—Records were collected by Sacramento Municipal Utility District, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.4	1.3	1.3	1.3	1.3	1.5	1.3	1.1	1.2	1.3	1.2
2	1.3	1.3	1.3	1.3	1.3	1.3	1.5	1.4	1.1	1.2	1.3	1.2
3	1.3	1.3	1.3	1.3	1.3	1.3	1.5	1.3	1.0	1.3	1.3	1.2
4	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.2	1.1	1.3	1.3	1.2
5	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.2	1.2	1.3	1.2	1.2
6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.3	1.3	1.2	1.3
7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.3	1.2	1.3
8	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.3	1.2	1.3
9	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.5	1.4	1.2	1.3
10	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.5	1.4	1.3	1.3
11	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.5	1.3	1.3	1.3
12	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.6	1.3	1.2	1.3
13	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.6	1.3	1.2	1.3
14	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.6	1.2	1.2	1.3
15	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.6	1.2	1.2	1.3
16	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.6	1.2	1.3	1.3
17	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.6	1.1	1.3	1.3
18	1.3	1.3	1.3	1.3	1.3	1.3	1.5	1.3	1.6	1.3	1.3	1.3
19	1.3	1.3	1.3	1.3	1.3	1.4	1.5	1.3	1.6	1.3	1.2	1.3
20	1.3	1.3	1.3	1.3	1.3	1.4	1.4	e1.3	1.6	1.3	1.2	1.2
21	1.3	1.3	1.3	1.3	1.3	1.5	1.4	e1.3	1.5	1.3	1.2	1.2
22	1.3	1.3	1.3	1.3	1.3	1.5	1.4	1.3	1.2	1.2	1.2	1.2
23	1.3	1.3	1.3	1.3	1.3	1.5	1.4	1.3	1.3	1.2	1.3	1.2
24	1.3	1.3	1.3	1.3	1.3	1.5	1.4	1.3	1.2	1.2	1.3	1.2
25	1.3	1.3	1.3	1.3	1.3	1.5	1.5	1.2	1.2	1.2	1.3	1.2
26	1.3	1.3	1.3	1.3	1.3	1.5	1.6	1.2	1.2	1.2	1.2	1.2
27	1.4	1.3	1.3	1.3	1.3	1.5	1.7	1.1	1.2	1.3	1.2	1.3
28	1.4	1.3	1.3	1.3	1.3	1.5	1.6	1.1	1.2	1.3	1.2	1.3
29	1.4	1.3	1.3	1.3	---	1.6	1.6	1.1	1.2	1.3	1.2	1.3
30	1.4	1.3	1.3	1.3	---	1.5	1.4	1.1	1.2	1.3	1.2	1.3
31	1.4	---	1.3	1.3	---	1.5	---	1.1	---	1.3	1.2	---
TOTAL	40.8	39.1	40.3	40.3	36.4	42.8	42.5	39.3	40.9	39.3	38.4	37.8
MEAN	1.32	1.30	1.30	1.30	1.30	1.38	1.42	1.27	1.36	1.27	1.24	1.26
MAX	1.4	1.4	1.3	1.3	1.3	1.6	1.7	1.4	1.6	1.4	1.3	1.3
MIN	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.1	1.0	1.1	1.2	1.2
AC-FT	81	78	80	80	72	85	84	78	81	78	76	75

e Estimated.

2001 WATER YEAR

LOON LAKE DAM (GERLE CREEK BELOW LOON LAKE)

- Minimum release requirements:

October through September

8 cfs

- Discharge is measured by applying recorded stage data from the gaging station, located about 1/3 mile below the Dam, to the existing stage-discharge relationship.
- The discharge record indicates no apparent violations during the water year.
- No modifications were made to the measuring device during the reporting period.

SACRAMENTO RIVER BASIN

11429500 GERLE CREEK BELOW LOON LAKE DAM, NEAR MEEKS BAY, CA

LOCATION.—Lat 39°00'20", long 120°18'52", in NE 1/4 NE 1/4 sec.5, T.13 N., R.15 E., El Dorado County, Hydrologic Unit 18020128, Eldorado National Forest, on right bank, 0.3 mi downstream from Loon Lake Dam, and 11 mi southwest of Meeks Bay.

DRAINAGE AREA.—8.01 mi².

PERIOD OF RECORD.—July 1910 to April 1914 (fragmentary), August 1962 to current year. Prior to August 1962, published as "near Rubicon Springs."

GAGE.—Water-stage recorder and V-notch sharp-crested weir. Elevation of gage is 6,250 ft above sea level, from topographic map. Prior to August 1962, nonrecording gage at site 1,400 ft upstream at different datum.

REMARKS.—Beginning in 1884, flow regulated by Loon Lake (station 11429350). Original dam was dismantled during September and October 1962 to permit construction of a new earthfill dam, which was completed Dec. 27, 1963. Loon Lake receives water from Rubicon River via Buck-Loon Tunnel (station 11428300). Since August 1971, most of the water is diverted past the station via Loon Lake Powerplant (station 11429340) and returns to Gerle Creek at Gerle Creek Dam. See schematic diagram of Middle Fork American and Rubicon River Basins.

COOPERATION.—Records were collected by Sacramento Municipal Utility District, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,240 ft³/s, unregulated, Feb. 1, 1963, gage height, 12.65 ft, from rating curve extended above 970 ft³/s, on basis of slope-area measurement of peak flow; no flow Oct. 15, 1913. Maximum discharge since construction of Loon Lake Dam in 1963, 1,050 ft³/s, June 5, 1969, gage height, 9.03 ft, minimum daily, 3.6 ft³/s, Sept. 27, 28, Nov. 3, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	8.7	8.9	9.7	11	9.8	12	12	8.9	9.2	9.5	11
2	8.6	8.9	8.9	9.8	11	10	11	8.6	8.9	9.2	9.3	11
3	8.6	8.6	9.0	10	9.6	10	10	8.8	8.9	9.2	9.4	11
4	8.6	8.6	9.4	10	9.9	11	10	8.9	8.9	9.2	9.3	11
5	8.6	8.6	9.0	10	9.3	11	11	8.9	8.9	9.2	9.4	11
6	8.6	8.6	8.9	10	9.2	11	10	9.0	8.9	9.2	9.2	11
7	8.6	8.6	9.6	10	9.2	12	10	9.1	8.9	9.2	9.2	11
8	8.6	8.6	9.8	10	8.9	11	10	9.1	8.9	9.2	9.2	11
9	8.7	8.8	9.2	10	9.0	10	10	9.0	8.9	9.2	9.2	11
10	8.8	8.6	9.5	11	9.2	9.6	11	8.9	8.9	9.2	9.2	11
11	8.6	8.9	8.3	11	9.2	9.5	10	8.9	8.9	9.2	9.2	11
12	8.5	8.8	8.5	11	9.2	9.8	10	8.9	8.8	9.2	9.2	11
13	8.3	8.7	9.2	11	9.2	11	11	8.9	8.7	9.4	9.2	11
14	8.3	9.0	9.2	11	9.2	11	11	8.9	8.6	9.5	11	11
15	8.3	9.1	9.2	12	9.2	9.9	12	9.3	8.6	9.5	9.5	11
16	8.3	9.0	9.2	11	9.2	11	13	8.9	8.6	9.5	9.5	10
17	8.4	9.0	9.1	11	9.2	12	13	8.9	8.6	9.5	9.2	10
18	8.6	9.0	8.9	12	9.2	11	13	8.9	8.7	9.5	9.2	10
19	8.6	9.0	8.9	12	9.2	12	11	8.9	8.6	9.5	9.2	10
20	8.6	9.0	8.9	12	9.2	12	11	8.9	8.6	9.5	9.8	10
21	8.6	9.2	9.0	12	9.2	12	11	8.9	8.6	9.5	11	10
22	8.6	9.2	9.2	12	9.4	12	12	8.9	8.6	9.5	11	10
23	8.6	9.2	9.2	9.6	9.5	12	13	8.9	8.6	9.5	11	10
24	8.6	9.4	9.2	10	9.5	13	14	8.9	8.6	9.5	11	10
25	11	9.3	9.1	10	9.5	16	15	8.9	8.6	9.5	11	11
26	8.8	9.3	9.1	10	9.5	11	15	8.9	8.6	9.5	11	11
27	8.6	9.2	9.2	11	9.5	12	14	8.9	8.6	9.5	11	10
28	9.4	8.7	9.2	11	9.6	13	13	8.9	8.6	9.5	11	10
29	9.1	8.8	9.3	11	---	12	13	8.9	8.6	9.5	11	10
30	8.8	9.1	9.5	11	---	12	14	8.9	8.6	9.5	11	10
31	8.6	---	9.5	11	---	13	---	8.9	---	9.5	11	---
TOTAL	269.5	267.5	283.1	333.1	264.0	352.6	354	279.6	261.7	290.8	308.9	317
MEAN	8.69	8.92	9.13	10.7	9.43	11.4	11.8	9.02	8.72	9.38	9.96	10.6
MAX	11	9.4	9.8	12	11	16	15	12	8.9	9.5	11	11
MIN	8.3	8.6	8.3	9.6	8.9	9.5	10	8.6	8.6	9.2	9.2	10
AC-FT	535	531	562	661	524	699	702	555	519	577	613	629
a	5260	344	7610	66	0	0	0	769	240	419	2880	1460

a Diversion, in acre-feet, to Loon Lake Powerplant (station 11429340), provided by Sacramento Municipal Utility District.

2001 WATER YEAR

ROBBS AND GERLE DAMS (S.F. RUBICON RIVER BELOW GERLE CREEK)

- Minimum release requirements:

October	10 cfs
November through September	5 cfs

- Discharge is measured by applying the recorded stage data from the gaging station, located about 600 feet below the confluence of Gerle Creek, to the existing stage-discharge relationship.
- The discharge record indicates no apparent violations during the water year.
- No modifications were made to the measuring device during the reporting period.

SACRAMENTO RIVER BASIN

11430000 SOUTH FORK RUBICON RIVER BELOW GERLE CREEK, NEAR GEORGETOWN, CA

LOCATION.—Lat 38°57'17", long 120°24'02", in SW 1/4 SW 1/4 sec.22, T.13 N., R.14 E., El Dorado County, Hydrologic Unit 18020128, Eldorado National Forest, on left bank, 600 ft downstream from Gerle Creek, 1.2 mi downstream from South Fork Rubicon River Diversion Dam, and 18 mi east of Georgetown.

DRAINAGE AREA.—47.6 mi².

PERIOD OF RECORD.—February 1910 to June 1914 (published as "Little South Fork Rubicon River below Gerle Creek, near Quintette"), August 1961 to current year.

REVISED RECORDS.—WSP 1931: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 4,970 ft above sea level, from topographic map. Feb. 1, 1910, to June 21, 1914, nonrecording gage at site about 700 ft downstream at different datum.

REMARKS.—Beginning in 1884, flow regulated by Loon Lake (station 11429350). Original dam was dismantled during September and October 1962 to permit construction of a new earthfill dam completed Dec. 27, 1963. Loon Lake receives water from Rubicon River via Rubicon-Rockbound Tunnel (station 11427940) to Buck Island Lake and from Buck Island Lake to Loon Lake via Buck-Loon Tunnel (station 11428300). Prior to Dec. 3, 1961, water was diverted out of the basin in Georgetown Divide Ditch. Water is diverted 1.2 mi upstream at South Fork Rubicon River Diversion Dam to Robbs Peak Powerplant (station 11429300). Diversion of up to 1,440 ft³/s to Silver Creek Basin began in October 1962. See schematic diagram of Middle Fork American and Rubicon River Basins.

COOPERATION.—Records were collected by Sacramento Municipal Utility District, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 12,600 ft³/s, Jan. 1, 1997, gage height, 12.65 ft, from rating curve extended above 2,500 ft³/s, on basis of slope-area measurement of peak flow; minimum, 0.8 ft³/s, Sept. 21, 1962.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	11	7.3	6.7	6.6	7.6	11	9.9	7.5	9.1	8.1	8.0
2	12	7.0	7.0	6.7	6.8	7.8	10	6.8	8.2	8.8	8.1	7.9
3	12	7.0	7.1	6.9	7.3	7.4	9.3	5.5	9.1	7.5	8.1	8.0
4	12	6.9	6.6	6.9	7.0	9.1	8.7	5.7	8.6	6.4	8.1	8.1
5	12	6.8	6.9	7.1	7.0	9.8	8.6	5.8	7.9	6.3	8.2	8.1
6	12	6.5	7.0	7.5	7.2	9.9	8.8	5.7	8.4	6.4	8.3	8.1
7	12	6.4	7.2	7.2	6.9	10	8.6	5.4	9.1	6.3	8.0	8.1
8	12	6.5	6.9	7.3	7.1	10	8.0	5.7	9.4	6.8	7.9	7.9
9	12	6.7	7.2	7.4	7.2	10	8.0	5.6	8.8	6.8	7.7	7.4
10	12	6.8	7.8	7.5	7.1	9.8	8.2	5.6	8.5	6.5	7.7	7.4
11	12	6.6	7.5	7.8	7.1	9.9	8.5	5.3	9.0	6.7	7.8	7.4
12	12	6.6	7.5	7.4	6.9	10	8.6	7.4	8.5	6.9	7.7	7.4
13	12	6.6	7.4	7.4	6.9	10	9.0	6.9	6.8	7.1	6.7	7.4
14	11	6.5	8.5	7.4	7.2	11	9.5	6.8	5.3	7.1	6.3	7.4
15	12	6.4	9.4	7.4	7.0	11	9.9	7.1	5.1	7.3	6.3	7.1
16	12	6.4	7.7	7.1	7.1	10	10	7.1	5.3	7.4	6.2	6.9
17	12	6.4	7.7	6.6	6.8	11	10	6.9	5.5	7.5	5.6	7.0
18	12	6.4	7.3	6.8	7.2	11	11	6.7	5.9	7.2	5.7	7.0
19	12	6.5	7.2	7.1	7.5	10	14	6.7	6.2	7.3	5.5	7.0
20	12	6.6	7.2	6.4	7.9	11	12	6.4	6.5	7.4	5.6	7.1
21	12	6.6	7.3	6.4	8.1	11	12	6.3	7.1	7.4	5.5	7.1
22	12	6.6	7.6	6.5	8.5	12	12	6.3	9.9	7.4	5.5	7.2
23	12	6.4	7.5	6.8	7.7	11	12	6.8	6.3	7.4	5.6	7.2
24	12	6.5	7.4	7.4	7.5	12	12	7.1	7.2	7.6	5.6	7.3
25	12	6.5	7.5	6.8	7.7	15	12	8.8	7.5	7.8	5.6	8.6
26	12	6.6	7.0	6.8	7.6	13	12	10	7.7	7.8	5.7	7.5
27	12	6.9	6.9	6.6	7.8	12	11	9.5	8.3	7.8	6.0	7.1
28	13	7.1	6.9	6.6	7.5	12	11	10	8.6	7.8	9.0	7.7
29	14	8.8	6.9	6.9	---	12	10	9.1	8.8	7.9	6.5	8.0
30	13	7.7	7.1	7.0	---	11	10	8.7	8.9	8.0	5.8	8.1
31	13	---	7.3	6.6	---	11	---	7.8	---	8.1	7.0	---
TOTAL	376	206.3	227.8	217.0	204.2	328.3	305.7	219.4	229.9	227.8	211.4	226.5
MEAN	12.1	6.88	7.35	7.00	7.29	10.6	10.2	7.08	7.66	7.35	6.82	7.55
MAX	14	11	9.4	7.8	8.5	15	14	10	9.9	9.1	9.0	8.6
MIN	11	6.4	6.6	6.4	6.6	7.4	8.0	5.3	5.1	6.3	5.5	6.9
AC-FT	746	409	452	430	405	651	606	435	456	452	419	449
a	5410	1060	8700	1110	1470	10420	13180	9850	841	546	3090	1490

a Diversion, in acre-feet, to Robbs Peak Powerplant (station 11429300), provided by Sacramento Municipal Utility District.

2001 WATER YEAR

ICE HOUSE (S.F. SILVER CREEK BELOW ICE HOUSE DAM)

- Minimum release requirements:

October	12 cfs
November 1 through 15	10 cfs
November 16 through December	4 cfs
January through April	3 cfs
May through September	5 cfs

- Discharge is measured by applying the recorded stage data from the gaging-station, located about 1/4 mile below the Dam, to the existing stage-discharge relationship.
- The discharge record indicates no apparent violations during the water year.
- No modifications were made to the measuring device during the reporting period.

11441500 SOUTH FORK SILVER CREEK NEAR ICE HOUSE, CA

LOCATION.—Lat 38°49'08", long 120°21'51", in NW 1/4 NW 1/4 sec.12, T.11 N., R.14 E., El Dorado County, Hydrologic Unit 18020129, Eldorado National Forest, on right bank, 300 ft upstream from Peavine Creek, 0.4 mi downstream from Ice House Dam, and 4.8 mi northwest of Kyburz.

DRAINAGE AREA.—27.5 mi².

PERIOD OF RECORD.—October 1924 to current year.

REVISED RECORDS.—WSP 1395: 1928, 1938. WSP 1635: Drainage area at former site.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 5,290 ft above sea level, from topographic map. Prior to Oct. 1, 1959, at site 0.3 mi upstream at different datum.

REMARKS.—Flow regulated by Ice House Reservoir (station 11441100) beginning in December 1959. Diversion to Jones Fork Powerplant (station 11440900) starting April 1985 bypasses station and returns to Silver Creek at Union Valley Reservoir (station 11441001). See schematic diagram of South Fork American River Basin.

COOPERATION.—Records were collected by Sacramento Municipal Utility District, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge prior to construction of Ice House Dam in 1959, 3,940 ft³/s, Dec. 23, 1955, gage height, 6.71 ft, site and datum then in use, from rating curve extended above 540 ft³/s, on basis of slope-area measurement at gage height 6.69 ft; no flow Oct. 31 to Nov. 9, 1958. Maximum discharge since construction of the dam, 7,530 ft³/s, May 16, 1996, gage height, 7.64 ft, from rating curve extended above 730 ft³/s, on basis of computation of flow over dam at gage height 5.66 ft; minimum daily, 1.2 ft³/s, Mar. 17–19, 1960.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	12	5.1	4.8	4.4	4.4	4.9	5.8	6.2	5.9	5.9	5.9
2	14	11	5.1	4.3	4.4	4.4	4.9	5.9	6.5	5.9	5.9	5.9
3	14	11	5.1	4.2	4.5	4.4	4.9	5.9	6.5	5.9	5.8	5.9
4	14	11	5.1	4.0	4.4	4.5	4.9	5.9	6.7	5.9	5.8	6.2
5	14	11	5.1	4.0	4.4	4.7	5.0	5.9	6.5	5.9	5.9	6.2
6	14	11	5.0	4.0	4.3	4.8	5.2	5.9	6.3	5.9	5.8	6.2
7	14	11	4.9	3.9	4.3	4.8	5.3	5.9	6.2	5.9	5.6	6.2
8	14	11	4.9	3.9	4.2	4.9	5.1	5.9	6.2	5.9	5.8	6.1
9	14	11	5.0	3.9	4.3	4.8	4.9	5.9	6.2	5.9	5.9	5.9
10	14	11	4.9	3.9	4.4	4.7	4.9	5.9	6.2	5.9	5.9	6.0
11	14	11	4.9	4.0	4.4	4.6	4.9	6.0	6.2	5.9	5.9	6.5
12	14	11	5.2	4.0	4.4	4.7	4.9	6.0	6.2	6.0	5.9	6.5
13	14	11	4.9	4.0	4.2	4.9	5.0	6.0	6.2	6.1	5.9	6.5
14	13	11	4.9	4.0	4.2	5.0	5.2	6.0	6.2	5.9	10	6.3
15	13	11	5.2	4.0	4.3	4.9	5.5	6.1	6.2	5.9	6.1	5.8
16	13	8.3	4.9	4.0	4.3	4.8	5.4	6.2	6.2	6.0	5.9	5.6
17	13	4.5	4.9	3.9	4.3	4.8	5.0	6.2	6.5	5.9	5.9	5.6
18	13	4.9	4.9	4.0	4.3	4.9	5.0	6.2	6.2	6.1	6.0	5.6
19	13	4.9	4.9	4.0	4.4	5.0	5.8	6.2	6.2	6.1	6.2	6.2
20	13	4.9	4.9	4.0	4.4	5.2	5.4	6.2	6.2	5.9	6.1	6.8
21	13	4.9	4.9	4.0	4.3	5.3	5.6	6.2	6.2	6.4	5.9	6.9
22	13	4.9	4.9	4.0	4.3	5.3	5.8	6.2	6.2	6.2	5.9	7.0
23	13	4.9	4.9	4.1	4.4	5.4	5.9	6.2	6.2	6.2	6.1	7.1
24	13	4.9	4.9	4.4	4.4	5.5	5.2	6.2	6.2	6.2	6.2	7.1
25	15	4.9	5.0	4.4	4.4	5.6	5.0	6.2	6.2	6.2	6.1	7.2
26	13	5.0	5.1	4.4	4.4	5.1	4.9	6.2	6.2	6.2	5.9	7.1
27	13	4.9	5.1	4.4	4.4	5.0	4.9	6.2	6.2	6.2	5.9	7.2
28	13	4.9	5.1	4.4	4.4	4.9	5.0	6.2	6.2	6.2	5.9	7.4
29	13	5.3	5.1	4.4	---	4.9	5.1	6.2	6.2	6.2	5.9	7.4
30	13	5.1	5.2	4.4	---	4.9	5.3	6.2	6.1	6.0	5.9	7.4
31	13	---	5.1	4.4	---	4.9	---	6.2	---	5.9	5.9	---
TOTAL	419	243.2	155.1	128.1	121.8	152.0	154.8	188.2	187.7	186.7	187.8	193.7
MEAN	13.5	8.11	5.00	4.13	4.35	4.90	5.16	6.07	6.26	6.02	6.06	6.46
MAX	15	12	5.2	4.8	4.5	5.6	5.9	6.2	6.7	6.4	10	7.4
MIN	13	4.5	4.9	3.9	4.2	4.4	4.9	5.8	6.1	5.9	5.6	5.6
AC-FT	831	482	308	254	242	301	307	373	372	370	373	384
a	4090	1260	3800	1330	571	421	31	279	1260	1760	1010	577

a Diversion, in acre-feet, to Jones Fork Powerplant (station 11440900), provided by Sacramento Municipal Utility District.

2001 WATER YEAR

JUNCTION DAM (SILVER CREEK BELOW JUNCTION RESERVOIR)

- Minimum release requirements:

October 1 through Oct 6	20 cfs
October 7 thru October 28 <i>(variance to remove sediment from Camino Res)</i>	5 cfs
October 29-31	20 cfs
November through September	10 cfs

- Discharge is measured by differential pressure taps on the release valve near the base of the Dam and the rate of release is telemetered hourly to the District's Headquarters.
- The discharge record indicates no apparent violation during the water year.
- No modifications were made to the measuring device during the reporting period.

11441800 SILVER CREEK BELOW JUNCTION DAM, NEAR POLLOCK PINES, CA

LOCATION.—Lat 38°51'08", long 120°27'22", in SW 1/4 SW 1/4 sec.30, T.12 N., R.14 E., El Dorado County, Hydrologic Unit 18020129, Eldorado National Forest, at outlet structure, on Junction Dam, and 9 mi northeast of Pollock Pines.

DRAINAGE AREA.—147 mi².

PERIOD OF RECORD.—October 1987 to current year (low-flow records only). Unpublished records for water years 1965–87 available in files of the U.S. Geological Survey.

GAGE.—Differential-pressure gage and orifice control in outlet pipe. Auxiliary nonrecording gage 550 ft downstream at different datum. Elevation of gage is 4,280 ft above sea level, from topographic map. August 1964 to December 1986, nonrecording gage at site 500 ft downstream at different datum. December 1986 to September 1987, nonrecording gage at site 550 ft downstream.

REMARKS.—Records not computed above 30 ft³/s. Flow completely regulated by Junction Dam. Flow over the spillway bypasses this station. Diversion through Jaybird Powerplant (station 11441780) since 1962 bypasses this station. See schematic diagram of South Fork American River Basin.

COOPERATION.—Records were collected by Sacramento Municipal Utility District, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	15	11	11	11	11	11	11	11	11	11	11
2	20	11	10	11	11	11	11	10	11	11	11	11
3	20	10	11	10	11	11	10	10	11	11	11	11
4	20	11	11	10	11	11	11	11	10	11	11	11
5	20	11	11	11	11	11	11	e11	10	11	11	11
6	20	10	11	11	11	11	11	e11	11	11	11	11
7	13	10	11	11	11	10	11	e11	11	11	11	11
8	5.7	11	11	10	11	11	11	11	11	11	11	11
9	5.7	11	11	11	11	10	11	11	11	11	11	11
10	5.6	11	10	11	11	11	11	11	11	11	11	11
11	5.5	11	11	10	11	11	11	10	11	11	11	11
12	5.6	11	11	10	11	10	10	11	11	11	11	11
13	5.6	11	10	11	11	10	10	11	11	11	11	11
14	5.7	11	11	11	11	10	10	11	11	11	11	11
15	5.7	11	10	11	11	10	11	11	11	11	11	11
16	5.6	10	10	11	10	10	11	11	11	11	11	11
17	5.6	10	11	11	11	10	11	10	11	11	11	11
18	5.6	11	11	11	11	11	10	11	11	11	11	11
19	5.7	11	11	11	11	11	10	10	11	11	11	11
20	5.7	11	11	10	11	11	10	11	11	11	11	11
21	5.6	10	11	10	11	11	10	11	11	11	11	11
22	5.6	11	11	11	11	11	11	11	11	11	11	11
23	5.7	11	11	11	10	10	11	10	11	11	11	11
24	5.7	10	10	11	11	11	10	11	11	11	11	11
25	5.7	11	11	11	11	11	10	10	11	11	11	11
26	5.6	10	11	11	11	10	11	10	11	11	11	11
27	5.6	11	11	10	10	10	10	10	11	11	11	11
28	12	10	11	10	11	11	10	10	11	11	11	11
29	21	11	11	11	---	10	11	11	11	11	11	11
30	21	11	11	11	---	11	10	11	11	11	11	11
31	21	---	11	10	---	11	---	11	---	11	11	---
TOTAL	320.8	325	335	331	305	329	317	331	328	341	341	330
MEAN	10.3	10.8	10.8	10.7	10.9	10.6	10.6	10.7	10.9	11.0	11.0	11.0
MAX	21	15	11	11	11	11	11	11	11	11	11	11
MIN	5.5	10	10	10	10	10	10	10	10	11	11	11
AC-FT	636	645	664	657	605	653	629	657	651	676	676	655
a	8510	49560	59070	17360	3050	6110	6050	8690	10380	12710	14410	4980

CAL YR 2000 a 482200

WTR YR 2001 a 201300

e Estimated.

a Diversion, in acre-feet, to Jaybird Powerplant (station 11441780), provided by Sacramento Municipal Utility District.

2001 WATER YEAR

CAMINO DAM (SILVER CREEK BELOW CAMINO DIVERSION DAM)

- Minimum release requirements:

October 1 through Oct 6	20 cfs
October 7 thru October 28	5 cfs
<i>(variance to remove sediment from Camino Res)</i>	
October 29-31	20 cfs
November through September	10 cfs

- Discharge is measured by applying recorded stage data from gaging station, located about 1/4 mile below the Dam, to the existing stage-discharge relationship.
- The discharge record indicates no apparent violations during the water year.
- No modifications were made to the measuring device during the reporting period.

11441900 SILVER CREEK BELOW CAMINO DIVERSION DAM, CA

LOCATION.—Lat 38°49'26", long 120°32'18", on line between secs.4 and 5, T.11 N., R.13 E., El Dorado County, Hydrologic Unit 18020129, Eldorado National Forest, on right bank, 300 ft downstream from Round Tent Canyon, 0.4 mi downstream from diversion dam, and 5 mi northeast of Pollock Pines.

DRAINAGE AREA.—171 mi².

PERIOD OF RECORD.—October 1960 to current year.

GAGE.—Water-stage recorder. Datum of gage is 2,754.06 ft above sea level (Sacramento Municipal Utility District benchmark).

REMARKS.—Flow is regulated by Ice House Reservoir (station 11441100) since 1959, Union Valley Reservoir (station 11441001) since 1962, and Junction and Camino Reservoirs (stations 11441760 and 11441890). Diversion to Camino Powerplant (station 11441895) since 1961 bypasses this station. See schematic diagram of South Fork American River Basin.

COOPERATION.—Records were collected by Sacramento Municipal Utility District, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, about 47,700 ft³/s, Jan. 2, 1997, gage height, 15.72 ft, backwater from log jam, from rating curve extended above 4,700 ft³/s, on basis of slope-area measurement at gage height 11.28 ft; minimum daily, 1.0 ft³/s, Nov. 1, 1980.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	20	13	13	14	14	14	14	14	13	14	14
2	23	14	13	14	14	14	14	13	14	14	14	13
3	23	14	14	13	14	14	14	13	14	13	14	14
4	23	14	13	13	14	14	13	13	14	14	14	14
5	22	14	14	14	14	15	13	14	14	14	14	14
6	22	14	13	14	14	16	13	13	14	14	14	13
7	22	14	13	14	14	17	13	14	14	14	14	14
8	19	14	14	13	14	18	13	14	14	14	14	13
9	25	14	14	14	14	18	13	14	14	14	14	13
10	28	14	13	14	14	16	13	14	14	14	14	14
11	19	14	14	13	14	15	14	14	14	14	14	14
12	29	14	13	14	14	14	13	14	14	14	14	14
13	25	14	14	14	14	14	13	14	14	14	14	14
14	21	14	13	14	14	14	13	14	14	14	14	14
15	20	14	13	13	13	14	14	14	14	14	14	14
16	20	14	13	13	13	14	13	14	14	14	14	14
17	20	14	13	14	14	14	13	14	14	14	14	15
18	19	13	13	14	14	14	19	14	14	14	14	13
19	20	13	14	13	14	14	53	14	14	14	14	13
20	19	13	13	14	14	14	57	14	14	14	14	13
21	20	13	14	14	14	14	56	14	14	14	14	13
22	19	13	14	14	13	15	56	14	14	14	14	13
23	16	13	14	14	13	14	41	14	14	14	14	13
24	9.5	13	14	13	14	14	22	14	15	14	14	13
25	9.9	13	13	14	13	16	19	14	14	14	14	14
26	8.4	13	13	14	14	14	17	14	14	14	14	13
27	6.7	13	14	14	14	14	14	14	14	14	14	13
28	15	13	14	14	13	14	13	14	14	14	14	13
29	27	13	14	14	---	14	14	14	14	13	14	13
30	26	13	14	14	---	14	13	14	14	14	14	13
31	26	---	13	14	---	14	---	14	---	14	13	---
TOTAL	625.5	413	418	425	386	454	620	430	421	431	433	405
MEAN	20.2	13.8	13.5	13.7	13.8	14.6	20.7	13.9	14.0	13.9	14.0	13.5
MAX	29	20	14	14	14	18	57	14	15	14	14	15
MIN	6.7	13	13	13	13	14	13	13	14	13	13	13
AC-FT	1240	819	829	843	766	901	1230	853	835	855	859	803
a	9430	50970	60980	18900	5800	11090	10810	11510	11510	13620	15340	5790

a Diversion, in acre-feet, to Camino Powerplant (station 11441895), provided by Sacramento Municipal Utility District.

2001 WATER YEAR

BRUSH CREEK DAM (BRUSH CREEK BELOW BRUSH CREEK DAM)

- Minimum release requirements:

October	3 cfs
November through March 12	6 cfs
November through May	4 cfs
June through September	2 cfs

- Discharge is measured by an orifice plate in the conduit near the base of the Dam and the rate of release is telemetered hourly to the District's Headquarters.
- The discharge record indicates no apparent violation during the water year.
- No modifications were made to the measuring device during the reporting period.

11442700 BRUSH CREEK BELOW BRUSH CREEK DAM, NEAR POLLOCK PINES, CA

LOCATION.—Lat 38°48'41", long 120°37'20", in NW 1/4 SE 1/4 sec.10, T.11 N., R.12 E., El Dorado County, Hydrologic Unit 18020129, Eldorado National Forest, at outlet structure on Brush Creek Dam, and 4.0 mi northwest of Pollock Pines.

DRAINAGE AREA.—7.99 mi².

PERIOD OF RECORD.—October 1987 to current year. Unpublished records for water years 1971–87 available in files of the U.S. Geological Survey.

GAGE.—Differential-pressure gage and orifice control in outlet pipe. Auxiliary water-stage recorder 200 ft downstream at different datum. Elevation of gage is 2,700 ft above sea level, from topographic map. Prior to October 1987, nonrecording gage 400 ft downstream at different datum.

REMARKS.—Flow completely regulated by Brush Creek Reservoir (station 11442690). See schematic diagram of South Fork American River Basin.

COOPERATION.—Records were collected by Sacramento Municipal Utility District, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 620 ft³/s, Jan. 2, 1997; minimum daily, 2.1 ft³/s, many days in 1988.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	7.1	6.7	6.7	6.7	6.7	4.5	4.5	3.7	2.6	2.7	2.8
2	3.3	7.1	6.7	6.8	6.7	6.7	4.5	4.5	2.7	2.6	2.7	2.8
3	3.3	7.1	6.7	6.8	6.7	6.8	4.5	4.5	2.7	2.6	2.7	2.8
4	3.4	7.1	6.7	6.8	6.8	6.8	4.5	4.5	2.6	2.6	2.8	2.8
5	3.3	7.1	6.7	6.8	6.8	6.9	4.5	4.5	2.7	2.6	2.8	2.8
6	3.3	7.1	6.7	6.8	6.7	6.9	4.5	4.5	2.6	2.6	2.8	2.8
7	3.4	7.2	6.7	6.7	6.7	6.9	4.5	4.4	2.6	2.7	2.7	2.8
8	3.4	7.2	6.6	6.7	6.7	6.8	4.4	4.4	2.6	2.7	2.7	2.8
9	3.4	7.1	6.7	6.7	6.7	6.8	4.5	4.4	2.6	2.6	2.7	2.8
10	3.4	7.2	6.7	6.8	6.7	6.9	4.5	4.5	2.5	2.7	2.8	2.8
11	3.4	7.2	6.7	6.8	6.8	6.9	4.5	4.5	2.5	2.7	2.8	2.8
12	3.4	7.2	6.7	6.7	6.7	6.8	4.5	4.5	2.5	2.7	2.7	2.8
13	3.4	7.2	6.7	6.7	6.7	5.4	4.5	4.5	2.4	2.7	2.7	2.8
14	3.4	7.1	6.7	6.7	6.8	4.4	4.5	4.5	2.4	2.7	2.8	2.8
15	3.4	7.2	6.7	6.7	6.7	4.5	4.5	4.5	2.7	2.7	2.8	2.8
16	3.4	7.0	6.8	6.7	6.8	4.5	4.5	4.5	2.7	2.7	2.8	2.8
17	3.4	7.0	6.7	6.8	6.9	4.5	4.5	4.5	2.7	2.7	2.9	2.8
18	3.4	7.0	6.7	6.8	6.9	4.5	4.5	4.5	2.7	2.7	2.9	2.8
19	3.4	6.9	6.8	6.8	6.9	4.5	4.4	4.5	2.7	2.7	2.9	2.8
20	3.4	6.9	6.8	6.8	6.8	4.5	4.5	4.5	2.6	2.7	2.9	2.8
21	3.4	6.7	6.7	6.7	6.8	4.5	4.5	4.4	2.6	2.7	2.8	2.8
22	3.4	6.7	6.7	6.7	6.8	4.5	4.5	4.4	2.6	2.6	2.9	2.8
23	3.4	6.7	6.7	6.8	6.9	4.5	4.5	4.4	2.6	2.6	2.9	2.8
24	3.4	6.7	6.7	6.8	6.9	4.5	4.5	4.4	2.6	2.6	2.9	2.8
25	3.3	6.7	6.7	6.8	6.8	4.5	4.4	4.4	2.6	2.6	2.8	2.8
26	3.3	6.7	6.7	6.8	6.7	4.5	4.4	4.4	2.7	2.6	2.8	2.8
27	3.3	6.7	6.7	6.8	6.8	4.5	4.4	4.4	2.7	2.7	2.8	2.8
28	3.3	6.7	6.7	6.7	6.8	4.5	4.4	4.4	2.7	2.7	2.8	2.7
29	3.4	6.7	6.7	6.7	---	4.5	4.4	4.4	2.7	2.7	2.8	2.8
30	3.4	6.7	6.7	6.7	---	4.5	4.5	4.4	2.6	2.7	2.8	2.8
31	5.3	---	6.7	6.7	---	4.5	---	4.4	---	2.7	2.8	---
TOTAL	106.4	209.0	207.9	209.3	189.7	168.2	134.3	138.1	79.6	82.5	86.7	83.9
MEAN	3.43	6.97	6.71	6.75	6.78	5.43	4.48	4.45	2.65	2.66	2.80	2.80
MAX	5.3	7.2	6.8	6.8	6.9	6.9	4.5	4.5	3.7	2.7	2.9	2.8
MIN	3.3	6.7	6.6	6.7	6.7	4.4	4.4	4.4	2.4	2.6	2.7	2.7
AC-FT	211	415	412	415	376	334	266	274	158	164	172	166

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)

	3.12	5.87	5.84	9.47	5.91	5.97	6.05	5.86	3.18	3.09	3.06	3.07
MEAN	3.12	5.87	5.84	9.47	5.91	5.97	6.05	5.86	3.18	3.09	3.06	3.07
MAX	3.86	8.06	7.81	58.0	7.76	8.95	10.4	9.09	4.43	4.26	3.87	3.81
(WY)	1994	1990	1990	1997	1997	1997	1997	1997	1995	1995	1995	1993
MIN	2.44	4.16	4.09	4.10	4.12	4.39	4.23	4.28	2.24	2.18	2.14	2.14
(WY)	1993	1991	1988	1988	1988	1992	1988	1988	1988	1988	1988	1988

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1988 - 2001

ANNUAL TOTAL	2011.0	1695.6	
ANNUAL MEAN	5.49	4.65	
HIGHEST ANNUAL MEAN			5.04
LOWEST ANNUAL MEAN			10.5
HIGHEST DAILY MEAN	7.6 Sep 19	7.2 Nov 7	620
LOWEST DAILY MEAN	3.1 Jun 2	2.4 Jun 13	2.1
ANNUAL SEVEN-DAY MINIMUM	3.2 Jun 2	2.5 Jun 8	2.1
ANNUAL RUNOFF (AC-FT)	3990	3360	3650
10 PERCENT EXCEEDS	7.1	6.8	7.0
50 PERCENT EXCEEDS	6.7	4.5	4.4
90 PERCENT EXCEEDS	3.3	2.7	2.5

2001 WATER YEAR

SLAB CREEK DAM (S.F. AMERICAN RIVER NEAR CAMINO)

- Minimum release requirements:

October through March 13	36 cfs
March 14 through May	10 cfs
June through September	36 cfs

- Discharge is measured by an acoustic velocity meter in the release conduit near the base of the Dam. The rate of release is telemetered hourly to the District's Headquarters.
- The discharge record indicates no apparent violation during the water year.
- No modifications were made to the measuring device during the reporting period.

11443500 SOUTH FORK AMERICAN RIVER NEAR CAMINO, CA

LOCATION.—Lat 38°46'23", long 120°42'02", in SW 1/4 NE 1/4 sec.25, T.11 N., R.11 E., El Dorado County, Hydrologic Unit 18020129, on right bank, 500 ft upstream from Iowa Canyon Creek, and 2.8 mi northwest of Camino.

DRAINAGE AREA.—493 mi².

PERIOD OF RECORD.—October 1922 to current year. Monthly discharge only for October 1922, WSP 1315-A. Records for river and American River Flume, published separately October 1922 to September 1956 and October 1962 to December 1964, when flume was destroyed. Records of river and flume combined October 1956 to September 1962.

REVISED RECORDS.—WSP 931: 1928, 1938, 1940(M). WSP 1931: Drainage area at former site.

GAGE.—Acoustic-velocity meter. Elevation of gage is 1,625 ft above sea level, from topographic map. Prior to May 26, 1987, water-stage recorder at different datum at site 1,000 ft downstream. Auxiliary water-stage recorder on Slab Creek Dam records spill discharges which are combined with release discharges. See WSP 2131 for history of changes prior to Oct. 12, 1966.

REMARKS.—Flow regulated by several reservoirs. Since 1967 diversion from Slab Creek Dam to White Rock Powerplant (station 11443460) bypasses this station. Echo Lake Conduit (station 11434500) imports up to 1,900 acre-ft each year from Truckee River Basin. Variable amounts of El Dorado Canal water, up to 40 ft³/s May to October, and about 7 ft³/s remainder of the year, diverted for irrigation and domestic use between Pollock Pines and Placerville. Water from Jenkinson Lake in North Fork Cosumnes River Basin diverted to Camino and substituted for flow from El Dorado Canal in some years. Since October 1962, water is imported from the Upper Rubicon River Basin by way of Robbs Peak Powerplant (station 11429300). See schematic diagram of South Fork American River Basin.

COOPERATION.—Records were collected by Sacramento Municipal Utility District, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 62,300 ft³/s, Jan. 2, 1997, from rating curve extended above 24,000 ft³/s, on basis of computation of peak flow over dam; minimum daily, 1.3 ft³/s, Aug. 24, 1931.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	38	38	40	40	39	13	11	37	38	37	38
2	40	37	38	40	40	39	13	11	37	38	38	e38
3	40	37	38	39	40	39	13	11	36	38	38	e38
4	40	37	38	39	40	39	12	11	36	38	38	38
5	40	38	38	39	40	38	12	11	36	e38	37	38
6	39	38	38	39	40	39	12	11	37	e38	38	38
7	39	39	38	39	40	39	12	11	36	e38	38	38
8	39	39	38	39	40	40	12	11	37	e38	38	38
9	39	38	39	39	40	40	12	11	38	37	38	38
10	39	39	40	39	39	40	12	11	38	37	38	38
11	39	38	40	39	40	40	12	11	38	37	38	e38
12	39	39	39	38	40	39	12	11	38	37	38	38
13	39	39	38	39	39	24	12	11	38	37	38	38
14	39	38	39	39	39	13	12	11	38	e37	38	38
15	39	38	39	39	39	13	12	11	38	e37	38	38
16	39	38	39	39	39	13	12	11	38	e37	38	38
17	39	38	40	39	39	13	12	11	38	37	38	e38
18	39	37	40	39	39	13	12	10	38	37	38	38
19	39	37	39	39	39	13	12	10	38	37	38	38
20	39	37	39	40	39	13	12	10	38	37	38	38
21	39	37	39	40	39	13	12	10	38	37	38	38
22	39	37	39	39	40	13	12	10	38	36	38	38
23	39	37	40	40	40	13	12	10	37	37	39	38
24	39	38	40	40	39	13	12	10	37	37	39	38
25	39	38	40	40	39	13	12	11	37	37	38	38
26	39	38	40	40	39	13	12	11	37	37	39	38
27	39	38	40	40	39	13	12	11	37	37	39	38
28	38	38	40	39	39	13	12	11	37	e37	39	38
29	38	38	39	40	---	12	12	11	37	e37	38	38
30	38	38	39	40	---	13	11	11	38	e37	38	38
31	38	---	40	40	---	12	---	25	---	37	38	---
TOTAL	1210	1136	1211	1220	1105	727	362	348	1121	1154	1181	1140
MEAN	39.0	37.9	39.1	39.4	39.5	23.5	12.1	11.2	37.4	37.2	38.1	38.0
MAX	40	39	40	40	40	40	13	25	38	38	39	38
MIN	38	37	38	38	39	12	11	10	36	36	37	38
AC-FT	2400	2250	2400	2420	2190	1440	718	690	2220	2290	2340	2260
a	18410	57680	65540	25720	14760	34780	48580	60100	16070	15900	14620	8430

e Estimated.

a Diversion, in acre-feet, to White Rock Powerplant (station 11443460), provided by Sacramento Municipal Utility District.

Memorandum

To : Files

Date : November 20, 1970

Subject: Permits 10703, 10704, 10705,
13746 & 15088 (Applications
12323, 12624, 14963, 20522
and 22110)D. E. Carroll
From : Division of Water Rights

On October 16, and 23, 1970, this writer attended a tour of Sacramento Municipal Utility District projects on the Rubicon River, Gerle Creek, Silver Creek, South Fork of Silver Creek, South Fork American River and various other streams and tributaries. Water rights for their projects are covered by the subject permits, all of which expire in December, 1975.

Because of the multiple points of diversion and other features which make these permits somewhat complex, a formal report will not be made separately on each permit.

Present on the tour were:

D. L. Kienlen, Consulting Engineer representing SMUD.

J. W. Carniglia - SMUD

K. L. Woodward, SWRCB (October 16 only)

L. C. Spencer, SWRCB

D. E. Carroll, SWRCB

The tour began at Loon Lake, the uppermost storage reservoir in the system. Loon Lake has a capacity of 76,500 acre-feet with a natural watershed of about eight square miles. In addition, water from the Desolation Valley watershed is diverted through a conduit which extends from Buck Island Lake in Desolation Valley to Loon Lake. Three lakes in Desolation Valley, Buck

SURNAME

WRCB 129 (10-67)

Carroll

Island, Rock Bound and Rubicon diversions are not actual storage reservoirs but collect the water for diversion to Loon Lake. Construction of these diversion works was made possible by constructing a road to Buck Island Lake, however, after the work was finished, portions of the road were destroyed to preserve the wild condition of the valley. Maintenance is performed by helicopter.

All of the water had been released from Loon Lake because of construction of the Loon Lake Powerhouse. The intake structure and the elevator building were visited. The powerhouse is located about 1,200 feet below the surface of the lake. A tunnel about four miles in length which will later be used for discharge into Gerle Creek is presently being used to haul materials into the powerhouse site. The tunnel exit was observed but the powerhouse was not visited. A small reservoir is located on Gerle Creek at the exit of the Loon Lake Powerhouse discharge tunnel. Capacity is about 1,200 acre-feet.

About one mile downstream from the Gerle Creek Reservoir at the junction with the South Fork of the Rubicon River the Robbs Peak Reservoir is located. This is a regulating reservoir of about 20 acre-feet which is the forebay to the Robbs Peak Powerhouse conduit. Robbs Peak Powerhouse is located about four miles southerly at the north end of Union Valley Reservoir on Silver Creek, a lake of about 271,000 acre-feet capacity.

Union Valley Powerhouse is located at the base of the dam which is an earthfill structure about 400 feet in height.

The tour also included Ice House Reservoir on the South Fork of Silver Creek which serves to collect and store a supplemental supply of water

for release downstream into the Union Valley Reservoir. Ice House Reservoir has a capacity of about 46,000 acre-feet.

Just downstream from the Union Valley Dam is Junction Reservoir which is located just below the confluence of Silver Creek and South Fork Silver Creek. It has a capacity of about 3,250 acre-feet and the dam functions as a diversion into the five mile long Jaybird Powerhouse conduit. Jaybird Powerhouse is also located on Silver Creek which receives the discharged water.

About one-half mile downstream from the Jaybird Powerhouse is Camino Dam which has a reservoir capacity of about 845 acre-feet. This dam diverts water into a conduit which extends about six miles to Camino Powerhouse located on the South Fork of the American River. Water from the conduit can also be diverted through a branch to Brush Creek Reservoir, about one and a half miles north of the Camino Powerhouse. The Brush Creek Reservoir is still under construction.

Slab Creek Dam is located on the South Fork of the American River about six miles downstream from the Camino Powerhouse. When full, the reservoir has a capacity of 16,600 acre-feet and the water surface is at an elevation that almost reaches upstream to the Camino Powerhouse. Water is diverted into a conduit which leads to the White Rock Powerhouse about six miles away.

The last installation is the Chili Bar Dam and Powerhouse, which was constructed by SMUD and turned over to Pacific Gas and Electric Company, in exchange for a PG&E Powerhouse which was inundated by SMUD.

A summary of SFUD permits follows:

Permit 10703 (Application 12323)

1. Source: A. South Fork of Silver Creek, B. Silver Creek.
2. Amount: A and/or B. 400 cubic feet per second direct diversion and A. 50,000 acre-feet and B. 225,000 acre-feet storage.
3. Diversion Points: A. Ice House Dam, B. Union Valley Dam, Junction Dam, and Camino Dam.
4. Points of redirection: Those dams in (3) which redirect water from upstream reservoirs under this permit and Brush Creek Dam, Slab Creek Dam and Chili Bar Dam.

Permit 10704 (Application 12624)

1. Source: A. Rubicon River, B. Rock Bound Creek, C. Gerle Creek, D. South Fork of Rubicon River.
2. Amount: A. 500 cubic feet per second and 75,000 acre-feet per annum, B. 200 cubic feet per second and 14,000 acre-feet per annum, C. 325 cubic feet per second and 130,000 acre-feet per annum, D. 175 cubic feet per second and 95,000 acre-feet per annum.
3. Diversion Points: A. Rubicon Diversion, B. Buck Island Lake Dam, C. Loon Lake Dam, Gerle Dam, D. Robbs Peak Dam.
4. Points of Rediversion: Those dams in (3) which redirect water from upstream diversions under this permit and Union Valley Dam,

Junction Dam, Camino Dam, Brush Creek Dam, Slab Creek Dam
and Chili Bar Dam.

Permit 10705 (Application 14963)

1. Source: A. Silver Creek, B. South Fork of American River.
2. Amount: A. 400 cubic feet per second, B. 800 cubic feet per second.
3. Diversion Points: A. Union Valley Dam, Junction Dam, Camino Dam, B. Slab Creek Dam and Chili Bar Dam.
4. Points of Rediversion: Those dams in (3) which rediverts water from upstream diversion under this permit and Brush Creek Dam.

Permit 13746 (Application 20522)

1. Source: A. South Fork of American River, B. Brush Creek.
2. Amount: 1,900 cubic feet per second.
3. Points of Diversion: A. Brush Creek Dam, B. Slab Creek Dam and Chili Bar Dam.
4. Points of Rediversion: Slab Creek Dam and Chili Bar Dam redivert water from the respective upstream diversion listed under this permit.

Permit 15088 (Application 22110)

1. Source: South Fork of American River.
2. Amount: 800 cubic feet per second.

3. Point of Diversion: Slab Creek Dam.

Note: Use of water is for generation of power. Place of use is the powerhouse supplied by the particular point of diversion.

We were informed that the use in 1969 from Loon Lake under Permit 10704 was very high and it is unlikely that it will be reached again for many years. Since the Loon Lake Powerhouse was not completed, it can not logically be included as a place of use if a license is issued now although Robbs Peak Powerhouse and others downstream are in use. The District has made a written inquiry asking if this can be licensed, and how it can be handled. This inquiry is presently being studied.

DEC:lr

STATE OF CALIFORNIA—THE RESOURCES AGENCY
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

REPORT OF INSPECTION

Filing Data

APPLICATION: 12624 FILING DATE: 07-29-48
NAME : SACRAMENTO M U D
ADDRESS : P O BOX 15830, SACRAMENTO, CALIF 95813
SOURCE : RUBICON RIVER TRIB MIDDLE FORK AMERICAN RIVER
PT. OF DIV. : NW1/4 OF SW1/4 SECTION 9 T13N R16E MDB&M COUNTY: EL DORADO
AMOUNT : 1200 CU FT/SEC 314,000 AC-FT/ANN TOTAL FROM 5 POINTS OF DIVERSION
PURPOSE : POWER
SEASON : JANUARY 1 TO DECEMBER 31 (DIRECT DIVERSION) OCTOBER 1 TO JULY 31 (STORAGE)

PERMIT NO. : 10704 DATE ISSUED: 04-30-57 EXPIRES: 12-01-75

Date of Inspection October 16 & 23, 1970 Inspected by K.L. Woodward, L.C. Spencer, D.E.
Accompanied by J. W. Carneglia & D. L. Kienlen Carroll
Persons interviewed Same
Reason for inspection Request by applicant - High use of water during past 3 years may meet requirement for license.

Recommendation

License ☒ Extension ☐ to 19..... No action ☐ Revoke ☐

Changes or corrections None ☒

(Indicate by an "X" the items that need change from permit or license and show correctly below)

Owner ☐ Address ☐ Amount ☐ Season ☐ Purpose ☐ Point of diversion ☐ Place of use ☐

Remarks (Explain basis for recommendation)

Amount - to be determined from material to be submitted

Point of diversion - as in permit

Place of Use - as in permit

Rubicon River, Rock Bound Creek, Source

Name Gerle Creek, S.F. Rubicon Who measures flow? USGS & SMUD
Tributary to M. F. American River Is supply natural flow? Yes
From (direction) East Estimated minimum flow unknown
During what portion of year does minimum flow occur? Late summer
Measured or estimated flow at time of inspection No observation made

Diversion System

Is point of diversion at location specified in permit, license or order? Yes

If not, when will petition be submitted?

If diversion point has been moved, roughly describe present location with respect to authorized location.....

Would change cause any injury?

Is diversion by gravity or pumping? gravity

Is diversion system complete? no If not, briefly explain what remains to be done Loon Lake Powerhouse is not complete. License is not to be issued until it has been in operations for one or two months. Time of completion - Spring 1971

If not complete, does it appear to have been pursued with reasonable diligence? Yes

What is the capacity of the limiting section?

How determined?

Explain briefly manner of determining above capacity to be determined from material yet to be submitted.

19.70

1st Inspection

DEC 9 '70
DEC 9 '70 D.E.C.

Place of Use

(Permit)

Name of place of use, if commonly known as such Loon Lake Powerhouse, Robbs Peak Powerhouse, etc.
Describe briefly any changes from place of use as described in permit, license or order None

Is petition required? No If so, indicate when it will be submitted

Is place of use developed to a point where full use of water may be made? Loon Lake Powerhouse to be completed
If not, describe briefly what remains to be done Complete construction of powerhouse in 1971

Does it appear that development has been pursued with due diligence? Yes

Does permittee or licensee own or control all the land originally covered or as covered by change? Yes

Major Use of Water

Briefly describe method of applying water to major use. Water is diverted from Rubicon River to Rock Bound Creek thence commingled water is diverted to Loon Lake for storage or use in Loon Lake Powerhouse. Water discharged from Loon Lake Powerhouse is commingled with Gerle Creek water and passes through the Robbs Peak Reservoir to the powerhouse. Some of this water is stored in Union Valley Powerhouse but all is ultimately released through all of the downstream powerhouse

Does method of use appear to be wasteful, judging from local standards? No

Explain answer

List units served during maximum season (if applicable) Loon Creek Powerhouse, Robbs Peak Powerhouse, Union Valley Powerhouse, Jaybird Powerhouse, Camino Powerhouse, Whiterock Powerhouse and P.G.&E.'s Chili Bar Powerhouse.

Other Uses

Average number of persons served during maximum period None Number of housing units None

Plumbing facilities available

Area of garden, lawn, etc., served Area sprinkled to allay dust

Number of domestic livestock served

Other miscellaneous domestic use

Recreational use

Extent of Use of Water

Season of use and/or diversion to storage: Direct diversion - January 1 to December 31; Storage - October 1 to July 31.

Average rate of use by direct diversion during maximum period

Approximate beginning and ending dates of maximum period

Year of maximum use

Complete the following only if storage is involved

Maximum amount diverted to storage in one season to be determined Year

Does the purpose for which water was stored require withdrawal before use? Yes

If so, give maximum withdrawal in one season to be determined Year 1969

How much water was held over in dead storage? Unknown

For what purpose?

Other Rights

None

Answer each question. If a question is not applicable insert "NA" in space for answer.

What portion of the diversion system existed at time permit was granted? All except Loon Lake Powerhouse

What construction work has since been done on project? Powerhouse is presently under construction

Which of the above items have been constructed or installed during the last extension period? NA

When did use of water commence? NA Is use of water increasing, decreasing or has it stabilized? stabilized

Is it evident that permittee plans to proceed with construction or increase the use of water in the near future? (Answer yes or no and explain in detail under "Remarks") Yes

Is irrigated acreage limited by crop acreage controls? NA If so, what are the limitations. NA

Is water temporarily unavailable due to conditions beyond control of permittee? No If so, describe briefly

Is progress commensurate with permittee's resources, insofar as diligence is concerned? Yes

Is water available for use under this right? Yes

Is the place of use prepared and ready to use water? No - see above

Is an alternate source being used? No If so, describe source and nature of right

(THE FOLLOWING QUESTIONS APPLY ONLY TO USE UNDER THIS APPROPRIATIVE RIGHT)

What date (year) does water appear to have last been used? 1970 What indications were found which establish and verify this date (year)? While no powerhouse was in operation at the time, representative reported that they had been in use during the summer.

If water is now being used but there has been a three-year period of nonuse when water was available for this appropriation specify such years of nonuse. NA

If the appropriator could not be contacted, what was the reason? NA

Was it possible to obtain pertinent information from other parties? No If so, give names of parties and type of information

Remarks

(The space below is to be used to amplify answers given above if necessary and to generally describe conditions on the project and/or its development)

Information furnished by the permittee will be studied to determine the maximum period of diversion after which we will notify them of the period of time daily figures will be required. This will be necessary to determine the maximum 14-day amount.

Don E. Carroll, Sr. Engineer

STATE OF CALIFORNIA—THE RESOURCES AGENCY
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

PROGRESS REPORT BY PERMITTEE FOR 1969

OWNER OF RECORD:

APPLICATION 12624

SACRAMENTO MUNICIPAL UTILITY DISTRICT
P.O. BOX 15830,
SACRAMENTO, CALIF 95813

If the owner or address shown above is wrong, please correct

SOURCE: RUBICON RIVER ROCKBOUND LAKE LOON LAKE GERLE CREEK
S FK RUBICON RIVER

AMOUNT: 1525 CU FT/SEC TOTAL 444,000 AC-FT/ANN TOTAL

PURPOSE: POWER

PERMIT 10704

This report is important to you in establishing your water right. It should be filled out carefully and returned promptly to the State Water Resources Control Board, Division of Water Rights, Room 1140, Resources Building, 1416 Ninth Street, Sacramento, California 95814.

Neither the filing of an application nor issuance of a permit in approval thereof constitutes a water right. A water right is established only by beneficial use of water in accordance with the terms and conditions of the permit. This report provides a record of the development of your project. If the project is diligently completed a license will be issued to confirm the right developed by beneficial use.

The project has been abandoned and I request revocation of this permit. ☐ Yes ☒ No

CONSTRUCTION WORK

- Has construction work commenced? Yes
- Has all construction work been completed? No If not, give estimated date of completion December 1971
- State approximate cost of construction work on this project during the past 12 months: \$13,000,000.00
Describe briefly the portions of the project upon which the above amount was spent: Continued excavation of Loon Lake Underground Powerhouse, tailrace tunnel, intake, penstock, access shaft, (over)
- What construction work remains to be done to complete the project? Completion of Loon Lake power facilities including transmission line, Complete Brush Creek Dam, Res., and Tunnel.

USE OF WATER

- Has use of water commenced? Yes It was used for:
 - ☐ Irrigation Total acres irrigated Name crops served and acreage of each
 - ☐ Stockwatering Number of animals Method of water use
 - ☐ Industrial Nature of use Method of use
 - ☐ Domestic Number of persons, Area of garden, lawn, etc. Installed horsepower capacity
 - ☐ Municipal Approximate population Other
 - ☐ Mining
 - ☐ Recreational
 - ☒ Power generation 687,500
- Has use of water, both amount and season, been as great as you expect in any future year under this permit?
- Has location of the intake or place of use been changed? No
- Did the source go dry? No If so, during what months?
- What quantity of water was used each month in 1969 under this permit in gallons or acre-feet? (If not known check months water was used.) (1000's AF)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
14.5	9.8	25.4	38.9	53.6	49.1	23.9	21.7	3.6	11.5	21.8	11.9	285.7

STORAGE PROJECTS ONLY

Did your reservoir spill this year? Yes If not, how many feet below spillway vertically was the water level at maximum storage? - Have you emptied the reservoir? No If not, how many feet below spillway vertically was it drawn down at end of season? 64

REMARKS

(If more space is needed, use reverse side)

Date January 26, 1970

Sign Here

GENERAL MGR. & CHIEF ENGINEER

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

THE STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

OWNER OF WATER RIGHTS

AGREEMENT OF WATER RIGHTS

AGREEMENT OF WATER RIGHTS

1. The power of water rights is hereby

2. The power of water rights is hereby

3. The power of water rights is hereby

4. The power of water rights is hereby

5. The power of water rights is hereby

6. The power of water rights is hereby

7. The power of water rights is hereby

8. The power of water rights is hereby

9. The power of water rights is hereby

3. Concreting invert of tailrace tunnel. Constructing 69 KV Transmission line between Loon Lake to Robbs Peak Powerhouse. Continued construction of Brush Creek Dam, Reservoir, and Tunnel.

10. The power of water rights is hereby

11. The power of water rights is hereby

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STATE WATER RESOURCES CONTROL BOARD

SAORAMENTO

CONTROL BOARD

STATE WATER RESOURCES

CONTROL BOARD

STATE WATER RESOURCES

CONTROL BOARD

STATE WATER RESOURCES

CONTROL BOARD

STATE WATER RESOURCES

CONTROL BOARD

EP-1355
UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

AMENDMENT NO.17
INSTRUMENT NO.35

Before Commissioners: John N. Nassikas, Chairman;
Lawrence J. O'Connor, Jr., Carl E. Bagge,
John A. Carver, Jr., and
Albert B. Brooke, Jr.

Sacramento Municipal Utility District) Project No. 2101

ORDER AMENDING LICENSE
(Issued February 11, 1970)

On June 23, 1969, Sacramento Municipal Utility District, licensee for Project No. 2101, filed an application seeking amendment of the license to delete the provision that the Jones Fork power plant and Ice House tunnel be constructed.

Article 25 of the license for the project, issued August 28, 1957, required construction of the Ice House tunnel as part of Stage III, to be completed within seven years from the date of issuance of the license. When it appeared that the Ice House tunnel diversion might not prove to be economically feasible we modified the license, by order issued May 27, 1968, to include that development in a list of proposed developments included in Article 44 of the license which now reads:

Article 44. At such time as the Commission may direct and to the extent that it is economically sound and in the public interest to do so, after notice and opportunity for hearing, the licensee shall complete the Camino power plant to its ultimate development; construct as part of the project the Brush Creek reservoir and tunnel, and Loon Lake Numbers 1 and 2, Robbs Peak and Jones Fork power plants and Ice House tunnel; and provide additional storage in the Rubicon diversion reservoir or Loon Lake reservoir.

Licensee has now completed the Robbs Peak power plant and the ultimate development of Camino power plant and is constructing Brush Creek reservoir and tunnel and the equivalent of Loon Lake Numbers 1 and 2 power houses. In support of the subject application licensee has furnished a study concerning the feasibility of diverting water from Ice House reservoir to Union Valley reservoir. The study includes five schemes of development as well as minor variations. None of the proposed schemes of development proved to be economically feasible. The study concludes that, because of the distance involved and the limited water available, there is no feasible way to develop the head between Ice House reservoir and Union Valley reservoir. Under these circumstances the licensee requests that the proposed diversion from Ice House reservoir be deleted from the license.

The project affects lands of the United States within the Eldorado National Forest. The U. S. Forest Service, in reporting on the application, offered no objection to the proposed amendment.

Since all the other developments specified in Article 44 are either completed or under construction as authorized elsewhere in the license, we shall delete the present Article 44 and substitute a new Article 44 which is similar to an article included in all major licenses which have been issued in recent years. The new Article 44 will provide for future expansion of the project by requiring installation of additional capacity or other modifications to be made as directed by the Commission when it is determined to be economically sound and in the public interest.

The Commission finds:

(1) It is appropriate and consistent with the public interest that the license for Project No. 2101 be amended as hereinafter provided.

(2) Public notice of the application for amendment has been given. No protests or petitions to intervene or notices of intervention have been received.

The Commission orders:

(A) Article 44 of the license for Project No. 2101, last amended by order issued May 27, 1968, is hereby amended by deleting the article in its entirety and substituting the following:

Article 44: The licensee shall install additional capacity or make other changes in the project as directed by the Commission, to the extent that it is economically sound and in the public interest to do so, after notice and opportunity for hearing.

(B) This amendment in the manner set out above shall not operate to alter or amend the license in any other respect, and shall not in any way constitute a waiver of any other part, provision or condition of the license.

(C) This order shall become final 30 days from the date of its issuance unless application for rehearing shall be filed as provided in Section 313(a) of the Act, and failure to file such an application shall constitute acceptance of this order.

By the Commission.

(S E A L)

Gordon M. Grant,
Secretary.

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STATE WATER RESOURCES
CONTROL BOARD
SACRAMENTO

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Sacramento Municipal Utility)
District) Project No. 2101

NOTICE OF APPLICATION FOR AMENDMENT
OF LICENSE FOR PARTLY CONSTRUCTED PROJECT
(November 14, 1969)

Public notice is hereby given that application for amendment of license has been filed under the FEDERAL POWER ACT (16 U.S.C. 791a-825r) by Sacramento Municipal Utility District (correspondence to: Paul E. Shaad, General Manager and Chief Engineer, Sacramento Municipal Utility District, 6201 S Street, Sacramento, California 95811) for the partly constructed Upper American River Project No. 2101, located on Silver Creek, a tributary of the South Fork American River, in Eldorado County, California, and affecting lands of the United States within the Eldorado National Forest.

According to the application, recent studies made by the licensee engineering consultants have shown that neither the unconstructed Jones Fork Power Plant nor Ice House Tunnel are economical additions to the project, and since their construction is expressly required by license Article 44, the licensee seeks to delete from the article mention of Jones Fork Power Plant and Ice House Tunnel as part of the project.

Any person desiring to be heard or to make any protest with reference to said application should on or before January 6, 1970, file with the Federal Power Commission, Washington, D.C. 20426, petitions to intervene

Project No. 2101

- 2 -

or protests in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 1.8 or 1.10). All protests filed with the Commission will be considered by it in determining the appropriate action to be taken but will not serve to make the protestants parties to the proceeding. Persons wishing to become parties to a proceeding or to participate as a party in any hearing therein must file petitions to intervene in accordance with the Commission's Rules. The application is on file with the Commission and available for public inspection.

Gordon M. Grant

Secretary

NOV 18 2 23 PM '69
STATE WATER RESOURCES
CONTROL BOARD
SACRAMENTO

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Before Commissioners: John H. Nassikas, Chairman;
L. J. O'Connor, Jr., Carl E. Bagge,
John A. Carver, Jr., and Albert B. Brooke, Jr.

Sacramento Municipal Utility)
District) Project No. 2101

ORDER EXTENDING TIME FOR COMPLETION OF
CONSTRUCTION OF THE LOON LAKE
POWERHOUSE DEVELOPMENT OF
THE PROJECT

(Issued September 8, 1969)

On June 23, 1969, Sacramento Municipal Utility District, licensee for Upper American River Project No. 2101, filed an application for an extension of time to complete construction of the Loon Lake Powerhouse Development. Article 60 of the license, which was added by the order issued May 15, 1967, authorizing the construction of the Loon Lake Powerhouse Development, required that construction of that development be completed within three years of the date of the order.

The licensee advises that construction has proceeded without interruption but that because of the intricate nature of the underground powerhouse, completion of the development is not expected until 1971. Accordingly, it has requested that the time for completion be extended to December 31, 1971.

The Commission finds:

It is appropriate and in the public interest to administer Part I of the Federal Power Act to grant the requested extension of time for completion of construction of the Loon Lake Powerhouse Development.

Project No. 2101

- 2 -

The Commission orders:

The time specified for completion of construction in Article 60 of the license for Project No. 2101 is hereby extended to December 31, 1971.

By the Commission.

(S E A L)

Gordon M. Grant,
Secretary.

SEP 12 11 04 AM '69
STATE WATER RESOURCES
CONTROL BOARD
SACRAMENTO

STATE OF CALIFORNIA—THE RESOURCES AGENCY
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

PROGRESS REPORT BY PERMITTEE FOR 1968

OWNER OF RECORD:

APPLICATION 12624

SACRAMENTO MUNICIPAL UTILITY DISTRICT
P. O. BOX 2394, 15830
SACRAMENTO, CALIF 95814

If the owner or address shown above is wrong, please correct

SOURCE: (1) RUBICON RIVER (2) ROCKBOUND LAKE
(3) LOON LAKE (4) GERLE CREEK
(5) S. FK RUBICON RIVER

AMOUNT:

PURPOSE: POWER

PERMIT 10704

This report is important to you in establishing your water right. It should be filled out carefully and returned promptly to the State Water Resources Control Board, Division of Water Rights, Room 1140, Resources Building, 1416 Ninth Street, Sacramento, California 95814.

Neither the filing of an application nor issuance of a permit in approval thereof constitutes a water right. A water right is established only by beneficial use of water in accordance with the terms and conditions of the permit. This report provides a record of the development of your project. If the project is diligently completed a license will be issued to confirm the right developed by beneficial use.

1. Has construction work commenced? Yes
2. Has all construction work been completed? No If not, give estimated date of completion Dec. 1971
3. State approximate cost of construction work on this project during the past 12 months \$ 3,736,000
Describe briefly the portions of the project upon which the above amount was spent See back side

4. What construction work remains to be done to complete the project? Completion of Loon Lake power facilities including 69 KV transmission line between Loon Lake and Robbs Peak Powerhouses. Brush Creek Dam and Tunnel

5. Has use of water commenced? Yes What was the maximum rate of diversion (if known)? thousands of

6. What quantity of water was used each month in 1968 under this permit in thousands of acre-feet? (If not known check months water was used.)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
11.0	13.5	9.4	12.3	6.8	19.7	17.7	17.7	6.6	4.5	2.2	2.9	123.11

7. Has use of water, both amount and season, been as great as you expect in any future year under this permit? No
8. Has location of the intake or place of use been changed? No
9. Did the source go dry? No If so, during what months?
10. Did your reservoir spill this year? No If not, how many feet below spillway vertically was the water level at maximum storage? 3' Have you emptied the reservoir? No If not, how many feet below spillway vertically was it drawn down at end of season? Loon Lake 64' (Oct. 31)

11. You should keep complete records of your use of water in your own files. Please supply information below concerning your use of water.

- (a) ☐ Irrigation Total acres irrigated Name crops raised and acreage of each
(b) ☐ Stockwatering Number of animals Method of water use
(c) ☐ Industrial Nature of use Nature of use
(d) ☐ Domestic Number of persons; Area of garden, lawn, etc. Installed horsepower capacity
(e) ☐ Municipal Approximate population Installed horsepower capacity
(f) ☐ Mining Method of water use
(g) ☐ Recreational Nature of use
(h) ☒ Power 687,500
(i) ☐ Other Nature of use

12. The project has been abandoned and I request revocation of this permit: ☐ Yes ☒ No

REMARKS: (If more space is needed, use reverse side)

Date January 13, 1969

Sign Here

Permitted General Mgr. & Chief Engr.

JAN 15 10 36 AM '69

STATE WATER RESOURCES
CONTROL BOARD
SACRAMENTO

#3

REMARKS Excavation of Loon Lake underground powerhouse including tailrace tunnel,
intake tunnel and penstock access shaft and powerhouse. Completion of Slab Creek Dam,
White Rock Tunnel, Penstock and 230 KV Transmission Line from Camino-White Rock
Powerhouses to Sacramento.

Completion of White Rock and Camino Powerhouses.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Before Commissioners: Lee C. White, Chairman; L. J. O'Connor, Jr.,
Carl E. Bagge, John A. Carver, Jr., and
Albert B. Brooke, Jr.

Sacramento Municipal Utility District) Project No. 2101

ORDER MODIFYING LICENSE ORDER

(Issued November 8, 1968)

On May 10, 1968 Sacramento Municipal Utility District, licensee for Project No. 2101, filed an application seeking deletion of Article 58 of its license and authorization to retain as a permanent part of the project works the diversion channel mentioned in the article.

The construction of the Robbs Peak Tunnel included a temporary diversion channel so that water could be diverted from the South Fork of the Rubicon River into the Union Valley Reservoir prior to the completion of the Robbs Peak power plant. Upon completion of the plant the channel was to be filled under the provisions of Article 58 which was added to the license by Commission order issued February 28, 1964 (31 FPC 473, 475).

Within the past year licensee has had to temporarily shut down the Robbs Peak plant due to operating difficulties and has avoided loss of the water to the project by diverting the flow through the subject channel away from the normal course through the tunnel and powerhouse. Because of the channel's usefulness as an emergency conduit, licensee is requesting that the channel be included as a permanent part of the project. The United States Forest Service has reported

that it has no objection to inclusion of the permanent channel, which is entirely on lands of the Eldorado National Forest, provided adequate fencing and safeguards against erosion are required.

The Commission finds:

It is appropriate and consistent with the public interest that the license for Project No. 2101 be modified as herein-after provided.

The Commission orders:

(A) Article 58 of the license for Project No. 2101 is hereby eliminated from the license.

(B) The license is hereby amended to include the following additional article:

Article 61. The licensee shall take appropriate measures to reduce further erosion in the diversion channel in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 11, T. 12 N., R 14 E., Mount Diablo Base and Meridan, by lining the banks with large boulders or other means that will minimize erosion and shall after completion of channel stabilization measures, install a chain-link fence, or similar type, on both sides of the diversion channel from the vicinity of Tells Creek to the concreted portion of the channel. In formulating measures to meet erosion conditions and to provide protective fencing, Licensee shall consult with the Forest Service. In the event that the Licensee and the Forest Service fail to agree on acceptable erosion control and fencing protection measures the Commission will determine such after notice and opportunity for hearing.

(C) This amendment in the manner set out above shall not operate to alter or amend the license in any other respect, and shall not in any way constitute a waiver of any other part, provision or condition of the license.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Before Commissioners: Lee C. White, Chairman; L. J. O'Connor, Jr.,
Charles R. Ross, Carl E. Bagge, and
John A. Carver, Jr..

Sacramento Municipal
Utility District

)
)

Project No. 2101

ORDER FURTHER AMENDING LICENSE
FOR PARTLY CONSTRUCTED PROJECT

(Issued May 27, 1968)

On September 3, 1964, Sacramento Municipal Utility District (SMUD), licensee of the Upper American River Project No. 2101, */ requested the deletion of the requirement that it construct Ice House tunnel as part of that project. Article 25(c) of the license requires completion of the tunnel by August 27, 1964.

The 1,490 foot long tunnel would have carried water from Ice House Reservoir to Union Valley Reservoir. The diversion, at an estimated cost of \$350,000, was thought to be economically feasible when the license was issued in 1957. Erosion problems, increased construction costs, and a more detailed study of the tunnel indicated an estimated cost of \$1,200,000 in 1964. SMUD stated in 1964 that it considered construction of the tunnel economically unfeasible.

Licensee proposes to submit an application for amendment to again include the facility in the project when and if the construction of the tunnel could be justified. Article 44 is being modified to require such construction when and if feasible.

RECEIVED
COMM. OF FERC
STATE OF CALIFORNIA

*/ License issued August 28, 1957, (18 FPC 228).

The Commission finds:

The requirement that the Ice House tunnel be constructed by 1964 should be deleted from the license.

The Commission orders:

(A) Article 25(c) of the license for Project No. 2101 is hereby amended to delete reference to the Ice House tunnel.

(B) Article 44 of the license for Project No. 2101 is hereby amended to include the Ice House tunnel and to read as follows:

Article 44. At such time as the Commission may direct and to the extent that it is economically sound and in the public interest to do so, after notice and opportunity for hearing, the Licensee shall complete the Camino power plant to its ultimate development; construct as part of the project the Brush Creek reservoir and tunnel, and Loon Lake Numbers 1 and 2, Robbs Peak and Jones Fork power plants and Ice House tunnel; and provide additional storage in the Rubicon diversion reservoir or Loon Lake reservoir.

(C) This amendment in the manner set out above shall not operate to alter or amend the license in any other respect, and shall not in any way constitute a waiver of any other part, provision or conditions of the license.

(D) This order shall become final 30 days from the date of its issuance unless application for rehearing shall be filed as provided in Section 313(a) of the Act, and failure to file such an application shall constitute acceptance of this license amendment.

By the Commission.

(S E A L)

STATE WATER RESOURCES
CONTROL BOARD
SACRAMENTO

MAY 29 10 09 AM '68

Gordon M. Grant,
Secretary.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Sacramento Municipal Utility District) Project No. 2101

NOTICE OF APPLICATION FOR AMENDMENT OF LICENSE
FOR PARTIALLY CONSTRUCTED PROJECT

(January 10, 1968)

Public notice is hereby given that application for amendment of license has been filed under the FEDERAL POWER ACT (16 U.S.C. 791a - 825r) by Sacramento Municipal Utility District (correspondence to: Paul E. Shaad, General Manager and Chief Engineer, Sacramento Municipal Utility District, 6201 S Street, Box 2391, Sacramento, California 95811) for partially constructed Project No. 2101, known as the Upper American River Project, located on Upper American River and its tributaries, and affecting lands of the United States within Eldorado National Forest.

The application seeks to add to the project the following described hydroelectric facilities to be located on Brush Creek: (1) a 213-foot high, 780-foot long variable curvature concrete arch dam with an uncontrolled overfall spillway and a fishwater outlet; (2) a reservoir to be operated with a periodic 78-foot surface fluctuation having a surface area of about 21 acres at maximum elevation 2915.0 feet (mean sea level datum) and usable storage capacity of 1,300 acre-feet; (3) an outlet structure in the reservoir; (4) a tunnel, about 4,440 feet long, to join with the existing Camino tunnel a short distance above its outlet, and (5) appurtenant facilities.

Protests or petitions to intervene may be filed with the Federal Power Commission, Washington, D. C., 20426, in accordance with the Rules of Practice and Procedure of the

STANDARD INDUSTRIAL CLASSIFICATION

JAN 15 15 05 BH JER

Project No. 2101

- 2 -

Commission (18 CFR 1.8 or 1.10). The last day upon which protests or petitions may be filed is February 28, 1968. The application is on file with the Commission for public inspection.

Gordon M. Grant
Secretary

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STATE WATER RESOURCES
CONTROL BOARD
SACRAMENTO

(D) This order shall become final 30 days from the date of its issuance unless application for rehearing shall be filed as provided in Section 313(a) of the Act, and failure to file such an application shall constitute acceptance of this order. In acknowledgment of the acceptance of this order, it shall be signed for the licensee and returned to the Commission within 60 days from the date of issuance of this order.

By the Commission.

(S E A L)

Gordon M. Grant,
Secretary.

IN TESTIMONY of its acknowledgment of acceptance of all of the provisions, terms and conditions of the foregoing order, Sacramento Municipal Utility District, this ____ day of _____, 196_, has caused its corporate name to be signed hereto by _____ its _____, President, and its corporate seal to be affixed hereto and attested by _____, its _____ Secretary, pursuant to a resolution of its Board of Directors duly adopted on the ____ day of _____, 196_, a certified copy of the record of which is attached hereto.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By _____
President

Attest:

Secretary

(Executed in quadruplicate)

NOV 12 10 14 AM '66
STATE WATER RESOURCES
CONTROL BOARD
SACRAMENTO

STATE OF CALIFORNIA
THE RESOURCES AGENCY
STATE WATER RIGHTS BOARD

PROGRESS REPORT BY PERMITTEE FOR 1967

OWNER OF RECORD: SACRAMENTO MUNICIPAL UTILITY DISTRICT
P O BOX 2391
SACRAMENTO, CALIF 95811

APPLICATION 12624 (C)
to permit the construction of a dam and tunnel on the
Sacramento River, to divert water to the
Sacramento Municipal Utility District for
use in the city of Sacramento, California.

If the owner or address shown above is wrong, please correct

SOURCE: (1) RUBICON RIVER (2) ROCKBOUND LAKE
(3) LOON LAKE (4) GERLE CREEK
(5) S FK RUBICON RIVER (6)
(7) PERMIT 10704

Neither the filing of an application nor issuance of a permit in approval thereof constitutes a water right. A water right is established only by beneficial use of water in accordance with the terms and conditions of the permit. This report provides a record of the development of your project. If the project is diligently completed a license will be issued to confirm the right developed by beneficial use.

1. Has construction work commenced? Yes

2. Has all construction work been completed? No If not, give estimated date of completion December, 1971

3. State approximate cost of construction work on this project during the past 12 months \$11,550,000.00

Describe briefly the portions of the project upon which the above amount was spent SEE REVERSE SIDE

4. What construction work remains to be done to complete the project? Completion of features mentioned in Item 3. The construction of Brush Creek Dam & Tunnel and a 69 K.V. line between Loon Lake Power Plant & Robbs Peak Power Plant.

5. Has use of water commenced? Yes What was the maximum rate of diversion (if known)?

6. What quantity of water was used each month in 1967 under this permit in gallons or acre-feet? (If not known check months water was used.)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
12.3	7.2	18.6	19.5	33.3	46.9	27.2	16.9	18.7	1.8	--	--	202.4

(10 Mos.)

7. Has use of water, both amount and season, been as great as you expect in any future year under this permit? No

8. Has location of the intake or place of use been changed? No

9. Did the source go dry? No If so, during what months? ---

10. Did your reservoir spill this year? Yes If not, how many feet below spillway vertically was the water level at maximum storage? --- Have you emptied the reservoir? No If not, how many feet below spillway vertically was it drawn down at end of season? Loon Lake 48' (Oct. 1)

11. You should keep complete records of your use of water in your own files. Please supply information below concerning your use of water.

- (a) ☐ Irrigation Total acres irrigated Name crops served and acreage of each
- (b) ☐ Stockwatering Number of animals (f) ☐ Mining Method of water use
- (c) ☐ Industrial Nature of use (g) ☐ Recreational Nature of use
- (d) ☐ Domestic Number of persons, Area of garden, lawn, etc. (h) ☒ Power 350,500 Installed horsepower capacity
- (e) ☐ Municipal Approximate population (i) ☐ Other

12. The project has been abandoned and I request revocation of this permit. ☐ Yes ☒ No

REMARKS

(If more space is needed, use reverse side)

Date November 13, 1967

Sign Here

General Manager & Chief Engineer

This report is of importance to you in establishing your water right as it will be used as a basis for action by the State Water Rights Board. It should be filled out carefully and returned promptly to the State Water Rights Board, Room 1140, Resources Building, 1416 Ninth Street, Sacramento, California 95814.

PROGRESS REPORT BY PERMITS THE 100 1967

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11. You should keep separate records of your netting water in your own files. There is only one place where you should follow company procedures.

DATE OF BIRTH: 1960-07-18
PLACE OF BIRTH: NEW YORK, NY

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED DATE 01-11-2001 BY 60322 UCBAW/STW

10. 1200750000 ☒ (7) 1200750000 ☐ (8)

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Eligible for the 2010-2011 season

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SAORAMENTO

STATE WATER RIGHTS BOARD

29. Nov 80 E 91.100N

Topic	Most relevant	Other
1. The impact of climate change on the environment	100%	0%
2. The impact of climate change on the economy	90%	10%
3. The impact of climate change on society	80%	20%
4. The impact of climate change on the environment	70%	30%
5. The impact of climate change on the economy	60%	40%
6. The impact of climate change on society	50%	50%
7. The impact of climate change on the environment	40%	60%
8. The impact of climate change on the economy	30%	70%
9. The impact of climate change on society	20%	80%
10. The impact of climate change on the environment	10%	90%

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001-11-1000

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

FEDERAL POWER COMMISSION
WASHINGTON, D.C. 20426

Project No. 2101
Sacramento Municipal Utility District

State Water Rights Board
Room 1140
Resources Building
1416 Ninth Street
Sacramento, California 95814

Gentlemen:

Enclosed is a copy of Instrument No. 26 for the above named project.

Very truly yours,


F. Stewart Brown
Chief, Bureau of Power

Enclosure No. 40633
Copy of Instrument No. 26

24CHAMEN10
STATE WATER RIGHTS BOARD
JUL 15 1965

Form No. F.P.C.-18

ENCLOSURE № 40633

FROM
FEDERAL POWER COMMISSION

U.S. GOVERNMENT PRINTING OFFICE 16-5487-2

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Before Commissioners: Lee C. White, Chairman; L. J. O'Connor, Jr.,
Charles R. Ross, Carl E. Bagge, and
John A. Carver, Jr.

Sacramento Municipal Utility District) Project No. 2101

ORDER APPROVING REVISED PROJECT
EXHIBIT L DRAWING

(Issued December 5, 1966)

On August 3, 1966, Sacramento Municipal Utility District, licensee for Upper American River Project No. 2101, filed for Commission approval revised Exhibit L drawings relating to the Camino and White Rock developments of the project located on upper Rubicon River and South Fork American River and tributaries, California.

The revised Exhibit L drawing for the Camino penstock show the "as constructed" Camino penstock with minor changes in elevation and alignment of the penstock shown on the license Exhibit L drawings. The revised Exhibit L drawing for the White Rock powerhouse, relate to its design as presently being constructed and show: (1) the addition of a training wall designed to protect the powerhouse against flood flows and to confine the river's encroachment on the powerhouse to the tailrace only; and (2) a lower turbine setting at elevation 990 feet, or 25 feet lower than as initially proposed. The lower setting is to accommodate the normal and minimum tailwater elevations of 996.5 feet and 990.0 feet, respectively.

The Commission finds:

The following described revised Exhibit L drawings conform to the Commission's rules and regulations and should be approved as part of the license for the project, and the license Exhibit L drawings described in this finding as being superseded should be eliminated from the license;

Project No. 2101

- 2 -

<u>Exhibit</u>	<u>FPC No.</u>	<u>Showing</u> <u>Camino Penstock</u>	<u>Superseding</u> <u>FPC No.</u>
L-135, Sheet 1	2101-231	Plan and Profile	2101-112
L-136, Sheet 2	2101-232	Plan and Profile	2101-113
<u>White Rock Powerhouse</u>			
L-137	2101-233	Site Plan	2101-127
L-138	2101-234	Plan - Generator Floor	
L-139	2101-235	Plan - Turbine Floor	
L-140	2101-236	Plan - Distributor Centerline	
L-141	2101-237	Transverse Sections	2101-127

The Commission orders:

The revised Exhibit L drawings described in the above finding are hereby approved as part of the license for Project No. 2101, and the superseded license Exhibit L drawings described in the same finding are hereby eliminated from the license for the project.

By the Commission.

Joseph H. Cutride,
Secretary.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Before Commissioners: Lee C. White, Chairman; L. J. O'Connor, Jr.,
Carl E. Bagge, and John A. Carver, Jr.

Sacramento Municipal Utility District) Project No. 2101

ORDER FURTHER AMENDING LICENSE (MAJOR)

(Issued May 15, 1967)

Application was filed on July 14, 1966 by Sacramento Municipal Utility District, licensee for Project No. 2101, for further amendment of its license for the project, known as Upper American River Project, located on tributaries of the American River in El Dorado County, California, and affecting lands of the United States within El Dorado National Forest.

The application seeks Commission authorization to complete the Loon Lake Development on Gerle Creek by the installation of hydroelectric facilities having a capacity of 80,750 kw. License Article 44 provides, among other things, that the Loon Lake hydroelectric facilities shall be constructed as a part of the project "at such time as the Commission may direct". Licensee, seeing a need for additional capacity, desires Commission authorization to proceed now with construction of such facilities. The Loon Lake dam has been completed. As presently proposed, the Loon Lake Development will be constructed generally as described in the license for the project, and as more fully set forth in paragraph (B) below. On the basis of Commission staff analysis, it appears that the Loon Lake Development will be a safe and an economic addition to the existing project works.

According to staff studies, the total annual cost, including operation, maintenance and administration, of the Loon Lake power facilities is estimated to be \$1,132,000. The estimated value of power exceeds the estimated annual cost by amounts ranging from \$337,000 to \$85,000 based upon alternative sources of power.

One of the effects of this amendment will be to increase the installed generating capacity of the entire project by 80,750 kw, or by 107,700 horsepower, with a resultant increase in the annual administrative charge.

The Chief, Forest Service, has advised that the location of the project works comprising the Loon Lake Development, as shown on the exhibits filed as part of the application for amendment, are satisfactory for the protection and utilization of the National Forest lands involved.

The Department of the Interior, in commenting on the application, has advised that the proposed construction will not affect significantly fish and wildlife resources, provided that construction activities and spoil disposition within Gerle Creek drainage do not result in undue water pollution, and the project operation does not interfere with established minimum flow releases for fish, as provided for under license. See license Articles 29 and 57 (18 FPC 228, 234-235) and (31 FPC 473, 475). The Department requested that the U.S. Forest Service, the California Department of Fish and Game, and the Department's Bureau of Sport Fisheries and Wildlife be given an opportunity to review and comment on the final plans for the completion and the operation of the Loon Lake Development to insure ample protection of fish and wildlife resources affected by the project. Since these agencies have had an opportunity to report on such final plans, apparently the Department is requesting that those agencies be afforded an opportunity to review and comment on detailed construction plans. This is provided for by license Article 59 herein.

The Commission finds:

(1) Public notice of the application has been given. No protests or petitions to intervene have been received.

(2) Construction of the proposed additional project works at the Loon Lake Development is economically sound and in the public interest.

(3) The following designated and described exhibits conform to the Commission's rules and regulations and should be approved as part of the license for the project:

<u>Exhibit</u>	<u>FPC No. 2101</u>	<u>SHOWING</u>
L-131	227	Plan and Profile
L-132	228	Machine Hall Sections
L-133	229	Generator Floor Plan
L-134	230	Plan at Distributor Centerline

Exhibit M-7 consisting of two typewritten sheets entitled "General Description of Equipment".

(4) The authorized installed horsepower capacity of the project under this amendment is increased to 814,300 horsepower, and the increased annual charge for reimbursing the United States for the costs of administration of Part I of the Federal Power Act, based on such capacity, as hereinafter provided, is reasonable.

The Commission orders:

(A) The exhibits designated and described in finding (3) above are hereby approved as part of the license for Project No. 2101.

(B) The licensee for Project No. 2101 is hereby authorized to proceed with the completion of construction of the Loon Lake Development of the project and the Loon Lake Development is redescribed as consisting of: a rock-fill dam with impervious core, designated Loon Lake Dam, approximately 2,265 feet long and about 105 feet high above streambed with a side-channel spillway and ogee weir about 250 feet long on the right bank, an earth-fill auxiliary dam approximately 910 feet long and about 82 feet high and a dike creating a reservoir with storage capacity of about 76,500 acre-feet at maximum normal water surface elevation of 6410 feet, a 1,050-foot long 10-foot diameter vertical power tunnel to an underground powerhouse containing one 80,750 kw generator, an 18-foot by 18-foot, 20,000-foot long modified horseshoe tailrace tunnel to Gerle Reservoir, and project access roads with 66-foot wide right-of-way extending from the northern terminus of the Eastside Road in NE $\frac{1}{4}$ of Section 3, T. 12 N., R. 14 E., Mount Diablo Base Meridian, to the vicinity of the southernmost bay of Loon Lake Reservoir thence around the west side of the reservoir, across the auxiliary dam to and across Loon Lake Dam.

(C) Article 46 (a) of the license is hereby further amended effective as of April 1, 1967, by substituting "(814,300 horsepower)" for "(706,600 horsepower)" as the presently authorized installed capacity of the project.

(D) The following additional articles are hereby added to the license:

Article 59. The Licensee shall, in the interest of preventing undue water pollution and protecting fish and wildlife resources, consult with the U.S. Forest Service, the California Department of Fish and Game and the Bureau of Sport Fisheries and Wildlife of the Department of the Interior, in the preparation of detailed plans for construction and operation of the Loon Lake Development. In the event the licensee and these agencies or any of them are unable to agree on any feature of the detailed plans such disagreement shall be resolved by the Commission after notice and opportunity for hearing.

Article 60. The Licensee shall commence construction of the remaining project works comprising the Loon Lake Development within one year of the date of issuance of this order and shall thereafter in good faith and with due diligence prosecute such construction, and shall complete such construction within three years of the date of issuance of this order.

(E) This amendment in the manner set out above shall not operate to alter or amend the license in any other respect, and shall not in any way constitute a waiver of any other part, provision or condition of the license.

(F) This order shall become final 30 days from the date of its issuance unless application for rehearing shall be filed as provided in Section 313 (a) of the Act, and failure to file such an application shall constitute acceptance of this license amendment. In acknowledgment of the acceptance of this license amendment, it shall be signed for the licensee and returned to the Commission within 60 days from the date of issuance of this order.

By the Commission.

Gordon M. Grant,
Acting Secretary.

IN TESTIMONY of its acknowledgment of acceptance of all the provisions, terms and conditions of this license amendment, Sacramento Municipal Utility District _____, this ____ day of _____, 1967, has caused its corporate name to be signed hereto by _____, its _____ President, and its corporate seal to be affixed hereto and attested by _____, its _____ Secretary, pursuant to a resolution of its Board of Directors duly adopted on the ____ day of _____, 1967, a certified copy of the record of which is attached hereto.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By _____ President

Attest:

Secretary

(Executed in quadruplicate)

MAY 22 10 16 AM '67

STATE WATER RIGHTS BOARD
SACRAMENTO

STATE OF CALIFORNIA—RESOURCES AGENCY
STATE WATER RIGHTS BOARD
RESOURCES BUILDING ROOM 1140
1416 NINTH STREET
SACRAMENTO, CALIFORNIA 95814

PROGRESS REPORT BY PERMITTEE FOR THE YEAR 1966

OWNER OF RECORD:

APPLICATION 12624

SACRAMENTO MUNICIPAL UTILITY DISTRICT
P O BOX 2391,
SACRAMENTO, CALIF 95811

If the owner or address shown above is wrong, please correct

SOURCE: (1) RUBICON RIVER
(3) LOON LAKE
(5) S FK RUBICON RIVER
(7)

(2) ROCKBOUND LAKE
(4) GERLE CREEK
(6)

PERMIT 10704

Neither the filing of an application nor issuance of a permit in approval thereof constitutes a water right. A water right is established only by beneficial use of water in accordance with the terms and conditions of the permit. This report provides a record of the development of your project. If the project is diligently completed a license will be issued to confirm the right developed by beneficial use.

1. Has construction work commenced? Yes
2. Has all construction work been completed? No If not, give estimated date of completion Dec. 1971
3. State approximate cost of construction work on this project during the past 12 months \$14,500,000

Describe briefly the portions of the project upon which the above amount was spent Continued construction of Slab Creek Dam, White Rock Powerhouse, Penstock and Tunnel. Started construction of second 230 KV Transmission Line.

4. What construction work remains to be done to complete the project? Completion of features mentioned in (3) and the construction of Brush Creek Dam and Tunnel.

5. Has use of water commenced? Yes What was the maximum rate of diversion (if known)? -----
thousands of

6. What quantity of water was used each month in 1966 under this permit in gallons or acre-feet? (If not known check months water was used.)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
7.6	2.2	15.5	23.8	6.9	9.8	11.1	12.2	2.9	✓	✓	✓	92.0

7. Has use of water, both amount and season, been as great as you expect in any future year under this permit? No
8. Has location of the intake or place of use been changed? No
9. Did the source go dry? No If so, during what months? ---
10. Did your reservoir spill this year? No If not, how many feet below spillway vertically was the water level at maximum storage? Loon Lake 9 ft. max. Have you emptied the reservoir? No If not, how many feet below spillway vertically was it drawn down at end of season? Loon Lake 49 ft. October 1, 1966.
11. You should keep complete records of your use of water in your own files. Please supply information below concerning your use of water.

- (a) ☐ Irrigation _____
Total acres irrigated _____
(b) ☐ Stockwatering _____
Number of animals _____
(c) ☐ Industrial _____
Nature of use _____
(d) ☐ Domestic _____
Number of persons, Area of garden, lawn, etc. _____
(e) ☐ Municipal _____
Approximate population _____
(f) ☐ Mining _____
Method of water use _____
(g) ☐ Recreational _____
Nature of use _____
(h) ☒ Power 350,500 _____
Installed horsepower capacity _____
(i) ☐ Other _____

12. The project has been abandoned and I request revocation of this permit. ☐ Yes ☒ No

REMARKS

(If more space is needed, use reverse side)

SACRAMENTO MUNICIPAL UTILITY DISTRICT

Date October 14, 1966

Sign Here

General Mgr. & Chief Engr

This report is of importance to you in establishing your water right as it will be used as a basis for action by the State Water Rights Board. It should be filled out carefully and returned promptly.

FORM

F.P.C.-18

ENCLOSURE N^o 38682

FROM -

FEDERAL POWER COMMISSION

U.S. GOVERNMENT PRINTING OFFICE 16-6487-2

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Sacramento Municipal Utility District) Project No. 2101

ERRATUM NOTICE

(August 25, 1966)

ORDER APPROVING PROJECT EXHIBITS
AND ADJUSTING AUTHORIZED INSTALLED
CAPACITY AND ANNUAL CHARGES

(Issued July 21, 1966)

Page 3, ordering clause (C), line 2 - Change "(706,000 horsepower)"
to read "(706,600 horsepower)".

Joseph H. Gutride,
Secretary.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Before Commissioners: Lee C. White, Chairman; L. J. O'Connor, Jr.,
Charles R. Ross, David S. Black, and Carl E. Bagge.

Sacramento Municipal Utility District) Project No. 2101

ORDER APPROVING PROJECT EXHIBITS
AND ADJUSTING AUTHORIZED INSTALLED
CAPACITY AND ANNUAL CHARGES

(Issued July 21, 1966)

On April 4, and May 24, 1966, respectively, Sacramento Municipal Utility District, licensee for the Upper American River Project No. 2101, filed for Commission approval Exhibit M-6 and revised Exhibit L drawings. The project is located on the upper Rubicon River and South Fork American River and tributaries, California.

The exhibit and drawings show the 71,250 kw generating unit No. 2 proposed to be installed in the constructed Camino powerhouse as occurring by February or March of 1968 rather than during construction of the Brush Creek facilities originally planned for completion in May, 1968. The licensee plans to delay until the early 1970's construction of the facilities which will provide diversion of Brush Creek waters and a forebay reservoir located on Brush Creek near the Camino tunnel outlet to permit additional peaking capability. Approximately 80 percent of the nameplate rating of generating units Nos. 1 and 2 in Camino powerhouse will be usable without the Brush Creek forebay. The Camino development of Project No. 2101 consists of a concrete arch dam, a reservoir having 650 acre feet of usable storage, a power tunnel, a penstock, and a powerhouse containing generating unit No. 1 of 71,250 kw, with provision for generating unit No. 2.

While the Camino tunnel is designed to convey 1,200 cfs in its upper 24,100 feet and 2,000 cfs in its lower 1,900 feet to provide for the originally planned future Brush Creek forebay, the upper portion of Camino tunnel can convey higher flows but with increased head losses, and the licensee plans a maximum flow of 1,700 cfs upon the installation of generating unit No. 2 by February or March of 1968. Upon the installation of generating unit No. 2, the dependable capacity of Camino power plant will be increased from 75,000 kw at 1,000 cfs to 114,000 kw at 1,700 cfs,

or an additional dependable capacity of 39,000 kw. However, because of the high head losses in the upper tunnel associated with flows in excess of the designed flow, the licensee plans normally to operate Camino powerplant below 114,000 kw. Our staff estimates that Camino will be able to generate about 100,000 kw at 1,400 cfs, the hydraulic capacity of the licensee's upstream Jaybird plant.

The licensee estimates that the costs for purchasing and installing generating unit No. 2 and associated equipment at the earlier date will be \$2,500,000, based on actual bid prices for major equipment items. Using fixed charges amounting to 5.4 percent of the estimated capital cost, plus operation, maintenance, and other expenses, the total estimated annual cost of adding unit No. 2 is \$190,250. Using the minimum cost of alternate power available to the licensee from Pacific Gas and Electric Company (\$10.73 per kw-year) the annual value of 39,000 kw of dependable capacity is \$418,470. Hence, the estimated annual benefits exceed the estimated annual costs by \$228,220, with no credit given to additional energy generated during periods of high stream flow.

The Commission finds:

(1) The following described revised Exhibit L drawings and Exhibit M-6 conform to the Commission's rules and regulations and should be approved as part of the license for the project, and license Exhibit L drawings (FPC No. 2101-114, -115, and -116), which have been superseded, should be eliminated from the license for the project:

<u>Exhibit</u>	<u>FPC No.</u>	<u>Entitled</u>
L-128	2101-220	Camino Powerhouse, General Arrangement, Plan - El. 1885.0;
L-129	2101-221	Camino Powerhouse, General Arrangement, Plan - El. 1838.0;
L-130	2101-222	Camino Powerhouse, General Arrangement, Transverse Sections - Unit No. 1 & Service Bay.; and

Exhibit M-6, consisting of one typewritten page entitled "Camino Power Plant, Unit No. 2, General Description of Equipment."

(2) The authorized capacity to be installed in the project for the purpose of computing the capacity component of the administrative annual charge is by this order increased to 706,600 horsepower, and the amount of annual charges, based upon such increased capacity, to be paid under the license for the costs of administration of Part I of the Federal Power Act is reasonable.

The Commission orders:

(A) The revised Exhibit L drawings and Exhibit M-6, designated and described in finding (1) above are hereby approved as part of the license for Project No. 2101, and the license Exhibit L mentioned in the same finding as being superseded is hereby eliminated from the license for the project.

(B) Article 25 of the license is hereby further modified by adding thereto the following subparagraph (f):

- (f) Commence construction for the installation of Camino generating unit No. 2 in the Camino powerhouse within 10 years from the effective date of this license (August 1, 1957) and shall thereafter and in good faith and with due diligence prosecute such construction; and shall complete such construction within 11 years from the effective date of the license.

(C) Article 46 (a) of the license is hereby further modified, effective as of July 1, 1966, by substituting "(706,000 horsepower)" for "(612,000 horsepower)" as the presently authorized installed capacity of the project.

(D) This order shall become final 30 days from the date of its issuance unless application for rehearing shall be filed as provided in Section 313 (a) of the Act, and failure to file such an application shall constitute acceptance of this order. In acknowledgment of the acceptance of this order, it shall be signed for the licensee and returned to the Commission within 60 days from the date of issuance of this order.

By the Commission.

Joseph H. Gutride,
Secretary.

IN TESTIMONY of its acknowledgment of acceptance of all of the provisions, terms and conditions of the foregoing order, Sacramento Municipal Utility District, this 18th day of August, 1966, has caused its corporate name to be signed hereto by Royal Miller its _____ President, and its corporate seal to be affixed hereto and attested by David S. Kaplan, its _____ Secretary, pursuant to a resolution of its Board of Directors duly adopted on the 18th day of August, 1966, a certified copy of the record of which is attached hereto.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By /s/ Royal Miller
President

Attest:

/s/ David S. Kaplan
Secretary

(Executed in quadruplicate)

FEDERAL POWER COMMISSION

WASHINGTON, D.C. 20426

Project No. 2101
Sacramento Municipal Utility District

DEC -6 1961

State Water Rights Board
1416 Ninth Street
Room 1140 Resources Building
Sacramento, California 95814

Gentlemen:

Enclosed is a copy of Instrument No. 28 for the above named project.

Very truly yours,


F. Stewart Brown
Chief, Bureau of Power

Enclosure No. 38682
Copy of Instrument No. 28

RECEIVED
FPC
DEC 15 12 25 PM '61

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Sacramento Municipal Utility District) Project No. 2101

NOTICE OF APPLICATIONS FOR AMENDMENT
OF LICENSE FOR PARTIALLY CONSTRUCTED PROJECT

(August 26, 1966)

Public notice is hereby given that applications have been filed for amendment of license under the Federal Power Act (16 U.S.C. 791a - 825r) by Sacramento Municipal Utility District (correspondence to: Paul E. Shaad, General Manager & Chief Engineer, Sacramento Municipal Utility District, 6201 S Street, Box 2391, Sacramento, California 95811) for partially constructed Project No. 2101, known as the Upper American River Project, located on the Rubicon River and tributaries, Silver Creek and tributaries, and South Fork of the American River in El Dorado County, California, near Placerville.

The applications for amendment seek authorization to: (1) remove from the license for the project a project access road leading to Loon Lake and crossing Loon Lake Dam, which road is now partially included in the County highway system and used for recreational purposes; (2) remove the license time requirement for construction of the proposed Ice House tunnel as not being presently economically feasible; and (3) include under the license the proposed Loon Lake underground powerhouse development consisting of: (a) a short intake tunnel at Loon Lake; (b) fixed wheel and bulkhead intake gates; (c) a lined 10-foot diameter vertical penstock about 1050 feet long; (d) an underground powerhouse containing a single 112,000 horsepower impulse turbine connected to a 80,750 kilowatt generator; (e) an 18-foot by 18-foot modified horseshoe tailrace tunnel about 20,000 feet long, to Gerle Reservoir; (f) a 13.8/69 kv transformer located underground; (g) an 8-mile 69 kv transmission line from the above ground switchyard to the Robbs Peak--Union Valley Line; and (h) appurtenant facilities.

Protests or petitions to intervene may be filed with the Federal Power Commission, Washington, D. C., 20426, in accordance with the Rules of Practice and Procedure of the Commission (18 CFR 1.8 or 1.10). The last day upon which protests or petitions may be filed is October 18, 1966. The application is on file with the Commission for public inspection.

SEP 20 1966

Joseph H. Gutride
Secretary

Memorandum

Mr. Lawrence C. Spencer
Chief Engineer
State Water Rights Board

Date : JUL 21 1966

File No.:

Subject: Notice of
Application
Filed

From : Department of Water Resources

Name of Dam Robbs Peak Application No. 1009-6

Mr. Paul E. Shaad
General Manager and Chief Engineer

On July 6, 1966, Sacramento Municipal Utility District
P. O. Box 15830, Sacramento, California,

filed with this office an application for approval of plans
and specifications for the enlargement of a concrete gravity
dam to be 36 feet in height, with a storage capacity of

30 acre-feet, at an estimated cost of \$ 12,000 in

NE $\frac{1}{4}$ of Section 27 T.13N R.14E, M.DB&M, on So. Fork Rubicon River
tributary to Rubicon River in County of El Dorado

to be used for Storage, Diversion Power
Purpose Use

Remarks: Installation of 5 feet of flashboards, increasing
storage capacity 10 acre-feet.

Robert B. Jansen

Robert B. Jansen
Division Engineer
Division of Safety of Dams

RECEIVED
STATE WATER RIGHTS DIV.
JUL 22 10 44 AM '66

No. 12624

REMARKS:

Please note that in last year's report Item 2 was noted as completed and Item 4 indicated no construction work remained. However, this year the District updated its filings and in doing so described the routing of water through the existing and proposed future additions for each application. As a result of this revision construction should not be considered complete for this application until the Brush Creek Dam and Tunnel, White Rock Tunnel, Penstock and Power Plant, Slab Creek Dam, and the Loon Lake Penstock, Tunnel and Power Plant are constructed.

The District's present construction schedule anticipates completion of the White Rock facilities by December 1967, the Loon Lake facilities by August 1970, and the Brush Creek facilities by December 1971.

STATE OF CALIFORNIA—RESOURCES AGENCY
STATE WATER RIGHTS BOARD
RESOURCES BUILDING, ROOM 1140
1416—9TH STREET
SACRAMENTO, CALIFORNIA 95814

PROGRESS REPORT BY PERMITTEE FOR THE YEAR 1965

OWNER OF RECORD:

APPLICATION 12624

SACRAMENTO MUNICIPAL UTILITY DISTRICT
P.O. BOX 2391,
SACRAMENTO, CALIF 95811

If the owner or address shown above is wrong, please correct

SOURCE: (1) RUBICON RIVER
(3) LOON LAKE
(5) S. F. RUBICON RIVER
(7)

(2) ROCK BOUND LAKE
(4) GEREE CREEK
(6)

PERMIT 10704

Neither the filing of an application nor issuance of a permit in approval thereof constitutes a water right. A water right is established only by beneficial use of water in accordance with the terms and conditions of the permit. This report provides a record of the development of your project. If the project is diligently completed a license will be issued to confirm the right developed by beneficial use.

1. Has construction work commenced? Yes
2. Has all construction work been completed? No If not, give estimated date of completion Dec. 1971
3. State approximate cost of construction work on this project during the past 12 months 0
Describe briefly the portions of the project upon which the above amount was spent: ---
4. What construction work remains to be done to complete the project? See Remarks
5. Has use of water commenced? Yes Amount (if known) -----
6. Has use of water, as to both amount and season, been as great as you expect in any future year under this permit?
No
7. During what months was water used in 1965 under this permit? All
8. Has location of the intake or place of use been changed? No
9. Did the source go dry? No If so, during what months? -----
10. Did your reservoir spill this year? Yes If not, how many feet below crest vertically was the water level at maximum storage? --- Have you emptied the reservoir? No If not, how many feet below crest vertically was it drawn down at end of season? Draw down October 1, 5 feet
11. You should keep complete records of your use of water in your own files. Please supply information below concerning your use of water.

- (a) ☐ Irrigation Total acres irrigated Name crops served and acreage of each
- (b) ☐ Stockwatering Number of animals
- (c) ☐ Industrial Nature of use
- (d) ☐ Domestic Number of persons, Area of garden, lawn, etc.
- (e) ☐ Municipal Approximate population
- (f) ☐ Mining Method of water use
- (g) ☐ Recreational Nature of use
- (h) ☒ Power 350,500 Installed horsepower capacity
- (i) ☐ Other

12. The project has been abandoned and I request revocation of this permit. ☐ Yes ☒ No

REMARKS See attached sheet

SACRAMENTO MUNICIPAL UTILITY DISTRICT

Date November 24, 1965

Sign Here

GENERAL MGR. & CHIEF ENGINEER

This report is of importance to you in establishing your water right as it will be used as a basis for action by the State Water Rights Board. It should be filled out carefully and returned promptly.

YEAR 1965

67

STANDARD TIME AND DATE SYSTEM

RECEIVED

TO: DIRECTOR, CALIFORNIA DEPARTMENT OF WATER RESOURCES

FROM: SAC, SACRAMENTO

SUBJECT: [Illegible]

RE: [Illegible]

DATE: [Illegible]

TIME: [Illegible]

BY: [Illegible]

FOR: [Illegible]

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FOR: [Illegible]

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STATE WATER BOARD
SACRAMENTO

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STATE OF CALIFORNIA

DEPARTMENT OF WATER RESOURCES

THE CHIEF, REGIONAL WATER RESOURCES DIVISION, SACRAMENTO

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STATE OF CALIFORNIA—STATE WATER RIGHTS BOARD
ROOM 1140, 1416 NINTH STREET
SACRAMENTO 95814

PROGRESS REPORT BY PERMITTEE
FOR THE YEAR 1964

OWNER OF RECORD:

APPLICATION 12624

SACRAMENTO MUNICIPAL UTILITY DIST
P O BOX 2391,
SACRAMENTO, CALIF

Indicate Corrections Above If the Owner or Address Shown Are Incorrect

SOURCE: (1) RUBICON RIVER (2) ROCK BOUND LAKE
(3) BUCK ISLAND LAKE (4) S FR RUBICON RIVER
(5) LOON LAKE (6) GERLE CREEK
(7)

PERMIT 10704

Neither the filing of an application nor issuance of a permit in approval thereof constitutes a water right. A water right is established only by beneficial use of water in accordance with the terms and conditions of the permit. This report provides a record of the development of your project. After use of water is complete, an inspection will be made and license issued for the amount of water actually put to use under the terms and conditions of the permit.

1. Has the project been abandoned? No Has construction work commenced? Yes
2. Has all construction work been completed? Yes If not, give estimated date of completion _____
3. State approximate cost of construction work on this project during the past 12 months \$25,000

Describe briefly the portions of the project upon which the above amount was expended Cleanup around Rubicon and Buck Island Reservoirs, replacing trails and obliterating road in wild area.

4. What construction work remains to be done to complete the project? None
5. Has use of water commenced? Yes
6. Has use of water, as to both amount and season, been as great as you expect in any future year under this permit? No
7. During what months was water used in 1964 under this permit? All
8. Has location of the intake or place of use been changed? No
9. Did the source go dry? No If so, during what months? _____
10. Did your reservoir spill this year? No If not, how many feet below crest vertically was the water level at maximum storage? Loon 32' Have you emptied the reservoir? No If not, how many feet below crest vertically was it drawn down at end of season? Loon 75'
11. You should keep complete records of your use of water in your own files. Please supply information below concerning your use of water.

- | | | | |
|---|---|---|--|
| (a) ☐ Irrigation | Total acres irrigated _____ | Name crops served and acreage of each _____ | |
| (b) ☐ Stock-watering | Number of animals _____ | (f) ☐ Mining | Method of water use _____ |
| (c) ☐ Industrial | Nature of use _____ | (g) ☐ Recreational | Nature of use _____ |
| (d) ☐ Domestic | Number of persons _____
Area of garden, lawn, etc. _____ | (h) ☒ Power | 316,000
Installed horsepower capacity _____ |
| (e) ☐ Municipal | Approximate population _____ | (i) ☐ Other | _____ |

REMARKS

SACRAMENTO MUNICIPAL UTILITY DISTRICT

Date November 25, 1964

Sign Here

General Mgr. & Chief Engr.

This report is of importance to you in establishing your water right. It will be used as a basis for action by the State Water Rights Board. It should therefore be filled out carefully and returned promptly.

YEAR 1964

NOV 27 11 03 AM '64
STATE WATER RIGHTS BOARD
SACRAMENTO

TO: DIRECTOR

FROM: [illegible]

SUBJECT: [illegible]

RE: [illegible]

DATE: [illegible]

BY: [illegible]

FOR: [illegible]

THROUGH: [illegible]

BY MAIL: [illegible]

BY TELEPHONE: [illegible]

BY FAX: [illegible]

BY OTHER: [illegible]

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STATE OF CALIFORNIA—STATE WATER RIGHTS BOARD

1401 21st STREET, P. O. BOX 1592

SACRAMENTO

PROGRESS REPORT BY PERMITTEE
FOR THE YEAR 1963

OWNER OF RECORD:

APPLICATION 12624

SACRAMENTO MUNICIPAL UTILITY DIST.
P. O. BOX 2391,
SACRAMENTO, CALIF.

Indicate Corrections Above If the Owner or Address Shown Are Incorrect

SOURCE: (1) RUBICON RIVER (2) ROCK BOUND LAKE
(3) BUCK ISLAND LAKE (4) SOUTH FORK RUBICON RIVER
(5) LOON LAKE (6) GERLE CREEK
(7)

PERMIT 10704

Neither the filing of an application nor issuance of a permit in approval thereof constitutes a water right. A water right is established only by beneficial use of water in accordance with the terms and conditions of the permit. This report provides a record of the development of your project. After use of water is complete, an inspection will be made and license issued for the amount of water actually put to use under the terms and conditions of the permit.

1. Has the project been abandoned? No Has construction work commenced? Yes
2. Has all construction work been completed? No If not, give estimated date of completion December 1963
3. State approximate cost of construction work on this project during the past 12 months \$6,960,000
Describe briefly the portions of the project upon which the above amount was expended Completion Loon Lake, Buck Island and Rubicon Dams and Rubicon and Buck-Loon Tunnels.
4. What construction work remains to be done to complete the project? None (December 1963)
5. Has use of water commenced? Yes
6. Has use of water, as to both amount and season, been as great as you expect in any future year under this permit?
No
7. Has location of the intake or place of use been changed? No
8. Did the source go dry? No If so, during what months? See Remarks
9. Did your reservoir spill this year? See Remarks If not, how many feet below crest vertically was the water level at maximum storage? Have you emptied the reservoir? If not, how many feet below crest vertically was it drawn down at end of season? Storage reservoirs not completed
10. You should keep complete records of your use of water in your own files. Please supply information below concerning your use of water.

- | | |
|--|--|
| (a) ☐ Irrigation
<small>Total acres irrigated</small> | (f) ☐ Mining
<small>Method of water use</small> |
| (b) ☐ Stock watering
<small>Number of animals</small> | (g) ☐ Recreational
<small>Nature of use</small> |
| (c) ☐ Industrial
<small>Nature of use</small> | (h) ☒ Power <u>316,000</u>
<small>Installed horsepower capacity</small> |
| (d) ☐ Domestic
<small>Number of persons
Area of garden, lawn, etc.</small> | (i) ☐ Other |
| (e) ☐ Municipal
<small>Approximate population</small> | |

REMARKS Storage reservoirs will not be completed until December 1963.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

Date November 14, 1963Sign Here Paul E. Shaul
General Manager and Chief Engineer

This report is of importance to you in establishing your water right. It will be used as a basis for action by the State Water Rights Board. It should therefore be filled out carefully and returned promptly.

YEAR 1963

Nov 22 9 37 AM '68
STATE WATER RIGHTS BOARD
SACRAMENTO

RECEIVED: 11/22/68 9:37 AM
STATE WATER RIGHTS BOARD
SACRAMENTO

TO: SACRAMENTO
FROM: SACRAMENTO

RE: SACRAMENTO
SUBJECT: SACRAMENTO

1. The Board of Directors of the Sacramento River Water Right Association, Inc. (SRWRA) has requested that the State Water Rights Board (SWRB) issue a ruling on the validity of the SRWRA's water rights. The SRWRA claims that its water rights are valid and that it is entitled to the full amount of water it has been using since 1900. The SWRB is currently reviewing the SRWRA's request and has asked for additional information regarding the SRWRA's water rights.

2. The SRWRA has provided the SWRB with a copy of its water rights application and a copy of its water rights agreement. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights.

3. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights.

4. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights.

5. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights.

6. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights.

7. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights.

8. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights. The SWRB is currently reviewing the SRWRA's application and has asked for additional information regarding the SRWRA's water rights.

STATE OF CALIFORNIA—STATE WATER RIGHTS BOARD

1401 21ST STREET, P. O. BOX 892

SACRAMENTO

PROGRESS REPORT BY PERMITTEE
FOR THE YEAR 1962

OWNER OF RECORD:

APPLICATION 12624

SACRAMENTO MUNICIPAL UTILITY DISTRICT

P. O. Box 2391

Sacramento 11, California

Indicate Corrections Above If the Owner or Address Shown Are Incorrect

SOURCE: (1) Rubicon River, etc. (2)
(3) (4)
(5) (6)

PERMIT 10704

Neither the filing of an application nor issuance of a permit in approval thereof constitutes a water right. A water right is established only by beneficial use of water in accordance with the terms and conditions of the permit. This report provides a record of the development of your project. After use of water is complete, an inspection will be made and license issued for the amount of water actually put to use under the terms and conditions of the permit.

1. Has the project been abandoned? No Has construction work commenced? Yes
2. Has all construction work been completed? No If not, give estimated date of completion December, 1963
3. State approximate cost of construction work on this project during the past 12 months \$5,520,000

Describe briefly the portions of the project upon which the above amount was expended. Completion of Robbs Peak Tunnel, Gerle Dam and Canal and Robbs Forebay; commencement of construction of Loon Lake Dam, Buck Island Dam and Buck-Loon Tunnel and access road to Rubicon diversion.

4. What construction work remains to be done to complete the project? Completion of Rubicon Diversion Dam, Buck Island Dam, Loon Lake Dam and Rubicon and Buck-Loon Tunnels.

5. Has use of water commenced? Yes
6. Has use of water, as to both amount and season, been as great as you expect in any future year under this permit? No

7. Has location of the intake or place of use been changed? No

8. Did the source go dry? No If so, during what months?

9. Did your reservoir spill this year? No If not, how many feet below crest vertically was the water level at maximum storage? No storage Reservoirs completed
Have you emptied the reservoir? No If not, how many feet below crest vertically was it drawn down at end of season?

10. You should keep complete records of your use of water in your own files. Please supply information below concerning your use of water.

- | | | | |
|--|--|---|--|
| (a) ☒ Irrigation | Total acres irrigated | Name crops served and acreage of each | |
| (b) ☒ Stock watering | Number of animals | (f) ☐ Mining | Method of water use |
| (c) ☐ Industrial | Nature of use | (g) ☐ Recreational | Nature of use |
| (d) ☒ Domestic | 176,000
Number of persons
Area of garden, lawn, etc. | (h) ☒ Power | 176,000
Installed horsepower capacity |
| (e) ☐ Municipal | Approximate population | (i) ☐ Other | |

REMARKS

SACRAMENTO MUNICIPAL UTILITY DISTRICT

Date March 13, 1963Sign Here [Signature]
Permittee
General Manager and Chief Engineer

This report is of importance to you in establishing your water right. It will be used as a basis for action by the State Water Rights Board. It should therefore be filled out carefully and returned promptly.

YEAR 1962

No Action
[Signature]
4/1/63

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TO BEYOND THE BARRIERS OF THE WORLD IN THE
COURTESY OF THE UNITED STATES OF AMERICA

1. THE STATE OF TEXAS, County of EL PASO, do hereby certify that the within and foregoing is a true and correct copy of the original as the same appears from the records of said County.

2000年12月12日

圖 1-1-1

【附】同 164 号

(5) 同 1997 年

Figure 1

[illegible][illegible]

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() INFORMATION BAST OFF

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1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

1997

1997

9780160757600

WAVES OF THE FUTURE

WILLIAM H. WILSON

LOK THE LEUK DRO
WICKER? KEROK RA BEKWI HIR

THE UNIVERSITY OF CHICAGO PRESS

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2015 RELEASE UNDER E.O. 14176

STATE OF CALIFORNIA—STATE WATER RIGHTS BOARD

1401 21ST STREET

P. O. BOX 1582

SACRAMENTO

PROGRESS REPORT BY PERMITTEE
FOR THE YEAR 1961

This report is of importance to you in establishing your water right. It will be used as a basis for action by the State Water Rights Board. It should therefore be filled out carefully and returned promptly. See reverse side of this sheet.

SOURCE Rubicon R., Etc.APPLICATION 12621PERMIT 10701

ANSWER ALL QUESTIONS—IF A QUESTION DOES NOT APPLY, SO STATE

1. Names of all parties who are owners of this permit:

SACRAMENTO MUNICIPAL UTILITY DISTRICT

MAILING ADDRESS

P. O. Box 2391, Sacramento 11, California2. Has the project been abandoned? No Has construction work commenced? Yes (See Remarks)3. Has all construction work been completed? No If not, give estimated date of completion 19634. State approximate cost of construction work on this project during the past 12 months \$2,300,000Describe briefly the portions of the project upon which the above amount was expended: See Remarks5. What construction work remains to be done to complete the project? Completion of all the features in (4) above.6. Has use of water commenced? No State maximum rate of use if known None

If so, check (x) purposes for which it was used and indicate acreage, number of persons, etc. served.

(a) ☐ Irrigation

Total acres irrigated

Name crops served and acreage of each

(b) ☐ Stock watering

Number of animals

(f) ☐ Mining

Method of water use

(c) ☐ Industrial(g) ☐ Recreational

Nature of use

(d) ☐ Domestic

Number of persons

(h) ☐ Power

Installed horsepower capacity

(e) ☐ Municipal

Approximate population

(i) ☐ Other7. During what months was water used in 1961? None

Do you expect to use it over a longer or different season in the future?

If so, state other months of use:

8. Have you used as much water this year as you expect to use in any future year under this permit? NoIf not, estimate year in which use will be full and complete 19659. Has location of the intake or place of use been changed? Yes (See Remarks)

IF PROJECT INVOLVES STORAGE ANSWER 10 AND 11

10. Have you filled in your reservoir during the 1960-61 collection season? No If not, do you expect to fill it in any one future collection season? Yes How much of the stored water has been used? NoneHave you emptied the reservoir? No If not, have you drawn down the reservoir as far as you intend to use in any one season? No State acre-feet used if known None11. During which months was water collected in the reservoir? None

Sign Here

Sacramento Municipal Utility DistrictBy: General Mgr. & Chief Engr.Date October 11, 1961

Orig. mailed to State Water Rights Board

10/11/61-18

FORM 87

YEAR 1961

INSTRUCTIONS

Please bear in mind that neither the filing of an application nor the approval thereof constitutes a water right. Beneficial use alone establishes the right. When you have used the greatest amount of water you ultimately expect to use, and use has been made over the full period of the year intended, an inspection will be made and license will be issued confirming your right to the water theretofore actually put to beneficial use.

If the time allowed in your permit within which to complete either construction or beneficial use has expired and additional time is required an extension may be allowed upon a showing of good cause, which showing should include a description of the further development proposed and indicate the probable date of completion. Lack of funds can not be accepted as good cause for failure to complete.

REMARKS

The space below may be used for describing in greater detail progress which has already been made toward completion of the project and plans for further development. Particularly if the time heretofore allowed for completion of either construction or use has expired and further time is needed, the cause of failure to complete should be stated and an estimate given of additional time required.

Item No. 2: Construction of Robbs Peak Tunnel and forebay dam and Gerle Creek

Diversion dam and diversion canal has commenced. Detailed plans are complete for the construction of Loon Lake Dam and exploratory drilling and location surveys are in progress at Rubicon diversion and Buck Island dams and tunnels.

Item No. 4: Continuing construction of Robbs Peak Tunnel; start of construction

of Gerle Creek Dam, canal and Robbs Peak diversion; final designs and specifications for Loon Lake Dam and access roads. Exploratory drilling and surveys for Rubicon diversion and Buck Island dams and tunnels.

Item No. 9: The intake to Robbs Peak Tunnel has been moved about one mile upstream

to shorten the tunnel and to increase the static head that will eventually be developed between the Rubicon and Silver Creek. The location of Loon Lake Dam has been moved about 700 feet upstream for geologic reasons and to better fit topographic conditions.

DO NOT WRITE IN THIS SPACE

(916) 657-1945
FAX: 657-1485

September 8, 1995

In Reply Refer
to:332:CAR:12624

Mr. Al Ortega, Manager
General Operations
Sacramento Municipal Utility District
P.O. Box 15830
Sacramento, CA 95852-1830

Dear Mr. Ortega:

BUCK ISLAND RESERVOIR - FERC PROJECT 2101

Your letter of September 4, 1995 to Roger Johnson has been referred to me for a response. You request that the Division of Water Rights (Division) provide written comments on the plans of the Sacramento Municipal Utility District (SMUD) for a physical solution to the problem related to the release of water for fishery maintenance below Buck Island Dam. Division staff believe that there are two items that need to be addressed in relation to the fishery flow release problem: (1) the physical solution proposed by SMUD to ensure that releases equal to or greater than the flow requirements are maintained; and (2) actions necessary to amend SMUD's water rights so that the physical solution will not result in a violation of California water rights law.

During our meeting on September 29, SMUD staff explained that they planned on installing a set of removable gates, two feet in height, in the entrance to the Buck-Loon tunnel. The purpose of these gates would be to maintain sufficient head on the outlet valve to maintain the minimum fishwater release during a dry fall. This action certainly has promise. However, Division staff are not certain that this action will guarantee that the problem will be corrected.

According to the California Division of Dam Safety, Buck Island Reservoir holds 1,070 acre-feet of water¹. If a continuous 1 cubic-foot-per-second release was made, this amount of storage should last for 540 days. This should be more than enough water to cover the required fish release; especially since there is probably some natural inflow to the reservoir in all but the driest of years. Presumably, the problem is related to the fact that the existing 6-foot high gates have been closed so late in the season that a large portion of the 1,070 acre-feet of stored water is diverted to Loon Lake

¹ - The engineering maps on file with the Division show a capacity of 1,371 acre-feet. These are obviously not the most recent maps/drawings for the project. Updated maps as required by Section 715 et seq. of Title 23 of the California Code of Regulations should be submitted.

and is not available to sustain the fishery flow release. Installation of the new gates would allow some water to continue to be diverted through the Buck-Loon Tunnel while still maintaining a larger pool of water for fishery flow release. However, if the new gates are not closed soon enough, the same problem may develop. Consequently, in order for Division staff to analyze this proposal in more detail we would appreciate submittal of the following information:

- A copy of the most recent area-capacity curve for the Buck Island Reservoir as requested during our meeting.
- A description of the fishery flow outlet works and the elevation of the centerline of this device in relation to the area-capacity curve.
- Any data relating to inflows into Buck Island Reservoir after diversions through the Rubicon and Buck-Loon Tunnels have been stopped. If flow data is not available, reservoir elevations would be helpful.
- A written description of the criteria that will be utilized for the operation of both the 2-foot and 6-foot gates.

Division staff would also like to visit Buck Island Reservoir with your staff at their convenience. Division staff have not visited this facility since 1987 and a one-day trip would help to refresh our memories and understanding of the situation. Helicopter transport is not necessary as the staff who would participate in this inspection are in good physical shape and can hike to the facilities.

During our September 29 meeting, SMUD's consulting counsel requested that the Division interpret SMUD's water right license in such a fashion that the storage of water in Buck Island Reservoir would be covered. This license authorizes storage as follows:

(B) Two hundred twenty-six thousand nine hundred (226,900) acre-feet per annum by storage, to be collected from all sources from October 1 of each year to July 31 of the succeeding year. The maximum amount of water to be collected to storage in any one year in each of licensee's reservoirs has been:

- (1) Loon Lake, 92,000 acre-feet*
- (2) Union Valley Reservoir, 141,500 acre-feet*

Since no reference was made to Buck Island Reservoir, interpreting this license in its present form to also authorize storage in Buck Island Reservoir may not be possible. Division staff are still analyzing this request to see if there is any way that SMUD's license could be "corrected" to include authorization of storage at Buck Island Reservoir. However, this course of action does not currently appear to be very promising. During our

September 29 meeting, we discussed several other options to resolve this issue including:

- Filing a new application to cover storage in Buck Island Reservoir. The sole purpose of this filing would be for fishery flow enhancement.
- Filing a change petition for redistribution of storage and adding fishery flow enhancement as a purpose of use under the existing water right license. Approval of such a petition could result in limiting the maximum amount of water that could be placed into storage in Loon Lake and/or Union Valley Reservoir during certain years.
- Utilization of water rights presently held by the El Dorado National Forest to authorize storage in Buck Island Reservoir for fishery enhancement purposes. There was some question during our meeting of the capacity of Buck Island Reservoir and the adequacy of Forest Service rights to cover the total amount of water that might be placed in storage at this facility.

The Division, like SMUD, would like to minimize the effort required to conform SMUD's water rights to California water law. Division staff want to work with SMUD staff to find the most expeditious and efficient method of resolving this issue.

Division staff understand that the Federal Energy Regulatory Commission (FERC) is interested in rapid resolution of the potential for future flow deficiencies below Buck Island Dam. Division staff would urge that FERC consider granting an extension of time to resolve this issue. I have visited the facilities in question on two occasions and have met with both Forest Service staff and representatives from the California Sportfishing Protection Alliance regarding fishery flow issues within the general area. I am not aware of any evidence indicating that the fishery below Buck Island Dam has been placed in any jeopardy due to occasional flow deficiencies during the fall. The channel below Buck Island Dam consists of numerous plunge pools. Because of this configuration, short-term flow deficiencies should not adversely impact the quantity of habitat available to resident fish. In addition, all of the deficiencies of which I am aware occurred when ambient temperatures were relatively low. Consequently, these deficiencies probably have not adversely impacted the quality of habitat available either.

I have been involved with water right enforcement actions for the past 15 years and have inspected projects all over California. In my opinion, SMUD is one of the very best operators in California. I have always found SMUD staff willing to address problems in a forthright and honest fashion. I believe that granting additional time to find the most practical solution is warranted and will help protect the interests of SMUD's ratepayers and the citizens of California without jeopardizing the resident fishery.

Mr. Al Ortega

- 4 -

September 8, 1995

I hope these comments are useful. Please let me know when it would be convenient for Division staff to visit the Buck Island facilities with SMUD staff. I can be reached at (916) 657-1945.

Sincerely,

/original signed by/

Charles A. Rich
Senior Water Resources Control Engineer

bcc: Roger Johnson, Dave Beringer

CRICH:crich 09-08-95 O:\CAR\SMUD



SACRAMENTO MUNICIPAL UTILITY DISTRICT ☐ P. O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

May 9, 1995
GO 95-80

Mr. Edward Anton, Chief
Division of Water Rights
P.O. Box 2000
Sacramento CA 95812-2000

Dear Mr. Anton:

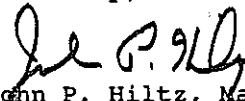
SUBJECT: ANNUAL FISHWATER COMPLIANCE REPORT - UPPER AMERICAN RIVER PROJECT

In accordance with our compliance plan dated June 1986, enclosed are the data for the 1994 water year. During the year two periods of deficient release occurred, both of which were communicated to your office by letter. Copies of the Notices of Deficient Releases sent to your office during the 1994 water year are also included.

The two periods of deficient release are:

<u>Station Name</u>	<u>Period</u>	<u>Cause</u>
• Little Rubicon River Below Buck Island Dam	11/06/93-12/16/93	Insufficient reservoir storage thru 11/30; Release valve partially plugged by debris 11/30 thru 12/16
• Slab Creek Dam (South Fork American River near Camino)	10/23/93	Electrical/mechanical equipment failure

Sincerely,


John P. Hiltz, Manager
Generation Operations

Enclosures

bcc: Corp. Files (Water Rights Division)
CA, State of (Compliance Report)

1994 WATER YEAR

RUBICON DAM (RUBICON RIVER BELOW RUBICON DAM)

- Minimum release requirements:

October through September	6 cfs or inflow, whichever is less
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- Inflow is determined by periodic stage observations at a rated staff gage. Discharge is measured by orifice plates in the release conduits.
- The discharge record indicates no apparent violations during the water year.
- There were no modifications to measuring devices during the reporting period.

STATION NUMBER 11427960 RUBICON R BL RUBICON LK CA STREAM SOURCE AGENCY USGS

LATITUDE 385926 LONGITUDE 1201315 DRAINAGE AREA 26.80 DATUM

STATE 06 COUNTY 017

PROV. DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	6.3	4.5	e6.4	6.5	6.6	6.3	e6.8	e6.7	6.6	1.8	.98
2	2.2	6.2	4.6	e6.4	6.4	6.7	6.3	e6.8	e6.5	6.6	1.8	.97
3	2.2	6.2	4.7	e6.4	6.4	6.7	6.4	e6.9	e6.5	6.6	1.8	.96
4	2.2	6.1	4.8	e6.5	6.4	6.7	6.2	e7.0	e6.4	6.6	1.8	.95
5	2.2	6.1	4.8	e6.7	6.4	6.8	6.1	e7.2	e6.4	6.5	1.8	.94
6	2.2	6.0	4.8	e6.6	6.4	6.8	6.1	e7.3	e6.3	6.4	1.8	.94
7	2.2	6.0	4.8	e6.5	6.4	6.8	6.2	e7.2	e6.4	6.4	1.8	.93
8	2.2	5.9	e4.7	e6.4	6.4	6.8	6.5	e7.0	6.6	6.4	1.8	.92
9	2.2	5.8	e4.9	e6.4	6.4	6.8	6.5	e7.3	6.6	6.4	1.6	.92
10	2.2	5.8	e5.4	e6.4	6.5	6.8	6.4	e7.5	6.7	6.4	1.2	.91
11	2.2	5.7	e5.7	e6.2	6.5	6.8	6.4	e7.2	6.7	6.4	1.2	.90
12	4.3	5.6	e5.9	e6.2	6.5	6.7	6.6	6.9	6.7	6.3	1.2	.90
13	6.8	5.6	e6.0	e6.0	6.5	6.7	6.9	e6.8	6.6	5.6	1.2	.88
14	6.5	5.5	e6.0	e6.0	6.5	6.9	7.1	e6.7	6.2	4.5	1.2	.87
15	6.6	5.4	e6.1	e6.0	6.5	7.0	7.3	e6.6	6.1	4.4	1.2	.87
16	6.8	5.3	e6.2	e6.0	6.5	7.1	7.5	e6.3	6.3	4.4	1.2	.86
17	6.7	5.2	e6.2	e6.0	6.5	7.0	7.7	e6.1	6.5	4.4	1.2	.86
18	6.6	5.1	e6.3	e6.2	6.5	6.9	7.8	e6.0	6.6	4.4	1.2	.85
19	6.5	5.0	e6.3	6.4	6.5	6.9	7.9	e6.0	6.6	4.3	1.2	.84
20	6.5	4.8	e6.3	6.5	6.6	6.9	7.8	e6.0	6.7	4.3	1.2	.82
21	6.5	4.7	e6.3	6.5	6.6	7.0	7.7	e6.2	6.7	4.3	1.2	.82
22	6.5	4.5	e6.3	6.5	6.5	6.9	7.4	6.5	6.7	4.3	1.2	.82
23	6.5	4.3	e6.4	6.5	6.5	6.8	7.2	6.6	6.7	4.3	1.1	.83
24	6.5	4.1	e6.4	6.5	6.5	6.7	6.9	e6.8	6.7	4.2	1.0	.79
25	6.5	3.8	e6.4	6.5	6.6	6.7	e6.7	e6.9	6.6	4.2	1.0	.79
26	6.4	3.3	e6.4	6.5	6.6	6.7	e6.7	e6.8	6.6	2.9	1.0	.82
27	6.4	2.7	e6.4	6.5	6.6	6.7	e6.7	6.7	6.6	1.8	1.0	.81
28	6.4	3.0	e6.4	6.5	6.6	6.9	e6.7	e6.7	6.6	1.8	.99	.80
29	6.4	3.6	e6.4	6.5	---	7.1	e6.8	e6.6	6.6	1.8	.99	1.1
30	6.3	4.3	e6.3	6.5	---	7.2	e6.8	e6.6	6.6	1.8	.99	1.4
31	6.3	---	e6.4	6.5	---	6.9	---	e6.7	---	1.8	.98	---
TOTAL	152.2	151.9	179.1	197.7	181.8	212.0	205.6	208.7	196.5	147.1	40.65	27.05
MEAN	4.91	5.06	5.78	6.38	6.49	6.84	6.85	6.73	6.55	4.75	1.31	.90
MAX	6.8	6.3	6.4	6.7	6.6	7.2	7.9	7.5	6.7	6.6	1.8	1.4
MIN	2.2	2.7	4.5	6.0	6.4	6.6	6.1	6.0	6.1	1.8	.98	.79
AC-FT	302	301	355	392	361	421	408	414	390	292	81	54

CAL YR 1993 TOTAL 2303.8 MEAN 6.31 MAX 7.9 MIN 2.2 AC-FT 4570

WTR YR 1994 TOTAL 1900.30 MEAN 5.21 MAX 7.9 MIN .79 AC-FT 3770

e Estimated

1994 WATER YEAR

BUCK ISLAND DAM (LITTLE RUBICON RIVER BELOW BUCK ISLAND DAM)

- Minimum release requirements:

October through September

1 cfs

- Discharge is measured by using recorded stage readings of flow over a 90 degree V-notch weir located immediately below Buck Island Dam.
- A Notice of Deficient Release was provided to the Division of Water Rights by letters dated November 10, 1993, January 3, 1994. The insufficient reservoir storage and plugged valve condition referred to in these letters continued through December 16, 1993.
- No modifications were made to the measuring device during the period.

STATION NUMBER 11428400 L RUBICON R BL BUCK ISLAND DAM CA STREAM SOURCE AGENCY USGS

LATITUDE 390020 LONGITUDE 1201520 DRAINAGE AREA 6.02 DATUM STATE 06 COUNTY 017

PR ONAL DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.1	.62	1.1	1.1	1.2	1.2	1.3	1.3	1.2	1.2	1.1
2	1.3	1.1	.61	1.1	1.1	1.2	1.2	1.3	1.3	1.2	1.2	1.1
3	1.3	1.1	.63	1.1	1.1	1.2	1.3	1.3	1.3	1.2	1.2	1.1
4	1.3	1.1	.59	1.1	1.1	1.2	1.2	1.3	1.2	1.2	1.2	1.1
5	1.3	1.0	.59	1.2	1.1	1.2	1.2	1.4	1.2	1.2	1.1	1.1
6	1.3	.86	.59	1.2	1.1	1.2	1.2	1.4	1.2	1.2	1.1	1.1
7	1.3	.74	.59	1.2	1.1	1.2	1.2	1.4	1.2	1.2	1.1	1.1
8	1.3	.68	.60	1.2	1.1	1.2	1.3	1.3	1.2	1.2	1.1	1.1
9	1.3	.59	.61	1.2	1.1	1.2	1.2	1.4	1.2	1.2	1.1	1.1
10	1.3	.50	.61	1.2	1.1	1.2	1.2	1.5	1.4	1.2	1.2	1.1
11	1.3	.46	.61	1.2	1.1	1.2	1.2	1.4	1.5	1.2	1.2	1.1
12	1.3	.52	.62	1.2	1.1	1.2	1.2	1.3	1.5	1.2	1.2	1.1
13	1.3	.49	.61	1.2	1.1	1.2	1.3	1.3	1.5	1.2	1.2	1.1
14	1.3	.42	.61	1.1	1.1	1.2	1.3	1.2	1.4	1.2	1.2	1.1
15	1.3	.34	.61	1.1	1.1	1.3	1.4	1.2	1.2	1.2	1.1	1.1
16	1.3	.32	.81	1.1	1.1	1.3	1.4	1.1	1.2	1.2	1.1	1.1
17	1.3	.31	1.1	1.1	1.1	1.3	1.5	1.1	1.2	1.2	1.1	1.1
18	1.2	.29	1.1	1.1	1.2	1.3	1.5	1.1	1.1	1.1	1.1	1.1
19	1.2	.24	1.1	1.1	1.1	1.3	1.5	1.1	1.1	1.1	1.1	1.1
20	1.2	.23	1.1	1.1	1.1	1.3	1.5	1.1	1.2	1.1	1.1	1.1
21	1.2	.20	1.1	1.1	1.1	1.3	1.5	1.1	1.2	1.1	1.1	1.1
22	1.2	.19	1.1	1.1	1.1	1.3	1.4	1.2	1.1	1.1	1.1	1.1
23	1.2	.22	1.1	1.1	1.1	1.3	1.4	1.2	1.2	1.1	1.1	1.1
24	1.2	.22	1.1	1.1	1.1	1.2	1.3	1.3	1.2	1.1	1.2	1.1
25	1.2	.22	1.1	1.1	1.1	1.2	1.3	1.3	1.2	1.1	1.1	1.1
26	1.2	.21	1.1	1.1	1.1	1.2	1.3	1.3	1.2	1.2	1.1	1.1
27	1.1	.21	1.1	1.1	1.2	1.2	1.3	1.3	1.2	1.2	1.1	1.1
28	1.1	.23	1.1	1.1	1.2	1.2	1.3	1.3	1.2	1.2	1.1	1.1
29	1.1	.40	1.1	1.1	---	1.3	1.3	1.3	1.2	1.2	1.1	1.1
30	1.1	.63	1.1	1.1	---	1.3	1.3	1.3	1.2	1.2	1.1	1.1
31	1.1	---	1.1	1.1	---	1.3	---	1.3	---	1.2	1.1	---
TOTAL	38.4	15.12	26.41	35.0	31.1	38.4	39.4	39.4	37.3	36.4	35.1	33.0
MEAN	1.24	.50	.85	1.13	1.11	1.24	1.31	1.27	1.24	1.17	1.13	1.10
MAX	1.3	1.1	1.1	1.2	1.2	1.3	1.5	1.5	1.5	1.2	1.2	1.1
MIN	1.1	.19	.59	1.1	1.1	1.2	1.2	1.1	1.1	1.1	1.1	1.1
AC-FT	78	30	52	69	62	76	78	78	74	72	70	65

CAL YR 1993 TOTAL 428.93 MEAN 1.18 MAX 1.8 MIN .19 AC-FT 851

WTR YR 1994 TOTAL 405.03 MEAN 1.11 MAX 1.5 MIN .19 AC-FT 803

1994 WATER YEAR

LOON LAKE DAM (GERLE CREEK BELOW LOON LAKE)

- Minimum release requirements:

October through September

8 cfs

- Discharge is measured by applying recorded stage data from the gaging station, located about 1/3 mile below the Dam, to the existing stage-discharge relationship.
- The discharge record indicates no apparent violations during the water year.
- No modifications were made to the measuring device during the reporting period.

STATION NUMBER 11429500 GERLE C BL LOON LK NR MEEKS BAY CA STREAM SOURCE AGENCY USGS
 LATITUDE 390020 LONGITUDE 1201852 DRAINAGE AREA 8.01 DATUM STATE 06 COUNTY 017

FR IONAL DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	8.6	8.6	8.8	9.2	10	9.6	9.2	9.5	9.5	9.2	9.5
2	10	8.6	8.6	8.6	9.2	9.8	9.7	9.2	9.5	9.5	9.2	9.5
3	10	8.6	8.6	8.7	9.2	9.8	9.8	9.2	9.5	9.5	9.2	9.3
4	9.7	8.6	8.6	10	9.2	9.9	9.6	9.2	9.6	9.5	9.0	9.3
5	9.2	8.6	8.7	8.9	9.5	10	9.6	9.5	9.7	9.5	9.3	9.5
6	9.1	8.6	8.6	8.6	9.5	9.9	9.5	9.9	9.7	9.5	9.8	9.5
7	9.0	8.6	8.6	8.6	9.5	9.9	9.5	9.9	9.8	9.5	9.8	9.8
8	8.9	8.6	8.7	8.6	9.5	10	9.5	9.6	9.7	9.5	9.7	9.6
9	8.9	8.6	9.7	8.6	9.5	10	9.5	9.5	9.8	9.5	9.5	9.5
10	8.9	8.6	8.9	8.6	9.6	10	9.5	9.5	9.8	9.5	9.5	9.5
11	8.9	8.6	8.9	8.6	9.5	9.9	9.6	9.5	9.8	9.5	9.5	9.5
12	8.9	8.7	8.8	8.6	9.5	9.8	9.8	9.4	9.8	9.4	9.5	9.5
13	8.8	8.6	8.8	8.6	9.5	10	9.8	9.2	9.8	9.2	9.5	9.6
14	8.6	8.6	8.9	8.6	9.5	10	9.7	9.2	9.8	9.2	9.5	10
15	9.9	8.6	8.8	8.6	9.5	10	10	9.2	9.8	9.2	9.5	10
16	8.8	8.6	8.6	8.6	9.5	9.9	10	9.2	9.8	9.2	9.5	10
17	8.6	8.6	8.6	8.6	9.7	9.9	10	9.2	9.8	9.2	9.5	10
18	8.6	8.6	8.6	8.6	9.7	10	9.8	9.3	9.8	9.2	9.5	9.8
19	8.6	8.6	8.6	8.6	9.5	9.9	9.4	9.5	9.8	9.2	9.5	9.8
20	8.6	8.6	8.7	8.6	9.8	9.9	9.3	9.2	9.8	9.2	9.5	9.8
21	8.6	8.6	8.9	8.6	9.8	9.9	9.2	9.2	9.8	9.2	9.5	9.8
22	8.6	8.6	8.9	8.6	9.8	9.1	9.2	9.5	9.7	9.2	9.5	9.8
23	8.6	8.9	8.9	8.6	9.8	8.9	9.2	9.5	9.5	9.2	9.5	9.8
24	8.6	8.6	8.9	8.6	9.9	9.0	9.2	9.5	9.5	9.2	9.5	10
25	8.6	8.6	8.9	8.5	10	9.0	9.2	9.5	9.5	9.2	9.5	9.8
26	8.8	8.6	9.0	8.4	10	9.2	9.4	9.5	9.5	9.2	9.5	9.8
27	8.9	8.9	9.2	8.3	10	9.6	9.7	9.5	9.5	9.2	9.5	9.8
28	8.6	9.5	9.4	8.3	10	9.7	9.4	9.5	9.5	9.2	9.5	10
29	8.6	10	9.5	8.3	---	9.6	9.2	9.5	9.5	9.2	9.5	9.9
30	8.6	8.6	9.6	8.3	---	9.8	9.2	9.5	9.5	9.2	9.5	9.7
31	8.6	---	9.8	8.6	---	9.6	---	9.6	---	9.2	9.5	---
TOTAL	276.3	261.0	275.9	267.1	268.9	302.2	286.1	291.9	290.1	288.7	293.7	291.4
MEAN	8.91	8.70	8.90	8.62	9.60	9.75	9.54	9.42	9.67	9.31	9.47	9.71
MAX	10	10	9.8	10	10	10	10	9.9	9.8	9.5	9.8	10
MIN	8.6	8.6	8.6	8.3	9.2	8.9	9.2	9.2	9.5	9.2	9.0	9.3
AC-FT	548	518	547	530	533	599	567	579	575	573	583	578

CAL YR 1993 TOTAL 3349.1 MEAN 9.18 MAX 15 MIN 8.2 AC-FT 6640

WTR YR 1994 TOTAL 3393.3 MEAN 9.30 MAX 10 MIN 8.3 AC-FT 6730

1994 WATER YEAR

ROBBS AND GERLE DAMS (S.F. RUBICON RIVER BELOW GERLE CREEK)

- Minimum release requirements:

October	10 cfs
November - September	5 cfs

- Discharge is measured by applying the recorded stage data from the gaging station, located about 600 feet below the confluence of Gerle Creek, to the existing state-discharge relationship.
- The discharge record indicates no apparent violations during the water year.
- No modifications were made to the measuring device during the reporting periods.

STATION NUMBER 11430000 SF RUBICON R BL GERLE C NR GEORGETOWN CA STREAM SOURCE AGENCY USGS
 LATITUDE 385717 LONGITUDE 1202402 DRAINAGE AREA 47.60 DATUM STATE 06 COUNTY 017

FI IONAL DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	9.9	5.8	5.6	5.5	8.4	5.4	6.0	6.7	7.5	6.7	6.7
2	11	7.7	5.6	5.6	6.0	8.9	5.4	5.9	5.4	7.6	6.7	6.6
3	11	7.2	5.8	5.7	6.0	8.7	5.6	5.9	6.2	7.7	6.8	6.0
4	12	6.5	6.0	7.6	6.2	8.6	5.5	5.8	7.1	7.4	6.5	6.1
5	12	6.5	5.5	7.2	6.1	10	5.1	6.0	6.7	7.5	6.3	5.8
6	12	6.5	5.4	5.5	6.1	9.3	5.5	7.1	6.9	7.5	6.5	5.7
7	12	6.5	5.4	5.2	6.9	8.8	5.3	7.1	6.8	7.7	7.0	6.0
8	11	6.5	6.1	5.2	6.7	8.8	6.2	6.8	6.9	7.4	6.9	6.0
9	11	6.5	9.8	5.3	6.8	8.6	7.0	6.3	6.2	6.9	6.4	5.8
10	11	6.5	6.9	5.5	7.4	9.0	6.5	5.6	6.1	6.8	6.1	5.7
11	11	6.6	6.6	6.4	6.6	9.9	6.1	5.4	5.4	7.0	6.1	5.8
12	12	6.9	6.2	5.5	6.6	9.0	6.0	5.5	5.9	6.9	6.0	6.3
13	11	7.0	6.5	5.3	6.5	9.0	7.2	5.5	6.4	7.0	5.8	6.1
14	11	7.0	6.4	5.4	6.5	9.4	5.8	5.3	5.7	6.9	6.0	6.0
15	13	7.0	6.0	5.4	6.3	9.8	5.5	5.7	5.7	6.9	6.0	6.0
16	12	7.3	6.2	5.7	5.7	8.8	5.4	6.0	6.2	6.9	6.1	6.1
17	11	8.1	6.1	5.4	8.2	6.7	5.3	6.2	6.6	6.6	6.0	5.9
18	11	5.8	5.8	5.7	7.5	5.9	5.3	6.3	6.1	6.3	5.9	5.8
19	10	5.3	5.7	5.6	6.4	6.5	5.6	6.5	5.8	6.3	6.1	5.9
20	11	5.7	5.8	5.5	6.4	6.2	5.7	6.2	5.7	6.4	6.0	5.9
21	12	5.5	6.0	5.4	6.2	5.9	5.6	6.1	6.7	6.9	5.8	6.1
22	11	5.9	6.0	5.5	6.1	5.7	5.7	6.1	6.9	6.8	5.9	6.1
23	11	5.8	5.6	7.2	6.1	5.3	5.8	6.1	5.6	6.6	6.2	6.1
24	11	5.8	5.5	7.3	6.4	5.3	5.8	6.2	5.4	6.4	6.2	6.3
25	11	5.9	5.5	6.3	6.5	5.8	6.5	6.1	6.0	6.4	6.0	6.5
26	11	6.0	5.8	5.7	6.9	5.4	6.7	6.7	6.2	6.5	6.1	6.4
27	11	5.9	5.9	6.3	8.7	6.4	6.6	5.9	5.8	6.6	5.7	6.1
28	11	6.1	5.6	6.1	8.2	6.2	6.7	7.4	5.4	6.5	5.7	6.5
29	11	6.9	5.5	5.9	---	6.0	6.5	7.2	6.9	7.0	5.7	6.6
30	11	6.8	5.8	5.5	---	6.1	6.2	6.4	7.5	6.8	5.9	6.3
31	11	---	6.1	5.6	---	5.7	---	7.4	---	6.8	5.9	---
TOTAL	350	197.6	186.9	181.1	185.5	234.1	177.5	192.7	186.9	214.5	190.8	183.2
MEAN	11.3	6.59	6.03	5.84	6.62	7.55	5.92	6.22	6.23	6.92	6.15	6.11
MAX	13	9.9	9.8	7.6	8.7	10	7.2	7.4	7.5	7.7	7.0	6.7
MIN	10	5.3	5.4	5.2	5.5	5.3	5.1	5.3	5.4	6.3	5.7	5.7
AC-FT	694	392	371	359	368	464	352	382	371	425	378	363

CAL YR 1993 TOTAL 4540.9 MEAN 12.4 MAX 301 MIN 5.3 AC-FT 9010
 WIR YR 1994 TOTAL 2480.8 MEAN 6.80 MAX 13 MIN 5.1 AC-FT 4920.

1994 WATER YEAR

ICE HOUSE DAM (S.F. SILVER CREEK BELOW ICE HOUSE DAM)

- Minimum release requirements:

October	12 cfs
November 1 through 15	10 cfs
November 16 through 30	4 cfs
December	4 cfs
January 1 through April 13	3 cfs
April 14 through September 30	5 cfs

- Discharge is measured by applying the recorded stage data from the gaging station, located about 1/4 mile below the Dam, to the existing stage-discharge relationship.
- The discharge record indicates no apparent violations during the water year.
- No modifications were made to the measuring device during the reporting period.

STATION NUMBER 11441500 SF SILVER C NR ICE HOUSE CA STREAM SOURCE AGENCY USGS

TITUDE 384908 LONGITUDE 1202151 DRAINAGE AREA 27.50 DATUM 5290.00 STATE 06 COUNTY 017

ROV...JNAL DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	12	4.4	4.6	3.5	4.4	4.0	5.6	5.1	5.9	6.2	6.2
2	13	11	4.5	4.9	3.5	4.4	4.1	5.6	5.1	5.8	6.2	6.2
3	13	11	4.4	5.2	3.7	4.4	4.2	5.6	5.1	5.8	6.2	6.2
4	13	11	4.8	4.6	4.0	4.5	4.2	5.8	5.1	5.6	6.2	5.9
5	13	11	4.9	3.4	4.0	5.0	4.0	5.9	5.1	5.6	6.2	5.9
6	13	11	4.7	3.5	4.0	4.6	4.0	6.0	5.1	5.6	6.2	5.6
7	13	11	4.6	3.6	4.2	4.4	4.0	6.1	5.1	5.7	6.2	5.7
8	13	11	4.8	3.5	4.6	4.3	4.1	6.0	5.1	6.1	6.2	6.4
9	13	11	5.5	3.8	4.4	4.3	4.2	5.9	5.1	6.1	6.2	6.5
10	13	11	5.1	4.0	4.2	4.4	4.2	5.8	5.1	5.9	6.2	6.5
11	12	11	5.0	3.7	4.2	4.5	4.2	5.7	5.1	6.0	6.2	6.5
12	12	11	4.6	3.4	4.2	4.3	4.2	5.9	5.1	6.0	6.2	6.4
13	12	11	4.7	3.6	4.2	4.3	4.2	5.9	5.1	6.1	6.2	6.2
14	12	11	4.7	3.4	4.2	4.4	5.0	6.0	5.1	6.0	6.2	6.2
15	13	11	4.7	3.8	4.2	4.5	5.4	6.2	5.1	6.3	6.2	6.2
16	12	8.2	4.7	3.9	4.2	4.4	5.4	5.7	5.4	6.4	6.2	6.2
17	12	4.8	4.9	3.3	4.5	4.3	5.4	5.4	6.2	6.2	6.2	6.2
18	12	4.4	5.1	3.2	4.2	4.3	5.5	5.5	6.2	6.2	6.2	6.2
19	12	4.3	4.9	3.3	4.2	4.4	5.9	5.6	6.2	6.2	6.2	6.2
20	12	4.5	4.6	3.3	4.1	4.4	5.7	5.4	6.2	6.4	6.2	6.2
21	12	5.1	4.8	3.2	4.1	4.2	5.8	5.4	6.4	6.5	6.2	6.2
22	12	5.1	4.6	3.1	4.2	4.2	5.8	5.4	6.5	6.5	6.2	6.2
23	12	4.8	4.6	3.1	4.0	4.2	5.7	5.4	6.1	6.5	6.2	6.2
24	12	4.4	4.6	3.3	4.0	4.2	5.8	5.4	5.9	6.4	6.2	6.2
25	12	4.4	4.6	3.5	4.1	4.2	5.9	5.4	5.8	6.2	6.2	6.2
26	12	4.5	4.8	3.5	4.3	4.0	6.2	5.4	5.6	6.2	6.2	6.2
27	12	4.5	5.1	3.5	4.7	4.0	6.2	5.3	5.7	6.2	6.2	6.2
28	12	4.4	5.2	3.5	4.3	4.0	5.9	5.1	5.9	6.2	6.2	6.4
29	12	4.5	5.1	3.5	---	4.2	5.8	5.1	5.9	6.2	6.2	6.3
30	13	4.6	4.6	3.5	---	4.2	5.6	5.1	5.9	6.2	6.2	6.2
31	13	---	4.6	3.5	---	4.2	---	5.2	---	6.2	6.2	---
TOTAL	386	238.5	148.2	113.2	116.0	134.1	150.6	173.8	166.4	189.2	192.2	185.9
MEAN	12.5	7.95	4.78	3.65	4.14	4.33	5.02	5.61	5.55	6.10	6.20	6.20
MAX	14	12	5.5	5.2	4.7	5.0	6.2	6.2	6.5	6.5	6.2	6.5
MIN	12	4.3	4.4	3.1	3.5	4.0	4.0	5.1	5.1	5.6	6.2	5.6
AC-FT	766	473	294	225	230	266	299	345	330	375	381	369

CAL YR 1993 TOTAL 3537.9 MEAN 9.69 MAX 18 MIN 3.5 AC-FT 7020

WTR YR 1994 TOTAL 2194.1 MEAN 6.01 MAX 14 MIN 3.1 AC-FT 4350

1994 WATER YEAR

JUNCTION DAM (SILVER CREEK BELOW JUNCTION RESERVOIR)

- Minimum release requirements:

October	20 cfs
November 1 through April 30	10 cfs
May - September	5 cfs

- Discharge is measured by differential pressure taps on the release valve near the base of the Dam and the rate of release is telemetered hourly to the District's Headquarters.
- The discharge record indicates no apparent violations during the water year.
- No modifications were made to the measuring device during the reporting period.

STATION NUMBER 11441800 SILVER C BL JUNCTION DAM NR POLLOCK PINES CA STREAM SOURCE AGENCY USGS

LATITUDE 385108 LONGITUDE 1202722 DRAINAGE AREA 146.00 DATUM

STATE 06 COUNTY 017

NOV AL DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

LY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	19	12	11	11	12	11	12	5.7	5.7	5.7	5.8
2	23	12	11	12	11	12	12	8.5	5.6	5.7	5.8	5.8
3	23	12	12	11	11	11	11	6.9	5.7	5.7	5.8	5.7
4	23	13	12	11	12	12	12	6.8	5.7	5.7	5.8	5.6
5	23	13	12	11	11	12	12	6.2	5.7	5.7	5.8	5.7
6	23	13	12	12	12	11	12	5.8	6.4	5.7	5.8	5.6
7	23	13	12	11	12	12	12	5.7	5.6	5.7	5.7	5.8
8	23	13	12	11	12	12	12	5.7	5.8	5.7	5.7	5.8
9	23	13	12	12	11	12	12	5.8	5.9	5.7	5.7	5.8
10	23	13	12	12	11	12	12	5.7	5.8	5.7	5.8	5.8
11	23	13	11	11	12	11	12	5.7	5.7	5.7	5.8	5.8
12	23	13	12	12	11	12	12	5.8	5.9	5.7	5.8	5.8
13	23	13	11	12	11	12	12	5.7	5.8	5.7	5.8	5.8
14	23	13	12	11	12	12	12	5.6	5.9	5.7	5.8	5.8
15	23	13	11	12	12	12	12	5.8	5.8	5.7	5.8	5.8
16	23	12	12	12	12	12	12	5.7	5.7	5.7	5.8	5.9
17	23	12	12	12	12	12	12	5.8	5.6	5.7	5.8	5.8
18	23	11	12	12	11	12	12	5.7	5.7	5.8	5.8	5.8
19	23	11	12	12	12	11	12	5.8	5.9	5.8	5.8	5.8
20	23	11	12	12	11	11	12	5.9	5.8	5.8	5.7	5.8
21	23	11	12	11	11	12	12	5.8	5.6	5.7	5.8	5.8
22	23	11	11	12	11	12	12	5.7	5.6	5.7	5.8	5.8
23	23	11	12	11	12	12	12	5.7	5.7	5.8	5.8	5.8
24	23	11	12	12	12	11	12	5.7	5.7	5.7	5.8	5.8
25	23	11	11	12	11	12	12	5.7	5.6	5.7	5.8	5.7
26	23	11	12	11	11	12	12	5.7	5.7	5.8	5.8	5.7
27	23	11	11	12	12	11	12	5.7	5.7	5.7	5.8	5.8
28	23	11	12	12	12	11	12	5.6	5.7	5.7	5.8	5.8
29	23	11	11	12	---	12	11	5.6	5.7	5.8	5.8	5.8
30	23	12	11	11	---	12	12	5.7	5.7	5.7	5.8	5.7
31	23	---	11	11	---	12	---	5.7	---	5.8	5.7	---
TOTAL	713	367	362	359	322	364	357	189.2	172.4	177.4	179.2	173.2
MEAN	23.0	12.2	11.7	11.6	11.5	11.7	11.9	6.10	5.75	5.72	5.78	5.77
MAX	23	19	12	12	12	12	12	12	6.4	5.8	5.8	5.9
MIN	23	11	11	11	11	11	11	5.6	5.6	5.7	5.7	5.6
AC-FT	1410	728	718	712	639	722	708	375	342	352	355	344

CAL YR 1993 TOTAL 5469.8 MEAN 15.0 MAX 23 MIN 6.8 AC-FT 10850

WTR YR 1994 TOTAL 3735.4 MEAN 10.2 MAX 23 MIN 5.6 AC-FT 7410

1994 WATER YEAR

CAMINO DAM (SILVER CREEK BELOW CAMINO DIVERSION DAM)

- Minimum release requirements:

October	20 cfs
November 1 through April 30	10 cfs
May - September	5 cfs
- Discharge is measured by applying recorded stage data from gaging station, located about 1/4 mile below the Dam, to the existing stage-discharge relationship.
- The discharge record indicates no apparent violations during the water year.
- No modifications were made to the measuring device during the reporting period.

STATION NUMBER 11441900 SILVER C BL CAMINO DIV DAM CA STREAM SOURCE AGENCY USGS

LATITUDE 384926 LONGITUDE 1203218 DRAINAGE AREA 171.00 DATUM

STATE 06 COUNTY 017

PRU ONAL DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	21	10	11	11	15	11	11	5.4	5.6	5.3	5.5
2	21	17	11	11	11	15	11	7.9	5.4	5.4	5.3	5.6
3	21	12	11	11	11	15	11	6.8	5.4	5.6	5.9	5.6
4	21	12	11	11	11	15	11	7.1	5.6	5.4	5.4	5.5
5	21	11	11	11	11	17	11	6.4	5.5	5.4	5.6	5.6
6	21	11	11	11	11	18	11	6.2	5.4	5.4	5.5	5.6
7	21	11	11	11	11	16	11	6.1	5.4	5.5	5.5	5.6
8	20	11	11	11	11	15	11	5.9	5.5	5.5	5.4	5.4
9	21	11	11	11	11	14	11	6.1	5.4	5.4	5.5	5.5
10	21	11	11	11	12	14	11	6.1	5.4	5.4	5.5	5.4
11	21	11	11	11	11	14	11	6.1	5.4	5.4	5.4	5.4
12	20	10	10	11	11	14	11	6.1	5.5	5.4	5.5	5.4
13	20	11	10	11	11	13	11	6.2	5.5	5.4	5.5	5.4
14	22	11	11	11	11	12	11	6.1	5.5	5.4	5.5	5.3
15	24	11	10	11	11	12	11	6.4	5.5	5.5	5.5	5.5
16	23	10	10	11	11	12	11	6.2	5.4	5.4	5.5	5.4
17	23	11	11	11	12	11	11	6.2	5.5	5.6	5.5	5.4
18	22	11	11	11	11	11	11	6.3	5.5	5.6	5.5	5.3
19	22	11	11	11	11	11	11	6.7	5.5	5.5	5.4	5.3
20	22	11	11	11	11	11	11	7.2	5.4	5.5	5.5	5.3
21	21	11	11	11	11	11	11	6.2	5.4	5.4	5.5	5.3
22	21	11	10	11	11	11	11	6.1	5.5	5.4	5.6	5.3
23	21	10	11	11	11	11	11	6.2	5.4	5.5	5.5	5.4
24	21	11	11	11	11	11	11	5.9	5.3	5.4	5.5	5.5
25	21	11	11	11	11	11	11	5.8	5.6	5.5	5.6	5.4
26	21	10	11	11	12	11	11	5.9	5.5	5.4	5.6	5.5
27	21	11	11	11	15	11	11	5.4	5.5	5.3	5.5	5.5
28	21	11	11	11	15	11	11	5.5	5.4	5.3	5.6	5.5
29	21	11	11	11	---	11	11	5.4	5.5	5.3	5.5	5.3
30	21	10	11	11	---	11	11	5.4	5.6	5.4	5.6	5.4
31	21	---	11	11	---	11	---	5.5	---	5.3	5.5	---
TOTAL	659	343	335	341	319	396	330	196.4	163.8	168.5	170.7	163.1
MEAN	21.3	11.4	10.8	11.0	11.4	12.8	11.0	6.34	5.46	5.44	5.51	5.44
MAX	24	21	11	11	15	18	11	11	5.6	5.6	5.9	5.6
MIN	20	10	10	11	11	11	11	5.4	5.3	5.3	5.3	5.3
AC-FT	1310	680	664	676	633	785	655	390	325	334	339	324

CAL YR 1993 TOTAL 9068.9 MEAN 24.8 MAX 818 MIN 6.6 AC-FT 17990

WTR YR 1994 TOTAL 3585.5 MEAN 9.82 MAX 24 MIN 5.3 AC-FT 7110

1994 WATER YEAR

BRUSH CREEK DAM (BRUSH CREEK BELOW BRUSH CREEK DAM)

- Minimum release requirements:

October	3 cfs
November 1 through March 13	6 cfs
March 14 through May 31	4 cfs
June through September	2 cfs

- Discharge is measured by an orifice plate in the conduit near the base of the dam and the rate of release is telemetered hourly to the District's Headquarters.
- The discharge record indicates no apparent violations during the water year.
- No modifications were made to the measuring device during the reporting period.

STATION NUMBER 11442700 BRUSH C BL BRUSH CREEK DAM NR POLLOCK PINES CA STREAM SOURCE AGENCY USGS

LATITUDE 384841 LONGITUDE 1203720 DRAINAGE AREA 8.04 DATUM

STATE 06 COUNTY 017

PR LONAL DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	6.8	6.8	6.8	6.8	6.8	4.8	4.7	3.3	2.5	2.6	2.6
2	3.8	6.8	6.8	6.8	6.8	6.8	4.8	4.7	2.7	2.5	2.6	2.6
3	3.8	6.8	6.8	6.8	6.8	6.8	4.8	4.7	2.7	2.5	2.6	2.6
4	3.8	6.8	6.7	6.8	6.8	6.8	4.8	4.7	2.6	2.5	2.6	2.6
5	3.8	6.8	6.8	6.8	6.8	6.8	4.8	4.8	2.6	2.6	2.6	2.6
6	3.8	6.8	6.8	6.8	6.8	6.9	4.8	4.8	2.6	2.7	2.6	2.6
7	3.8	6.8	6.8	6.8	6.8	6.8	4.8	4.8	2.6	2.7	2.6	2.6
8	3.8	6.8	6.8	6.8	6.8	6.7	4.8	4.8	2.6	2.7	2.6	2.6
9	3.8	6.8	6.8	6.8	6.8	6.7	4.8	4.8	2.6	2.7	2.6	2.6
10	3.7	6.8	6.8	6.8	6.8	6.8	4.8	4.8	2.6	2.6	2.6	2.6
11	3.8	6.8	6.8	6.8	6.8	6.8	4.8	4.8	2.6	2.6	2.6	2.6
12	3.8	6.8	6.8	6.8	6.8	6.8	4.8	4.7	2.6	2.6	2.6	2.6
13	3.8	6.8	6.8	6.8	6.8	6.8	4.8	4.7	2.6	2.6	2.6	2.6
14	3.9	6.8	6.8	6.8	6.8	5.5	4.8	4.7	2.6	2.6	2.6	2.6
15	3.9	6.8	6.8	6.8	6.7	4.8	4.8	4.8	2.6	2.6	2.6	2.6
16	3.9	6.8	6.8	6.8	6.7	4.8	4.8	4.8	2.5	2.6	2.6	2.6
17	3.8	6.8	6.8	6.8	6.7	4.8	4.8	4.8	2.5	2.6	2.6	2.6
18	3.8	6.7	6.9	6.8	6.8	4.8	4.8	4.8	2.5	2.6	2.6	2.6
19	3.9	6.7	6.8	6.7	6.8	4.9	4.8	4.8	2.5	2.6	2.6	2.6
20	3.9	6.8	6.8	6.7	6.8	4.8	4.8	4.8	2.5	2.6	2.6	2.6
21	3.8	6.8	6.8	6.8	6.8	4.8	4.8	4.8	2.6	2.6	2.6	2.6
22	3.8	6.8	6.8	6.8	6.7	4.8	4.8	4.8	2.6	2.6	2.6	2.6
23	3.8	6.8	6.8	6.9	6.8	4.8	4.8	4.8	2.5	2.6	2.6	2.6
24	3.8	6.7	6.8	6.9	6.7	4.8	4.8	4.8	2.5	2.6	2.6	2.6
25	3.8	6.7	6.7	6.9	6.7	4.8	4.8	4.8	2.5	2.6	2.6	2.6
26	3.8	6.9	6.8	6.8	6.7	4.7	4.8	4.8	2.5	2.6	2.7	2.6
27	3.8	6.8	6.8	6.8	6.8	4.7	4.7	4.8	2.6	2.6	2.7	2.6
28	3.8	6.8	6.8	6.8	6.8	4.7	4.7	4.8	2.6	2.6	2.7	2.6
29	3.8	6.8	6.8	6.7	---	4.7	4.7	4.8	2.6	2.6	2.6	2.6
30	3.8	6.8	6.8	6.7	---	4.8	4.7	4.8	2.6	2.6	2.6	2.6
31	5.2	---	6.8	6.7	---	4.8	---	4.8	---	2.6	2.6	---
TOTAL	119.6	203.7	210.7	210.6	189.7	175.1	143.6	148.1	77.9	80.6	80.9	78.0
MEAN	3.86	6.79	6.80	6.79	6.77	5.65	4.79	4.78	2.60	2.60	2.61	2.60
MAX	5.2	6.9	6.9	6.9	6.8	6.9	4.8	4.8	3.3	2.7	2.7	2.6
MIN	3.7	6.7	6.7	6.7	6.7	4.7	4.7	4.7	2.5	2.5	2.6	2.6
AC-FT	237	404	418	418	376	347	285	294	155	160	160	155

CAL YR 1993 TOTAL 1836.2 MEAN 5.03 MAX 6.9 MIN 3.4 AC-FT 3640

WTR YR 1994 TOTAL 1718.5 MEAN 4.71 MAX 6.9 MIN 2.5 AC-FT 3410

1994 WATER YEAR

SLAB CREEK DAM (S.F. AMERICAN RIVER NEAR CAMINO)

- Minimum release requirements:

October through March 14	36 cfs
March 15 through May 31	10 cfs
June through September	36 cfs

- Discharge is measured by an acoustic velocity meter in the release conduit near the base of the Dam. The rate of release is telemetered hourly to the District's Headquarters.
- A notice of deficient release for October 23, 1993 was reported to the Division by letter dated October 27, 1993.
- No modifications were made to the measuring device during the reporting period.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

11443500 South Fork American River near Camino

PROVISIONAL DATA SUBJECT TO USGS REVIEW

U S #: 11-4435.00

DAILY DISCHARGE IN CUBIC FEET PER SECOND WATER YEAR OCT 1993 TO SEP 1994

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	36	37	36	36	36	10	10	36	36	36	36
2	36	36	36	36	36	36	10	10	36	36	36	36
3	36	36	36	36	36	36	10	10	36	36	36	36
4	36	36	36	36	36	36	10	10	36	36	36	36
5	36	36	37	36	36	36	10	10	36	36	36	36
6	36	36	37	36	36	36	10	10	36	36	36	36
7	36	36	37	36	36	36	10	10	36	36	36	36
8	36	36	36	36	36	36	10	10	36	36	36	36
9	36	36	37	36	36	36	10	10	36	36	36	36
10	36	36	37	36	36	36	10	10	36	36	36	36
11	36	36	37	36	36	36	10	10	36	36	36	36
12	36	36	37	36	36	36	10	10	36	36	36	36
13	36	36	36	36	36	36	10	10	36	36	36	36
14	36	36	36	36	36	36	10	10	36	36	36	36
15	36	36	36	36	36	21	10	10	36	36	36	36
16	36	36	36	36	36	10	10	10	36	36	36	36
17	36	36	36	36	36	10	10	10	36	36	36	36
18	36	36	36	36	36	10	10	10	36	36	36	36
19	36	36	36	36	36	10	10	10	36	36	36	36
20	36	36	36	36	36	10	10	10	36	36	36	36
21	36	36	36	36	36	10	10	10	36	36	36	36
22	36	36	36	36	36	10	10	10	36	36	36	36
23	33	36	36	36	36	10	10	10	36	36	36	36
24	36	36	36	36	36	10	10	10	36	36	36	36
25	36	36	36	36	36	10	10	10	36	36	36	36
26	37	36	36	36	36	10	10	10	36	36	36	36
27	36	36	36	36	36	10	10	10	36	36	36	36
28	36	36	36	36	36	10	10	10	36	36	36	36
29	36	36	36	36	-----	10	10	10	36	36	36	36
30	36	36	36	36	-----	10	10	10	41	36	36	36
31	36	-----	36	36	-----	10	-----	23	-----	36	36	-----
TOTAL	1,114	1,080	1,124	1,116	1,008	685	300	323	1,085	1,116	1,116	1,080
MEAN	35.9	36.0	36.3	36.0	36.0	22.1	10.0	10.4	36.2	36.0	36.0	36.0
MAX	37	36	37	36	36	36	10	23	41	36	36	36
MIN	33	36	36	36	36	10	10	10	36	36	36	36
AC-FT	2,210	2,140	2,230	2,210	2,000	1,360	595	641	2,150	2,210	2,210	2,140
CAL YEAR 1993 TOTAL		13,490	MEAN	37.0	MAX	1,460	MIN	10	AC-FT	26,760		
WTR YEAR 1994 TOTAL		11,147	MEAN	30.5	MAX	41	MIN	10	AC-FT	22,110		



SACRAMENTO MUNICIPAL UTILITY DISTRICT □ P. O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

October 27, 1993
GO 93-146

THE SECRETARY
FEDERAL ENERGY REGULATORY COMMISSION
MAIL CODE: DPCA, HL21.1
825 N. CAPITOL STREET, NE
WASHINGTON DC 20426

SUBJECT: FERC PROJECT 2101 - NOTICE OF DEFICIENT RELEASE

Date of Notice:	October 27, 1993
Reporting Entity:	Sacramento Municipal Utility District
Gaging Site:	South Fork American River below Slab Creek Dam (USGS 11443500)
Period of Deficiency:	October 23, 1993
Required Release during period:	36 cfs
Release during period:	33 cfs
Date of Discovery:	October 23, 1993
Reason for deficiency:	(See below)

At 0100 hours on October 23, 1993, the acoustical velocity meter (AVM) that measures fishwater flow malfunctioned, resulting in an erroneous indicated flow of 49.6 cfs. This situation was immediately detected by the system Dispatcher, who in turn, notified the project on-call Supervisor.

The early warning device for Slab Creek dam failure, located downstream of the release site, serves as a backup for monitoring fishwater releases. The downstream device indicated that releases were being maintained at > 36 cfs, thus the decision was made to continue monitoring the downstream device to insure compliance and to investigate the AVM malfunction at dawn. Additionally, the fishwater release runs a turbine-generator, hence with the output of the generator constant and with little change in head, releases remain constant.

At 0919 hours, October 23, the local area powerline to the turbine generator was momentarily interrupted causing the generator to trip off-line. The Dispatcher notified the on-call Supervisor, who instructed an Operator and an Electronic Technician to investigate both the trip and AVM failure. Within an hour of the unit trip, the downstream device being used to monitor the fishwater flow alarmed the Dispatcher that fishwater was below minimum, indicating that the hollow cone valve designed to open when the unit trips, had failed to open.

The responding Operator and Technician arrived at the site at 1110 hours and manually opened the hollow cone valve to restore fishwater flow. At 1216 hours, the generator was restarted, the hollow cone valve closed and the AVM malfunction repaired.


John P. Hiltz, Manager
Generation Operations

cc: Regional Director, FERC
FERC Div. of Project Compliance & Adm.
Edward C. Anton, Div. of Water Rights

bcc: Corp. Files (thru Leo Fassler)
FERC Streamflow File
Merv Young

Eric Haemer
Ralph Lange
Rodd Lindberg

DISTRICT HEADQUARTERS □ 6201 S Street, Sacramento CA 95817-1899



SMUD

SACRAMENTO MUNICIPAL UTILITY DISTRICT □ P. O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

November 10, 1993
GO 93-151

The Secretary
Federal Energy Regulatory Commission
Mail Code: DPCA, HL21.1
825 North Capitol Street, N.E.
Washington DC 20426

SUBJECT: FERC PROJECT 2101 - NOTICE OF DEFICIENT RELEASE

Date of Notice:	11/10/93
Reporting Entity:	Sacramento Municipal Utility District
Gaging Site:	Little Rubicon River below Buck Island Dam (USGS 11428400)
Period of Deficiency:	Continuous beginning 11/06/93
Required Release During period:	1 cfs
Release During Period:	Variable, depending on reservoir stage
Date of Discovery:	11/06/93
Reason for Deficiency:	(See below)

Natural inflow to Buck Island Reservoir is not sufficient to maintain adequate storage to support a 1 cfs release. This condition will continue until Buck Island storage is replenished.

John P. Hiltz
John P. Hiltz, Manager
Generation Operations

cc: Regional Director, FERC
FERC Div. of Project Compliance & Adm.
Edward C. Anton, Div. of Water Rights

bcc: Eric Haemer
Corporate files thru Leo Fassler
Ralph Lange
Rodd Lindberg



SMUD

SACRAMENTO MUNICIPAL UTILITY DISTRICT □ P. O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

January 3, 1994
GO 94-01

THE SECRETARY
FEDERAL ENERGY REGULATORY COMMISSION
MAIL CODE: DPCA, HL21.1
825 N. CAPITOL STREET, NE
WASHINGTON DC 20426

SUBJECT: FERC PROJECT 2101.- NOTICE OF DEFICIENT RELEASE

Date of Notice:	December 30, 1993
Reporting Entity:	Sacramento Municipal Utility District
Gaging Site:	Little Rubicon River below Buck Island Dam (USGS 11428400)
Period of Deficiency:	November 30, 1993 through December 16, 1993
Required Release during period:	1 cfs
Release during period:	0.60 - 0.65 cfs
Date of Discovery:	December 7, 1993
Reason for deficiency:	(See below)

A letter from the Sacramento Municipal Utility District to your Agency, dated November 10, 1993, stated that due to insufficient storage in Buck Island Reservoir, the required 1 cfs release could no longer be maintained and that this condition would continue until Buck Island storage was replenished.

On November 30 a moderate Pacific storm system produced runoff into Buck Island Reservoir sufficient to increase storage to a capacity capable of supporting a 1 cfs release. Prior to the November 30 storm Buck Island Reservoir consisted of two pools - an extremely small pool immediately upstream of the Dam face (outlet works) and the main reservoir pool. As the main pool filled and fed into the lesser pool, small shoreline debris from the main pool was carried toward the release intake structure and subsequently partially plugged the release valve creating the under-release condition.

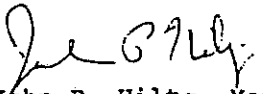
This site is remote and accessible by helicopter only during the late fall-winter months. Due to a combination of inclement weather and helicopter transport availability, we were unable to visit the site until December 16, 1993, at which time the release valve was flushed and releases set above the 1 cfs minimum.

We are currently in the process of upgrading our hydro-meteorological SCADA system. The upgrade will allow for changeable alarm limits for selected sites. This capability will provide for alarming Buck Island Reservoir at any pre-selected elevation and thus, reduce greatly the potential for underreleases due to the causes described in this notification. The upgraded SCADA system is scheduled to be operational by late summer 1994.

DISTRICT HEADQUARTERS □ 6201 S Street, Sacramento CA 95817-1899

January 3, 1994

Additionally, we are investigating the feasibility of providing additional storage for releases after the tunnel gates have been raised. Gates are typically raised late September - mid-October. Additional storage could be achieved by installing a barrier 1-1.5 feet high upstream of the tunnel gates providing approximately 45-70 acre-feet storage above the point at which the Reservoir splits into two pools. This would allow for additional 20-35 days of sustained releases at or above 1 cfs.


John P. Hiltz, Manager
Generation Operations

cc: Regional Director, FERC
FERC Div. of Project Compliance & Adm.
Edward C. Anton, Div. of Water Rights

bcc: Eric Haemer
Corp. Files thru Leo Fassler
Merv Young
Rodd Lindberg



SACRAMENTO MUNICIPAL UTILITY DISTRICT ☐ P. O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

April 6, 1994
GO 94-38

Mr. Edward Anton, Chief
Division of Water Rights
P.O. Box 2000
Sacramento CA 95812-2000

Dear Mr. Anton:

SUBJECT: ANNUAL COMPLIANCE REPORT - 1993 WATER YEAR

In accordance with our compliance plan dated June 1986, enclosed are the data for the 1993 water year. During the year two period of deficient release occurred, both of which were communicated to your office by letter. Copies of the Notices of Deficient Releases sent to your office during the 1993 water year are also included.

The two periods of deficient release are:

<u>Station Name</u>	<u>Period</u>	<u>Cause</u>
Little Rubicon River below Buck Island Dam	10/27/92-10/28/92	Insufficient reservoir storage
Rubicon River below Rubicon Reservoir	6/7/93	Loss of head over valve caused by cold storm that reduced inflow to reservoir

Sincerely,

John P. Hiltz, Manager
Generation Operations

Enclosures

1993 WATER YEAR

RUBICON DAM (RUBICON RIVER BELOW RUBICON DAM)

* Minimum release requirements:

October through September	6 cfs or inflow, whichever is less
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- * Inflow is determined by periodic stage observations at a U.S.G.S. rated staff gage. Discharge measurement was modified from stage observation at a U.S.G.S. rated staff in October 1990. Subsequent to October 1990, discharge is measured by orifice plates in the release conduits.
- * A Notice of Deficient Release for June 7, 1993 was provided to the Division by letter dated June 14, 1993
- * There were no modifications to measuring devices during the reporting period.

STATION NUMBER 11427960 RUBICON R BL RUBICON LK CA STREAM SOURCE AGENCY USGS

LATITUDE 385926 LONGITUDE 1201315 DRAINAGE AREA 26.80 DATUM

STATE 06 COUNTY 017

PROVISIONAL DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.8	6.2	6.5	6.4	6.4	7.2	6.7	7.0	6.8	7.2	6.2
2	1.1	1.8	6.1	6.5	6.4	6.4	7.0	6.7	6.6	6.9	7.1	6.2
3	1.1	1.8	6.1	6.4	6.4	6.5	7.0	6.8	6.2	6.8	7.1	6.2
4	1.1	4.2	6.2	6.4	6.4	6.5	7.1	6.6	6.3	6.7	7.0	6.2
5	1.1	6.3	6.2	6.4	6.5	6.5	7.1	6.4	6.3	6.7	7.0	6.2
6	1.1	6.3	6.1	6.4	6.5	6.5	7.0	6.5	6.0	6.7	7.0	6.2
7	1.1	6.3	6.2	6.6	6.5	6.6	6.9	6.6	5.7	6.7	7.0	6.2
8	1.1	6.3	6.2	6.7	6.6	6.6	7.0	6.6	6.2	6.7	7.0	6.2
9	1.1	6.3	6.2	6.5	6.6	6.7	7.1	6.6	6.7	6.6	6.9	6.5
10	1.1	6.2	6.4	6.5	6.5	6.7	7.2	6.8	7.0	6.6	6.9	6.7
11	1.1	6.2	6.5	6.5	6.5	6.7	7.1	7.0	7.3	6.5	6.9	6.6
12	1.1	6.2	6.5	6.5	6.5	6.7	7.0	7.0	7.1	6.5	6.7	6.6
13	1.1	6.2	6.5	e6.6	6.5	6.7	7.0	6.6	7.1	6.5	6.4	6.6
14	1.1	6.1	6.4	e6.6	6.5	6.9	7.0	6.6	7.3	6.4	6.4	6.6
15	1.1	6.1	6.4	e6.5	6.5	7.0	7.1	6.7	7.4	6.3	6.4	6.6
16	1.1	6.1	6.4	e6.5	6.5	6.8	7.2	6.8	7.3	6.2	6.4	6.6
17	1.1	6.1	6.4	e6.5	6.5	7.4	7.1	7.0	7.2	6.2	6.4	6.5
18	1.1	6.1	6.4	e6.5	6.5	7.9	7.0	7.0	7.3	6.1	6.4	6.5
19	1.1	6.1	6.4	e6.4	6.6	7.5	6.9	7.1	7.4	6.1	6.4	6.5
20	1.1	6.1	6.4	e6.5	6.6	7.2	7.0	7.2	7.4	6.1	6.4	6.4
21	1.1	6.1	6.4	e6.8	6.6	7.2	7.3	7.1	7.2	6.1	6.3	6.4
22	1.1	6.2	6.4	e7.2	6.5	7.2	7.6	7.0	7.1	6.1	6.3	6.4
23	1.1	6.3	6.3	e7.0	6.5	7.3	7.5	7.0	6.9	6.2	6.3	6.3
24	1.1	6.3	6.3	e6.8	6.5	7.5	7.2	7.0	6.9	6.2	6.3	6.3
25	1.1	6.3	6.3	e6.6	6.5	7.3	7.1	7.1	6.9	6.2	6.3	6.3
26	1.3	6.2	6.4	6.6	6.5	7.1	7.3	7.0	7.1	6.2	6.3	6.2
27	1.6	6.3	6.4	6.5	6.5	7.0	7.4	6.9	7.2	6.2	6.3	6.2
28	1.6	6.3	6.4	6.5	6.5	6.9	7.5	6.6	7.1	6.2	6.3	6.2
29	1.6	6.3	6.4	6.5	---	6.9	7.1	6.4	6.9	6.2	6.3	4.7
30	1.8	6.2	6.5	6.5	---	7.0	6.7	6.6	6.8	6.7	6.2	2.2
31	1.8	---	6.5	6.5	---	7.1	---	6.6	---	7.1	6.2	---
TOTAL	37.2	171.1	196.5	203.5	182.1	214.7	213.7	210.6	206.9	199.5	204.1	185.5
MEAN	1.20	5.70	6.34	6.56	6.50	6.93	7.12	6.79	6.90	6.44	6.58	6.18
MAX	1.8	6.3	6.5	7.2	6.6	7.9	7.6	7.2	7.4	7.1	7.2	6.7
MIN	1.1	1.8	6.1	6.4	6.4	6.4	6.7	6.4	5.7	6.1	6.2	2.2
AC-FT	74	339	390	404	361	426	424	418	410	396	405	368

CAL YR 1992 TOTAL 1880.6 MEAN 5.14 MAX 7.8 MIN 1.0 AC-FT 3730
WTR YR 1993 TOTAL 2225.4 MEAN 6.10 MAX 7.9 MIN 1.1 AC-FT 4410

e Estimated

1993 WATER YEAR

BUCK ISLAND DAM (LITTLE RUBICON RIVER BELOW BUCK ISLAND DAM)

- * Minimum release requirements:
 - October through September 1 cfs
- * Discharge is measured by periodic stage observations of flow over a 90 degree V-notch weir located immediately below Buck Island Dam.
- * A Notice of Deficient Release was provided to the Division of Water Rights by letter dated October 27, 1992. The insufficient reservoir storage condition referred to in this letter continued through October 28, 1992.
- * No modifications were made to the measuring device during the period.

STATION NUMBER 11428400 L RUBICON R BL BUCK ISLAND DAM CA STREAM SOURCE AGENCY USGS
 LATITUDE 390020 LONGITUDE 1201520 DRAINAGE AREA 6.02 DATUM STATE 06 COUNTY 017
 PROVISIONAL DATA SUBJECT TO REVISION
 DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.6	1.1	1.1	1.1	1.2	1.3	1.6	1.7	1.2	1.2	1.2
2	1.1	1.6	1.1	1.1	1.1	1.2	1.3	1.6	1.4	1.2	1.2	1.2
3	1.1	1.6	1.1	1.1	1.1	1.2	1.3	1.6	1.2	1.2	1.2	1.3
4	1.1	1.5	1.1	1.1	1.1	1.2	1.3	1.6	1.2	1.2	1.2	1.2
5	1.1	1.2	1.1	1.1	1.0	1.2	1.3	1.5	1.2	1.2	1.2	1.3
6	1.1	1.2	1.1	1.1	1.1	1.2	1.3	1.5	1.1	1.2	1.2	1.3
7	1.1	1.2	1.1	1.2	1.1	1.2	1.3	1.6	1.1	1.2	1.2	1.3
8	1.1	1.2	1.1	1.3	1.1	1.2	1.3	1.6	1.1	1.2	1.2	1.3
9	1.1	1.1	1.1	1.3	1.1	1.2	1.3	1.5	1.2	1.2	1.2	1.3
10	1.1	1.1	1.2	1.2	1.1	1.2	1.4	1.6	1.3	1.2	1.2	1.3
11	1.1	1.1	1.2	1.2	1.1	1.2	1.3	1.7	1.4	1.1	1.2	1.3
12	1.1	1.1	1.2	e1.2	1.1	1.2	1.3	1.8	1.4	1.1	1.3	1.3
13	1.1	1.1	1.2	e1.2	1.1	1.2	1.3	1.6	1.3	1.1	1.2	1.3
14	1.1	1.1	1.1	e1.2	1.1	1.3	1.3	1.6	1.4	1.1	1.2	1.2
15	1.1	1.1	1.1	e1.2	1.1	1.3	1.3	1.6	1.4	1.1	1.2	1.2
16	1.1	1.1	1.1	e1.2	1.1	1.3	1.4	1.6	1.4	1.1	1.2	1.2
17	1.1	1.1	1.1	e1.2	1.1	1.5	1.4	1.7	1.3	1.1	1.2	1.2
18	1.1	1.1	1.1	e1.2	1.2	1.6	1.3	1.8	1.4	1.1	1.2	1.2
19	1.1	1.1	1.1	e1.2	1.2	1.5	1.3	1.8	1.4	1.0	1.2	1.2
20	1.1	1.1	1.1	e1.2	1.2	1.4	1.3	1.8	1.4	1.2	1.2	1.2
21	1.2	1.1	1.1	e1.3	1.2	1.4	1.4	1.7	1.3	1.3	1.2	1.2
22	1.2	1.1	1.1	e1.5	1.2	1.4	1.5	1.5	1.3	1.2	1.2	1.2
23	1.2	1.1	1.1	e1.4	1.2	1.4	1.5	1.5	1.3	1.2	1.2	1.2
24	1.1	1.1	1.1	e1.3	1.2	1.5	1.4	1.5	1.3	1.2	1.2	1.2
25	1.1	1.1	1.1	e1.2	1.2	1.4	1.4	1.6	1.3	1.2	1.3	1.2
26	1.1	1.1	1.1	1.2	1.2	1.3	1.4	1.6	1.3	1.1	1.3	1.2
27	.72	1.1	1.1	1.2	1.2	1.3	1.4	1.5	1.3	1.1	1.2	1.2
28	.65	1.1	1.1	1.1	1.2	1.2	1.5	1.4	1.3	1.1	1.2	1.2
29	1.1	1.1	1.1	1.1	---	1.2	1.5	1.3	1.3	1.3	1.2	1.2
30	1.5	1.1	1.1	1.1	---	1.3	1.6	1.3	1.2	1.2	1.2	1.3
31	1.6	---	1.1	1.1	---	1.3	---	1.5	---	1.2	1.2	---
TOTAL	34.57	35.3	34.5	37.1	31.8	40.2	40.9	49.1	39.2	36.1	37.5	37.1
MEAN	1.12	1.18	1.11	1.20	1.14	1.30	1.36	1.58	1.31	1.16	1.21	1.24
MAX	1.6	1.6	1.2	1.5	1.2	1.6	1.6	1.8	1.7	1.3	1.3	1.3
MIN	.65	1.1	1.1	1.1	1.0	1.2	1.3	1.3	1.1	1.0	1.2	1.2
AC-FT	69	70	68	74	63	80	81	97	78	72	74	74

WATER YEAR 1992 TOTAL 440.27 MEAN 1.20 MAX 1.6 MIN .65 AC-FT 873
 WATER YEAR 1993 TOTAL 453.37 MEAN 1.24 MAX 1.8 MIN .65 AC-FT 899

e Estimated

1993 WATER YEAR

LOON LAKE DAM (GERLE CREEK BELOW LOON LAKE)

- * Minimum release requirements:

October through September

8 cfs

- * Discharge is measured by applying recorded stage data from the U.S.G.S. gaging station, located about 1/3 mile below the Dam, to the existing u.S.G.S. stage-discharge relationship.
- * The discharge record indicates no apparent violations during the water year.
- * No modifications were made to the measuring device during the reporting period.

STATION NUMBER 11429500 GERLE C BL LOON LK NR MEEKS BAY CA STREAM SOURCE AGENCY USGS
 LATITUDE 390020 LONGITUDE 1201852 DRAINAGE AREA 8.01 DATUM STATE 06 COUNTY 017
 ADDITIONAL DATA SUBJECT TO REVISION
 DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	8.5	8.9	9.2	9.5	8.5	10	9.7	10	8.9	8.9	8.3
2	9.2	8.2	8.9	9.2	9.3	8.9	9.8	10	9.8	8.9	8.9	8.3
3	9.2	8.0	8.9	9.2	9.2	9.0	10	10	9.8	8.9	8.9	8.3
4	9.2	8.0	8.9	9.2	9.2	9.2	10	9.5	11	8.9	8.9	8.3
5	9.0	8.2	8.9	9.2	9.2	9.2	9.8	9.6	11	8.9	8.6	8.3
6	8.9	8.6	8.9	9.3	9.2	9.3	9.8	9.8	11	8.9	8.3	8.3
7	8.9	8.6	8.9	12	9.2	9.4	9.9	10	11	8.9	8.7	8.3
8	20	8.6	8.9	9.5	9.4	9.3	10	9.9	9.8	8.9	9.2	8.3
9	54	8.6	9.4	9.2	9.2	9.1	12	10	9.2	8.9	9.2	8.3
10	54	8.6	9.9	9.2	9.2	9.2	10	11	9.2	8.9	9.2	8.3
11	47	8.6	9.3	9.2	9.2	8.9	9.7	11	9.2	8.9	10	8.3
12	8.8	8.6	9.2	9.2	9.2	9.0	9.5	8.7	9.2	8.9	9.2	8.3
13	8.6	8.6	9.2	9.3	9.1	9.3	9.3	8.2	9.2	8.9	9.3	8.5
14	8.6	8.6	9.2	9.3	8.9	11	9.4	8.8	9.2	8.9	9.5	8.6
15	8.6	8.6	9.2	9.1	8.9	9.7	9.7	8.9	9.5	8.9	9.5	8.6
16	8.6	8.6	9.0	9.2	8.9	10	9.4	9.3	9.8	8.9	9.1	8.6
17	8.6	9.2	9.0	9.0	8.9	15	9.3	9.5	9.8	8.9	8.3	8.6
18	8.6	9.1	8.9	9.0	8.9	11	9.2	9.6	9.8	8.9	8.3	8.3
19	8.6	8.9	8.9	8.9	9.2	10	8.8	9.6	9.8	8.9	8.3	8.3
20	8.6	8.9	8.9	10	8.9	10	8.7	9.4	9.8	9.4	8.3	8.3
21	8.7	8.9	8.9	13	8.9	10	8.9	9.3	9.8	9.5	8.3	8.4
22	8.1	9.4	8.9	12	8.6	11	9.1	9.2	9.7	9.5	8.3	8.6
23	8.0	9.0	8.9	9.6	8.6	12	8.4	9.4	9.5	9.5	8.3	8.6
24	8.0	9.0	8.9	9.5	8.6	11	8.2	9.3	9.5	9.4	8.3	8.6
25	8.0	8.9	8.9	9.5	8.6	10	8.5	11	9.5	9.2	8.3	8.6
26	8.0	8.9	8.9	9.5	8.5	9.8	8.8	9.6	9.5	9.2	8.3	8.7
27	8.1	9.2	8.9	9.5	8.4	9.8	8.9	9.2	9.5	9.2	8.3	8.7
28	8.5	8.9	8.9	9.5	8.3	9.8	9.2	9.2	9.3	9.2	8.3	8.6
29	11	8.9	9.2	9.5	---	10	9.8	9.5	8.9	9.2	8.3	8.6
30	11	8.9	9.1	9.5	---	9.9	9.7	9.5	8.9	9.1	8.3	8.6
31	9.0	---	9.2	9.5	---	10	---	12	---	8.9	8.3	---
TOTAL	412.6	261.6	280.0	298.0	251.2	308.3	283.8	299.7	291.2	280.4	269.9	253.4
MEAN	13.3	8.72	9.03	9.61	8.97	9.95	9.46	9.67	9.71	9.05	8.71	8.45
MAX	54	9.4	9.9	13	9.5	15	12	12	11	9.5	10	8.7
MIN	8.0	8.0	8.9	8.9	8.3	8.5	8.2	8.2	8.9	8.9	8.3	8.3
AC-FT	818	519	555	591	498	612	563	594	578	556	535	503

CAL YR 1992 TOTAL 3482.8 MEAN 9.52 MAX 54 MIN 8.0 AC-FT 6910
 WTR YR 1993 TOTAL 3490.1 MEAN 9.56 MAX 54 MIN 8.0 AC-FT 6920

1993 WATER YEAR

ROBBS AND GERLE DAMS (S.F. RUBICON RIVER BELOW GERLE CREEK)

* Minimum release requirements:

October through April	5 cfs
May through September	10 cfs

- * Discharge is measured by applying the recorded stage data from the U.S.G.S. gaging station, located about 600 feet below the confluence of Gerle Creek, to the existing U.S.G.S. stage-discharge relationship.
- * The discharge record indicates no apparent violations during the water year.
- * No modifications were made to the measuring device during the reporting period.

STATION NUMBER 11430000 SF RUBICON R BL GERLE C NR GEORGETOWN CA STREAM SOURCE AGENCY USGS

LATITUDE 385717 LONGITUDE 1202402 DRAINAGE AREA 47.60 DATUM STATE 06 COUNTY 017

VIS L DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	5.4	5.4	6.9	8.2	6.1	14	11	138	11	11	12
2	5.6	5.8	5.4	6.6	7.9	6.2	11	13	12	11	12	11
3	5.5	5.8	5.4	6.9	7.7	7.1	11	13	11	11	12	11
4	5.5	5.5	5.4	6.7	7.3	7.2	14	13	13	11	12	11
5	6.1	5.3	5.3	6.5	8.0	7.7	11	13	13	11	11	11
6	5.4	5.2	6.1	7.3	8.6	8.5	11	12	13	11	11	11
7	5.4	5.2	6.4	13	8.7	8.8	9.8	12	13	11	11	11
8	5.4	5.2	7.0	9.4	10	9.2	10	12	12	11	11	11
9	5.4	5.3	24	7.9	11	9.3	15	13	11	11	11	11
0	5.5	5.7	13	7.4	9.5	9.4	12	13	11	11	11	11
1	5.5	5.7	9.9	7.2	9.5	9.6	11	12	12	11	11	11
2	5.7	5.7	8.3	7.3	8.8	10	9.6	12	11	11	11	11
3	5.7	5.7	7.6	19	8.5	11	9.1	12	11	11	11	11
4	5.7	5.7	7.2	16	8.2	14	9.2	12	11	12	11	12
5	5.7	5.7	7.0	12	7.7	13	9.6	12	10	11	11	11
16	5.7	5.9	6.9	13	7.6	13	9.3	12	10	11	11	11
17	5.7	5.9	7.2	10	8.6	301	44	12	11	11	11	11
18	5.7	5.9	6.9	9.5	12	53	14	12	11	11	11	11
19	5.8	6.0	6.5	8.8	16	15	11	11	11	11	11	11
20	5.8	5.6	6.5	36	12	14	10	11	11	11	11	11
21	7.5	5.3	6.3	40	10	13	10	11	11	11	11	11
22	5.8	5.3	6.3	52	9.1	13	10	11	11	11	11	11
23	5.4	5.3	6.3	15	8.6	36	9.6	11	11	11	11	11
24	5.5	5.5	6.1	12	7.9	81	9.1	11	11	11	11	11
25	5.7	5.4	6.1	11	7.9	23	8.8	13	11	11	11	11
26	5.8	5.4	6.1	9.9	7.4	16	8.5	12	11	11	12	12
27	5.9	5.7	6.1	9.2	6.4	13	8.1	12	11	12	12	12
28	6.1	5.4	6.7	8.7	6.1	12	7.7	12	11	11	12	12
29	11	5.5	10	8.4	---	12	7.4	11	12	11	12	11
30	9.6	5.5	11	8.1	---	12	7.5	11	12	11	12	12
31	5.7	---	7.6	8.1	---	12	---	184	---	11	12	---
TOTAL	186.0	166.5	236.0	399.8	249.2	776.1	342.3	542	468	343	350	336
MEAN	6.00	5.55	7.61	12.9	8.90	25.0	11.4	17.5	15.6	11.1	11.3	11.2
MAX	11	6.0	24	52	16	301	44	184	138	12	12	12
MIN	5.2	5.2	5.3	6.5	6.1	6.1	7.4	11	10	11	11	11
AC-FT	369	330	468	793	494	1540	679	1080	928	680	694	666

CAL YR 1992 TOTAL 2337.9 MEAN 6.39 MAX 24 MIN 5.1 AC-FT 4640

WTR YR 1993 TOTAL 4394.9 MEAN 12.0 MAX 301 MIN 5.2 AC-FT 8720

1993 WATER YEAR

ICE HOUSE DAM (S.F. SILVER CREEK BELOW ICE HOUSE DAM)

* Minimum release requirements:

October - March	5 cfs
April	3 cfs
May - June	8 cfs
June - September	15 cfs

- * Discharge is measured by applying the recorded stage data from the U.S.G.S. gaging station, located about 1/4 mile below the Dam, to the existing U.S.G.S. stage-discharge relationship.
- * The discharge record indicates no apparent violations during the water year.
- * No modifications were made to the measuring device during the reporting period.

STATION NUMBER 11441500 SF SILVER C NR ICE HOUSE CA STREAM SOURCE AGENCY USGS
 LATITUDE 384908 LONGITUDE 1202151 DRAINAGE AREA 27.50 DATUM 5290.00 STATE 06 COUNTY 017

ROV' ANAL DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
 DAILY MEAN VALUES

AY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	5.6	5.4	6.1	6.2	5.6	7.5	10	8.8	16	16	16
2	5.4	5.6	5.6	6.1	6.2	5.7	6.9	9.7	8.7	16	16	16
3	5.3	5.6	5.9	6.1	6.2	6.0	7.0	10	8.8	16	16	16
4	5.4	5.6	5.6	6.2	6.2	5.9	7.8	10	8.9	16	16	16
5	5.3	5.6	5.9	6.2	6.4	6.0	5.3	10	9.1	16	16	16
6	5.2	5.6	5.9	6.3	6.3	6.0	3.8	10	9.4	16	16	16
7	5.3	5.6	5.9	7.2	6.3	6.2	3.8	10	9.3	16	16	16
8	5.2	5.6	6.8	6.7	6.7	6.4	3.8	10	8.7	16	16	16
9	5.1	5.6	9.0	6.5	6.6	6.4	4.4	10	8.4	16	16	16
10	5.1	5.6	6.8	6.6	6.3	6.5	3.9	11	8.4	16	16	16
11	5.1	5.8	6.2	6.8	6.3	6.5	3.6	10	8.3	16	18	16
12	5.1	5.9	5.9	6.6	6.2	6.6	3.7	9.4	8.5	16	16	16
13	5.1	5.9	5.9	7.3	6.2	6.8	3.8	9.7	8.6	16	16	16
14	5.3	5.9	5.9	7.2	5.9	7.6	3.7	9.7	8.3	16	16	16
15	5.6	5.9	5.9	6.8	5.9	7.0	3.7	9.7	8.4	16	16	16
16	5.6	5.9	6.2	7.4	5.9	7.2	3.6	9.7	8.3	16	16	16
17	5.6	5.9	6.4	7.4	6.0	10	4.1	9.7	8.3	16	16	16
18	5.6	5.9	5.9	7.3	6.1	8.1	4.5	9.7	8.3	16	16	16
19	5.6	6.0	5.9	7.2	6.5	7.6	4.3	9.7	8.3	16	16	16
20	5.6	5.6	5.9	8.1	6.1	7.7	3.8	9.8	8.3	16	16	16
21	5.9	5.4	6.1	9.4	5.9	7.6	3.5	10	8.3	16	16	16
22	5.8	5.7	6.3	8.3	5.9	7.3	3.6	10	8.3	16	16	16
23	5.6	5.6	6.5	6.9	6.0	8.1	3.7	10	8.3	16	16	16
24	5.6	5.5	6.6	6.5	5.9	8.6	3.8	9.3	8.3	16	16	16
25	5.6	5.4	6.5	6.5	5.9	7.9	3.7	9.3	8.3	16	16	16
26	5.6	5.5	5.9	6.5	5.9	7.5	3.6	9.1	8.3	16	17	16
27	5.6	5.6	6.0	6.5	5.6	7.1	3.5	9.0	8.3	16	16	16
28	5.7	5.6	6.3	6.5	5.6	6.9	3.5	8.9	8.3	16	16	16
29	5.9	5.3	5.6	6.3	---	7.0	3.5	8.4	8.5	16	16	16
30	6.1	5.2	5.4	6.2	---	7.1	5.7	8.3	11	16	16	16
31	5.6	---	5.7	6.2	---	7.3	---	9.7	---	16	16	---
TOTAL	169.8	169.5	189.8	211.9	171.2	218.2	131.1	299.8	258.0	496	499	480
MEAN	5.48	5.65	6.12	6.84	6.11	7.04	4.37	9.67	8.60	16.0	16.1	16.0
MAX	6.1	6.0	9.0	9.4	6.7	10	7.8	11	11	16	18	16
MIN	5.1	5.2	5.4	6.1	5.6	5.6	3.5	8.3	8.3	16	16	16
AC-FT	337	336	376	420	340	433	260	595	512	984	990	952

CAL YR 1992 TOTAL 2122.5 MEAN 5.80 MAX 10 MIN 5.1 AC-FT 4210
 WTR YR 1993 TOTAL 3294.3 MEAN 9.03 MAX 18 MIN 3.5 AC-FT 6530

1993 WATER YEAR

JUNCTION DAM (SILVER CREEK BELOW JUNCTION RESERVOIR)

* Minimum release requirements:

October	10 cfs
November 1 through April 5	6 cfs
April 6 -31	10 cfs
May - September	20 cfs

* Discharge is measured by differential pressure taps on the release valve near the base of the Dam and the rate of release is telemetered hourly to the District's Headquarters.

* The discharge record indicates no apparent violations during the water year.

* No modifications were made to the measuring device during the reporting period.

STATION NUMBER 11441800 SILVER C BL JUNCTION DAM NR POLLOCK PINES CA STREAM SOURCE AGENCY USGS

LATITUDE 385105 LONGITUDE 1202718 DRAINAGE AREA 146.00 DATUM STATE 06 COUNTY 017

OVT VAL DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAILY MEAN VALUES

LY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	10	7.1	7.4	7.0	6.9	6.8	20	20	20	20	20
2	11	7.8	7.1	7.3	6.9	7.0	6.9	20	20	20	20	20
3	11	6.7	7.2	7.0	7.0	7.0	6.9	20	20	20	20	20
4	10	6.7	7.1	7.0	7.0	6.9	6.9	20	20	20	20	20
5	10	7.0	7.1	7.0	7.0	7.0	8.8	20	20	20	20	20
6	10	6.9	7.2	7.3	6.9	6.9	11	20	20	20	20	20
7	10	6.9	7.1	7.1	6.9	7.0	11	20	20	20	20	20
8	10	6.9	7.2	7.1	6.9	7.0	11	20	20	20	20	20
9	10	7.0	7.2	7.1	7.0	7.1	11	20	20	20	20	20
10	10	6.9	7.1	6.9	7.0	7.0	11	20	20	20	20	20
11	10	7.0	7.2	7.1	7.0	7.1	11	20	20	21	20	20
12	10	7.0	7.1	7.1	6.9	7.1	11	20	20	21	20	20
13	10	6.9	7.1	7.1	7.0	7.1	11	20	20	20	20	21
14	10	7.0	7.2	7.0	6.9	7.0	11	20	20	20	20	22
15	10	6.9	7.2	7.0	6.9	6.9	11	20	20	20	20	22
16	10	6.8	7.1	7.2	6.9	6.8	11	20	20	20	20	21
17	10	6.8	7.3	7.1	6.9	6.9	11	20	20	20	20	21
18	10	6.9	7.2	7.2	7.0	7.0	11	20	20	20	20	21
19	10	7.0	7.2	7.1	7.0	6.8	11	20	20	20	20	21
20	10	6.9	7.2	7.1	7.0	6.8	11	20	20	20	20	21
21	10	7.0	7.2	7.2	6.9	6.9	11	20	20	20	20	21
22	10	6.9	7.2	7.1	7.0	6.8	11	20	20	20	20	21
23	10	6.9	7.2	7.0	6.9	6.8	11	20	20	20	20	21
24	10	6.9	7.2	6.9	6.9	6.9	11	20	20	20	20	21
25	10	7.1	7.2	6.9	6.9	7.0	11	20	20	20	20	21
26	10	7.2	7.3	6.9	7.0	6.9	11	20	20	20	20	22
27	10	7.2	7.3	7.0	6.9	6.9	11	20	20	20	20	21
28	10	7.1	7.6	6.8	7.0	6.9	11	20	20	20	20	21
29	10	7.2	7.5	6.9	---	6.8	11	20	20	20	20	20
30	10	7.2	7.4	7.0	---	6.9	16	20	20	20	20	22
31	10	---	7.1	7.0	---	6.9	---	20	---	20	20	---
TOTAL	313	212.7	223.4	218.9	194.6	215.0	316.3	620	600	622	620	621
MEAN	10.1	7.09	7.21	7.06	6.95	6.94	10.5	20.0	20.0	20.1	20.0	20.7
MAX	11	10	7.6	7.4	7.0	7.1	16	20	20	21	20	22
MIN	10	6.7	7.1	6.8	6.9	6.8	6.8	20	20	20	20	20
AC-FT	621	422	443	434	386	426	627	1230	1190	1230	1230	1230

CAL YR 1992 TOTAL 3347.5 MEAN 9.15 MAX 11 MIN 6.7 AC-FT 6640

WTR YR 1993 TOTAL 4776.9 MEAN 13.1 MAX 22 MIN 6.7 AC-FT 9470

1993 WATER YEAR

CAMINO DAM (SILVER CREEK BELOW CAMINO DIVERSION DAM)

* Minimum release requirements:

October	10 cfs
November 1 - April 5	6 cfs
April 1 - 31	10 cfs
May - September	20 cfs

- * Discharge is measured by applying recorded stage data from the U.S.G.S. gaging station, located about 1/4 mile below the Dam, to the existing U.S.G.S. stage-discharge relationship.
- * The discharge record indicates no apparent violations during the water year.
- * No modifications were made to the measuring device during the reporting period.

STATION NUMBER 11441900 SILVER C BL CAMINO DIV DAM CA STREAM SOURCE AGENCY USGS

LATITUDE 384926 LONGITUDE 1203218 DRAINAGE AREA 171.00 DATUM STATE 06 COUNTY 017

PR JONAL DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	6.6	7.6	18	17	41	32	21	21	21	21
2	11	8.4	6.6	6.8	17	18	36	32	22	21	21	21
3	11	7.4	6.5	7.1	16	21	44	27	22	21	21	21
4	11	7.2	6.6	6.9	16	22	49	25	23	20	21	21
5	11	6.9	6.6	6.6	17	23	37	24	22	20	21	21
6	11	6.8	6.7	6.9	18	26	26	24	23	20	21	21
7	11	6.6	7.6	23	19	28	23	23	22	20	21	21
8	11	6.8	8.6	21	24	30	21	24	22	20	21	21
9	11	6.7	29	17	33	32	22	24	22	20	21	21
10	11	6.5	16	14	31	33	20	23	22	20	20	21
11	11	6.8	20	12	32	33	19	24	22	22	21	21
12	11	6.5	12	11	29	32	18	23	22	21	21	20
13	11	6.6	9.6	26	26	33	16	24	22	22	20	21
14	11	6.5	8.0	30	24	41	15	24	22	20	20	21
15	11	6.6	7.1	26	22	42	15	23	22	20	21	21
16	11	6.7	6.4	35	21	40	14	23	22	20	20	21
17	11	6.9	6.5	35	21	65	14	23	22	20	20	21
18	11	6.9	6.4	33	25	62	14	22	22	20	20	21
19	11	6.7	6.5	26	39	51	13	22	22	20	20	21
	11	6.5	6.5	87	39	44	13	21	22	20	20	21
21	14	6.7	6.7	428	34	38	12	22	22	20	20	21
22	16	6.7	7.1	818	29	34	12	22	21	21	20	21
23	16	6.7	7.1	58	29	35	12	22	21	21	20	21
24	16	6.8	7.1	44	26	55	12	22	20	21	20	21
25	16	6.6	7.2	35	22	78	12	22	21	21	20	21
26	16	6.6	7.0	29	20	69	12	22	21	21	20	21
27	13	6.7	6.9	23	18	57	12	22	21	21	20	21
28	11	6.7	8.5	21	17	49	12	22	21	21	20	21
29	11	6.7	7.8	20	---	42	12	22	21	21	20	21
30	11	6.7	6.9	20	---	36	18	22	21	21	21	21
31	13	---	6.9	18	---	34	---	23	---	21	21	---
TOTAL	373	207.9	269.0	1951.9	682	1220	596	730	651	638	634	629
MEAN	12.0	6.93	8.68	63.0	24.4	39.4	19.9	23.5	21.7	20.6	20.5	21.0
MAX	16	11	29	818	39	78	49	32	23	22	21	21
MIN	11	6.5	6.4	6.6	16	17	12	21	20	20	20	20
AC-FT	740	412	534	3870	1350	2420	1180	1450	1290	1270	1260	1250

CAL YR 1992 TOTAL 3818.3 MEAN 10.4 MAX 53 MIN 6.4 AC-FT 7570

WTR YR 1993 TOTAL 8581.8 MEAN 23.5 MAX 818 MIN 6.4 AC-FT 17020

1993 WATER YEAR

BRUSH CREEK DAM (BRUSH CREEK BELOW BRUSH CREEK DAM)

* Minimum release requirements:

October	2 cfs
November through March 1	4 cfs
March 2 through May 31	6 cfs
June through September	3 cfs

* Discharge is measured by an orifice plate in the conduit near the base of the dam and the rate of release is telemetered hourly to the District's Headquarters.

* The discharge record indicates no apparent violations during the water year.

* No modifications were made to the measuring device during the reporting period.

STATION NUMBER 11442700 BRUSH C BL BRUSH CREEK DAM NR POLLOCK PINES CA STREAM SOURCE AGENCY USGS

LATITUDE 384841 LONGITUDE 1203720 DRAINAGE AREA 8.04 DATUM STATE 06 COUNTY 017

OPTIONAL DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	4.3	4.4	4.5	4.5	4.5	6.4	6.5	4.4	3.5	3.5	3.8
2	2.4	4.3	4.4	4.5	4.5	6.0	6.4	6.5	3.5	3.5	3.5	3.8
3	2.4	4.4	4.4	4.5	4.5	6.8	6.5	6.4	3.5	3.5	3.4	3.8
4	2.4	4.3	4.4	4.5	4.5	6.8	6.5	6.4	3.5	3.5	3.4	3.8
5	2.4	4.3	4.4	4.5	4.5	6.8	6.4	6.4	3.5	3.5	3.5	3.8
6	2.4	4.3	4.4	4.5	4.5	6.8	6.4	6.4	3.5	3.5	3.5	3.8
7	2.4	4.4	4.4	4.5	4.5	6.8	6.4	6.4	3.5	3.5	3.5	3.8
8	2.4	4.4	4.4	4.5	4.5	6.8	6.4	6.4	3.5	3.5	3.5	3.8
9	2.4	4.4	4.4	4.5	4.5	6.8	6.4	6.4	3.5	3.5	3.5	3.8
10	2.4	4.4	4.5	4.5	4.5	6.8	6.4	6.4	3.5	3.5	3.6	3.8
11	2.4	4.4	4.4	4.5	4.5	6.8	6.4	6.4	3.5	3.5	3.8	3.8
12	2.4	4.4	4.4	4.5	4.5	6.8	6.4	6.4	3.6	3.5	3.8	3.8
13	2.4	4.4	4.4	4.5	4.5	6.8	6.4	6.4	3.6	3.5	3.8	3.8
14	2.4	4.4	4.4	4.4	4.5	6.8	6.4	6.4	3.5	3.5	3.8	3.8
15	2.4	4.4	4.4	4.4	4.5	6.6	6.4	6.4	3.5	3.5	3.8	3.8
16	2.4	4.4	4.4	4.5	4.5	6.5	6.4	6.4	3.6	3.5	3.8	3.8
17	2.4	4.4	4.4	4.5	4.5	6.5	6.4	6.4	3.5	3.5	3.8	3.8
18	2.4	4.4	4.4	4.4	4.5	6.4	6.4	6.4	3.6	3.5	3.8	3.8
19	2.4	4.4	4.4	4.4	4.6	6.4	6.4	6.4	3.6	3.5	3.8	3.8
20	2.4	4.4	4.4	4.5	4.6	6.4	6.4	6.4	3.5	3.5	3.8	3.8
21	2.4	4.4	4.4	4.5	4.6	6.4	6.4	6.4	3.5	3.5	3.8	3.9
22	2.4	4.4	4.4	4.5	4.6	6.4	6.4	6.4	3.5	3.5	3.8	3.9
23	2.4	4.4	4.4	4.4	4.6	6.4	6.4	6.4	3.5	3.5	3.8	3.9
24	2.4	4.4	4.4	4.5	4.5	6.4	6.4	6.4	3.5	3.5	3.8	3.8
25	2.4	4.4	4.3	4.5	4.5	6.4	6.4	6.4	3.5	3.5	3.8	3.8
26	2.4	4.4	4.4	4.5	4.5	6.4	6.5	6.3	3.5	3.5	3.8	3.9
27	2.4	4.3	4.4	4.5	4.5	6.4	6.5	6.4	3.5	3.5	3.8	3.8
28	2.4	4.3	4.5	4.5	4.5	6.4	6.5	6.5	3.5	3.5	3.8	3.8
29	2.4	4.4	4.5	4.5	---	6.4	6.4	6.5	3.5	3.5	3.8	3.8
30	2.4	4.4	4.5	4.5	---	6.4	6.4	6.4	3.5	3.5	3.8	3.8
31	3.5	---	4.5	4.5	---	6.5	---	6.5	---	3.5	3.8	---
TOTAL	75.5	131.3	136.8	139.0	126.5	201.4	192.5	198.8	106.4	108.5	114.7	114.4
MEAN	2.44	4.38	4.41	4.48	4.52	6.50	6.42	6.41	3.55	3.50	3.70	3.81
MAX	3.5	4.4	4.5	4.5	4.6	6.8	6.5	6.5	4.4	3.5	3.8	3.9
MIN	2.4	4.3	4.3	4.4	4.5	4.5	6.4	6.3	3.5	3.5	3.4	3.8
AC-FT	150	260	271	276	251	399	382	394	211	215	228	227

CAL YR 1992 TOTAL 1303.2 MEAN 3.56 MAX 4.7 MIN 2.3 AC-FT 2580

WTR YR 1993 TOTAL 1645.8 MEAN 4.51 MAX 6.8 MIN 2.4 AC-FT 3260

1993 WATER YEAR

SLAB CREEK DAM (S.F. AMERICAN RIVER NEAR CAMINO)

* Minimum release requirements:

October through November 15	36 cfs
November 16 through March 8	10 cfs
March 9 through September	36 cfs

* Discharge is measured by an acoustic velocity meter in the release conduit near the base of the Dam. The rate of release is telemetered hourly to the District's Headquarters.

* The discharge record indicates no apparent violations during the year.

* No modifications were made to the measuring device during the reporting period.

STATION NUMBER 11443500 SF AMERICAN R NR CAMINO CA STREAM SOURCE AGENCY USGS
 ALTITUDE 384623 LONGITUDE 1204202 DRAINAGE AREA 493.00 DATUM 1620.00 STATE 06 COUNTY 017

ROV
NAL DATA

SUBJECT TO REVISION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAILY MEAN VALUES

AY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	37	10	10	10	10	36	36	36	36	36	36
2	37	37	10	10	10	10	36	36	36	36	36	36
3	37	37	10	10	10	10	37	36	36	36	36	36
4	36	36	10	10	10	10	36	36	36	36	36	36
5	37	37	10	10	10	10	36	36	36	36	36	36
6	37	37	10	10	10	10	37	36	36	36	36	36
7	36	37	10	10	10	10	37	36	36	36	36	36
8	37	37	10	10	10	20	36	36	36	36	36	36
9	37	37	10	10	10	36	37	36	36	36	36	36
10	37	37	10	10	10	37	37	36	36	36	36	36
11	36	37	10	10	10	37	36	36	36	36	36	36
12	36	37	10	10	10	37	36	36	36	36	36	36
13	37	37	10	10	10	37	36	36	36	36	36	36
14	37	36	10	10	10	37	36	36	36	36	36	36
15	37	37	10	10	10	37	36	36	36	36	36	36
16	37	22	10	10	10	36	37	37	37	36	36	36
17	37	10	10	10	10	37	37	36	36	36	36	36
18	37	10	10	10	10	37	37	37	36	36	36	36
19	37	10	10	10	10	37	36	36	36	36	36	36
20	36	10	10	10	10	36	36	36	36	36	36	36
21	37	10	10	550	10	36	36	36	36	36	36	36
22	37	10	10	1460	10	36	37	36	36	36	36	36
23	37	10	10	10	10	36	36	36	36	36	36	36
24	37	10	10	10	10	36	36	36	37	36	36	36
25	37	10	10	10	10	37	36	37	36	36	36	36
26	37	10	10	10	10	37	36	36	36	36	36	36
27	37	10	10	10	10	37	36	36	36	36	36	36
28	37	10	10	10	10	36	36	36	36	36	36	36
29	37	10	10	10	---	37	36	36	36	36	36	36
30	37	10	10	10	---	36	36	36	36	36	36	36
31	37	---	10	10	---	37	---	36	---	36	36	---
TOTAL	1141	715	310	2300	280	932	1089	1119	1082	1116	1116	1080
MEAN	36.8	23.8	10.0	74.2	10.0	30.1	36.3	36.1	36.1	36.0	36.0	36.0
MAX	37	37	10	1460	10	37	37	37	37	36	36	36
MIN	36	10	10	10	10	10	36	36	36	36	36	36
AC-FT	2260	1420	615	4560	555	1850	2160	2220	2150	2210	2210	2140

CAL YR 1992 TOTAL 8311 MEAN 22.7 MAX 50 MIN 10 AC-FT 16480
 WTR YR 1993 TOTAL 12280 MEAN 33.6 MAX 1460 MIN 10 AC-FT 24360

REPORT OF LICENSEE FOR

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS
SACRAMENTO
1992 MAR 27 PM 3:22
APPLICATION: A012624
LICENSE: 011074

OWNER OF RECORD:

SACRAMENTO M U D ET AL
C/O SACRAMENTO MUNICIPAL UTILITY DIST
P O BOX 15830
SACRAMENTO, CA 95813

TELEPHONE NUMBER:
(916) 732-5836

IF OWNER'S NAME/ADDRESS/PHONE NO. IS WRONG OR MISSING, PLEASE CORRECT.

SOURCE:

COUNTY:

RUBICON RIVER
(OTHER SOURCES NOT SHOWN)

EL DORADO

PURPOSE:

DIVERSION/STORAGE SEASON:

ACRES/HP:

POWER
RECREATION

JAN 01 TO DEC 31 // OCT 01 TO JUL 31 346800.0 HP
JAN 01 TO DEC 31 // OCT 01 TO JUL 31 .0 AC

AMOUNT: 1200 cfs
XXXXXX 226700.0 AC-FT

THIS REPORT IS REQUIRED BY THE TERMS AND CONDITIONS OF YOUR LICENSE

IMPORTANT! EVERY license is subject to the conditions therein. I have currently reviewed my license: YES [X]. NO []. I am complying with the conditions of my license: YES [X] NO []. Identify any noncompliance by license term number under "Remarks" on reverse side. This report is important in providing the record of use needed in maintaining your water right. It should be filled out carefully and returned promptly to the above-listed address.

THE PROJECT HAS BEEN ABANDONED, AND I REQUEST REVOCATION OF THE LICENSE: YES [] NO [X]

COMPLETE FOR DIRECT DIVERSION PROJECTS

1. Have you used the full licensed amount of water each year? YES [] NO [X].
2. State the quantity of water used each month in gallons or acre-feet (if not known, check months water was used).

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
1989	2.4	4.6	31.5	34.8	27.4	17.9	9.2	5.3	0.8	10.8	15.2	10.3	170.2
1990	8.3	5.2	12.8	17.5	8.4	10.9	8.1	8.2	0.8	2.5	4.0	1.7	88.4
1991	4.3	3.8	9.5	30.2	16.6	10.7	4.7	8.2	7.0	13.5	1.7	1.0	111.2

COMPLETE FOR STORAGE PROJECTS

	1989	1990	1991
3. Did your reservoir spill this year?	1) no 2) no	1) no 2) no	1) no 2) no
4. If not, how many feet below spillway vertically was the water level at maximum storage?	1) 0.8' 2) 1.1'	1) 2.2' 2) 1.5'	1) 31.2' 2) 0.8'
5. Have you emptied the reservoir?	1) no 2) no	1) no 2) no	1) no 2) no
6. How many feet below spillway vertically was it drawn down at end of season?	1) 157.8' 2) 81.3'	1) 86.1' 2) 36.0'	1) 93.4' 2) 32.9'

USE (COMPLETE FOR ALL PROJECTS)

	1989	1990	1991
7. Acreage irrigated	Not applicable	Not applicable	Not applicable
Crops grown	"	"	"
8. Stockwatering — number of stock	"	"	"
kind of stock	"	"	"
9. Domestic — number of persons	"	"	"
garden area, etc.	"	"	"
10. Recreational — nature of use	"	"	"
11. Industrial — nature of use	"	"	"
Municipal — approximate population	"	"	"
Power generation — K.W.	653,000	653,000	653,000
14. Other			

15. If no water was used in one or more years, briefly state the reason on the reverse side under "Remarks".
16. If either the location of the point of diversion or place of use has been changed and the permission of this Board has not yet been obtained, please describe nature of change on the reverse side under "Remarks".

**SMUD**

SACRAMENTO MUNICIPAL UTILITY DISTRICT ☐ P. O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

RECEIVED

JAN 31 1992

WSP ECA
EXECUTIVE OFFICE

GO 92-19

January 29, 1992

MR. WALTER PETTIT, CHIEF
DIVISION OF WATER RIGHTS
P. O. BOX 2000
SACRAMENTO, CA 95810

Dear Mr. Pettit:

Subject: ANNUAL COMPLIANCE REPORT - 1991 WATER YEAR

In accordance with our compliance plan, dated June 1986, attached are the data for the 1991 water year. There occurred during the water year four periods of apparent Deficient Release, all of which were communicated to your office by letter when they were discovered. Copies of the Notices of Deficient Releases sent to your office during the 1991 water year are also attached.

The four periods of Deficient Release are:

<u>Station Name</u>	<u>Period</u>	<u>Cause</u>
Little Rubicon below Buck Island Dam	10/1/90-1/12/91	Insufficient Reservoir Storage
Little Rubicon below Buck Island Dam	1/13/91-1/31/91	Plugged Release Valve
Silver Creek below Camino Diversion Dam	1/15/91	Mechanical Failure
S.F. Rubicon River below Gerle Creek	5/12/91	Operator Error

Sincerely,

John P. Hiltz, Manager
Generation Operations Department

Attachment

1991 WATER YEAR

RUBICON DAM (RUBICON RIVER BELOW RUBICON DAM)

- . Minimum release requirements:
 - October through September 6 cfs or inflow,
whichever is less
- . Inflow is determined by periodic stage observations at a U.S.G.S. rated staff gage. Discharge measurement was modified from stage observation at a U.S.G.S. rated staff in October 1990. Subsequent to October 1990, discharge is measured by orifice plates in the release conduits.
- . The discharge record indicates no apparent violation during the water year.
- . There were no modifications to measuring devices during the reporting period.

1991 WATER YEAR

BUCK ISLAND DAM (LITTLE RUBICON RIVER BELOW BUCK ISLAND DAM)

- . Minimum release requirements:
 - October through September 1 cfs
- . Discharge is measured by periodic stage observations of flow over a 90 degree V-notch weir located immediately below Buck Island Dam.
- . A Notice of Deficient Release was provided to the Division of Water Rights by letter dated August 31, 1990. The insufficient reservoir storage condition referred to in this letter continued through January 12, 1991. A Notice of Deficient Release for the period January 13 - 30, 1991 was provided to the Division of Water Rights by letter dated June 18, 1991 (copy attached).
- . No modifications were made to the measuring device during the period.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

11428400

Little Rubicon River below Buck Island Reservoir

1991

Control is 90 deg. v-notch weir; stilling well GH's measured with submersible pressure transducer and encoder; estimated record considered fair
USGS #: 11-4284.00

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR Oct 1990 TO Sep 1991

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1		.12e	.06e	.27e	1.1	1.2	1.2	1.3	1.1	1.3	1.1e	1.1e
2		.03e	.05e	.25e	1.1	1.2	1.2	1.3	1.2	1.3	1.1e	1.1e
3		.03e	.05e	.27e	1.1	1.3	1.2	1.2	1.3	1.3	1.1e	1.1e
4		.02e	.05e	.27e	1.1	131 s	1.3	1.2	1.3	1.3	1.1e	1.1e
5		.02e	.06e	.27e	1.2	35 s	1.3	1.3	1.3	1.3	1.1e	1.1e
6		.02e	.05e	.27e	1.2	1.1	1.4	1.4	1.2	1.3	1.1e	1.1e
7		.02e	.05e	.27e	1.1	1.0	1.4	1.5	1.1	1.3	1.1e	1.2
8		.01e	.04e	.27e	1.1	1.2	1.4	1.5	1.1	1.3	1.1e	1.2
9		.01e	.04e	.27e	1.1	1.3	1.3	1.4	1.2	1.3	1.2e	1.2
10		.01e	.04e	.27e	1.1	1.3	1.3	1.3	1.2	1.3	1.2e	1.2
11		.01e	.07e	.27e	1.1	1.2	1.3	1.2	1.2	1.3	1.1e	1.2
12		.02e	.12e	.27e	1.1	1.2	1.3	1.2	1.2	1.2	1.1e	1.2
13		.02e	.14e	.27e	1.1	1.2	1.3	1.2	1.2	1.2	1.1e	1.1
14		.02e	.14e	.27e	1.1	1.1	1.3	1.2	1.1	1.2	1.1e	1.1
15		.02e	.12e	.27e	1.1	1.2	1.3	1.3	1.1	1.2	1.1e	1.1
16		.02e	.14e	.27e	1.1	1.2	1.3	1.3	1.1	1.2e	1.1e	1.1
17		.02e	.16e	.27e	1.1	1.2	1.3	1.4	1.1	1.2e	1.1e	1.1
18		.02e	.17e	.27e	1.1	1.2	1.2	1.3	1.0	1.0e	1.1e	1.1
19		.03e	.19e	.27e	1.1	1.2	1.3	1.2	1.2	1.1e	1.1e	1.1
20		.03e	.22e	.27e	1.1	1.2	1.3	1.2	1.3	1.1e	1.1e	1.1
21		.02e	.25e	.27e	1.2	1.1	1.3	1.2	1.2	1.1e	1.1e	1.1
22		.02e	.25e	.27e	1.2	1.1	1.3	1.2	1.2	1.1e	1.1e	1.1
23		.02e	.27e	.25e	1.2	1.2	1.3	1.4	1.2	1.1e	1.1e	1.1
24		.02e	.29e	.27e	1.2	1.2	1.4	1.4	1.3	1.1e	1.1e	1.1
25		.03e	.27e	.27e	1.2	1.2	1.3	1.4	1.3	1.1e	1.1e	1.2
26		.03e	.25e	.22e	1.2	1.1	1.3	1.4	1.3	1.1e	1.1e	1.3
27	.02e	.05e	.25e	.27e	1.2	1.1	1.3	1.3	1.3	1.1e	1.1e	1.3
28	.02e	.05e	.25e	.25e	1.2	1.1	1.2	1.2	1.3	1.1e	1.1e	1.2
29	.02e	.06e	.25e	.27e	-----	1.2	1.3	1.2	1.4	1.1e	1.1e	1.2
30	.02e	.06e	.27e	.63e	-----	1.1	1.3	1.3	1.3	1.1e	1.1e	1.2
31	.07e	-----	.27e	1.1	-----	1.2	-----	1.2	-----	1.1e	1.1e	-----
TOTAL	0.15	0.86	4.83	9.45	31.8	200.1	38.9	40.1	36.3	36.8	34.3	34.4
MEAN	.030	.029	.16	.30	1.14	6.45	1.30	1.29	1.21	1.19	1.11	1.15
MAX	.07	.12	.29	1.1	1.2	131	1.4	1.5	1.4	1.3	1.2	1.3
MIN	.02	.01	.04	.22	1.1	1.0	1.2	1.2	1.0	1.0	1.1	1.1
AC-FT	.3	1.7	9.6	19	63	397	77	80	72	73	68	68
★												
CAI YEAR 1990 TOTAL*		5.84	MEAN	.088	MAX	.29	MIN	.01	AC-FT	12		
EAR 1991 TOTAL*		467.99	MEAN	1.38	MAX	131	MIN	.01	AC-FT	928		

* Incomplete Record e-estimated based on partial gage-height record /s-reservoir spilled this day

1991 WATER YEAR

LOON LAKE DAM (GERLE CREEK BELOW LOON LAKE)

- . Minimum release requirements:
 - October through September 8 cfs
- . Discharge is measured by applying the hourly telemetered stage data from the U.S.G.S. gaging station, located about 1/3 mile below the dam, to the existing U.S.G.S. stage-discharge relationship.
- . From October 1 through September 30, the discharge record is from the hourly telemetered stage data (enclosed).
- . The discharge record indicates no apparent violations during the water year.
- . No modifications were made to the measuring device during the reporting period.

01/28/92 14:20

SACRAMENTO MUNICIPAL UTILITY DISTRICT

1 29500 Gerle Creek below Loon Lake Dam near Meeks Bay

1991

USGS #: 11-4295.00

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR Oct 1990 TO Sep 1991

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	8.9	8.9	8.6	8.3	8.9	8.9	9.2	9.5	9.2	8.9	8.9	8.7
2	8.9	8.9	8.7	8.3	9.1	8.7	9.2	9.2	9.2	8.9	8.9	8.9
3	8.9	8.9	8.6	8.2	9.0	11	9.3	9.3	9.0	8.9	8.9	9.2
4	8.9	8.9	8.9	8.0	8.7	19	9.5	9.8	8.9	8.9	8.9	8.9
5	8.9	8.9	9.1	8.1	8.6	9.9	9.8	10	8.9	8.8	8.9	8.6
6	8.9	8.9	9.2	8.2	8.4	9.2	11	11	8.9	8.6	8.9	8.6
7	8.9	8.9	9.4	8.3	8.3	9.2	9.9	11	8.9	8.6	8.9	8.6
8	8.8	8.9	9.5	8.3	8.3	9.2	9.6	11	8.9	8.6	8.9	8.6
9	9.2	8.9	10	8.3	8.3	9.2	9.8	10	8.9	8.6	8.9	8.6
10	9.2	8.9	9.1	8.4	8.3	9.2	9.4	9.2	8.9	8.6	9.0	8.6
11	9.2	8.9	8.5	8.6	8.3	9.2	9.2	9.2	8.9	8.6	8.6	8.6
12	9.2	8.9	8.5	8.6	8.3	9.2	9.3	9.3	8.9	8.6	8.9	8.6
13	9.2	8.9	8.4	8.6	8.4	9.2	9.6	10	8.5	8.6	8.8	8.6
14	9.2	8.8	8.3	8.6	8.6	9.2	9.7	9.6	8.3	8.6	8.7	8.6
15	9.2	8.6	8.3	8.6	8.4	9.2	9.3	9.8	8.9	8.6	8.6	8.6
16	9.2	8.6	8.3	8.6	8.5	9.2	9.2	10	8.9	8.6	8.6	8.6
17	9.2	8.6	8.3	8.6	8.3	9.2	9.2	10	8.9	8.6	8.9	8.6
18	12	8.6	8.3	8.6	8.3	9.2	9.2	9.7	8.8	8.6	8.9	8.6
19	21	8.6	8.4	8.6	8.3	9.2	9.4	9.9	8.9	8.7	8.7	8.6
20	25	8.6	8.3	8.6	8.2	9.2	9.2	9.5	8.9	8.9	8.4	8.6
21	26	8.6	8.3	8.6	8.1	9.2	9.6	9.4	8.9	8.9	8.6	8.6
22	26	8.6	8.3	8.6	8.2	9.2	9.5	9.6	8.9	8.9	8.6	8.6
23	26	8.6	8.4	8.6	8.6	9.2	9.7	9.8	8.8	8.9	8.6	8.6
24	26	8.6	8.3	8.5	8.6	9.2	9.3	9.7	8.8	8.9	8.6	8.6
25	16	8.6	8.3	8.6	8.6	9.2	9.2	9.7	8.8	8.9	8.6	8.6
26	9.0	8.6	8.3	8.6	8.6	9.2	9.2	9.5	8.8	8.9	8.6	8.6
27	8.9	8.6	8.3	8.6	8.6	9.2	9.3	9.3	8.8	8.9	8.6	8.6
28	8.9	8.6	8.3	8.6	8.7	9.2	9.6	9.2	9.5	8.9	8.6	8.6
29	8.9	8.6	8.3	8.6	-----	9.2	9.8	9.2	8.9	8.9	8.6	9.0
30	8.9	8.6	8.3	8.8	-----	9.3	10	9.9	8.9	8.9	8.6	9.1
31	9.8	-----	8.3	8.9	-----	9.3	-----	9.2	-----	8.9	8.6	-----
TOTAL	386.3	262.1	266.1	263.4	237.5	296.9	285.2	301.5	266.7	271.7	270.8	260.2
MEAN	12.5	8.74	8.58	8.50	8.48	9.58	9.51	9.73	8.89	8.76	8.74	8.67
MAX	26	8.9	10	8.9	9.1	19	11	11	9.5	8.9	9.0	9.2
MIN	8.8	8.6	8.3	8.0	8.1	8.7	9.2	9.2	8.3	8.6	8.4	8.6
AC-FT	766	520	528	522	471	589	566	598	529	539	537	516
YEAR 1990 TOTAL*		914.5	MEAN	9.94	MAX	26	MIN	8.3	AC-FT	1,810		
WTR YEAR 1991 TOTAL		3,368.4	MEAN	9.23	MAX	26	MIN	8.0	AC-FT	6,680		

* Incomplete Record

1991 WATER YEAR

ICE HOUSE DAM (S. F. SILVER CREEK BELOW ICE HOUSE DAM)

- . Minimum release requirements:

October - September

5 cfs

- . Discharge is measured by applying the hourly telemetered stage data from the U.S.G.S. gaging station, located about 1/4 mile below the dam, to the existing U.S.G.S. stage-discharge relationship.
- . From October 1 through September 30, the discharge record is from the hourly telemetered stage data (enclosed).
- . The discharge record indicates no apparent violations during the water year.
- . No modifications were made to the measuring device during the reporting period.

01/29/92 08:42

SACRAMENTO MUNICIPAL UTILITY DISTRICT

11441500 South Fork Silver Creek near Ice House

1991

USGS #: 11-4415.00

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR Oct 1990 TO Sep 1991

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	5.6	6.2	5.6	6.2	5.7	6.5	7.3	5.6	6.2	5.5	5.6	6.0
2	5.6	6.0	5.6	6.2	6.2	6.3	7.2	5.6	6.2	5.6	5.6	5.9
3	5.6	5.8	5.4	6.2	6.0	7.7	7.0	5.4	5.9	5.7	5.6	5.9
4	5.6	5.9	5.5	6.2	6.0	12	7.1	5.4	5.7	5.9	5.6	5.9
5	5.5	5.9	5.3	5.9	6.9	7.7	7.2	5.9	5.7	6.0	5.6	5.9
6	5.4	5.9	5.2	5.5	6.2	6.6	7.7	7.2	5.7	5.6	5.6	5.9
7	5.4	5.9	5.3	5.4	6.1	6.5	7.3	6.3	5.6	5.6	5.6	5.9
8	5.6	5.9	5.0	5.4	6.0	6.5	7.1	6.3	5.6	5.4	5.6	5.9
9	5.7	5.9	5.1	5.4	6.0	6.5	6.9	6.5	5.7	5.5	5.6	5.7
10	5.8	5.2	5.1	5.4	6.0	6.5	6.0	6.4	5.8	5.6	5.6	5.8
11	5.7	5.4	5.2	5.4	6.0	6.5	5.8	6.4	5.6	5.6	5.4	5.7
12	5.9	6.5	5.2	5.4	5.9	6.5	5.8	6.5	5.6	5.7	5.4	5.6
13	5.9	5.4	5.4	5.4	5.9	6.5	5.8	6.6	5.6	5.8	5.4	5.6
14	5.9	5.4	5.4	5.4	5.9	6.5	5.7	6.5	5.6	5.9	5.4	5.6
15	5.9	5.4	5.6	5.4	5.9	6.4	5.6	6.5	5.6	5.8	5.4	5.6
16	5.9	5.4	5.6	5.3	5.9	6.2	5.6	6.6	5.6	5.8	5.4	5.6
17	5.9	5.9	5.7	5.4	5.9	6.4	5.6	6.8	5.6	5.6	5.3	5.7
18	6.0	6.2	5.7	5.4	5.9	6.3	5.6	6.8	5.6	5.9	5.1	5.6
19	6.0	6.4	6.2	5.4	5.9	6.4	5.6	6.8	5.6	5.9	5.3	5.6
20	5.9	6.0	6.2	5.4	5.9	6.3	5.7	6.6	5.6	5.9	5.6	5.4
21	5.9	6.0	6.2	5.3	5.9	6.4	5.7	6.5	5.6	5.9	5.6	5.4
22	5.9	5.9	6.2	5.4	5.9	6.4	5.6	6.5	5.6	5.8	5.6	5.4
23	5.9	5.9	6.2	5.4	5.9	6.5	5.6	6.5	5.6	5.4	5.4	5.4
24	5.8	5.6	6.2	5.4	5.9	6.4	5.7	6.5	5.6	5.4	5.5	5.4
25	5.7	5.3	6.2	5.4	5.9	6.5	5.8	6.5	5.6	5.4	5.7	5.7
26	5.5	5.2	6.2	5.4	5.9	6.3	6.0	6.6	5.4	5.4	5.6	8.0
27	5.7	5.7	6.2	5.5	5.9	6.4	5.6	6.5	5.4	8.2	5.6	8.0
28	5.6	6.3	6.1	5.6	6.2	6.5	5.5	6.5	5.9	5.9	5.6	7.0
29	5.4	5.5	6.2	5.5	-----	6.6	5.4	6.3	5.7	5.6	5.6	5.3
30	5.5	5.6	6.2	5.6	-----	6.7	5.4	6.3	5.4	5.6	5.6	5.3
31	6.2	-----	6.2	5.6	-----	6.8	-----	6.2	-----	5.6	5.7	-----
TOTAL	177.9	173.6	177.4	171.8	167.7	208.3	183.9	197.6	169.9	178.5	171.2	175.7
MEAN	5.74	5.79	5.72	5.54	5.99	6.72	6.13	6.37	5.66	5.76	5.52	5.86
MAX	6.2	6.5	6.2	6.2	6.9	12	7.7	7.2	6.2	8.2	5.7	8.0
MIN	5.4	5.2	5.0	5.3	5.7	6.2	5.4	5.4	5.4	5.4	5.1	5.3
AC-FT	353	344	352	341	333	413	365	392	337	354	340	349

YEAR 1990	TOTAL*	528.9	MEAN	5.75	MAX	6.5	MIN	5.0	AC-FT	1,050
YEAR 1991	TOTAL	2,153.5	MEAN	5.90	MAX	12	MIN	5.0	AC-FT	4,270

* Incomplete Record

1991 WATER YEAR

JUNCTION DAM (SILVER CREEK BELOW JUNCTION RESERVOIR)

- . Minimum release requirements:

October	10 cfs
November through September	6 cfs

- . Discharge is measured by differential pressure tops on the release valve near the base of the dam and the rate of release is telemetered hourly to the District's Headquarters.
- . From October 1 through September 30, the discharge record is from the hourly telemetered release quantities (enclosed).
- . The discharge record indicates no apparent violations during the water year.
- . No modifications were made to the measuring device during the reporting period.

01/25/92 08:37

SACRAMENTO MUNICIPAL UTILITY DISTRICT

1441800

Silver Creek below Junction Dam near Riverton

1991

USGS #: 11-4418.00

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR Oct 1990 TO Sep 1991

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	11	7.7	6.6	6.8	6.6	6.7	6.8	12	12	12	12	12
2	11	6.1	6.5	6.7	6.6	6.7	6.7	12	12	12	12	12
3	11	6.1	6.7	6.6	6.6	6.7	6.8	12	12	12	12	12
4	11	6.1	6.6	6.7	6.8	6.7	6.8	12	12	12	12	12
5	11	6.2	6.6	6.7	6.6	6.6	6.7	12	12	12	12	12
6	11	6.1	6.6	6.6	6.6	6.6	6.7	12	12	12	12	12
7	11	6.0	6.6	6.7	6.7	6.8	6.7	12	12	12	12	12
8	11	6.1	6.7	6.7	6.6	6.5	6.7	12	12	12	12	12
9	11	6.3	6.6	6.7	6.7	6.6	6.6	12	12	12	12	12
10	11	6.3	6.7	6.7	6.6	6.6	6.6	12	12	12	12	12
11	11	6.3	6.6	6.7	6.6	6.6	6.6	12	12	12	12	12
12	11	6.3	6.6	6.7	6.7	6.6	6.6	12	12	12	12	12
13	11	6.5	6.6	6.7	6.7	6.8	6.7	12	12	12	12	12
14	11	6.6	6.8	6.7	6.7	6.8	6.6	12	12	12	12	12
15	11	6.7	6.6	6.6	6.6	6.6	6.6	12	12	12	12	12
16	11	6.7	6.7	6.7	6.6	6.6	6.6	12	12	12	12	12
17	11	6.6	6.6	6.6	6.6	6.5	6.6	12	12	12	12	12
18	11	6.6	6.6	6.7	6.7	6.6	6.6	12	12	12	12	12
19	11	6.7	6.6	6.6	6.6	6.6	6.6	12	12	12	12	12
20	11	6.6	6.7	6.6	6.6	6.6	6.6	12	12	12	12	12
21	11	6.7	6.7	6.8	6.6	6.5	6.5	12	12	12	12	12
22	11	6.6	6.6	6.7	6.6	6.6	6.6	12	12	12	12	11
23	11	6.6	6.6	6.6	6.6	6.6	6.7	12	12	12	12	12
24	11	6.6	6.6	6.6	6.6	6.6	6.7	12	12	12	12	12
25	11	6.6	6.7	6.6	6.6	6.6	6.7	12	12	12	12	12
26	11	6.6	6.7	6.6	6.6	6.5	6.7	12	12	12	12	12
27	11	6.5	6.7	6.6	6.7	6.7	6.6	12	12	12	12	12
28	11	6.7	6.6	6.6	6.6	6.7	6.8	12	12	12	12	12
29	11	6.7	6.6	6.6	-----	6.8	6.8	12	12	12	12	12
30	11	6.6	6.8	6.6	-----	6.8	9.1	12	12	12	12	12
31	11	-----	6.7	6.6	-----	6.8	-----	12	-----	12	12	-----
TOTAL	341	194.8	205.9	206.4	185.7	206.0	202.4	372	360	372	372	359
MEAN	11.0	6.49	6.64	6.66	6.63	6.65	6.75	12.0	12.0	12.0	12.0	12.0
MAX	11	7.7	6.8	6.8	6.8	6.8	9.1	12	12	12	12	12
MIN	11	6.0	6.5	6.6	6.6	6.5	6.5	12	12	12	12	11
AC-FT	676	386	408	409	368	409	401	738	714	738	738	712
WTR YEAR 1990 TOTAL*		741.7	MEAN	8.06	MAX	11	MIN	6.0	AC-FT	1,470		
WTR YEAR 1991 TOTAL		3,377.2	MEAN	9.25	MAX	12	MIN	6.0	AC-FT	6,700		

* Incomplete Record

1991 WATER YEAR

ROBBS AND GERLE DAMS (S.F. RUBICON RIVER BELOW GERLE CREEK)

- . Minimum release requirements:

October through September

5 cfs

- . Discharge is measured by applying the hourly telemetered stage data from the U.S.G.S. gaging station, located about 600 feet below the confluence of Gerle Creek, to the existing U.S.G.S. stage-discharge relationship.
- . A Notice of Deficient Release, on 5/12/91, was provided to the Division of Water Rights, by letter dated June 18, 1991 (copy attached).
- . No modifications were made to the measuring device during the reporting period.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

11430000

South Fork Rubicon River below Gerle Creek

1991

USGS #: 11-4300.00

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR Oct 1990 TO Sep 1991

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	5.5	5.5	5.6	5.5e	5.7	7.7	11	5.7	5.5	6.8	5.2	6.3
2	5.5	5.6	5.7	5.5e	7.0	7.2	10	5.6	5.6	7.7	5.8	6.3
3	5.5	5.5	5.7	5.4	6.8	17	11	5.6	5.5	6.9	6.0	6.4
4	5.5	5.5	5.7	5.4	6.5	756	11	5.4	6.5	6.5	6.0	5.8
5	5.5	5.6	5.7	5.2	8.2	181	11	5.4	5.4	6.3	6.1	6.0
6	5.5	5.5	5.7	5.2	6.5	11	14	5.3	5.6	6.2	6.2	6.1
7	5.5	5.5	5.7	5.6	6.2	9.7	13	5.5	6.9	6.3	6.4	6.3
8	5.7	5.5	5.7	5.5	6.0	9.0	12	5.5	6.9	6.4	7.6	6.1
9	5.5	5.5	5.7	5.5	6.1	8.6	11	5.7	6.6	6.1	7.5	6.2
10	5.5	5.5	5.7	5.6	5.9	8.6	9.6	5.4	6.1	6.0	7.7	6.2
11	5.5	5.5	6.3	5.6	5.9	8.1	8.3	5.2	6.1	5.6	7.3	6.2
12	5.5	5.5	5.8	5.6	6.0	8.1	7.5	4.9	7.1	5.2	7.2	6.2
13	5.6	5.6	5.8	5.6	5.7	8.1	7.7	5.7	6.6	6.5	6.9	6.2
14	5.7	5.6	5.7	5.6	5.7	7.7	7.9	6.2	6.8	5.8	5.6	6.3
15	5.7	5.5	5.7	5.7	5.9	7.6	7.8	5.5	6.8	5.9	5.7	6.3
16	5.7	5.4	5.5	5.7	6.0	7.5	7.0	5.5	6.7	5.9	5.6	6.4
17	5.7	5.4	5.5	5.7	6.2	7.5	6.6	6.6	6.7	6.0	5.8	6.4
18	6.0	5.4	5.5	5.5	5.9	7.4	6.5	6.4	6.0	6.3	5.9	6.5
19	6.1	5.5	5.8	5.5	6.0	6.9	7.2	6.3	5.8	5.8	5.8	6.4
20	5.9	5.7	5.5	5.5	6.3	6.8	6.9	6.3	6.4	5.7	5.8	6.2
21	6.0	5.6	5.5	5.4	6.1	6.8	7.1	6.0	6.6	5.9	5.9	6.4
22	6.2	5.5	5.5e	5.7	6.1	6.9	7.1	5.6	6.4	6.2	6.4	6.4
23	6.3	5.5	5.5e	5.8	6.0	7.3	7.1	5.5	5.9	6.5	6.3	6.4
24	6.5	5.5	5.5e	5.8	6.0	7.5	7.4	5.5	6.1	6.5	6.6	6.3
25	6.9	5.9	5.5e	5.6	5.9	7.6	7.7	5.5	6.6	5.7	6.7	6.4
26	7.4	5.8	5.5e	5.2	5.8	7.3	7.2	5.4	6.8	5.6	6.6	6.6
27	6.8	5.7	5.5	5.2	5.9	7.6	6.6	5.9	6.9	5.3	6.3	6.1
28	6.8	5.6	5.5	5.8	6.7	7.9	6.1	6.8	8.7	6.1	6.4	6.3
29	6.9	5.7	5.5	6.1	-----	7.9	6.0	6.2	7.5	6.5	6.2	6.6
30	7.0	5.7	5.5	5.6	-----	8.8	5.8	6.1	7.2	5.9	5.9	6.4
31	7.2	-----	5.5e	5.5	-----	9.6	-----	5.4	-----	5.3	6.2	-----
TOTAL	186.6	166.8	174.5	172.1	173.0	1,176.7	255.1	177.6	194.3	189.4	195.6	188.7
MEAN	6.02	5.56	5.63	5.55	6.18	38.0	8.50	5.73	6.48	6.11	6.31	6.29
MAX	7.4	5.9	6.3	6.1	8.2	756	14	6.8	8.7	7.7	7.7	6.6
MIN	5.5	5.4	5.5	5.2	5.7	6.8	5.8	4.9	5.4	5.2	5.2	5.8
AC-FT	370	331	346	341	343	2,330	506	352	385	376	388	374

YEAR 1990	TOTAL*	527.9	MEAN	5.74	MAX	7.4	MIN	5.4	AC-FT	1,050
YEAR 1991	TOTAL	3,250.4	MEAN	8.91	MAX	756	MIN	4.9	AC-FT	6,450

* Incomplete Record e = Estimated

1991 WATER YEAR

CAMINO DAM (SILVER CREEK BELOW CAMINO DIVERSION DAM)

. Minimum release requirements:

October	10 cfs
November through September	6 cfs

- . Discharge is measured by applying hourly telemetered stage data from the U.S.G.S. gaging station, located about 1/4 mile below the dam, to the existing U.S.G.S. stage-discharge relationship.
- . From October 1 through September 30, the discharge record is from the hourly telemetered stage data (enclosed).
- . A Notice of Deficient Release for the period 1/15/91, was provided to the Division of Water Rights, by letter dated February 25, 1991 (copy attached).
- . No modifications were made to the measuring device during the reporting period.

01/28/92 11:21

SACRAMENTO MUNICIPAL UTILITY DISTRICT

1990 Silver Creek below Camino Diversion Dam

1991

USGS #: 11-4419.00

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR Oct 1990 TO Sep 1991

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	11	8.7	6.7	6.5	6.8	8.8	25	11	11	11	11	12
2	11	7.4	6.5	6.4	6.7	8.7	23	11	11	11	11	11
3	11	7.6	6.5	6.6	6.5	28	23	11	10	11	11	12
4	10	7.4	6.4	6.3	6.8	61	25	11	11	11	11	12
5	10	7.4	6.5	6.2	6.9	40	27	11	11	11	11	11
6	11	7.3	6.4	6.1	6.7	20	32	11	11	11	11	12
7	11	7.7	6.7	6.3	6.7	15	31	10	10	11	11	11
8	11	7.5	6.5	6.2	6.8	12	27	11	11	11	11	11
9	11	6.9	6.4	6.3	6.6	10	24	11	11	11	11	11
10	11	6.5	6.3	6.3	6.8	9.5	22	10	11	11	11	12
11	11	6.5	6.5	6.2	6.7	8.8	20	11	11	11	11	11
12	11	6.6	6.4	6.2	6.7	8.8	18	11	10	11	11	11
13	11	6.6	6.4	6.3	6.7	10	17	11	11	11	11	11
14	11	6.7	6.6	6.2	6.7	9.0	17	10	11	11	11	11
15	11	6.6	6.6	5.9	6.7	8.4	16	11	10	11	11	11
16	11	6.4	6.5	6.5	6.9	8.1	15	11	11	11	11	12
17	11	6.5	6.6	7.0	6.9	8.3	14	11	11	11	11	11
18	11	6.5	6.5	6.8	7.0	8.8	13	11	11	11	11	11
19	11	6.6	6.7	7.0	24	8.9	13	11	11	12	11	11
20	11	6.3	6.6	7.2	251	8.6	13	11	11	12	11	11
21	11	6.4	6.5	7.1	510	8.1	12	11	11	12	11	11
22	11	6.4	6.5	6.8	459	8.2	13	11	11	12	11	11
23	11	6.4	6.5	6.7	438	8.8	12	11	11	12	11	11
24	11	6.6	6.5	6.7	172	11	12	11	11	12	12	11
25	11	6.5	7.4	6.7	13	12	13	11	11	12	12	11
26	11	6.4	6.8	6.6	6.9	19	17	11	11	11	12	11
27	11	6.3	6.6	6.7	6.8	9.8	16	11	11	11	11	11
28	11	6.6	6.5	7.0	7.1	10	14	11	11	11	11	11
29	11	6.7	6.5	6.8	-----	12	13	11	11	12	12	11
30	11	6.5	6.5	6.6	-----	15	12	11	11	11	11	11
31	11	-----	6.5	6.7	-----	19	-----	11	-----	11	11	-----
TOTAL	339	204.5	203.1	202.9	2,009.4	433.6	549	338	326	349	345	336
MEAN	10.9	6.82	6.55	6.55	71.8	14.0	18.3	10.9	10.9	11.3	11.1	11.2
MAX	11	8.7	7.4	7.2	510	61	32	11	11	12	12	12
MIN	10	6.3	6.3	5.9	6.5	8.1	12	10	10	11	11	11
AC-FT	672	406	403	402	3,990	860	1,090	670	647	692	684	666

YEAR 1990 TOTAL*	746.6	MEAN	8.12	MAX	11	MIN	6.3	AC-FT	1,480
WTR YEAR 1991 TOTAL	5,635.5	MEAN	15.4	MAX	510	MIN	5.9	AC-FT	11,180

* Incomplete Record

1991 WATER YEAR

BRUSH CREEK DAM (BRUSH CREEK BELOW BRUSH CREEK DAM)

- . Minimum release requirements:

October	2 cfs
November through May	4 cfs
June through September	2 cfs
- . Discharge is measured by an orifice plate in the conduit near the base of the dam and the rate of release is telemetered hourly to the District's Headquarters.
- . From October 1 through September 30, the discharge record is from the hourly telemetered release quantities (enclosed).
- . The discharge record indicates no apparent violations during the water year.
- . No modifications were made to the measuring device during the reporting period.

01/29/92 13:02

SACRAMENTO MUNICIPAL UTILITY DISTRICT

11442700 Brush Creek blw Brush Creek Reservoir

1991

USGS #: 11-4427.00

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR Oct 1990 TO Sep 1991

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2.4	4.7	4.1	4.1	4.3	4.4	4.4	4.4	3.2	2.5	2.5	2.5
2	2.4	4.7	4.1	4.1	4.3	4.4	4.5	4.4	2.5	2.5	2.5	2.5
3	2.4	4.7	4.1	4.1	4.3	4.5	4.5	4.4	2.6	2.5	2.5	2.5
4	2.4	4.7	4.2	4.1	4.4	4.5	4.5	4.4	2.7	2.5	2.5	2.5
5	2.4	4.7	4.3	4.1	4.4	4.5	4.4	4.4	2.7	2.5	2.5	2.5
6	2.4	4.3	4.3	4.1	4.4	4.4	4.4	4.4	2.8	2.5	2.5	2.4
7	2.4	4.0	4.3	4.1	4.4	4.4	4.4	4.4	2.7	2.5	2.5	2.4
8	2.4	4.0	4.3	4.1	4.4	4.4	4.4	4.4	2.8	2.5	2.5	2.4
9	2.4	4.0	4.3	4.1	4.5	4.4	4.4	4.4	2.8	2.5	2.5	2.4
10	2.4	4.0	4.3	4.2	4.4	4.4	4.4	4.4	2.6	2.5	2.5	2.4
11	2.4	4.0	4.3	4.2	4.4	4.4	4.4	4.4	2.6	2.5	2.5	2.4
12	2.4	4.0	4.3	4.2	4.4	4.4	4.4	4.4	2.6	2.5	2.5	2.4
13	2.4	4.0	4.3	4.2	4.4	4.4	4.4	4.4	2.5	2.5	2.5	2.5
14	2.4	4.0	4.3	4.2	4.4	4.4	4.4	4.4	2.5	2.5	2.5	2.6
15	2.4	4.0	4.3	4.1	4.4	4.4	4.4	4.4	2.5	2.5	2.5	2.5
16	2.4	4.0	4.3	4.1	4.4	4.4	4.5	4.4	2.5	2.5	2.5	2.5
17	2.4	4.0	4.3	4.1	4.4	4.4	4.4	4.4	2.5	2.5	2.5	2.5
18	2.4	4.0	4.3	4.1	4.4	4.4	4.4	4.4	2.5	2.5	2.5	2.5
19	2.4	4.0	4.3	4.1	4.3	4.4	4.5	4.4	2.5	2.5	2.5	2.6
20	2.4	4.1	4.3	4.1	4.5	4.4	4.4	4.4	2.5	2.5	2.5	2.5
21	2.4	4.1	4.3e	4.1	4.5	4.4	4.5	4.4	2.5	2.5	2.5	2.5
22	2.4	4.1	4.3e	4.1	4.4	4.4	4.4	4.4	2.5	2.5	2.5	2.5
23	2.4	4.1	4.3e	4.3	4.4	4.4	4.4	4.4	2.5	2.5	2.5	2.5
24	2.4	4.1	4.3e	4.4	4.4	4.4	4.4	4.4	2.5	2.5	2.5	2.5
25	2.4	4.1	4.3e	4.4	4.4	4.4	4.4	4.4	2.5	2.5	2.5	2.5
26	2.4	4.1	4.0	4.4	4.4	4.4	4.4	4.4	2.5	2.5	2.5	2.5
27	2.4	4.1	4.0	4.4	4.5	4.4	4.5	4.4	2.5	2.5	2.5	2.5
28	2.4	4.1	4.0	4.4	4.4	4.4	4.4	4.4	2.5	2.5	2.5	2.5
29	2.4	4.1	4.0	4.4	-----	4.4	4.4	4.4	2.5	2.5	2.5	2.5
30	2.4	4.1	4.0	4.4	-----	4.4	4.4	4.4	2.5	2.5	2.5	2.5
31	3.9	-----	4.1	4.3	-----	4.4	-----	4.4	-----	2.5	2.5	-----
TOTAL	75.9	124.9	130.9	130.1	123.2	136.7	132.7	136.4	77.6	77.5	77.5	74.5
MEAN	2.45	4.16	4.22	4.20	4.40	4.41	4.42	4.40	2.59	2.50	2.50	2.48
MAX	3.9	4.7	4.3	4.4	4.5	4.5	4.5	4.4	3.2	2.5	2.5	2.6
MIN	2.4	4.0	4.0	4.1	4.3	4.4	4.4	4.4	2.5	2.5	2.5	2.4
AC-FT	151	248	260	258	244	271	263	271	154	154	154	148

YEAR 1990	TOTAL*	331.7	MEAN	3.61	MAX	4.7	MIN	2.4	AC-FT	658
WATER YEAR 1991	TOTAL	1,297.9	MEAN	3.56	MAX	4.7	MIN	2.4	AC-FT	2,570

* Incomplete Record

1991 WATER YEAR

SLAB CREEK DAM (S.F. AMERICAN RIVER NEAR CAMINO)

. Minimum release requirements:

October through November 15	36 cfs
November 16 through May	10 cfs
June through September	36 cfs

- . Discharge is measured by an acoustic velocity meter in the release conduit near the base of the dam. The rate of release is telemetered hourly to the District's Headquarters.
- . From October 1 through September 30, the discharge record is from the hourly telemetered acoustic velocity meter release quantities (enclosed).
- . The discharge record indicates no apparent violations during the water year.
- . No modifications were made to the measuring device during the reporting period.

01/25/92 11:12

SACRAMENTO MUNICIPAL UTILITY DISTRICT

1143500 South Fork American River near Camino

1991

USGS #: 11-4435.00

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR Oct 1990 TO Sep 1991

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	36.3	36.3	10.3	10.3	10.4e	10.2	10.6	10.4	36.4	37.8	36.5	39.1
2	36.3	36.3	10.3	10.3	10.4e	10.3	10.7	10.4	36.6	37.4	36.5	39.2
3	36.3	36.3	10.3	10.3	10.4e	10.3	10.7	10.4	36.6	37.0	36.8	39.2
4	36.3	36.3	10.4	10.3	10.4e	10.3	10.7	10.4	36.5	36.7	36.7	38.0
5	36.3	36.3	10.3	10.3	10.4e	10.3	10.6	10.4	36.6	36.5	36.6	36.8
6	36.3	36.3	10.3	10.3	10.4e	10.4e	10.6	10.4	36.8	36.8	37.0	37.0
7	36.3	36.4	10.3	10.3	10.4e	10.4e	10.6	10.4	36.4	36.7	36.9	37.0
8	36.3	36.3	10.3	10.3	10.4e	10.4e	10.7	10.4	36.7	36.7	36.7	36.9
9	36.3	36.3	10.3	10.4	10.4e	10.4e	10.6	10.3	36.4	36.5	36.4	36.4
10	36.3	36.3	10.3	10.3	10.4e	10.4e	10.5e	10.2	36.7	36.4	36.7	36.3
11	36.3	36.3	10.3	10.3	10.4e	10.4e	10.5e	10.3	36.5	36.6	36.7	36.2
12	36.2	36.3	10.3	10.3	10.5	10.6	10.5e	10.4	36.7	36.6	36.6	36.3
13	36.3	36.3	10.3	10.3	10.5	10.6	10.5e	10.4	36.6	36.7	36.7	36.5
14	36.2	36.2	10.3	10.3	10.6	10.7	10.5e	10.4	36.6	36.8	36.3	36.4
15	36.3	36.3	10.3	10.4	10.4	10.4	10.5e	10.3	36.7	36.5	36.9	36.1
16	36.3	21.1	10.3	10.4	10.3	10.5	10.5e	10.4	36.6	36.8	36.9	36.2
17	36.3	10.3	10.3	10.4	10.3	10.4	10.5	10.5	36.6	36.6	37.0	36.9
18	36.2	10.2	10.3	10.5	10.3	10.4	10.6	10.5	37.3	36.7	36.5	36.9
19	36.3	10.2	10.3	10.4	10.3	10.5	10.6	10.4	38.3	36.2	37.0	37.5
20	36.3	10.2	10.3	10.3	10.3	10.5	10.6	10.5	38.5	36.4	36.5e	38.2
21	36.4	10.3	10.4	10.4	10.4	10.5	10.6	10.5	38.4	36.8	36.5e	38.2
22	36.3	10.4	10.4	10.4	10.4	10.7	10.5	10.5	38.3	36.9	36.5e	38.2
23	36.2	10.3	10.4	10.4	10.3	10.6	10.4	10.6	38.3	36.5	36.4	37.8
24	36.2	10.3	10.4	10.4	10.3	10.8	10.5	10.6	38.2	36.8	36.3	37.4
25	36.3	10.3	10.4	10.4	11.5	10.6	10.4	10.6	38.5	37.0	36.4	37.3
26	36.2	10.3	10.3	10.5	11.4	10.6	10.3	10.6	37.8	37.0	36.3	37.1
27	36.2	10.3	10.3	10.5	10.2	10.5	10.4	10.5	37.7	36.9	36.4	37.4
28	36.3	10.4	10.3	10.3	10.2	10.6	10.4	10.7	38.1	36.6	36.3	37.4
29	36.3	10.3	10.3	10.4	-----	10.5	10.4	11.0	37.5	36.9	37.3	37.2
30	36.3	10.4	10.3	10.3	-----	10.5	10.5	10.9	38.4	36.3	39.1	37.1
31	36.3	-----	10.3	10.4e	-----	10.6	-----	19.4	-----	36.4	39.2	-----
TOTAL	1,124.7	709.8	319.9	321.1	292.6	324.9	316.0	333.7	1,117.3	1,138.5	1,140.6	1,118.2
MEAN	36.3	23.7	10.3	10.4	10.5	10.5	10.5	10.8	37.2	36.7	36.8	37.3
MAX	36.4	36.4	10.4	10.5	11.5	10.8	10.7	19.4	38.5	37.8	39.2	39.2
MIN	36.2	10.2	10.3	10.3	10.2	10.2	10.3	10.2	36.4	36.2	36.3	36.1
AC-FT	2,231	1,408	635	637	580	644	627	662	2,216	2,258	2,262	2,218

YEAR 1990 TOTAL* 2,154.4 MEAN 23.4 MAX 36.4 MIN 10.2 AC-FT 4,273
 YEAR 1991 TOTAL 8,257.3 MEAN 22.6 MAX 39.2 MIN 39.2 AC-FT 16,380

* Incomplete Record e = Estimated; ~~-----~~

SURNAME/FILES

(916) 324-5696

FEB 1 1989

In Reply Refer
To:343:ANW:12624

Sacramento Municipal Utility District
Post Office Box 15830
Sacramento, CA 95852-1830

Gentlemen:

LICENSE 11074 (APPLICATION 12624) RUBICON RIVER AND LITTLE RUBICON RIVER
IN EL DORADO COUNTY

This is to acknowledge receipt of your Annual Compliance Report for the water year 1988, as required by the Compliance Plan.

We have noted the deficient releases which are part of the problems discussed in my letter of December 8, 1988.

Please keep us informed of any actions taken to relieve this problem.

Sincerely,

ORIGINAL SIGNED BY:

Walter G. Pettit, Chief
Division of Water Rights

cc: Department of Fish and Game
Region II
1701 Nimbus Road
Rancho Cordova, CA 95670

Federal Energy Regulatory Commission
901 Market Street, Suite 350
San Francisco, CA 94103

California Sportfishing
Protection Alliance
1859 Salida Way
Paradise, CA 95969

El Dorado National Forest
100 Forni Road
Placerville, CA 95667

bcc: Walt Pettit
Board Members
Executive Officer
Maureen Marche'

ANWebb:pberg 1/26/89 anw12624

REPORT OF LICENSEE FOR

1986, 1987, 1988

OWNER OF RECORD:

Sacramento M U D et al
c/o John Hilts
P. O. Box 15830
Sacramento, CA 95813

APPLICATION: A012624
LICENSE: 011074

TELEPHONE NUMBER:
(916) 732-5836

IF OWNER'S NAME/ADDRESS/PHONE NO. IS WRONG OR MISSING, PLEASE CORRECT.

SOURCE:

RUBICON RIVER
(OTHER SOURCES NOT SHOWN)

COUNTY:

EL DORADO

PURPOSE

DIVERSION/STORAGE SEASON:

ACRES/HP:

POWER JAN 01 to DEC 31 // OCT 01 TO JUL 31
RECREATION JAN 01 TO DEC 31 // OCT 01 TO JUL 31

348800.0 HP
.0 AC

FLOW: 1200 cfs 226900.0 AC-FT

STATE WATER RESOURCES
CONTROL BOARD
1989 JUL -3 PM 3:43
DIV. OF WATER RIGHTS
SACRAMENTO

THIS REPORT IS REQUIRED BY THE TERMS AND CONDITIONS OF YOUR LICENSE

IMPORTANT! EVERY license is subject to the conditions therein. I have currently reviewed my license: YES ☒ NO ☐. I am complying with the conditions of my license: YES ☒ NO ☐. Identify any noncompliance by license term number under "Remarks" on reverse side. This report is important in providing the record of use needed in maintaining your water right. It should be filled out carefully and returned promptly to the above-listed address.

THE PROJECT HAS BEEN ABANDONED, AND I REQUEST REVOCATION OF THE LICENSE: YES ☐ NO ☒

COMPLETE FOR DIRECT DIVERSION PROJECTS

1. Have you used the full licensed amount of water each year? YES ☐ NO ☒.
2. State the quantity of water used each month in gallons or acre-feet (if not known, check months water was used).

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
21.1	28.8	46.1	44.1	35.2	33.1	7.5	8.6	4.7	8.0	6.0	6.1	249.3
3.6	6.4	10.1	15.0	6.5	5.6	2.9	3.1	3.3	14.8	17.4	4.8	93.5
4.4	12.8	8.9	8.9	11.9	9.3	10.7	9.7	0.2	0.1	2.5	2.0	81.4

COMPLETE FOR STORAGE PROJECTS

3. Did your reservoir spill this year?
4. If not, how many feet below spillway vertically was the water level at maximum storage?
5. Have you emptied the reservoir?
6. How many feet below spillway vertically was it drawn down at end of season?

1986	1987	1988
(1) Yes (2) No	(1) No (2) No	(1) No (2) No
(2) .04	(1) 61.6 (2) 7.2	(1) 90.8 (2) 35.4
(1) No (2) No	(1) No (2) No	(1) No (2) No
(1) 77.5 (2) 35.2	(1) 159.3 (2) 54.9	(1) 140.5 (2) 81.6

Note: Used Loon Lake spill crest elevation and top of Union Valley spill gates elevation to answer No. 4 and No. 6.

USE (COMPLETE FOR ALL PROJECTS)

7. Acreage irrigated
8. Stockwatering — number of stock
9. Domestic — number of persons
10. Recreational — nature of use
11. Industrial — nature of use
12. Municipal — approximate population
13. Power generation — K.W.
14. Other

1986	1987	1988
Not Applicable	Not Applicable	Not Applicable
"	"	"
"	"	"
"	"	"
"	"	"
"	"	"
"	"	"
653,000	653,000	653,000

15. If no water was used in one or more years, briefly state the reason on the reverse side under "Remarks".
16. If either the location of the point of diversion or place of use has been changed and the permission of this Board has not yet been obtained, please describe nature of change on the reverse side under "Remarks".

NOTE: The following questions relate to the Board's continuing responsibility to insure that appropriated water is best developed, conserved, and utilized in the public interest as required by the Water Code. Please answer those questions which are applicable to your project.

CONSERVATION OF WATER (WATER PURVEYORS)

17. What measures are you using or planning to reduce water losses in conveyance systems? (1) Seepage or leak detection program []; (2) Lining canals []; (3) Phreatophyte and aquatic vegetation control []; (4) Other (describe in "Remarks") [].
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19. What measures are used to encourage municipal and industrial consumers to conserve water? (1) Regulations to control wasteful use []; (2) Public education program on water conservation []; (3) Pricing to encourage reduced use []; (4) Assistance to industry in design of recycle systems []; (5) Other (describe in "Remarks") [].
20. What records are maintained on water use and conservation? (1) Loss rate from conveyance system []; (2) Water use for major crops by each farm []; (3) Other (describe in "Remarks") [].

CONSERVATION OF WATER (WATER USERS)

21. Describe any water conservation efforts you may have started: _____
22. If credit toward beneficial use of water under this license for water not used due to a conservation effort is claimed under Water Code Section 1011, please show the amounts of water conserved (acre feet or mg.):
19 _____ 19 _____ 19 _____

WATER QUALITY AND WASTEWATER RECLAMATION

23. Describe methods you are using to minimize erosion and to prevent the entry of silt into surface waters: _____
24. After use, the water is (1) retained in reservoir []; (2) discharged into a stream or lake []; (3) discharged into settling ponds []; (4) Other []. Describe: _____
25. Does or will water being discharged contain waste materials? YES [] NO [].
(1) Domestic []; (2) Municipal []; (3) Industrial []; (4) Agricultural []; (5) Other []. Describe: _____
26. Does or will water being discharged contain any specific material which is deleterious to fish and wildlife or which would impair the water for beneficial uses? YES [] NO []. Describe: _____

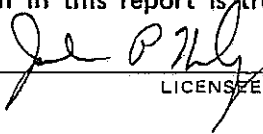
TO THE EXTENT THE FOLLOWING QUESTIONS APPLY TO YOUR LICENSE, PLEASE ANSWER IN REMARKS SECTION BELOW.

27. Are you now or have you been using reclaimed water from a wastewater treatment facility or water polluted by waste to a degree which unreasonably affects such water for other beneficial uses? YES [] NO [].
If credit toward use under this water right through substitution of reclaimed or polluted water in lieu of appropriated water is claimed under Section 1010 of the Water Code, please show amounts of reduced diversion and amounts of reclaimed water used.
28. Are you now or have you been reclaiming or reusing any of the water appropriated under this right? YES [] NO [].
If yes, please describe. _____
29. What is present availability or current potential for using reclaimed water from a wastewater treatment plant or polluted water in place of the appropriated water to satisfy all or part of your water needs?
30. What is the current potential for reusing the appropriated water to satisfy part of your water needs?
31. If you produce reclaimed water, or polluted water, is there a potential for others to use it?

REMARKS: (Identify the item you are explaining. Additional pages may be attached.)

No. 2 Used at Robbs Peak Powerhouse. The quantities are thousands of acre-feet.
Nos. 3, 4, 5, & 6 (1) Represents data for Union Valley Reservoir
(2) Represents data for Loon Lake Reservoir

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief.

Date: 6/28/89 Sign Here:  LICENSEE (OP. AGENT OR DESIGNEE)

KGA 8 2 1982

State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. BOX 2000 SACRAMENTO, CA 95810
901 P STREET SACRAMENTO, CA
(916) 324-6626

REPORT OF LICENSEE FOR

1983, 1984, 1985

OWNER OF RECORD:

APPLICATION: A012624

Sacramento M U D et al
c/o Glenda Stewart
P.O. Box 15830
Sacramento, CA 95813

ET AL

LICENSE: 011074

TELEPHONE NUMBER:
(916) 732-5836

IF OWNER'S NAME/ADDRESS/PHONE NO. IS WRONG OR MISSING, PLEASE CORRECT.

SOURCE:

COUNTY:

RUBICON RIVER

EL DORADO

(OTHER SOURCES NOT SHOWN)

PURPOSE:

DIVERSION/STORAGE SEASON:

ACRES/HP:

POWER

JAN 01 TO DEC 31 // OCT 01 TO JUL 31 348800.0 HP

RECREATION

JAN 01 TO DEC 31 // OCT 01 TO JUL 31 .0 AC

1200 cfs

AMOUNT: 0-000

226900.0 AC-FT

THIS REPORT IS REQUIRED BY THE TERMS AND CONDITIONS OF YOUR LICENSE

IMPORTANT! EVERY license is subject to the conditions therein. I have currently reviewed my license: YES [X] NO []. I am complying with the conditions of my license: YES [X] NO []. Identify any noncompliance by license term number under "Remarks" on reverse side. This report is important in providing the record of use needed in maintaining your water right. It should be filled out carefully and returned promptly to the above-listed address.

THE PROJECT HAS BEEN ABANDONED, AND I REQUEST REVOCATION OF THE LICENSE: YES [] NO [X]

COMPLETE FOR DIRECT DIVERSION PROJECTS

1. Have you used the full licensed amount of water each year? YES [] NO [X].
2. State the quantity of water used each month in gallons or acre-feet (if not known, check months water was used).

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
1983	21.3	16.7	43.3	24.5	45.0	58.1	41.4	18.3	14.9	1.3	28.8	27.3	340.9
1984	21.4	24.5	34.3	30.9	22.9	25.7	13.6	16.9	1.1	0.4	12.6	22.4	226.7
1985	5.7	10.3	11.4	22.9	12.5	8.0	5.5	6.8	4.2	6.6	16.9	7.2	118.0

COMPLETE FOR STORAGE PROJECTS

	1983	1984	1985
Did your reservoir spill this year?	(1) Yes (2) Yes	(1) Yes (2) NO	(1) No (2) NO
not, how many feet below spillway vertically was the water level at maximum storage?		(2) 0.4'	(1) 4.2' (2) 1.5'
5. Have you emptied the reservoir?	(1) No (2) No	(1) No (2) No	(1) No (2) No
6. How many feet below spillway vertically was it drawn down at end of season?	(1) 34.4' (2) 73.2'	(1) 43.4' (2) 36.0'	(1) 57.3' (2) 48.1'

USE (COMPLETE FOR ALL PROJECTS)

	1983	1984	1985
7. Acreage irrigated	Not Applicable	Not Applicable	Not Applicable
Crops grown			
8. Stockwatering - number of stock			
kind of stock			
9. Domestic - number of persons			
garden area, etc.			
10 Recreational - nature of use			
11 Industrial - nature of use			
12. Municipal - approximate population			
13. Power generation - K.W.	653,000	653,000	653,000
14. Other			

15. If no water was used in one or more years, briefly state the reason on the reverse side under "Remarks".
16. If either the location of the point of diversion or place of use has been changed, and the permission of this Board has not yet been obtained, please describe nature of change on the reverse side under "Remarks".

DEC 29 1986

REPORT OF LICENSEE FOR

- PAGE 2

NOTE: The following questions relate to the Board's continuing responsibility to insure that appropriated water is developed, conserved, and utilized in the public interest as required by the Water Code. Please answer those questions which are applicable to your project.

CONSERVATION OF WATER (WATER PURVEYORS)

17. What measures are you using or planning to reduce water losses in conveyance systems? (1) Seepage or leak detection program ☐; (2) Lining canals ☐; (3) Phreatophyte and aquatic vegetation control ☐; (4) Other (describe in "Remarks") ☐
18. What measures are used to encourage consumers to conserve water in agricultural use? (1) Program to encourage more efficient irrigation systems (sprinkler, drip, etc.) where applicable ☐; (2) Return flow systems on individual farms ☐; (3) Return flow system areawide ☐; (4) Water pricing to encourage reduced use ☐; (5) Charges for drainage of irrigated lands ☐; (6) Other (describe in "Remarks") ☐
19. What measures are used to encourage municipal and industrial consumers to conserve water? (1) Regulations to control wasteful use ☐; (2) Public education program on water conservation ☐; (3) Pricing to encourage reduced use ☐; (4) Assistance to industry in design of recycle systems ☐; (5) Other (describe in "Remarks") ☐
20. What records are maintained on water use and conservation? (1) Loss rate from conveyance system ☐; (2) Water use for major crops by each farm ☐; (3) Other (describe in "Remarks") ☐

CONSERVATION OF WATER (WATER USERS)

21. Describe any water conservation efforts you may have started: _____

22. If credit toward beneficial use of water under this license for water not used due to a conservation effort is claimed under Water Code Section 1011, please show the amounts of water conserved (acre feet or mg.):
1978 _____ 1979 _____ 1980 _____

WATER QUALITY AND WASTEWATER RECLAMATION

23. Describe methods you are using to minimize erosion and to prevent the entry of silt into surface waters: _____

24. After use, the water is: (1) retained in reservoir ☐; (2) discharged into a stream or lake ☐; (3) discharged into settling ponds ☐; (4) Other ☐. Describe: _____

25. Does or will water being discharged contain waste materials? YES ☐ NO ☐.
(1) Domestic ☐; (2) Municipal ☐; (3) Industrial ☐; (4) Agricultural ☐; (5) Other ☐. Describe: _____

26. Does or will water being discharged contain any specific material which is deleterious to fish and wildlife or which would impair the water for beneficial uses? YES ☐ NO ☐. Describe: _____

TO THE EXTENT THE FOLLOWING QUESTIONS APPLY TO YOUR LICENSE, PLEASE ANSWER IN REMARKS SECTION BELOW.

27. Are you now or have you been using reclaimed water from a wastewater treatment facility or water polluted by waste to a degree which unreasonably affects such water for other beneficial uses? YES ☐ NO ☐.
If credit toward use under this water right through substitution of reclaimed or polluted water in lieu of appropriated water is claimed under Section 1010 of the Water Code, please show amounts of reduced diversion and amounts of reclaimed water used.
28. Are you now or have you been reclaiming or reusing any of the water appropriated under this right? YES ☐ NO ☐.
If yes, please describe.
29. What is present availability or current potential for using reclaimed water from a wastewater treatment plant or polluted water in place of the appropriated water to satisfy all or part of your water needs?
30. What is the current potential for reusing the appropriated water to satisfy part of your water needs?
31. If you produce reclaimed water, or polluted water, is there a potential for others to use it?

REMARKS: (Identify the item you are explaining. Additional pages may be attached.)

No. 2 Used at Robbs Peak Powerhouse. The quantities are thousands of acre-feet.

Nos. 3, 4, 5, & 6 Represents data for Union Valley Reservoir.

(2) Represents data for Loon Lake Reservoir.

STATE WATER SOURCES
CONTROL BOARD
DIV. OF WATER RIGHTS
SACRAMENTO
1986 DEC -3 AM 11:08

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief.

Date: NOV 25 1986

Sign Here:

WILLIAM K. LATHAM
Acting General Manager

LICENSEE (AGENT OR DESIGNEE)

Recording requested by:
STATE WATER RESOURCES CONTROL BOARD
Pursuant to Government Code Sec. 6103.

OFFICIAL RECORDS
ELDORADO COUNTY-CALIF.
RECORD REQUESTED BY
STATE OF CALIFORNIA
Dec 10 9 31 AM 1984

When recorded mail to:
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

DOROTHY GARR
COUNTY RECORDER

NO FEE

P. O. Box 2000
Sacramento, CA 95810

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

ORDER

APPLICATION 12624 PERMIT 10704 LICENSE 11074

ORDER CORRECTING PLACE OF USE AND LICENSE TERMS

WHEREAS:

1. License 11074 was issued to Sacramento Municipal Utility District and Pacific Gas and Electric Company and was recorded with the County Recorder of El Dorado County on December 8, 1980 in Book 1935, Page 485.
2. A petition for change in place of use and modification of license term for five licenses was filed with the State Water Resources Control Board. Four of the licenses were granted some changes. Due to an administrative oversight License 11074 was not included and no order allowing a change in place of use or a modification of license term was granted.
3. The State Water Resources Control Board has determined that said correction in the description of the place of use and said modification of license terms will not initiate a new right nor operate to the injury of any other lawful user of the water and that good and sufficient cause has been shown for said correction.

NOW, THEREFORE, IT IS ORDERED THAT:

1. The place of use under License 11074 shall be described as follows:

Loon Lake Power Plant (SMUD) - Within NE $\frac{1}{4}$ of NE $\frac{1}{4}$ of Section 18, T13N, R15E, MDB&M.
Robbs Peak Power Plant (SMUD) - Within NE $\frac{1}{4}$ of SW $\frac{1}{4}$ of Section 11, T12N, R14E, MDB&M.
Union Valley Power Plant (SMUD) - Within SW $\frac{1}{4}$ of SW $\frac{1}{4}$ of Section 20, T12N, R14E, MDB&M.
Jaybird Power Plant (SMUD) - Within NE $\frac{1}{4}$ of NW $\frac{1}{4}$ of Section 4, T11N, R13E, MDB&M.
Camino Power Plant (SMUD) - Within SW $\frac{1}{4}$ of SE $\frac{1}{4}$ of Section 15, T11N, R12E, MDB&M.
White Rock Power Plant (SMUD) - Within NW $\frac{1}{4}$ of NE $\frac{1}{4}$ of Section 31, T11N, R11E, MDB&M.
Slab Creek Power Plant (SMUD) - Within SE $\frac{1}{4}$ of NW $\frac{1}{4}$ of Section 25, T11N, R11E, MDB&M.
Chili Bar Power Plant (SMUD) - Within NE $\frac{1}{4}$ of SW $\frac{1}{4}$ of Section 25, T11N, R10E, MDB&M.

2. Subparagraph G on Page 3 of License 11074 relating to fish releases from Slab Creek Reservoir under said License 11074, be replaced by the following term:

The Licensee shall release through a near-streambed outlet of Slab Creek Dam the flows specified in the following schedule as measured by the existing U.S. Geological Survey gaging station located about one-eighth of a mile below the Slab Creek dam or at such new location as may be determined pursuant to Article 7 of Form L-2 of FERC license 2101:

54804

Forecast of the unimpaired
runoff of the American River
inflow to Folsom Lake for the
current water year, October 1
through September 30, in
acre-feet,^{1/}

Minimum instantaneous
release to South Fork
from Slab Creek Dam in
cubic feet per second

	June thru November 15	November 16 thru May 31
More than 2,000,000	36	36
Less than 2,000,000 but not less than 1,500,000	36	36
Less than 1,500,000 but not less than 1,000,000	36	10
Less than 1,000,000	36	10

^{1/} As presented in the Bulletin of the California Department of Water Resources, "Water Conditions in California," beginning with the March 1 bulletin and applying in turn the April 1 and May 1 bulletins as they are issued. The May 1 bulletin shall apply until March 1 bulletin of the succeeding year is issued.

3. This license is subject to the agreement dated July 15, 1982 between Licensee and the State Department of Boating and Waterways, to the extent such agreement covers matters within the Board's jurisdiction.

Dated: NOVEMBER 29 1984

L. D. Johnson

for Raymond Walsh, Chief
Division of Water Rights

State Water Resources Control Board
DIVISION OF WATER RIGHTS
77 Cadillac Drive, Sacramento, CA 95825

STATE WATER RESOURCES
CONTROL BOARD

REPORT OF LICENSEE FOR

1980, 1981, 1982

OWNER OF RECORD:

DIV. OF WATER RIGHTS
SACRAMENTO

APPLICATION: A012624

SACRAMENTO M U D ET-AL
C/O SACRAMENTO MUNICIPAL UTILITY DIST
P O BOX 15830
SACRAMENTO, CALIF 95813

ET AL

LICENSE: 011074

TELEPHONE NUMBER:
(916) 452 -3211

IF OWNER'S NAME/ADDRESS/PHONE NO. IS WRONG OR MISSING, PLEASE CORRECT.

SOURCE:

COUNTY:

RUBICON RIVER
(OTHER SOURCES NOT SHOWN)

EL DORADO

PURPOSE:

DIVERSION/STORAGE SEASON:

ACRES/HP:

POWER
RECREATION

JAN 01 TO DEC 31 // OCT 01 TO JUL 31 348800.0 HP
JAN 01 TO DEC 31 // OCT 01 TO JUL 31 .0 AC

AMOUNT: 0.000

226900.0 AC-FT

THIS REPORT IS REQUIRED BY THE TERMS AND CONDITIONS OF YOUR LICENSE

IMPORTANT! EVERY license is subject to the conditions therein. I have currently reviewed my license: YES [X]. NO []. I am complying with the conditions of my license: YES [X] NO []. Identify any noncompliance by license term number under "Remarks" on reverse side. This report is important in providing the record of use needed in maintaining your water right. It should be filled out carefully and returned promptly to the above-listed address.

THE PROJECT HAS BEEN ABANDONED, AND I REQUEST REVOCATION OF THE LICENSE: YES [] NO [X]

COMPLETE FOR DIRECT DIVERSION PROJECTS

1. Have you used the full licensed amount of water each year? YES [] NO [X].
2. State the quantity of water used each month in gallons or acre-feet (if not known, check months water was used).

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
1980	17.2	22.0	21.0	41.9	37.6	24.4	25.7	9.3	3.7	10.7	4.6	5.9	224.0
1981	4.0	10.2	17.7	26.9	8.9	4.0	11.2	12.0	2.0	0.8	15.7	37.8	151.2
1982	40.0	26.9	18.7	30.0	49.4	46.0	19.6	12.1	2.1	17.1	27.1	25.7	314.7

COMPLETE FOR STORAGE PROJECTS

	1980	1981	1982
3. Did your reservoir spill this year?	Loon Lake Yes	No	Yes
4. If not, how many feet below spillway vertically was the water level at maximum storage?	Union Valley No Loon Lake 9.2' Union Valley 0.1'	No 9.2' 36.6'	Yes
5. Have you emptied the reservoir?	No	No	No
6. How many feet below spillway vertically was it drawn down at end of season?	Loon Lake 45.7' Union Valley 84.7'	47.0' 105.9'	73.2' 49.4'

USE (COMPLETE FOR ALL PROJECTS)

7. Acreage irrigated	Not applicable	Not applicable	Not applicable
Crops grown	"	"	"
8. Stockwatering — number of stock	"	"	"
kind of stock	"	"	"
9. Domestic — number of persons	"	"	"
garden area, etc.	"	"	"
10. Recreational — nature of use	"	"	"
11. Industrial — nature of use	"	"	"
12. Municipal — approximate population	"	"	"
13. Power generation — K.W.	653,000	653,000	653,000
14. Other			

15. If no water was used in one or more years, briefly state the reason on the reverse side under "Remarks".
16. If either the location of the point of diversion or place of use has been changed and the permission of this Board has not yet been obtained, please describe nature of change on the reverse side under "Remarks".

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TO THE EXTENT THE FOLLOWING QUESTIONS APPLY TO YOUR LICENSE, PLEASE ANSWER IN REMARKS SECTION BELOW.

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If yes, please describe: _____
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31. If you produce reclaimed water, or polluted water, is there a potential for others to use it?

REMARKS: (Identify the item you are explaining. Additional pages may be attached.)

#2 Used at Robbs Peak Powerhouse. The quantities are thousands of
acre-feet. The quantities for 1980 are revised from the Report
of Permittee submitted 9/10/81.

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief.

Date: Dec. 2, 1983

Sign Here:

John J. Mattimore
John J. Mattimore LICENSEE (OR AGENT OR DESIGNEE)
General Manager and
Chief Engineer



SACRAMENTO MUNICIPAL UTILITY DISTRICT □ P. O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

GO 89-09

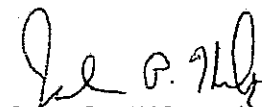
January 18, 1989

MR. WALTER PETTIT, CHIEF
DIVISION OF WATER RIGHTS
P. O. BOX 2000
SACRAMENTO, CA 95810

Subject: ANNUAL COMPLIANCE REPORT - 1988 WATER YEAR

In accordance with our Compliance Plan, dated June 1986, attached are the data for 1988 water year. There were two apparent violations during the reporting period:

- On October 5, 9, and 30, at Little Rubicon River below Buck Island Dam, the record indicates observed discharges of 0.51, 0.17 and 0.07 cfs respectively. The requirement is 1 cfs.
- On December 17, at Rubicon River below Rubicon Dam, the record indicates a discharge of 5.6 cfs with a requirement of 6 cfs.


John P. Hiltz, Manager
Generation Operations Department

Attachments

1 9 8 8 W A T E R Y E A R

SLAB CREEK DAM (S. F. AMERICAN RIVER NEAR CAMINO)

- Minimum release requirements:

October through November 15	36 cfs
November 16 through May	10 cfs
June through September	36 cfs
- Discharge is measured by an acoustic velocity meter in the release conduit near the base of the dam. The rate of release is telemetered hourly to the District's headquarters.
- From October 1 through September 30, the discharge record is from the telemetered acoustic velocity meter release quantities (enclosed).
- The discharge record indicates no apparent violations during the entire year.
- No modifications were made to the measuring device during the reporting period.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

SLAB CREEK DAM
WATER YEAR: 1988

COMPUTED: 10/21/88
By: RCL

DISCHARGE IN CFS

	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	
1	36	36	10	10	10	10	10	10	36	36	36	36	1
2	36	36	10	10	10	22	10	10	36	36	40	36	2
3	36	36	10	10	10	36	10	10	36	36	43	36	3
4	36	36	10	10	10	36	10	10	36	36	36	36	4
5	36	36	10	10	10	36	10	10	36	36	36	36	5
6	36	36	10	10	10	36	10	10	36	36	36	36	6
7	36	36	10	10	10	22	10	10	36	36	36	36	7
8	36	36	10	10	10	10	10	10	36	36	36	36	8
9	36	36	10	10	10	10	10	10	36	36	36	36	9
10	36	36	10	10	10	10	10	10	36	36	36	36	10
11	36	36	10	10	10	10	10	10	36	36	36	36	11
12	36	36	10	10	10	10	10	10	36	36	36	36	12
13	36	36	10	10	10	11	10	10	36	37	36	36	13
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16	36	27	10	10	10	10	10	10	36	36	36	36	16
17	36	10	10	10	10	10	10	10	36	36	36	36	17
18	36	10	10	10	10	10	10	10	36	36	36	36	18
19	36	10	10	10	10	10	10	10	36	38	36	36	19
20	36	10	10	10	10	10	10	10	36	50	36	36	20
21	36	10	10	10	10	10	10	10	36	36	36	36	21
22	36	10	10	10	10	10	10	10	36	36	36	36	22
23	36	10	10	10	10	10	10	10	36	36	36	36	23
24	36	10	10	10	10	10	10	10	36	36	37	36	24
25	36	10	10	10	10	10	10	10	36	36	36	36	25
26	36	10	10	10	10	10	10	10	36	36	36	38	26
27	36	10	10	10	10	10	10	10	36	36	36	42	27
28	36	10	10	10	10	10	10	10	36	36	36	36	28
29	36	10	10	10	10	10	10	10	36	38	39	36	29
30	36	10	10	10		10	10	10	36	36	36	36	30
31	36		10	10		10		22		36	36		31
MAX	36	37	10	10	10	36	10	22	36	50	43	42	
MIN	36	10	10	10	10	10	10	10	36	36	36	36	
MEAN	36	24	10	10	10	14	10	10	36	37	36	36	
TOTAL	1116	708	310	310	290	441	300	322	1080	1135	1131	1088	
AC-FT	2214	1404	615	615	575	875	595	639	2142	2251	2243	2158	

1 9 8 8 W A T E R Y E A R

BRUSH CREEK DAM (BRUSH CREEK BELOW BRUSH CREEK DAM)

- Minimum release requirements:

October	2 cfs
November through May	4 cfs
June through September	2 cfs
- Discharge is measured by an orifice plate in the conduit near the base of the dam and the rate of release is telemetered hourly to the District's headquarters.
- From October 1 through September 30, the discharge record is from telemetered release quantities (enclosed).
- The discharge record indicates no apparent violations during the entire year.
- No modifications were made to the measuring device during the reporting period.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

BRUSH CREEK DAM

COMPUTED: 10/20/88
By: RCL

WATER YEAR: 1988

DISCHARGE IN CFS

	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	
1	2.4	4.4	4.1	4.1	4.1	4.2	4.2	4.3	2.9	2.2	2.2	2.1	1
2	2.4	4.4	4.1	4.1	4.1	4.2	4.2	4.3	2.4	2.2	2.2	2.1	2
3	2.4	4.4	4.1	4.1	4.1	5.0	4.2	4.3	2.6	2.2	2.2	2.1	3
4	2.4	4.4	4.1	4.1	4.1	5.9	4.2	4.3	2.2	2.1	2.2	2.2	4
5	2.4	4.4	4.0	4.1	4.1	5.9	4.2	4.3	2.2	2.1	2.2	2.2	5
6	2.4	4.4	4.0	4.1	4.1	5.9	4.2	4.3	2.2	2.1	2.2	2.2	6
7	2.4	4.4	4.1	4.1	4.1	4.9	4.2	4.3	2.2	2.1	2.1	2.2	7
8	2.4	4.4	4.1	4.1	4.1	4.2	4.2	4.3	2.2	2.1	2.2	2.2	8
9	2.4	4.4	4.1	4.1	4.1	4.2	4.2	4.3	2.2	2.2	2.2	2.1	9
10	2.4	4.4	4.1	4.1	4.1	4.2	4.2	4.3	2.2	2.2	2.2	2.1	10
11	2.4	4.4	4.1	4.1	4.1	4.2	4.3	4.3	2.2	2.2	2.2	2.1	11
12	2.4	4.4	4.1	4.1	4.1	4.2	4.3	4.3	2.2	2.2	2.2	2.1	12
13	2.3	4.1	4.1	4.1	4.1	4.2	4.3	4.3	2.2	2.2	2.1	2.1	13
14	2.3	4.1	4.1	4.1	4.1	4.2	4.3	4.3	2.2	2.2	2.2	2.1	14
15	2.3	4.1	4.1	4.1	4.1	4.2	4.2	4.3	2.2	2.2	2.1	2.1	15
16	2.3	4.1	4.1	4.1	4.1	4.2	4.2	4.3	2.2	2.2	2.1	2.1	16
17	2.4	4.1	4.1	4.1	4.1	4.2	4.2	4.3	2.2	2.2	2.1	2.1	17
18	2.3	4.1	4.1	4.1	4.1	4.2	4.2	4.3	2.2	2.2	2.1	2.1	18
19	2.3	4.0	4.1	4.1	4.1	4.2	4.2	4.3	2.2	2.2	2.1	2.1	19
20	2.4	4.0	4.1	4.1	4.1	4.2	4.2	4.3	2.2	2.2	2.1	2.1	20
21	2.4	4.1	4.1	4.1	4.1	4.2	4.2	4.3	2.2	2.2	2.1	2.1	21
22	2.4	4.0	4.1	4.1	4.1	4.2	4.2	4.3	2.2	2.2	2.1	2.1	22
23	2.4	4.1	4.1	4.1	4.1	4.2	4.2	4.2	2.2	2.2	2.1	2.1	23
24	2.4	4.1	4.1	4.1	4.1	4.2	4.2	4.2	2.2	2.2	2.1	2.1	24
25	2.4	4.1	4.1	4.1	4.2	4.2	4.3	4.2	2.2	2.2	2.1	2.1	25
26	2.4	4.1	4.1	4.1	4.2	4.2	4.3	4.2	2.2	2.2	2.1	2.1	26
27	2.4	4.1	4.1	4.1	4.2	4.2	4.3	4.2	2.2	2.2	2.1	2.2	27
28	2.4	4.1	4.1	4.1	4.2	4.2	4.3	4.2	2.2	2.2	2.1	2.2	28
29	3.2	4.1	4.1	4.1	4.2	4.2	4.3	4.2	2.2	2.2	2.2	2.3	29
30	4.4	4.1	4.1	4.1		4.2	4.3	4.3	2.2	2.2	2.1	2.3	30
31	4.4		4.1	4.1		4.2		4.3		2.2	2.1		31
MAX	4.4	4.4	4.1	4.1	4.2	5.9	4.3	4.3	2.9	2.2	2.2	2.3	
MIN	2.3	4.0	4.0	4.1	4.1	4.2	4.2	4.2	2.2	2.1	2.1	2.1	
MEAN	2.5	4.2	4.1	4.1	4.1	4.4	4.2	4.3	2.2	2.2	2.1	2.1	
TOTAL	79	126	127	127	119	137	127	133	67	68	66	64	
AC-FT	156	251	252	252	237	271	252	269	133	134	132	127	

1 9 8 8 W A T E R Y E A R

CAMINO DAM (SILVER CREEK BELOW CAMINO DIVERSION DAM)

- Minimum release requirements:

October	10 cfs
November through April	6 cfs
May through September	5 cfs
- Discharge is measured by applying telemetered stage data from the U.S.G.S. gaging station, located about 1/4 mile below the dam, to the existing U.S.G.S. stage-discharge relationship.
- From October 1 through September 30, the discharge record is from telemetered stage data (enclosed).
- The discharge record indicates no apparent violations during the entire year.
- No modifications were made to the measuring device during the reporting period.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

SILVER CREEK BLOW CAMINO DAM
WATER YEAR: 1988

COMPUTED: 10/19/88
By: RCL

DISCHARGE IN CFS

	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	
1	11	11	6.7	7.0	9.3	8.1	6.5	6.1	5.3	5.5	5.3	5.4	1
2	11	7.8	6.7	7.0	8.3	7.3	6.5	5.9	5.3	5.3	5.4	5.9	2
3	11	6.4	6.5	12	7.9	7.2	6.7	5.3	5.4	5.4	5.4	5.7	3
4	11	6.4	6.5	14	7.4	7.1	6.5	5.9	5.3	5.4	5.3	5.3	4
5	11	6.5	6.5	18	7.2	7.0	6.5	5.0	5.2	5.3	5.4	5.3	5
6	10	6.5	7.4	15	7.2	7.2	6.5	5.6	5.3	5.3	5.3	5.3	6
7	10	6.6	7.3	12	7.0	6.9	6.5	5.8	5.3	5.3	5.2	5.4	7
8	10	6.6	6.9	9.4	6.8	6.9	6.5	5.8	5.3	5.3	5.3	5.4	8
9	10	6.8	9.5	11	6.8	6.8	6.5	5.5	5.3	5.3	5.3	5.2	9
10	10	6.7	9.2	12	6.6	6.4	6.5	5.4	5.3	5.1	5.3	5.4	10
11	10	6.3	8.9	19	6.7	6.4	6.5	5.3	5.3	5.2	5.3	5.4	11
12	11	6.3	8.1	14	6.8	6.4	6.6	5.2	5.3	5.2	5.3	5.3	12
13	11	6.8	7.8	11	6.4	6.3	6.2	5.5	5.3	5.2	5.3	5.4	13
14	11	6.7	7.3	9.7	6.4	6.3	6.4	6.0	5.2	5.2	5.3	5.3	14
15	11	7.3	7.1	10	6.5	6.4	6.6	6.0	5.4	5.2	5.4	5.4	15
16	10	7.1	7.0	9.8	6.3	6.3	6.3	5.8	5.3	5.1	5.4	5.3	16
17	10	6.9	7.0	9.0	6.3	6.4	6.3	5.6	5.1	5.3	5.3	5.3	17
18	11	6.5	6.9	7.9	6.5	6.7	6.4	5.5	5.1	5.4	5.3	5.6	18
19	11	6.5	7.0	7.8	6.4	6.6	6.5	5.3	5.6	5.4	5.3	5.3	19
20	11	6.8	6.8	7.4	6.4	6.5	6.7	5.3	5.2	5.3	5.4	6.2	20
21	10	6.6	6.8	7.3	6.5	6.5	6.8	5.3	5.2	5.2	5.4	6.0	21
22	10	6.5	8.8	7.3	6.5	6.4	7.9	5.3	5.1	5.6	5.5	5.3	22
23	10	6.5	8.4	7.4	6.5	6.7	8.9	5.3	5.2	5.4	5.3	5.2	23
24	10	6.5	8.1	7.5	6.7	6.4	8.7	5.3	5.3	5.3	5.3	5.1	24
25	10	6.3	7.9	7.6	6.6	6.4	8.4	5.3	5.2	5.2	5.4	5.5	25
26	10	6.3	7.7	7.8	6.8	6.5	7.7	5.3	5.1	5.4	5.2	5.3	26
27	10	6.3	7.2	7.8	6.8	6.5	7.2	5.6	5.1	5.3	5.5	5.4	27
28	10	6.5	7.3	7.8	6.8	6.5	6.8	5.6	5.1	5.3	5.5	5.2	28
29	10	6.6	7.2	8.2	6.6	6.6	6.6	5.3	5.2	5.3	5.3	5.4	29
30	11	6.6	7.2	9.7		6.5	6.3	5.3	5.2	5.3	5.4	5.1	30
31	11		7.1	9.5		6.6		5.3		5.4	5.3		31
MAX	11.0	11.0	9.5	19.0	9.3	8.1	8.9	6.1	5.6	5.6	5.5	6.2	
MIN	10.0	6.3	6.5	7.0	6.3	6.3	6.2	5.2	5.1	5.1	5.2	5.1	
MEAN	10.5	6.8	7.4	10.0	6.9	6.7	6.8	5.6	5.3	5.3	5.3	5.4	
TOTAL	324	203	231	311	199	207	205	172	158	164	166	162	
AC-FT	643	403	458	617	395	410	407	341	312	326	328	322	

1 9 8 8 W A T E R Y E A R

JUNCTION DAM (SILVER CREEK BELOW JUNCTION RESERVOIR)

- Minimum release requirements:

October	10 cfs
November through April	6 cfs
May through September	5 cfs
- Discharge is measured by differential pressure taps on the release valve near the base of the dam and the rate of release is telemetered hourly to the District's headquarters.
- From October 1 through September 30, the discharge record is from telemetered release quantities (enclosed).
- The discharge record indicates no apparent violations during the entire year.
- No modifications were made to the measuring device during the reporting period.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

JUNCTION DAM
WATER YEAR: 1988

COMPUTED: 10/19/88
By: RCL

DISCHARGE IN CFS

	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	
1	11	11	6.4	6.5	6.5	6.4	6.4	6.6	5.3	5.4	5.4	5.3	1
2	11	8.1	6.4	6.6	6.4	6.3	6.5	6.6	5.3	5.5	5.3	5.3	2
3	11	7.2	6.5	6.6	6.5	6.3	6.6	6.0	5.3	5.5	5.3	5.3	3
4	11	7.0	6.5	6.5	6.5	6.3	6.5	5.2	5.3	5.5	5.3	5.3	4
5	10	7.1	6.5	6.4	6.4	6.3	6.4	5.3	5.4	5.5	5.3	5.3	5
6	10	7.0	6.5	6.4	6.4	6.3	6.4	5.4	5.4	5.4	5.4	5.3	6
7	11	7.1	6.4	6.4	6.5	6.4	6.4	5.3	5.4	5.3	5.3	5.3	7
8	11	7.1	6.3	6.5	6.5	6.4	6.3	5.3	5.4	5.3	5.3	5.3	8
9	10	7.0	6.4	6.5	6.5	6.3	6.3	5.3	5.4	5.4	5.3	5.3	9
10	10	7.1	6.4	6.5	6.5	6.3	7.0	5.3	5.4	5.4	5.3	5.4	10
11	10	7.1	6.5	6.5	6.5	6.2	12	5.3	5.5	5.4	5.3	5.4	11
12	11	7.0	6.4	6.5	6.5	6.2	9.3	5.3	5.5	5.4	5.3	5.4	12
13	11	7.0	6.3	6.4	6.5	6.3	6.4	5.3	5.4	5.4	5.3	5.4	13
14	11	7.1	6.4	6.5	6.5	6.2	6.4	5.3	5.4	5.4	5.3	5.4	14
15	11	7.1	6.4	6.5	6.5	6.2	6.4	5.3	5.4	5.4	5.3	5.4	15
16	11	7.1	6.3	6.5	6.4	6.3	6.4	5.3	5.4	5.4	5.3	5.4	16
17	11	6.9	6.5	6.4	6.4	6.3	6.4	5.3	5.4	5.4	5.2	5.4	17
18	11	6.7	6.5	6.5	6.4	6.3	6.4	5.3	5.3	5.4	5.3	5.4	18
19	11	6.7	6.5	6.4	6.5	6.3	6.4	5.3	5.4	5.3	5.4	5.4	19
20	11	6.7	6.5	6.4	6.5	6.3	6.3	5.3	5.3	5.3	5.3	5.2	20
21	11	6.7	6.5	6.5	6.5	6.3	6.7	5.4	5.4	5.3	5.3	5.3	21
22	11	6.7	6.4	6.5	6.5	6.3	6.3	5.3	5.4	5.3	5.3	5.3	22
23	11	6.8	6.3	6.5	6.4	6.3	6.3	5.3	5.3	5.4	5.3	5.3	23
24	10	6.4	6.3	6.5	6.4	6.3	6.3	5.2	5.4	5.3	5.3	5.3	24
25	10	6.2	6.3	6.5	6.5	6.4	6.3	5.2	5.4	5.3	5.3	5.3	25
26	11	6.3	6.2	6.5	6.4	6.4	6.3	5.2	5.4	5.3	5.3	5.2	26
27	11	6.3	6.4	6.5	6.4	6.3	6.3	5.3	5.4	5.3	5.3	5.3	27
28	11	6.3	6.5	6.5	6.3	6.3	6.3	5.3	5.4	5.3	5.3	5.3	28
29	11	6.3	6.4	6.5	6.4	6.3	6.5	5.2	5.4	5.3	5.3	5.3	29
30	11	6.4	6.4	6.5		6.3	6.6	5.2	5.4	5.3	5.3	5.3	30
31	11		6.5	6.6		6.3		5.3		5.3	5.3		31
MAX	11.0	11.0	6.5	6.6	6.5	6.4	12.0	6.6	5.5	5.5	5.4	5.4	
MIN	10.0	6.2	6.2	6.4	6.3	6.2	6.3	5.2	5.3	5.3	5.2	5.2	
MEAN	10.8	7.0	6.4	6.5	6.5	6.3	6.7	5.4	5.4	5.4	5.3	5.3	
TOTAL	334	210	199	201	187	195	202	167	162	166	165	160	
AC-FT	662	416	394	399	371	398	400	332	320	330	326	317	

1988 WATER YEAR

ICE HOUSE DAM (S.F. SILVER CREEK BELOW ICE HOUSE DAM)

- Minimum release requirements:
October through September 5 cfs
- Discharge is measured by applying the hourly telemetered stage data from the U.S.G.S. gaging station, located about 1/4 mile below the dam, to the existing U.S.G.S. stage-discharge relationship.
- From October 1 through September 30 the discharge record is from telemetered stage data (enclosed).
- The discharge record indicates no apparent violations during the entire year.
- No modifications were made to the measuring device during the reporting period.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

SF SILVER CREEK b/w ICE HOUSE RESERVOIR
WATER YEAR: 1988

COMPUTED: 10/19/88
By: RCL

DISCHARGE IN CFS

	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	
1	5.6	5.4	6.4	5.6	5.7	6.0	5.9	5.7	5.7	5.4	5.3	5.7	1
2	5.5	5.4	6.0	5.7	5.7	6.1	5.9	5.4	5.7	5.4	5.4	5.7	2
3	5.7	5.2	5.4	6.6	5.7	6.1	5.9	5.4	5.7	5.2	5.4	5.8	3
4	5.7	5.4	5.3	6.4	5.7	6.2	5.6	5.4	5.7	5.2	5.4	5.9	4
5	5.5	5.4	5.4	6.5	5.7	6.0	5.5	5.4	5.7	5.3	5.4	5.8	5
6	5.7	5.4	5.8	6.0	5.7	5.9	5.8	5.4	5.7	5.7	5.4	5.4	6
7	5.5	5.4	5.5	5.7	5.7	5.9	5.4	5.6	5.7	5.9	5.4	5.4	7
8	5.5	5.4	5.4	5.7	5.8	5.9	5.4	5.5	5.7	5.9	5.4	5.4	8
9	5.9	5.4	6.4	5.8	5.7	5.9	5.4	5.4	5.5	5.9	5.3	5.4	9
10	5.7	5.4	6.0	5.7	5.8	5.9	5.4	5.4	5.4	5.9	5.4	5.4	10
11	5.4	5.4	5.7	6.0	5.8	5.9	5.4	5.4	5.4	5.9	5.4	5.5	11
12	5.4	5.4	5.5	5.7	5.7	6.0	5.4	5.4	5.4	5.9	5.4	5.9	12
13	5.4	5.8	5.4	5.7	5.7	6.1	5.5	5.4	5.6	5.9	5.4	5.6	13
14	5.4	5.4	5.4	5.7	5.7	6.2	5.9	5.4	5.5	5.8	5.4	5.4	14
15	5.4	5.4	5.4	5.8	5.7	6.2	5.7	5.4	5.5	5.8	5.4	5.4	15
16	5.4	5.6	5.4	5.7	5.7	6.2	5.7	5.5	5.4	5.8	5.4	5.4	16
17	5.4	5.7	5.4	5.7	5.7	6.2	5.7	5.4	5.4	5.9	5.3	5.4	17
18	5.3	5.6	5.4	5.7	5.6	6.3	5.5	5.4	5.5	5.8	5.4	5.4	18
19	5.4	5.7	5.4	5.7	5.7	6.1	5.8	5.4	5.7	5.7	5.7	5.4	19
20	5.4	5.8	5.4	5.7	5.7	5.9	5.9	5.4	5.5	5.8	5.7	5.5	20
21	5.6	5.7	5.6	5.7	5.8	5.9	5.8	5.4	5.6	5.8	5.7	5.4	21
22	5.7	5.7	6.4	5.7	5.8	5.9	5.7	5.4	5.4	5.6	5.7	5.4	22
23	5.8	5.7	5.8	5.8	5.7	5.9	5.6	5.4	5.4	6.2	5.7	5.6	23
24	5.7	5.6	5.8	5.9	5.7	5.9	5.5	5.4	5.4	6.0	5.7	5.4	24
25	5.4	5.5	5.6	5.8	5.7	5.9	5.4	5.4	5.5	5.2	5.7	5.4	25
26	5.6	5.6	5.4	5.7	5.7	5.9	5.4	5.6	5.4	5.2	5.8	5.4	26
27	5.7	5.6	5.4	5.7	5.8	5.9	5.5	5.6	5.4	5.2	5.7	5.5	27
28	5.8	5.6	5.4	5.7	5.9	5.9	5.5	5.8	5.4	5.2	5.7	5.6	28
29	5.7	5.5	5.4	5.7	5.9	5.9	5.9	5.9	5.4	5.2	5.6	5.4	29
30	5.5	5.5	5.4	5.7		5.9	5.9	5.7	5.4	5.2	5.7	5.4	30
31	5.4		5.4	5.7		5.9		5.7		5.2	5.9		31
MAX	5.9	5.8	6.4	6.6	5.9	6.3	5.9	5.9	5.7	6.2	5.9	5.9	
MIN	5.3	5.2	5.3	5.6	5.6	5.9	5.4	5.4	5.4	5.2	5.3	5.4	
MEAN	5.6	5.5	5.6	5.8	5.7	6.0	5.6	5.5	5.5	5.6	5.5	5.5	
TOTAL	172	166	174	180	166	186	169	170	166	174	171	165	
AC-FT	341	328	344	357	330	369	335	337	329	345	340	328	

1 9 8 8 W A T E R Y E A R

ROBBS & GERLE DAMS (S.F. RUBICON RIVER BELOW GERLE CREEK)

- Minimum release requirements:
October through September 5 cfs
- Discharge is measured by applying the hourly telemetered stage data from the U.S.G.S gaging station, located about 600 feet below the confluence of Gerle Creek, to the existing U.S.G.S stage-discharge relationship.
- From October 1 through September 30, the discharge record is from telemetered stage data (enclosed).
- The discharge record indicates no apparent violations during the entire year.
- No modifications were made to the measuring device during the reporting period.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

SF RUBICON RIVER B1W GERLE RESERVOIR
WATER YEAR: 1988

COMPUTED: 10/19/88
By: RCL

DISCHARGE IN CFS

	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	
1	5.6	5.2	7.4	5.2	5.7	7.5	5.5	5.5	5.7	5.7	5.7	5.6	1
2	5.5	5.3	7.4	5.3	5.5	7.1	5.4	5.3	5.7	6.1	6.1	5.8	2
3	5.6	5.2	6.4	8.8	5.7	6.8	5.5	6.0	5.7	6.2	5.9	5.7	3
4	5.6	5.1	6.1	9.9	5.9	6.6	5.5	6.0	5.7	6.3	5.9	5.8	4
5	5.9	5.5	6.0	11	5.9	6.8	5.5	6.0	5.8	6.3	6.0	5.9	5
6	5.3	5.9	9.1	8.4	5.7	6.3	5.4	5.8	6.9	5.9	6.1	5.9	6
7	5.7	5.4	7.7	7.5	5.8	6.1	5.3	6.2	7.0	5.9	6.1	5.9	7
8	10	5.3	6.6	19	5.8	5.9	5.5	6.0	6.5	5.7	6.2	5.8	8
9	7.6	5.4	7.9	8.2	13	6.0	5.8	5.8	5.9	5.5	6.4	5.6	9
10	5.5	5.3	8.7	7.8	10	5.8	5.7	5.8	5.8	5.1	6.2	5.9	10
11	5.2	5.3	7.3	9.6	7.7	5.6	5.7	5.7	5.7	5.3	6.1	5.8	11
12	5.1	5.3	6.4	7.9	12	5.5	5.6	5.7	6.0	6.3	6.1	5.7	12
13	5.0	7.4	6.1	7.5	6.7	5.4	5.8	5.8	6.1	5.9	6.0	5.7	13
14	5.7	6.3	5.8	7.6	6.6	5.6	6.7	5.7	5.9	6.0	5.9	5.7	14
15	5.5	5.6	5.6	7.5	6.6	5.9	6.0	5.7	5.8	6.3	6.0	5.7	15
16	5.7	5.4	5.8	7.8	6.5	5.8	5.9	5.8	5.9	6.2	5.9	5.6	16
17	5.7	5.9	5.6	7.2	6.5	5.7	5.9	6.2	5.9	5.7	5.6	5.8	17
18	5.6	5.6	5.6	6.7	6.0	5.7	5.8	5.8	6.1	5.3	5.8	6.0	18
19	5.6	5.4	5.6	6.6	5.9	5.8	8.2	5.6	5.9	6.2	5.7	6.0	19
20	5.6	5.6	5.5	6.6	5.9	5.7	8.9	5.6	6.2	5.7	5.7	6.2	20
21	5.7	5.7	5.6	6.0	5.9	5.6	8.1	5.7	5.4	5.8	5.7	5.5	21
22	6.5	5.5	7.7	6.2	6.0	5.5	7.9	5.5	5.2	6.2	5.7	5.4	22
23	7.1	5.3	6.1	6.1	6.1	5.6	7.7	5.6	5.7	5.7	6.0	5.3	23
24	6.4	5.2	5.9	6.3	6.2	5.4	7.5	5.6	5.7	5.2	5.9	5.2	24
25	6.3	5.4	5.7	6.1	6.0	5.4	6.9	5.7	5.8	5.8	5.8	5.1	25
26	6.1	6.1	5.7	6.2	6.0	5.4	6.8	5.7	5.8	6.1	5.8	5.0	26
27	5.4	6.1	5.6	5.7	6.3	5.3	6.3	5.6	6.0	6.4	5.4	5.7	27
28	5.9	6.1	5.7	5.7	6.8	5.3	6.2	6.1	6.0	6.5	5.3	5.5	28
29	5.4	6.1	5.6	5.9	6.9	5.6	5.9	6.6	5.6	5.8	5.3	5.1	29
30	5.1	6.1	5.6	6.0		5.6	5.9	6.0	5.6	5.8	5.5	5.1	30
31	5.2		5.4	5.8		5.4		5.8		5.5	5.5		31
MAX	10.0	7.4	9.1	19.0	13.0	7.5	8.9	6.6	7.0	6.5	6.4	6.2	
MIN	5.0	5.1	5.4	5.2	5.5	5.3	5.3	5.3	5.2	5.1	5.3	5.0	
MEAN	5.9	5.6	6.4	7.5	6.7	5.9	6.3	5.8	5.9	5.9	5.8	5.6	
TOTAL	182	169	197	232	196	182	189	180	177	182	181	169	
AC-FT	361	335	391	460	388	360	374	357	351	361	360	335	

1 9 8 8 W A T E R Y E A R

LOON LAKE DAM (GERLE CREEK BELOW LOON LAKE)

- Minimum release requirements:
October through September 8 cfs
- Discharge is measured by applying the hourly telemetered stage data from the U.S.G.S. gaging station, located about 1/3 mile below the dam, to the existing U.S.G.S. stage-discharge relationship.
- From October 1 through September 30, the discharge record is from telemetered stage data (enclosed).
- The discharge record indicates no apparent violation during the entire year.
- No modifications were made to the measuring device during the reporting period.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

GERLE CREEK b/w LOON LAKE RESERVOIR
WATER YEAR: 1988

COMPUTED: 10/19/88
By: RCL

DISCHARGE IN CFS

	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	
1	8.3	8.3	10	9.5	9.2	9.1	9.1	8.6	8.6	8.3	8.5	8.9	1
2	8.3	8.3	10	9.5	9.2	9.0	9.1	8.6	8.6	8.3	8.6	8.9	2
3	8.3	8.3	9.3	9.5	9.2	9.1	9.2	8.6	8.6	8.3	8.7	8.9	3
4	8.3	8.2	9.2	10	9.2	9.2	9.2	8.6	8.6	8.3	8.7	8.9	4
5	8.3	8.1	9.2	10	9.2	9.2	9.2	8.6	8.6	8.3	8.6	8.9	5
6	8.1	8.3	12	9.8	9.2	9.1	9.2	8.6	8.6	8.4	8.7	8.9	6
7	8.1	8.3	9.5	9.8	9.2	9.2	9.2	8.8	8.9	8.8	9.1	8.9	7
8	8.3	8.2	9.5	9.2	9.2	9.6	9.2	8.6	8.6	8.3	9.3	8.9	8
9	8.3	8.2	12	10	9.2	9.2	9.2	8.6	8.6	8.3	9.4	8.6	9
10	8.3	8.2	13	9.4	9.3	8.9	9.2	8.5	8.6	8.3	9.1	8.6	10
11	8.3	8.2	9.9	9.2	9.2	8.9	9.2	8.4	8.6	8.3	8.6	8.5	11
12	8.3	8.3	9.8	9.2	9.2	8.9	9.2	8.4	8.6	8.3	8.4	8.3	12
13	8.3	10	9.8	9.2	8.9	9.0	9.7	8.4	8.6	8.2	8.5	8.5	13
14	8.3	8.4	11	9.2	9.0	9.2	11	8.4	8.6	8.3	8.6	8.6	14
15	8.3	8.3	11	9.2	9.0	9.0	9.5	8.6	9.0	8.3	8.6	8.6	15
16	8.3	8.3	11	9.2	8.9	9.1	9.2	8.6	8.9	8.3	8.4	8.6	16
17	8.3	8.6	10	9.2	9.2	9.1	9.2	8.7	8.9	8.3	8.7	8.6	17
18	8.3	8.2	10	9.2	9.2	9.5	8.9	8.6	8.6	8.3	8.5	8.6	18
19	8.1	8.2	9.5	9.2	9.2	9.7	9.5	8.6	8.8	8.6	8.5	8.6	19
20	8.3	8.6	9.5	9.2	9.2	9.7	9.2	8.6	8.9	8.6	8.4	8.6	20
21	8.3	8.6	10	9.2	9.2	9.4	9.1	8.6	8.9	8.4	8.5	8.6	21
22	8.4	8.6	11	9.2	9.3	9.5	8.9	8.6	8.7	8.3	8.2	8.6	22
23	8.7	8.6	9.8	9.2	9.3	10	9.6	8.5	8.6	8.3	8.5	8.6	23
24	8.2	8.5	9.8	9.2	9.3	9.4	10	8.3	8.9	8.3	8.2	8.6	24
25	8.1	8.3	9.8	9.2	9.4	9.5	9.5	8.3	9.2	8.4	8.6	8.6	25
26	8.0	8.3	9.8	9.2	9.4	9.6	9.2	8.3	9.2	8.6	9.0	8.6	26
27	8.1	8.3	9.8	9.2	9.3	9.2	9.2	8.3	9.2	8.6	8.9	8.6	27
28	8.6	8.3	9.8	9.2	9.5	9.2	9.0	9.4	9.2	8.6	8.9	8.6	28
29	8.3	8.3	9.8	9.2	9.3	9.1	8.9	9.1	9.4	8.6	8.9	8.6	29
30	8.3	8.8	9.8	9.2		8.9	8.6	8.6	9.5	8.6	8.9	8.6	30
31	8.3		9.8	9.2		9.0		8.6		8.5	8.9		31
MAX	8.7	10	13	10	9.5	10	11	9.4	9.5	8.8	9.4	8.9	
MIN	8.0	8.1	9.2	9.2	8.9	8.9	8.6	8.3	8.6	8.2	8.2	8.3	
MEAN	8.3	8.4	10.1	9.4	9.2	9.2	9.3	8.6	8.8	8.4	8.7	8.7	
TOTAL	257	252	314	290	267	287	278	266	265	260	269	260	
AC-FT	509	500	624	575	530	568	552	528	525	516	534	516	

1 9 8 8 W A T E R Y E A R

BUCK ISLAND DAM (LITTLE RUBICON RIVER BELOW BUCK ISLAND DAM)

- Minimum release requirements:
October through September 1 cfs
- Discharge is measured by periodic stage observations of flow through a 90° V-notch weir located immediately below Buck Island Dam.
- The discharge record indicates apparent violations between the inspection dates of October 5, 1987 and November 24, 1987 (enclosed).
- The violation was due to insufficient water in Buck Island Reservoir to provide the required release.
- No modifications were made to the measuring device during the period.

ADAPS 01/05/89

24 24AL DATA

SUBJECT TO REVISION

INSTANTANEOUS VALUES

[illegible]

1 9 8 8 W A T E R Y E A R

RUBICON DAM (RUBICON RIVER BELOW RUBICON DAM)

- Minimum release requirements:
October through September 6 cfs or inflow,
 whichever is less.
- Release and inflow are determined by periodic stage observations at U.S.G.S. rated staff gages below and above Rubicon Reservoir.
- The discharge record indicates one apparent violation on December 17, 1988, when the inflow was believed to be greater than 6 cfs and the release was observed to be 5.6 cfs (enclosed).
- The apparent violation was due to an improper valve setting.
- There were no modifications to measuring devices during the reporting period.

..DAPS 01/05/89

VI¹ AL DATA

SUBJECT TO REVISION

INSTANTANEOUS VALUES

[illegible]

[illegible]

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Sacramento Municipal Utility District

Flow Releases
Project No. 2101

ORDER APPROVING FLOW RELEASES

(Issued May 18, 1981)

The Sacramento Municipal Utility District (Licensee) filed on February 27, 1981, the results of studies conducted on the South Fork of the American River, and for Commission approval 1/ a proposed monthly fishwater release schedule, pursuant to Article 70 2/ of the amended license 3/ for the Slab Creek

- 1/ Authority to act on this matter is delegated to the Director, Office of Electric Power Regulation under 18 C.F.R. §375.308 (1980) as amending by 46 Fed. Reg. 14119 (1981)
- 2/ Article 70. The Licensee shall, in cooperation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, conduct studies to determine the effect, if any, of various release schedules upon the thermal regimes of the South Fork America River between Slab Creek Dam and Chile Bar Reservoir, and file with the Commission within six months from date of issuance of this order, the results of these studies and for approval of a proposed release schedule for temperature control.

The minimum flows required by Article 29 may be temporarily modified, if necessary, to conduct the studies required herein, but these flows shall remain in effect until further order of the Commission.
- 3/ Order Amending License (Major) Sacramento Municipal Utility District, FERC No. 2101 (September 10, 1980).

DC-A-16

5

Hydroelectric Project, FERC No. 2101. Article 29 of the license requires minimum flow releases from Slab Creek Dam. 4/ and 5/

The Licensee's proposal would provide 36 cubic feet per second (cfs) of water below Slab Creek Dam from June 1 to May 31 in all years, when the forecasted inflow to Folsom Lake is 1.5 million acre-feet or greater, 10 cfs from November 16 to May 31 when the inflow to Folsom Lake is less than 1.5 million acre-feet, and 36 cfs from June 1 to November 15, when the inflow to Folsom Lake is less than 1.5 million acre-feet.

4/ Article 29.

- (h) The Licensee shall release through a near-streambed outlet of Slab Creek Dam the flows specified in the following schedule as measured by the existing U.S. Geological Survey gaging station located about one-eighth of a mile below the Slab Creek damsite or at such new location as may be determined pursuant to Article 7 of Form L-2 of this license:

Forecast of the unimpaired runoff of the American River, inflow to Folsom, for the current water year, October 1 through September 30, in acre-feet. 1/

Minimum instantaneous release to South Fork from Slab Creek Dam in cubic feet per second

	<u>April thru June</u>	<u>July thru October</u>	<u>November thru March</u>
More than 2,000,000	75	35	20
Less than 2,000,000 but not less than 1,500,000	60	30	15
Less than 1,500,000	25	25	15

- 1/ As presented in the Bulletin of the California Department of Water Resource, "Water Conditions in California," beginning with the March 1 bulletin and applying in turn the April 1 and May 1 bulletins as they are issued. The May 1 bulletin shall apply until March 1 bulletin of the succeeding year is issued.

- 5/ Order, further amending license (major) issued October 31, 1962.

The proposed fishwater release schedule is based on the results of a water temperature monitoring study conducted on the South Fork of the American River between Slab Creek Dam and Chile Bar Reservoir, in cooperation with the California Department of Fish and Game, and the U.S. Fish and Wildlife Service (FWS). The Licensee and FWS agreed that the maximum desirable daytime water temperature suitable for trout was 70°F, or a maximum of 68°F at night. Water temperatures were measured under various flow regimes for 1 week periods during the July 23, 1980 through September 12, 1980 period. The study concluded that a flow of 36 cfs during a normal water year would sustain a trout fishery and only during periods of unusually hot weather would trout in the lower end of the study reach be subject to water temperatures exceeding 70°F.

The proposed fishwater release schedule would also allow the Licensee's 36 cfs turbine to run at 100 percent load nearly all the time and enhance the fishery resources between Slab Creek Dam and Chile Bar Reservoir. The above agencies have reviewed and approved the Licensee's proposed fishwater release schedule.

It is concluded that the proposed fishwater release schedule is appropriate and would enhance downstream fishery resources. On the basis of the agency comments and staff's analysis, it is concluded that approval of the proposed fishwater release schedule would not constitute a major Federal action significantly affecting the quality of the human environment.

It is ordered that:

- A. The proposed flow releases to the South Fork of the American River from Slab Creek Dam are approved.
- B. Subparagraph (h) of Article 29 is revised to read as follows:
 - .(h) The Licensee shall release through a near-streambed outlet of Slab Creek Dam the flows specified in the following schedule as measured by the existing U.S. Geological Survey gaging station located about one-eighth of a mile below the Slab Creek dam or at such new location as may be determined pursuant to Article 7 of Form L-2 of this license:

Forecast of the unimpaired runoff of the American River, inflow to Folsom Lake for the current water year, October 1 through September 30, in acre-feet, 1/

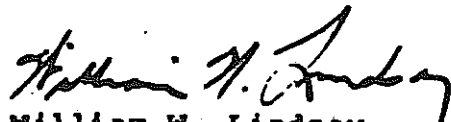
Minimum instantaneous release to South Fork from Slab Creek Dam in cubic feet per second

	June thru <u>November 15</u>	November 16 thru <u>May 31</u>
More than 2,000,000	36	36
Less than 2,000,000 but not less than 1,500,000	36	36
Less than 1,500,000 but not less than 1,000,000	36	10
Less than 1,000,000	36	10

1/ As presented in the Bulletin of the California Department of Water Resources, "Water Conditions in California," beginning with the March 1 bulletin and applying in turn the April 1 and May 1 bulletins as they are issued. The May 1 bulletin shall apply until March 1 bulletin of the succeeding year is issued.

- (C) This order is final unless a petition appealing it to the Commission is filed within 30 days from the date of its issuance, as provided in Section 1.7(d) of the Commission's regulations, 18 C.F.R. 1.7(d) (1979), as amended, 44 Fed. Reg. 46449 (1979). The filing of a petition appealing this order to the Commission or an application for rehearing as provided in Section 313(a) of the Act does not operate as a stay of the effective date of this permit or of any other date specified in this order, except as specifically ordered by the Commission.

(SEAL)


William W. Lindsay
Director, Office of Electric
Power Regulation

PROGRESS REPORT BY PERMITTEE FOR

1980

OWNER OF RECORD:

APPLICATION#: 012624

SACRAMENTO M U D ET AL
C/O SACRAMENTO MUNICIPAL UTILITY DIST
P O BOX 15830
SACRAMENTO, CALIF 95813

ET AL

PERMIT: 010704

TELEPHONE NUMBER:
(916) 452-3211

IF OWNER'S NAME/ADDRESS/PHONE NO. IS WRONG OR MISSING, PLEASE CORRECT.

SOURCE:

COUNTY:

RUBICON RIVER
(OTHER SOURCES NOT SHOWN)

EL DORADO

PURPOSE:

DIVERSION/STORAGE SEASON:

ACRES/HP:

POWER:

JAN 01 TO DEC 31 // OCT 01 TO JUL 31

0 HP

AMOUNT: 0.000

0.0 AC-FT

COMPLETE USE BY: 12/01/75

IMPORTANT! EVERY permit is issued subject to the conditions therein expressed. I have currently reviewed my permit. YES [X] NO [] I am complying with the conditions under which my permit has been issued. YES [X] NO [] Identify any noncompliance by permit term number under "Remarks" on reverse side. This report is important in providing the record of use needed in establishing your water right. It should be filled out carefully and returned promptly to the above address.

THE PROJECT HAS BEEN ABANDONED AND I REQUEST REVOCATION OF THIS PERMIT. YES [] NO [X]

CONSTRUCTION WORK

- Has construction work commenced? YES [X] NO [] Is construction completed? YES [X] NO []
- If incomplete, describe briefly the work done, including cost.
- If not completed, give estimated date of completion.
- What percent of construction work remains to be done? Explain.

USE OF WATER

- Has use of water commenced? YES [] NO [X] Check appropriate box(es) below and explain how water was used:
 - Irrigation. Total acres irrigated. Name of crops served and acreage of each.
 - Stockwatering. Number of animals. (f) [X] Recreational. See Remarks. Boating, fishing, water contact sports.
 - Industrial. Nature of use. (g) [X] Power generation. 842,500. Installed horsepower capacity.
 - Domestic. Number of persons, area of garden, lawn, etc. (h) [] Other.
 - Municipal. Approximate population.

6. Amount of water used each month under this permit in gallons or acre-feet. (If not known, check months water was used.)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
18.9	23.4	21.4	43.0	38.2	25.5	26.3	9.5	3.6	11.1	4.9	6.0	231.8

- Has use of water, both amount and season, been as great as you expect in any future year under this permit? YES [X] NO [] If "No", explain in "Remarks".
- Has location of the intake, place of use, or type of use been changed? YES [] NO [X] Explain in "Remarks".
- Did the source go dry? YES [] NO [X] If so, during what months?

STORAGE PROJECTS ONLY

- Did your reservoir spill this year? YES [] NO [X] If not, how many feet below spillway vertically was the water level at maximum storage? See Remarks Have you emptied the reservoir? YES [] NO [X] If not, how many feet below spillway vertically was it drawn down at end of season? Loon Lake 37', Union Valley 6'

PLEASE ANSWER ONLY THOSE QUESTIONS BELOW WHICH ARE APPLICABLE TO YOUR PROJECT
MUNICIPAL, COMMUNITY, OR SUBDIVISION PROJECTS ONLY
CONSERVATION OF WATER

11. How many service connections to date? _____ Total population served by the water system _____
12. Estimated number of service connections under full use _____
13. Are the connections individually metered? YES ☐ NO ☒
14. Do you plan to meter the connections? YES ☐ NO ☐ When? _____
15. Sewage generated by those to whom you deliver water is disposed of by: Septic tanks and leach lines ☐; Seepage pits ☐; Central treatment plant ☐ operated by _____ Other ☐ (specify under "Remarks").
16. Is water service provided to an area or subdivision including a recreational reservoir? YES ☐ NO ☒
17. Name of area or subdivision so served _____
18. State surface area at maximum water level in recreational reservoir(s) referred to in 16. Identify surface area(s) by name of dam or reservoir: _____
19. What measures are you using or planning to reduce water losses in conveyance systems? (1) Seepage or leak detection program ☐; (2) Lining canals ☐; (3) Phreatophyte and aquatic vegetation control ☐; (4) Other (describe in "Remarks") ☐.
20. What measures are used to encourage consumers to conserve water in agricultural use? (1) Program to encourage more efficient irrigation systems (sprinkler, drip, etc.), where applicable ☐; (2) Return flow systems on individual farms ☐; (3) Return flow system areawide ☐; (4) Water pricing to encourage reduced use ☐; (5) Charges for drainage of irrigated lands ☐; (6) Other (describe in "Remarks") ☐.
21. What measures are used to encourage municipal and industrial consumers to conserve water? (1) Regulations to control wasteful use ☐; (2) Public education program on water conservation ☐; (3) Pricing to encourage reduced use ☐; (4) Assistance to industry in design of recycle systems ☐; (5) Other (describe in "Remarks") ☐.
22. What records are maintained on water use and conservation? (1) Loss rate from conveyance system ☐; (2) Water use for major crops by each farm ☐; (3) Other (describe in "Remarks") ☐.
23. Describe any water conservation efforts you may have started: _____
24. If credit toward beneficial use of water under this permit for water not used due to a conservation effort is claimed under Water Code Section 1010, please show the amounts of water conserved (acre feet or mg): _____

WATER QUALITY AND WASTEWATER RECLAMATION

25. Describe methods you are using to minimize erosion and to prevent the entry of silt into surface waters: _____
26. After use, the water is (1) retained in reservoir ☐; (2) discharged into a stream or lake ☒; (3) discharged into settling ponds ☐; (4) other ☐ Describe: _____
27. Does or will water being discharged contain waste materials? (1) YES ☒ NO ☐
(1) Domestic ☐; (2) Municipal ☐; (3) Industrial ☐; (4) Agricultural ☐; (5) Other ☐ Describe: _____
28. Does or will water being discharged contain any specific material which is deleterious to fish and wildlife or which would impair the water for beneficial uses? ☐ Yes ☒ No Describe: _____

TO THE EXTENT THE FOLLOWING QUESTIONS APPLY TO YOUR PERMIT PLEASE ANSWER IN REMARKS SECTION BELOW

29. Are you now or have you been using reclaimed water from a wastewater treatment facility or water polluted by waste to a degree which unreasonably affects such water for other beneficial uses? ☐ Yes ☒ No
If credit toward use under this water right through substitution of reclaimed or polluted water in lieu of appropriated water is claimed under Section 1010 of the Water Code, please show the amounts of reclaimed water used: _____
30. Are you now or have you been reclaiming or reusing any of the water appropriated under this right? ☐ Yes ☒ No
If Yes, please describe: _____
31. What is present availability or current potential for using reclaimed water from a wastewater treatment plant or polluted water in place of the appropriated water to satisfy all or part of your water needs? _____
32. What is the current potential for reusing the appropriated water to satisfy part of your water needs? _____
33. If you produce reclaimed water or polluted water, is there a potential for others to use it? _____

REMARKS (Identify the item you are explaining. Additional pages may be attached.)

See attached page

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief

Dated _____ at _____ Location _____ State _____
Signature _____
PERMITTEE AGENT OF DESIGNEE

- #10 Loon Lake filled to capacity and spilled less than 10 acre-feet on July 4. Union Valley Filled to within 0.1' of capacity on July 3.
- #5 Water is used domestically for picnic and campgrounds at Loon Lake and Union Valley Reservoir. In addition, both of these reservoirs are used for fishing, boating, swimming and other water sports.
- #6 Used at Robbs Peak Powerhouse. The quantities are in thousands of acre-feet.



NOTICE OF PETITION TO CHANGE

LICENSE 11074 ISSUED PURSUANT TO APPLICATION 12624

NOTICE IS HEREBY GIVEN THAT

SACRAMENTO MUNICIPAL UTILITY DISTRICT AND PACIFIC GAS & ELECTRIC COMPANY
C/O SACRAMENTO MUNICIPAL UTILITY DIST, P O BOX 15830, SACRAMENTO, CALIF 95813

PETITIONED THE STATE WATER RESOURCES CONTROL BOARD FOR PERMISSION TO CHANGE THE
POINT OF DIVERSION BY ADDING A POINT OF DIVERSION ON THE SOUTH FORK RUBICON RIVER
TO DIVERT WATER TO LOON LAKE UNDER THE ABOVE-NUMBERED LICENSE.

LICENSE PRESENTLY ALLOWS DIVERSION FROM RUBICON RIVER TRIBUTARY TO
MIDDLE FORK AMERICAN RIVER
POINT OF DIVERSION WITHIN NW1/4 OF SW1/4 SECTION 9 T13N R16E MDB&M
IN THE COUNTY OF EL DORADO
IN THE AMOUNT OF: 500 CUBIC FEET PER SECOND BY DIRECT DIVERSION AND *226,900 ACRE-FEET
PER ANNUM BY STORAGE

LICENSE PRESENTLY ALLOWS DIVERSION FROM UNNAMED STREAM TRIBUTARY TO
RUBICON RIVER
POINT OF DIVERSION WITHIN SW1/4 OF NW1/4 SECTION 6 T13N R16E MDB&M
IN THE COUNTY OF EL DORADO
IN THE AMOUNT OF: 200 CUBIC FEET PER SECOND BY DIRECT DIVERSION AND *226,900 ACRE-FEET
PER ANNUM BY STORAGE

LICENSE PRESENTLY ALLOWS DIVERSION FROM GERLE CREEK TRIBUTARY TO
SOUTH FORK RUBICON RIVER
POINT OF DIVERSION WITHIN SE1/4 OF NE1/4 SECTION 5 T13N R15E MDB&M
IN THE COUNTY OF EL DORADO
IN THE AMOUNT OF: 325 CUBIC FEET PER SECOND BY DIRECT DIVERSION AND *226,900 ACRE-FEET
PER ANNUM BY STORAGE

LICENSE PRESENTLY ALLOWS DIVERSION FROM GERLE CREEK TRIBUTARY TO
SOUTH FORK RUBICON RIVER
POINT OF DIVERSION WITHIN LOT 14 SECTION 15 T13N R14E MDB&M
IN THE COUNTY OF EL DORADO
IN THE AMOUNT OF: 325 CUBIC FEET PER SECOND BY DIRECT DIVERSION AND *226,900 ACRE-FEET
PER ANNUM BY STORAGE

LICENSE PRESENTLY ALLOWS DIVERSION FROM S FK RUBICON RIVER TRIBUTARY TO
RUBICON RIVER THENCE MIDDLE FORK AMERICAN RIVER
POINT OF DIVERSION WITHIN SW1/4 OF NE1/4 SECTION 27 T13N R14E MDB&M
IN THE COUNTY OF EL DORADO
IN THE AMOUNT OF: 175 CUBIC FEET PER SECOND BY DIRECT DIVERSION AND *226,900 ACRE-FEET
PER ANNUM BY STORAGE

*THE TOTAL AMOUNT COLLECTED TO STORAGE NOT TO EXCEED 226,900 ACRE-FEET PER ANNUM.

PURPOSES: POWER & RECREATIONAL

DIVERSION SEASON: JANUARY 1 TO DECEMBER 31 (DIRECT DIVERSION) OCTOBER 1 TO
JULY 31 (STORAGE)

PLACE OF USE DESCRIBED: LOON LAKE POWER PLANT (SMUD)
ROBBS PEAK POWER PLANT (SMUD)
UNION VALLEY POWER PLANT (SMUD)
JAYBIRD POWER PLANT (SMUD)
CAMINO POWER PLANT (SMUD)
WHITE ROCK POWER PLANT (SMUD)
CHILI BAR POWER PLANT (PG&E)

-CONTINUED-

DESCRIPTION OF PROPOSED CHANGE

TO ADD A POINT OF DIVERSION ON SOUTH FORK RUBICON RIVER AT A POINT LOCATED SOUTH 1800 FEET AND EAST 600 FEET FROM THE NE CORNER OF SECTION 16, T13N, R15E, MDB&M. THE WATER WOULD BE CONVEYED TO LOON LAKE FOR STORAGE.

PETITIONER REPRESENTS THAT THIS CHANGE INVOLVES NO CHANGE IN SOURCE AND NO INCREASE IN THE AMOUNT OF APPROPRIATION.

RELATIVE TO PROTESTS

BLANKS UPON WHICH TO SUBMIT PROTESTS WILL BE SUPPLIED FREE UPON REQUEST

ANY PERSON DESIRING TO PROTEST THE GRANTING OF SUCH CHANGE SHALL WITHIN 30 DAYS FROM DATE HEREOF FILE A WRITTEN PROTEST WITH THE STATE WATER RESOURCES CONTROL BOARD, AT THE ABOVE ADDRESS. A COPY OF THE PROTEST SHALL BE SENT TO THE PETITIONER. SUCH PROTEST SHALL CLEARLY SET FORTH THE PROTESTANT'S OBJECTIONS TO THE CHANGE AND SHALL BE ON FORMS PROVIDED BY THE BOARD.

SEP 18 1981

DATED: SACRAMENTO, CALIFORNIA

MEMORANDUM OF AGREEMENT
BETWEEN
CALIFORNIA DEPARTMENT OF FISH AND GAME
AND
SACRAMENTO MUNICIPAL UTILITY DISTRICT
FERC PROJECT NO. 2101

The Memorandum of Agreement by and between the People of the State of California Department of Fish and Game, hereinafter referred to as the CDFG and Sacramento Municipal Utility District, hereinafter referred to as SMUD.

Recitals:

1. SMUD is a public agency organized under and pursuant to the laws of the State of California, and is in the process of applying to the Federal Energy Regulatory Commission for an amendment to License No. 2101 to construct, operate and maintain the Jones Fork Hydroelectric Development as part of the Upper American River Hydroelectric Project, which will occupy private lands and lands of the United States, El Dorado National Forest.
2. CDFG is responsible for the protection and preservation of the fish and wildlife resources of the area on behalf of the people of the State of California in connection with the construction and operation of the Upper American River Hydroelectric Project.
3. SMUD and CDFG in the interest of protecting and preserving the fish and wildlife resources, intend and desire by this Memorandum of Agreement to define the responsibility of SMUD and CDFG with respect to public utilization of lands for

recreational purposes and the preservation of fish and wildlife in the area.

NOW, THEREFORE, it is mutually agreed by the parties hereto as follows:

1. For the maintenance of fish and wildlife in the South Fork of Silver Creek, SMUD shall release the following flows from Ice House Reservoir.
 - a. For the years when the forecast inflow into Folsom Reservoir is greater than 1,500,000 acre-feet per annum, as measured on April 1st and revised on May 1st by the California Department of Water Resources, the following flows, in cubic feet per second, shall be released:

October	12 cfs	April	3 cfs
November 1 thru 15	10 cfs	May	8 cfs
November 16 thru 30	4 cfs	June	8 cfs
December	4 cfs	July	15 cfs
January	3 cfs	August	15 cfs
February	3 cfs	September	15 cfs
March	3 cfs		

The average year conditions shall be implemented on April 1st or May 1st whenever an average year occurs and shall continue until predicted inflow into Folsom Reservoir will be less than 1,500,000 acre-feet per annum.

- b. For the years when the forecast inflow into Folsom Reservoir is less than 1,500,000 acre-feet per annum, as measured on April 1st and revised on May 1st by the California Department of Water Resources, the flow shall be five (5) cubic feet per second continuous throughout the year. Dry year conditions shall be implemented on April 1st or May 1st whenever a dry year occurs and shall continue until predicted inflow into Folsom Reservoir will exceed 1,500,000 acre-feet per annum.

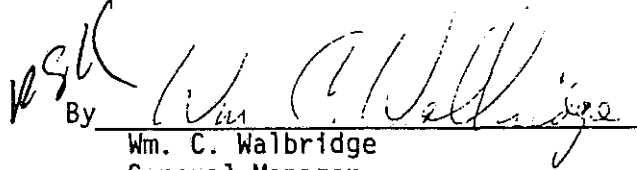
- c. The stream flow in the South Fork of Silver Creek shall be measured at the USGS gauging station immediately downstream of Ice House Dam.
- d. The flows released from Ice House Reservoir shown above may be changed by mutual agreement between SMUD and the CDFG.
- 2. SMUD shall continue to operate the level of Ice House Reservoir in a similar manner to that mode of operation occurring in the past.
- 3. SMUD shall, in ten areas designated by SMUD and approved by CDFG, provide a minimum clearance of 4.5 feet beneath the Jones Fork penstock to allow the passage of deer.
- 4. SMUD shall notify its contractors of the necessity for compliance with Section 1601-1603, 5650 and 12015 of the California Fish and Game Code and other applicable statutes relating to such matters and shall include reference to these items in construction contracts it may issue relating to the Jones Fork Project.
- 5. SMUD and the CDFG hereby further agree that the provisions of this agreement may be included by reference on any permit or license issued by the State of California or the Federal Energy Regulatory Commission pursuant to the amendments of License to Project No. 2101. If the terms of the agreement are included, CDFG agrees that its protest or intervention may be considered withdrawn and disregarded. This agreement shall not become operative until and unless SMUD receives from the Federal Energy Regulatory Commission an amendment

to its license for Project No. 2101, permitting it to construct
the Jones Fork Hydroelectric Development.

Executed as of the _____ day of _____, 1981.

Attest _____

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By 
Wm. C. Walbridge
General Manager

CALIFORNIA DEPARTMENT OF FISH AND GAME

E. C. Fullerton
Director

PETITION FOR CHANGE ☒ OF POINT OF DIVERSION
☐ BY ADDITION OF POINT OF REDIVERSION
☐ OF PLACE OF USE

Application 12624 Permit 10704 License STATE WATER RESOURCES CONTROL BOARD

State Water Resources Control Board
Division of Water Rights
77 Cadillac Drive
Sacramento, CA 95825
(916) 920-6151

MAR 27 2 01 PM '81

DIV. OF WATER RIGHTS
SACRAMENTO

I hereby petition for changes noted above and shown on the accompanying map and described as follows:

See Supplement

(Give tie by bearing and distance or by coordinate distances from some

government corner and the 40-acre subdivisions in which the new point

of diversion lies or acreage to be irrigated within each 40-acre tract.)

GIVE REASON FOR PROPOSED CHANGE: to increase the amount of energy
developed by the Upper American River Project.

WILL OLD POINT OF DIVERSION OR PLACE OF USE BE ABANDONED? No
(yes or no)

WATER WILL BE USED FOR power PURPOSES.

I have access to the proposed new point of diversion or control the place of use proposed by virtue of

purchase or condemnation
(ownership, lease, verbal, or written agreement)

(If by lease or agreement, state name and address of party or parties from whom access has been obtained.)

Are there any persons taking water from the stream between the old point of diversion and the new point of diversion? No
(yes or no)

Give names and addresses, if answered yes, as well as other persons known to you who may be affected by the proposed change.

THIS CHANGE DOES NOT INVOLVE AN INCREASE IN THE AMOUNT OF THE APPROPRIATION OR SEASON OF USE.

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

Dated: MAR 26 1981, 1981, at Sacramento California.

Wm. C. Wellridge

Note: Section 1547 of the Water Code requires a \$10 filing fee with petitions for changes.

Supplement to Petition
License 11074 - Application 12624

This petition for change is to add a new point of diversion from the South Fork Rubicon River. The proposed project would divert a portion of the water presently authorized under License 11074 from the South Fork Rubicon River at a point located South 1800 and East 600 feet from the NE Cor. Section 16, T13N, R15E, MDB&M, being within the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of said Section 16. Water would be conveyed through a pipeline into Loon Lake and then released from Loon Lake through the Loon Lake Powerhouse located within the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 18, T13N, R15E, MDB&M, which is an authorized place of use under License 11074 but will be an additional place of use for water diverted from the South Fork Rubicon River.



SMUD

SACRAMENTO MUNICIPAL UTILITY DISTRICT □ 6201 S Street, Box 15830, Sacramento, California 95813; (916) 452-3211

March 23, 1981

Mr. Walter G. Pettit, Chief
Division of Water Rights
State Water Resources Control Board
77 Cadillac Drive
Sacramento, California 95825

License 11074 (Application 12624)

Dear Mr. Pettit:

Enclosed is a petition to add a new point of diversion from the South Fork Rubicon River. The proposed project would divert a portion of the water presently authorized under License 11074 from the South Fork Rubicon River. Water would be conveyed through a pipeline into Loon Lake and then released from Loon Lake through the Loon Lake Powerhouse, which is an authorized place of use under License 11074, but will be an additional place of use for water diverted from the South Fork Rubicon River.

The original map filed with Application 12624 has been revised to show this new point of diversion and is re-submitted with this petition. Also enclosed is our check in the amount of \$10.00 for the filing fee.

A certified copy of the Board of Directors' resolution authorizing the filing of this petition will be filed as soon as it can be prepared. Please send copies of all correspondence regarding this petition to Mr. D. E. Kienlen, 600 Forum Building, 1107 Ninth Street, Sacramento, California 95814.

Sincerely,

George Rummel
Project Manager

Enclosures - see text

Recording Requested by:
STATE WATER RESOURCES CONTROL BOARD
Pursuant to Government Code Section 6103

When Recorded Mail to:
STATE WATER RESOURCES CONTROL BOARD
77 Cadillac Drive
Sacramento, CA 95825

OFFICIAL RECORDS
ELDORADO COUNTY-CALIF.
RECORD REQUESTED BY
STATE OF CALIFORNIA
DEC 8 2 02 PM 1980
DOROTHY CARR
COUNTY RECORDER

NO FEE



STATE OF CALIFORNIA
THE RESOURCES AGENCY
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

License for Diversion and Use of Water

APPLICATION 12624

PERMIT 10704

LICENSE 11074

PAGE 1 OF 5

THIS IS TO CERTIFY, That

SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD) AND
PACIFIC GAS AND ELECTRIC COMPANY (PG&E)
P. O. BOX 15830, SACRAMENTO, CALIFORNIA 95813

HAVING made proof as of OCTOBER 16, 1970 AND MAY 30, 1980 (the date of inspection)
to the satisfaction of the State Water Resources Control Board of a right to the use of the water of
(1) RUBICON RIVER, (2) UNNAMED STREAM (AKA ROCKBOUND CREEK OR LITTLE RUBICON RIVER), (3A)(3B) GERLE CREEK AND (4) SOUTH FORK RUBICON RIVER IN EL DORADO COUNTY tributary to (1) MIDDLE FORK AMERICAN RIVER, (2)(4) RUBICON RIVER, AND (3A)(3B) SOUTH FORK RUBICON RIVER

for the purpose of POWER AND RECREATIONAL USES
under Permit 10704 of the Board and that the right to the use of this water has been perfected in accordance with the laws of California, the Regulations of the Board and the permit terms; that the priority of this right dates from JULY 29, 1948 and that the amount of water to which this right is entitled and hereby confirmed is limited to the amount actually beneficially used for the stated purposes and shall not exceed (A) ONE THOUSAND TWO HUNDRED (1,200) CUBIC FEET PER SECOND BY DIRECT DIVERSION, TO BE DIVERTED FROM JANUARY 1 TO DECEMBER 31 OF EACH YEAR AS FOLLOWS:

POINT OF DIVERSION (1) - 500 CUBIC FEET PER SECOND
POINT OF DIVERSION (2) - 200 CUBIC FEET PER SECOND
POINTS OF DIVERSION (3A)(3B)(4) - 500 CUBIC FEET PER SECOND
NOT TO EXCEED 325 CUBIC FEET PER SECOND FROM (3A) AND (3B) AND 175 CUBIC FEET PER SECOND FROM (4); AND

(B) TWO HUNDRED TWENTY-SIX THOUSAND NINE HUNDRED (226,900) ACRE-FEET PER ANNUM BY STORAGE, TO BE COLLECTED FROM ALL SOURCES FROM OCTOBER 1 OF EACH YEAR TO JULY 31 OF THE SUCCEEDING YEAR. THE MAXIMUM AMOUNT OF WATER TO BE COLLECTED TO STORAGE IN ANY ONE YEAR IN EACH OF LICENSEE'S RESERVOIRS HAS BEEN:

- (1) LOON LAKE, 92,000 ACRE-FEET.
- (2) UNION VALLEY RESERVOIR, 141,500 ACRE-FEET.

THE TOTAL AMOUNT OF WATER TO BE TAKEN FROM THE SOURCE (DIRECT DIVERSION PLUS COLLECTION TO STORAGE) SHALL NOT EXCEED TWO HUNDRED EIGHTY-ONE THOUSAND ONE HUNDRED (281,100) ACRE-FEET PER YEAR. THE TOTAL AMOUNT OF WATER TO BE PLACED TO BENEFICIAL USE (FLOW THROUGH ROBBS PEAK POWERHOUSE) SHALL NOT EXCEED TWO HUNDRED FIFTY THOUSAND (250,000) ACRE-FEET PER YEAR.

WATER IS RETURNED TO THE SOUTH FORK AMERICAN RIVER AT CHILI BAR POWERHOUSE WITHIN NE1/4 OF SE1/4 OF SECTION 25, T11N, R10E, MDB&M.

THE POINTS OF DIVERSION OF SUCH WATER ARE LOCATED:

- (1) RUBICON RIVER
RUBICON DIVERSION DAM - NORTH 4°30' EAST 1,850 FEET FROM SW CORNER OF SECTION 9, T13N, R16E, MDB&M, BEING WITHIN NW1/4 OF SW1/4 OF SAID SECTION 9,
- (2) UNNAMED STREAM (AKA ROCKBOUND CREEK OR LITTLE RUBICON RIVER)
BUCK ISLAND DAM - SOUTH 27°20' EAST 2,050 FEET FROM NW CORNER OF SECTION 6, T13N, R16E, MDB&M, BEING WITHIN SW1/4 OF NW1/4 OF SAID SECTION 6,

WRCB 16-4 (3-73)

BOOK 1935 PAGE 485

49840

Licensee shall allow representatives of the Board and other parties, as may be authorized from time to time by the Board, reasonable access to project works to determine compliance with the terms of this license.

All rights and privileges under this license including method of diversion, method of use and quantity of water diverted are subject to the continuing authority of the Board in accordance with law and in the interest of the public welfare to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said water.

Reports shall be filed promptly by licensee on appropriate forms which will be provided for the purpose from time to time by the Board.

The right hereby confirmed to the diversion and use of water is restricted to the point or points of diversion herein specified and to the lands or place of use herein described.

This license is granted and licensee accepts all rights herein confirmed subject to the following provisions of the Water Code:

Section 1625. Each license shall be in such form and contain such terms as may be prescribed by the Board.

Section 1626. All licenses shall be under the terms and conditions of this division (of the Water Code).

Section 1627. A license shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code) but no longer.

Section 1628. Every license shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a license is issued takes the license subject to the conditions therein expressed.

Section 1629. Every licensee, if he accepts a license does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any license granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any licensee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any licensee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Section 1630. At any time after the expiration of twenty years after the granting of a license, the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State shall have the right to purchase the works and property occupied and used under the license and the works built or constructed for the enjoyment of the rights granted under the license.

Section 1631. In the event that the State, or any city, city and county, municipal water district, irrigation district, lighting district, or political subdivision of the State so desiring to purchase and the owner of the works and property cannot agree upon the purchase price, the price shall be determined in such manner as is now or may hereafter be provided by law for determining the value of property taken in eminent domain proceedings.

Dated: DECEMBER 4 1980

STATE WATER RESOURCES CONTROL BOARD

Walter G. Pettit

Chief, Division of Water Rights

(3) GERLE CREEK

- (A) LOON LAKE DAM - SOUTH $3^{\circ}59'36''$ WEST 2,083.30 FEET FROM NE CORNER OF SECTION 5, T13N, R15E, MDB&M, BEING WITHIN SE1/4 OF NE1/4 OF SAID SECTION 5,
(B) GERLE DAM - SOUTH $89^{\circ}53'06''$ WEST 2,166.79 FEET FROM SE CORNER OF SECTION 15, T13N, R14E, MDB&M, BEING WITHIN LOT 14 OF SAID SECTION 15, AND

(4) SOUTH FORK RUBICON RIVER

- ROBBS PEAK DAM - SOUTH $42^{\circ}28'52''$ WEST 2,037.57 FEET FROM NE CORNER OF SECTION 27, T13N, R14E, MDB&M, BEING WITHIN SW1/4 OF NE1/4 OF SAID SECTION 27.

THE POINTS OF REDIVERSION OF SUCH WATER ARE LOCATED AS FOLLOWS:

(1) SILVER CREEK

- (A) UNION VALLEY DAM - NORTH $12^{\circ}28'13''$ EAST 712.79 FEET FROM SW CORNER OF SECTION 20, T12N, R14E, MDB&M, BEING WITHIN SW1/4 OF SW1/4 OF SAID SECTION 20,
(B) JUNCTION DAM - NORTH $47^{\circ}16'41''$ EAST 1,986.05 FEET FROM SW CORNER OF SECTION 30, T12N, R14E, MDB&M, BEING WITHIN SW1/4 OF SW1/4 OF SAID SECTION 30,
(C) CAMINO DAM - SOUTH $12^{\circ}38'03''$ EAST 2,856.36 FEET FROM NW CORNER OF SECTION 4, T11N, R13E, MDB&M, BEING WITHIN LOT 9 OF SAID SECTION 4,

(2) BRUSH CREEK DAM - NORTH $35^{\circ}00'$ WEST 2,450 FEET FROM SE CORNER OF SECTION 10, T11N, R12E, MDB&M, BEING WITHIN NW1/4 OF SE1/4 OF SAID SECTION 10,

(3) SOUTH FORK AMERICAN RIVER

- (A) SLAB CREEK DAM - NORTH $35^{\circ}39'55''$ EAST 3,622.27 FEET FROM SW CORNER OF SECTION 25, T11N, R11E, MDB&M, BEING WITHIN SE1/4 OF NW1/4 OF SAID SECTION 25,
(B) CHILI BAR DAM - NORTH $52^{\circ}36'08''$ EAST 3,163.80 FEET FROM SW CORNER OF SECTION 25, T11N, R10E, MDB&M, BEING WITHIN NE1/4 OF SW1/4 OF SAID SECTION 25.

A DESCRIPTION OF LANDS OR THE PLACE WHERE
SUCH WATER IS PUT TO BENEFICIAL USE IS AS FOLLOWS:

LOON LAKE POWER PLANT (SMUD)	- WITHIN NE1/4 OF NE1/4 OF SECTION 18, T13N, R15E, MDB&M.
ROBBS PEAK POWER PLANT (SMUD)	- WITHIN NE1/4 OF SW1/4 OF SECTION 11, T12N, R14E, MDB&M.
UNION VALLEY POWER PLANT (SMUD)	- WITHIN SW1/4 OF SW1/4 OF SECTION 20, T12N, R14E, MDB&M.
JAYBIRD POWER PLANT (SMUD)	- WITHIN NE1/4 OF NW1/4 OF SECTION 4, T11N, R13E, MDB&M.
CAMINO POWER PLANT (SMUD)	- WITHIN SW1/4 OF SE1/4 OF SECTION 15, T11N, R12E, MDB&M.
WHITE ROCK POWER PLANT (SMUD)	- WITHIN NW1/4 OF NE1/4 OF SECTION 31, T11N, R11E, MDB&M.
CHILI BAR POWER PLANT (PG&E)	- WITHIN NE1/4 OF SW1/4 OF SECTION 25, T11N, R10E, MDB&M.

NO DIVERSION OR USE OF WATER SHALL BE MADE UNDER THIS LICENSE WHICH WILL IN ANY WAY INTERFERE WITH DIVERSION OR USE OF WATER FOR IRRIGATION OR DOMESTIC PURPOSES, WHETHER SUCH HIGHER USES ARE MADE UNDER EITHER PRIOR OR SUBSEQUENT RIGHTS.

LICENSEE SHALL MAINTAIN THE FOLLOWING MINIMUM STREAMFLOWS IN THE INTEREST OF FISH LIFE:

- (A) IN RUBICON RIVER BELOW RUBICON DIVERSION DAM, 6 CUBIC FEET PER SECOND OR THE NATURAL FLOW, WHICH EVER IS LESS, PLUS STORAGE PROVIDED BY STREAMFLOW MAINTENANCE DAMS OF THE CALIFORNIA DEPARTMENT OF FISH AND GAME IN LAKES CLYDE, SCHMIDELL, LOIS, AND MIDDLE VELMA, AT ALL TIMES.
- (B) IN BUCK ISLAND CREEK BELOW BUCK ISLAND RESERVOIR, 1 CUBIC FOOT PER SECOND AT ALL TIMES IN ADDITION TO THE STORAGE RELEASES FROM STREAMFLOW MAINTENANCE DAMS OF THE CALIFORNIA DEPARTMENT OF FISH AND GAME IN BUCK ISLAND, ROCKBOUND, AND HIGHLAND LAKES AS DETERMINED BY THAT DEPARTMENT.
- (C) IN GERLE CREEK BELOW LOON LAKE, 8 CUBIC FEET PER SECOND AT ALL TIMES, PROVIDED THAT:

LICENSEE SHALL OPERATE LOON LAKE DAM AND RESERVOIR SO AS TO RESTRICT CHANGES IN CONTROLLABLE DISCHARGES INTO GERLE CREEK TO THOSE WHICH WILL INCREASE OR DECREASE STREAM LEVELS NOT MORE THAN ONE FOOT PER HOUR DURING THE MONTHS OF JULY THROUGH DECEMBER AND NOT MORE THAN ONE FOOT PER HOUR UNTIL THE FLOW IN GERLE CREEK REACHES 200 CUBIC FEET PER SECOND DURING THE MONTHS OF JANUARY THROUGH JUNE, PROVIDED THAT DURING THE JANUARY-JUNE PERIOD STREAM FLUCTUATIONS ABOVE 200 CUBIC FEET PER SECOND SHALL BE LIMITED TO THOSE NECESSARY TO MAINTAIN A STEADY FLOW OF WATER THROUGH ROBBS PEAK TUNNEL.

- (D) IN SOUTH FORK RUBICON RIVER DOWNSTREAM FROM ROBBS PEAK DAM AND IN GERLE CREEK DOWNSTREAM FROM GERLE DAM COMBINED, 10 CUBIC FEET PER SECOND, MAY 1 THROUGH OCTOBER 31, AND 5 CUBIC FEET PER SECOND NOVEMBER 1 THROUGH APRIL 30, DISTRIBUTED, AS NEARLY AS POSSIBLE, AS FOLLOWS:

PERIOD	RELEASE FROM RESERVOIR (CUBIC FEET PER SECOND)	
	ROBBS PEAK	GERLE
	RESERVOIR	RESERVOIR
MAY 1 - OCTOBER 31	3	7
NOVEMBER 1 - APRIL 30	1	4

PROVIDED, THAT THE COMBINED RELEASES BE MEASURED ON SOUTH FORK RUBICON RIVER BELOW THE MOUTH OF GERLE CREEK, AND THAT SUCH RELEASES SHALL BE OVER AND ABOVE ANY INTERVENING ACCRETIONS.

- (E) IN SILVER CREEK BETWEEN UNION VALLEY DAM AND JUNCTION RESERVOIR, NO MINIMUM FLOW REQUIRED.
- (F) IN SILVER CREEK BELOW JUNCTION DAM AND BELOW CAMINO DIVERSION DAM, 20 CUBIC FEET PER SECOND FROM MAY 1 THROUGH OCTOBER 31 AND 10 CUBIC FEET PER SECOND FROM NOVEMBER 1 THROUGH APRIL 30: PROVIDED, THAT ALL STREAMFLOWS SPECIFIED ABOVE SHALL BE MEASURED AT A POINT APPROXIMATELY ONE-FOURTH MILE BELOW THE PROJECT STRUCTURE INDICATED EXCEPT FOR THOSE STRUCTURES SPECIFIED IN PARAGRAPH (D) WHERE THE POINT OF MEASUREMENT SHALL BE APPROXIMATELY ONE-FOURTH MILE BELOW THE CONFLUENCE OF GERLE CREEK AND LITTLE SOUTH FORK RUBICON: PROVIDED FURTHER, THAT WHEN THE STREAMFLOW FORECAST FOR THE AMERICAN RIVER AT FAIR OAKS, AS GIVEN BY THE APRIL 1 BULLETIN OF THE CALIFORNIA DEPARTMENT OF WATER RESOURCES, INDICATES A RUNOFF FOR THE WATER YEAR OF 1,500,000 ACRE-Feet OR LESS, THE RELEASES AT THE POINTS REFERRED TO IN (D) MAY BE CONTINUED AT THE RATE OF 5 CUBIC FEET PER SECOND THROUGHOUT THE SUCCEEDING 12-MONTH PERIOD BEGINNING MAY 1: PROVIDED FURTHER, THAT ACCORDING TO THE STREAMFLOW FORECAST FOR THE AMERICAN RIVER AT FAIR OAKS AS GIVEN BY THE APRIL 1 BULLETIN OF THE CALIFORNIA DEPARTMENT OF WATER RESOURCES, THE RELEASES AT POINTS REFERRED TO IN (F) MAY BE MODIFIED THROUGHOUT THE SUCCEEDING 12-MONTH PERIOD BEGINNING MAY 1 AS INDICATED IN THE FOLLOWING SCHEDULE:

APRIL, FORECAST OF SEASONAL RUNOFF AT FAIR OAKS IN ACRE-Feet	RELEASE FROM CONTROL STRUCTURES REFERRED TO IN (F)	
	MAY 1 THROUGH OCTOBER 31 (cfs)	NOVEMBER 1 THROUGH APRIL 30 (cfs)
LESS THAN 2,000,000 BUT NOT LESS THAN 1,500,000	15	8
LESS THAN 1,500,000 BUT NOT LESS THAN 1,000,000	10	6
LESS THAN 1,000,000	5	5

- (G) THE LICENSEE SHALL RELEASE THROUGH A NEAR-STREAMBED OUTLET OF SLAB CREEK DAM THE FLOWS SPECIFIED IN THE FOLLOWING SCHEDULE AS MEASURED BY THE EXISTING U. S. GEOLOGICAL SURVEY GAUGING STATION LOCATED ABOUT ONE-EIGHTH OF A MILE BELOW THE SLAB CREEK DAMSITE OR AT SUCH NEW LOCATION AS MAY BE DETERMINED PURSUANT TO ARTICLE 7 OF FORM L-2 OF FEDERAL ENERGY REGULATION COMMISSION LICENSE NO. 2101.

FORECAST OF THE UNIMPAIRED
RUNOFF OF THE AMERICAN RIVER
(INFLOW TO FOLSOM), FOR THE
CURRENT WATER YEAR, OCTOBER 1
THROUGH SEPTEMBER 30, IN
ACRE-FEET. 1/

MINIMUM INSTANTANEOUS RELEASE
TO SOUTH FORK FROM SLAB CREEK
DAM IN CUBIC FEET PER SECOND

APRIL THRU JUNE	JULY THRU OCTOBER	NOVEMBER THRU MARCH
-----------------------	-------------------------	---------------------------

MORE THAN 2,000,000

75

35

20

LESS THAN 2,000,000 BUT
NOT LESS THAN 1,500,000

60

30

15

LESS THAN 1,500,000

25

25

15

1/ AS PRESENTED IN THE BULLETIN OF THE CALIFORNIA DEPARTMENT OF WATER RESOURCES, "WATER CONDITIONS IN CALIFORNIA", BEGINNING WITH THE MARCH 1 BULLETIN AND APPLYING IN TURN THE APRIL 1 AND MAY 1 BULLETINS AS THEY ARE ISSUED. THE MAY 1 BULLETIN SHALL APPLY UNTIL MARCH 1 BULLETIN OF THE SUCCEEDING YEAR IS ISSUED.

- (H) LICENSEE SHALL MAINTAIN, BY RELEASE THROUGH A NEAR-STREAMBED OUTLET OF BRUSH CREEK DAM, THE FOLLOWING SCHEDULE OF FLOWS: SAID FLOWS TO BE DETERMINED BY A STAFF GAUGE, SAID GAUGE TO BE LOCATED NOT MORE THAN ONE-QUARTER MILE BELOW BRUSH CREEK DAM. WHEN THE FORECAST OF THE UNIMPAIRED RUNOFF OF THE AMERICAN RIVER, (INFLOW TO FOLSOM), FOR THE CURRENT WATER YEAR, OCTOBER 1 THROUGH SEPTEMBER 30, IS MORE THAN 1,500,000 ACRE-FEET, MINIMUM INSTANTANEOUS RELEASE FROM BRUSH CREEK DAM SHALL BE 6 CUBIC FEET PER SECOND FROM NOVEMBER 1 THROUGH MAY 31 AND 3 CUBIC FEET PER SECOND FROM JUNE 1 THROUGH OCTOBER 31.

WHEN THE FORECAST OF THE UNIMPAIRED RUNOFF OF THE AMERICAN RIVER, (INFLOW TO FOLSOM), FOR THE CURRENT WATER YEAR, OCTOBER 1 THROUGH SEPTEMBER 30, IS LESS THAN 1,500,000 ACRE-FEET, MINIMUM INSTANTANEOUS RELEASE FROM BRUSH CREEK DAM SHALL BE 4 CUBIC FEET PER SECOND FROM NOVEMBER 1 THROUGH MAY 31 AND 2 CUBIC FEET PER SECOND FROM JUNE 1 THROUGH OCTOBER 31.

PROVIDED THAT THE STATED MINIMUM RELEASES MAY BE REDUCED TO EQUAL THE NATURAL FLOW IMMEDIATELY ABOVE BRUSH CREEK RESERVOIR IF SUCH FLOW IS LESS THAN THE AMOUNTS SPECIFIED.

THE FORECAST OF THE UNIMPAIRED RUNOFF OF THE AMERICAN RIVER, (INFLOW TO FOLSOM), SHALL BE AS PRESENTED IN THE BULLETIN OF THE CALIFORNIA DEPARTMENT OF WATER RESOURCES, "WATER CONDITIONS IN CALIFORNIA", BEGINNING WITH THE MARCH 1 BULLETIN AND APPLYING IN TURN TO THE APRIL 1 AND MAY 1 BULLETINS AS THEY ARE ISSUED. THE MAY 1 BULLETIN SHALL APPLY UNTIL THE MARCH 1 BULLETIN OF THE SUCCEEDING YEAR IS ISSUED.

LICENSEE, SACRAMENTO MUNICIPAL UTILITY DISTRICT, SHALL OPERATE ITS FACILITIES AND COORDINATE WITH PACIFIC GAS AND ELECTRIC COMPANY, OPERATOR OF CHILI BAR POWER-PLANT, IN ORDER THAT SAID CHILI BAR POWERPLANT OPERATOR MAY CONFORM WITH THE REQUIREMENTS OF FPC LICENSE 2101 WHICH PROVIDE THAT CHILI BAR DIVERSION DAM AND POWERPLANT SHALL BE OPERATED SO AS TO SMOOTH THE DOWNSTREAM DISCHARGE AND MAINTAIN STREAMFLOW. SAID REQUIREMENTS SPECIFICALLY PROVIDE THAT CHANGE OF CONTROLLABLE DISCHARGE SHALL BE GRADUAL AND AT NO GREATER RATE THAN WILL INCREASE OR DECREASE THE STAGE OF THE RIVER BY ONE FOOT IN ELEVATION DURING ANY ONE-HOUR PERIOD, SUCH CHANGES IN STAGE TO BE MEASURED AT A CONTROL POINT OF REPRESENTATIVE WIDTH DOWN-STREAM FROM CHILI BAR DAM BY THE STREAM GAGE INSTALLED UNDER THE SUPERVISION OF THE U. S. GEOLOGICAL SURVEY PURSUANT TO ARTICLE 7 OF FORM L-2 OF FPC LICENSE 2101; PROVIDED AT NO TIME SHALL THE FLOW PAST THE GAGING STATION BE LESS THAN 100 SECOND FEET.

THE INTEREST OF PACIFIC GAS AND ELECTRIC COMPANY IN THIS LICENSE IS LIMITED TO THE OPERATION OF CHILI BAR POWERHOUSE.

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD } ss.

CERTIFICATE 12108
APPLICATION 12624
PERMIT 10704
LICENSE 11074

I, Elaine Garrett, having custody
of the files and records of the State Water Resources Control Board, State of
California, do hereby certify that the attached License for Diversion and
Use of Water, dated December 4, 1980

is a true copy of the original on file in this office.

WITNESS my hand and the seal of the State Water Resources Control Board,
State of California, this 4th day of December, 1980

Elaine Garrett

Title Office Services Supervisor

WRCB 127 (8-68)
64379-383 8-72 2M OGP

END OF DOCUMENT

BOOK 1935 PAGE 490

STAFF RECOMMENDATION RE:

ISSUANCE OF WATER RIGHT LICENSE

AND ANY ASSOCIATED PETITION FOR CHANGES OR EXTENSION TO COVER YEAR OF MAXIMUM USE

PERMIT NO. 10704	DATE ISSUED 4-30-57	APPLICATION NO. 12624	DATE FILED 7-29-48
---------------------	------------------------	--------------------------	-----------------------

DESCRIPTION OF PERMITTED PROJECT

PERMITTEE: SMUD & PG&E

11074

SOURCE: Rubicon River, Unnamed Stream AKA Rock Bound Creek, South Fork Rubicon River, Gerle Creek

COUNTY: El Dorado

AMOUNT: 1,200 cubic feet per second
314,000 acre-feet

PURPOSE: Power

SEASON OF DIVERSION: January 1 - December 31 Direct
October 1 - July 31

Beneficial Use to be Completed by: 12-01-75

Project Reported as Completed on: Prior to 1975

LICENSE PROPOSAL IN ACCORDANCE WITH THE FOLLOWING CONFIRMED FACTS

AMOUNT: 1,200 cubic feet per second
226,900 acre-feet

PURPOSE: (If Change from Permitted Purpose is Requested) Power and Recreational

SEASON OF DIVERSION: NC

PLACE OF USE: (If Different from that in Permit) NC

POINT OF DIVERSION: (If Different from that in Permit) NC

The Project was last inspected on 10-16-70 by D. E. Carroll
(DATE)

CHECK FOR LICENSE

Application No. 12624 Permit No. 10704 Drafted by HWO Date 10/27/80
 Checked by _____ Date _____

Indicate by check mark that the following items are correctly shown on the license draft, according to latest available authentic information.

GENERAL

Application and permit numbers (✓)
 Ownership (Assignment to indicated owner in order and spelling correct) (✓)
 Address (latest known) (✓)
 Inspection date (Same as "having made proof as of") (1)

SOURCE

Name correct - no changes indicated in report or all changes cleared (✓)
 Tributary to - (Correct and carried out sufficiently) (✓)
 County correctly indicates county in which point of diversion located (✓)

PURPOSE

Are all purposes listed on license draft covered by permit or order (YES)
 If there are known uses not included, does report indicate that permittee does not wish to petition to have it included, if that is possible (✓)
 Permit number and priority (filing) date are correctly shown in draft (YES)

COMPUTATIONS

Calculations of amount upon which license based have been checked (✓)
 Any assumptions made in calculations above appear to be reasonable (✓)
 Amount limited by conduit () Amount available () Permit () Use (✓)
 Amount limited by reservoir ()
 Time of maximum use occurred after permit was issued (YES)

SEASON

Wording is correct, within permit season and based on reports or statements (✓)

POINT OF DIVERSION AND PLACE OF USE

Descriptions agree with corrected map (✓)
 Secondary uses (domestic, stockwatering, etc.) given specific location (✓)
 Is location within projected section (NO)

CLAUSES TO BE USED IN LICENSE

Rotation	(NO)	Maximum withdrawal	(NO)
Water Return	()	Rate of diversion to off-stream storage	(NO)
Combined amounts	()	Special clauses	(5)
Equal priority	()	Waste Water (for use in letter of transmittal)	(NO)

any clauses were omitted from license that were in permit, explain briefly

MAP

Type of map E Map has been altered or corrected as needed (NO)
 Located in Natl Forest Yes (✓) No () Name EL DORADO

REMARKS

- ① REPORT OF INSPECTION DATED 10-16-80; ADD'L DATA REC'D 5-30-80.
- ② RECREATION added under Sec 744
- ③
- ④ "E" MAP STILL SHOWS ~~THE~~ FUTURE JONES FORK PH AND CONDUIT FROM ICE HOUSE RESERVOIR.
- ⑤ Permit Terms 9a-9g revised to conform to FDC license terms.

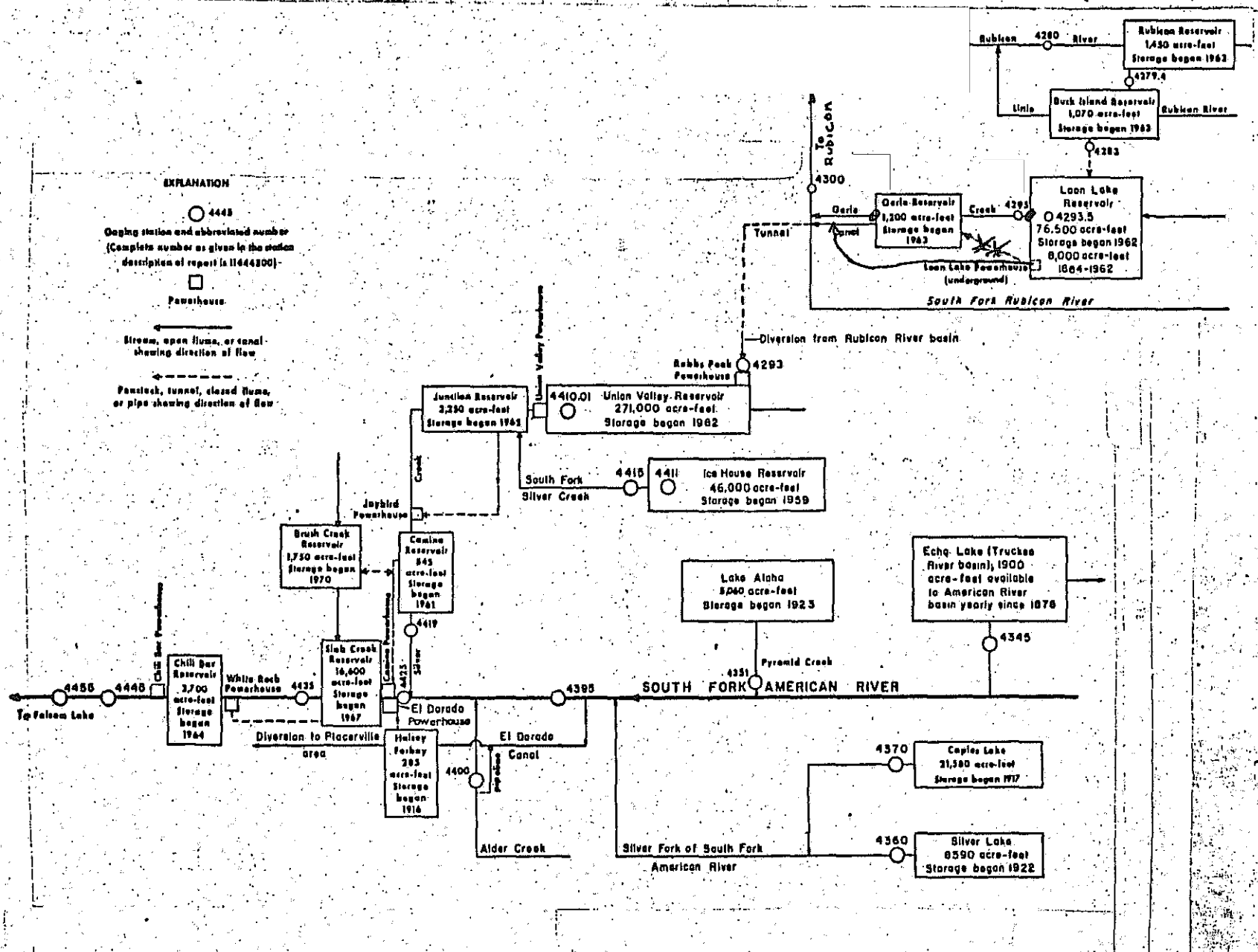


FIGURE 11.—Schematic diagram showing diversions and storage in South Fork American River basin.

CHECK FOR LICENSE

Application No. 12624 Permit No. 10704 Drafted by RLK Date 2-23-79
 Checked by _____ Date _____

Indicate by check mark that the following items are correctly shown on the license draft, according to latest available authentic information.

GENERAL

Application and permit numbers (✓)
 Ownership (Assignment to indicated owner in order and spelling correct) (✓)
 Address (latest known) (✓)
 Inspection date (Same as "having made proof as of") (✓)

SOURCE

Name correct - no changes indicated in report or all changes cleared (✓)
 Tributary to - (Correct and carried out sufficiently) (✓)
 County correctly indicates county in which point of diversion located (✓)

PURPOSE

Are all purposes listed on license draft covered by permit or order (✓)
 If there are known uses not included, does report indicate that permittee does not wish to petition to have it included, if that is possible (NA)
 Permit number and priority (filing) date are correctly shown in draft (✓)

COMPUTATIONS

Calculations of amount upon which license based have been checked (✓)
 Any assumptions made in calculations above appear to be reasonable (✓)
 Amount limited by conduit () Amount available () Permit (✓) Use (✓)
 Amount limited by reservoir (✓)
 Time of maximum use occurred after permit was issued (✓)

SEASON

Wording is correct, within permit season and based on reports or statements (✓)

POINT OF DIVERSION AND PLACE OF USE

Descriptions agree with corrected map (✓)
 Secondary uses (domestic, stockwatering, etc.) given specific location (NA)
 Is location within projected section (NO)

CLAUSES TO BE USED IN LICENSE

Rotation ()	Maximum withdrawal ()
Water Return ()	Rate of diversion to off-stream storage ()
Combined amounts ()	Special clauses <u>Permit terms #8 & 9</u> ()
Equal priority ()	Waste Water (for use in letter of transmittal) ()

any clauses were omitted from license that were in permit, explain briefly

NUNK; #9 has been awarded

MAPS

Type of map E Map has been altered or corrected as needed (✓)
 Located in Natl Forest Yes (✓) No () Name EL DOLADO

REMARKS

ON May 8, 1964 Amended ON May 8, 1964

Application No. 12624 Filed July 29, 1948 at 4:36 P. M.
(Applicant must not fill in the above blanks)

As AMENDED 2-13-58
APPLICATION TO APPROPRIATE UNAPPROPRIATED WATER

I, Sacramento Municipal Utility District
Name of applicant or applicants
of Sacramento County of Sacramento
Address
State of California, do hereby make application for a permit to appropriate the

following described unappropriated waters of the State of California, SUBJECT TO VESTED RIGHTS:

Source, Amount, Use and Location of Diversion Works

1. The source of the proposed appropriation is See supplement
Give name of stream, lake, etc., if named; if unnamed state nature of source and that it is unnamed

located in _____ County, tributary to _____

2. The amount of water which applicant desires to appropriate under this application is as follows:

(a) For diversion to be directly applied to beneficial use See supplement cubic feet per
second, to be diverted from _____ to _____ of each year.
Beginning date _____ Closing date _____

(b) For diversion to be stored and later applied to beneficial use _____ acre-feet
per annum, to be collected between _____ and _____ of each season.
Beginning date _____ Closing date _____

NOTE.—Answer (a) or (b) or both (a) and (b) as may be necessary. If amount under (a) is less than .025 cubic foot per second, state in gallons per day. Neither the amount nor the season may be increased after application is filed. If underground storage is proposed a special supplemental form will be supplied by the State Water Rights Board upon request.

3. The use to which the water is to be applied is power
Domestic, irrigation, power, municipal, mining, industrial, recreational
and appropriate to diversion purposes.

4. The point of diversion is to be located See supplement
State bearing and distance or coordinate distances from section or quarter section corner

being within the _____
State 40-acre subdivision of public land survey or projection thereof

of Section _____, T. _____, R. _____, B. & M., in the County of _____

5. The main conduit terminates in NE $\frac{1}{4}$ of SW $\frac{1}{4}$ of Sec. 25, T. 11 N., R. 10 E., M. D. B. & M.
at Chili Bar Dam.
State 40-acre subdivision of U. S. Government survey or projection thereof

Description of Diversion Works

NOTE.—An application cannot be approved for an amount grossly in excess of the estimated capacity of the diversion works.

6. Intake or Headworks (fill only those blanks which apply) See supplement

(a) Diversion will be made by pumping from _____
Sump, offset well, unobstructed channel, etc.

(b) Diversion will be by gravity, the diverting dam being _____ feet in height (stream bed to level of overflow); _____ feet long on top; and constructed of _____
Concrete, earth, brush, etc.

(c) The storage dam will be _____ feet in height (stream bed to spillway level); _____ feet long on top; have a freeboard of _____ feet, and be constructed of _____
Concrete, earth, etc.

7. Storage Reservoir See supplement
Name _____

The storage reservoir will flood lands in _____
Indicate section or sections, also 40-acre subdivisions unless shown upon map

It will have a surface area of _____ acres, and a capacity of _____ acre-feet. If reservoir has a capacity of 25 acre-feet or more fill in the following: Diameter of outlet pipe _____ inches; length _____ feet; difference in elevation from spillway level to highest point of outlet pipe _____ feet; fall in pipe _____ feet.

In case of insufficient space for answers in form, attach extra sheets at top of page 3 and cross reference.

AMENDED
SUPPLEMENT TO/ APPLICATION

Paragraph 1 - Source of Water

- (1) Rubicon River in El Dorado County, tributary of the Middle Fork of the American River.
- (2) Rock Bound Creek located in El Dorado County, tributary of the Rubicon River.
- (3) Gerle Creek located in El Dorado County, tributary of the South Fork of the Rubicon River.
- (4) South Fork of the Rubicon River located in El Dorado County, tributary of the Rubicon River.

SUPPLEMENT TO AMENDED APPLICATION

Paragraph 2 - Amount of Water to be Appropriated

<u>Source</u>	<u>Direct Diversion (sec. ft.)</u>	<u>Diversion To Storage (acre ft.)</u>
(1) Rubicon River	500	75,000
(2) Rock Bound Creek	200	14,000
(3) Gerle Creek	325	130,000
(4) South Fork Rubicon River	<u>175</u>	<u>95,000</u>
	1,200	314,000

Direct diversion will be made between January 1 and December 31 of each year.

Diversion to storage will be between October 1 and July 31 of each season. Amounts include refill. Storage yields are considered independent of one another and all may not reach maximum amounts in any one season.

SUPPLEMENT TO AMENDED APPLICATION

Paragraph 4 - Points of Diversion and Rediversion

<u>Diversion</u>	<u>Bearing To Section Corner</u>	<u>Section Corner</u>	<u>Diversion Located Within</u>
(1) Rubicon River	S. 4° 30' W. 1850 ft.	SW Cor. Sec. 9 T 13 N, R 16 E	NW¼ of SW¼ of said Section 9
(2) Rockbound Creek	N.27°20' W. 2050 ft.	NW Cor. Sec. 6 T 13 N, R 16 E	SW¼ of NW¼ of said Section 6
(3) Gerle Creek			
A. Loon Lake Dam	N.3°59'36" E.2083.30 ft.	NE Cor. Sec. 5 T 13 N, R 15 E	SE¼ of NE¼ of said Section 5
B. Gerle Dam	N.89°53'06" E. 2166.79 ft.	SE Cor. Sec. 15 T 13 N, R 14 E	Lot 14 of said Section 15
(4) South Fork Rubicon River			
A. Robbs Peak Dam	N.42°28'52" E. 2037.57 ft.	NE Cor. Sec. 27 T. 13 N, R 14 E	SW¼ of NE¼ of said Section 27
(5) Silver Creek			
A. Union Valley Dam	S.12°28'13" W. 712.79 ft.	SW Cor. Sec. 20 T 12 N, R 14 E	SW¼ of SW¼ of said Section 20
B. Junction Dam	S.47°16'41" W. 1986.05 ft.	SW Cor. Sec. 30 T 12 N, R 14 E	SW¼ of SW¼ of said Sec. 30
C. Camino Dam	N.12°38'03" W.2856.36 ft.	NW Cor. Sec. 4 T 11 N, R 13 E	Lot 9 of said Sec. 4
(6) Brush Creek	S.35°00' E. 2450 ft.	SE Cor. Sec. 10 T 11 N, R 12 E	NW¼ of SE¼ of said Sec. 10
(7) South Fork American River			
A. Slab Creek Dam	S.35°39'55" W.3622.27 ft.	SW Cor. Sec. 25 T 11 N, R 11 E.	SE¼ of NW¼ of Section 25
B. Chili Bar Dam	S.52°36'08" W.3163.80 ft.	SW Cor. Sec. 25 T 11 N, R 10 E	NE¼ of SW¼ of said Section 25

Paragraph 4 - Points of Diversion and Rediversion (cont'd)

Water from Rubicon River is diverted by Rubicon Dam through Rockbound Tunnel to Rockbound Lake. There it will comeingle with water from Rockbound Creek and together be delivered through Buck Island Lake Reservoir and Buck-Loon Tunnel to Loon Lake Reservoir. It is then comingled with water from Gerle Creek and released through a power tunnel to Loon Lake Powerhouse. Water from Loon Lake Powerhouse is then comingled with additional water from Gerle Creek and South Fork Rubicon River at Robbs Peak Dam and diverted by Robbs Peak Tunnel through Robbs Peak Powerhouse into Union Valley Reservoir where it comingles with water from South Fork Silver Creek and Silver Creek.

From Union Valley Reservoir these waters are released through Union Valley Powerhouse to Silver Creek, immediately rediverted by Junction Dam through Jaybird Power Tunnel and Powerhouse to Silver Creek, immediately rediverted by Camino Dam and a portion of this water is regulated at Brush Creek Reservoir and released through the Camino Power Tunnel and Powerhouse to the South Fork American River, rediverted by Slab Creek Dam through White Rock Power Tunnel and Powerhouse to the South Fork American River and thence rediverted at Chili Bar Dam through the Chili Bar Powerhouse to the South Fork American River.

SUPPLEMENT TO AMENDED APPLICATION

Paragraph 6 - Dimensions of Dams

<u>Dam</u>	<u>Height Ft. (*)</u>	<u>Crest Length (Ft.)</u>	<u>Surface Area (acres)</u>	<u>Gross Capacity (ac.ft.)</u>	<u>Type</u>
1. Rubicon	31	1140	108	1,750	Conc. Gravity
2. Buck Island	32	540	86	1,330	Conc. Gravity
3. Loon Lake	100	3480	1450	76,500	Rock Fill
4. Gerle Creek	70	395	57	1,000	Conc. Gravity
5. Robbs Peak	37	275	2	50	Conc. Gravity
6. Union Valley	428	1860	2860	271,000	Earth Fill
7. Junction	168	520	64	3,250	Conc. Arch
8. Camino	118	440	17	845	Conc. Arch
9. Brush Creek	180	450	20	1,260	Earth Fill
10. Slab Creek	230	880	247	16,600	Conc. Arch
11. Chili Bar	96	388	140	3,700	Conc. Gravity

(*) Height from foundation to crest of dam.

AMENDED
SUPPLEMENT TO APPLICATION

Paragraph 7 - Lands Flooded

The surface area and capacity of each of the two storage reservoirs under this application are given by the tabulation as shown in Paragraph 6.

The sections within which land will be flooded by each of the storage reservoirs are as follows and as shown on map filed in support of application:

- (1) Loon Lake - Secs. 33 and 34, T 14 N, R 15 E, MDB&M
Secs. 3, 4, 5, 7, 8, 9 and 17, T 13 N,
R 15 E, MDB&M
- (2) Union Valley - Secs. 11, 13, 14, 15, 16, 17, 20, 21, 22
23, 24, 26, 27, 28 and 29, T 12 N, R 14 E,
MDB&M

Paragraphs 8 and 9 - Conduit System

The dimensions and capacities of the main conduits are as follows:

	<u>Size</u>	<u>Length (ft.)</u>	<u>Grade</u>	<u>Capacity (sec.ft.)</u>	<u>Type</u>
A. <u>Tunnels</u>					
1. Rockbound	13'	1,170	0.0030	1,050	80% unlined 20% conc. lined
2. Buck-Loon	13'	8,230	0.0045	1,200	90% unlined 10% conc. lined
3. Loon Lake PH (underground)	11'	1,200	0.0025	1,120	Conc. lined HS
	11'	1,400	1.1917	1,120	Conc. & steel lined
	16'	18,300	0.0020	1,120	Unlined HS Tailrace Tunnel (free flow)
4. Gerle Canal	18' Bottom	10,460	0.0002	1,120	Unlined canal
5. Robbs Peak	13'	16,920	0.0020	1,120	80% unlined 20% conc. lined
6. Union Valley	11'	2,000	0.0025	1,450	Conc. & steel lined
7. Jaybird	14'	21,300	0.0025	1,330	80% unlined 20% conc. lined
8. Camino	14'	26,600	0.0025	2,050	80% unlined 20% conc. lined
9. Brush Creek	14'	5,000	0.0025	1,200	80% unlined 20% conc. lined
10. White Rock	24'	25,000	0.0025	3,500	80% unlined 20% conc. lined
B. <u>Penstocks</u>					
1. Robbs Peak	120"/84"	2,700	0.14	1,120	Single steel pipe
2. Union Valley	120"/84"	1,420	0.02	1,450	Single steel pipe
3. Jaybird	132"/111"	2,500	0.68	1,330	Single steel pipe
4. Camino	144"/120"	1,600	0.91	2,050	Single steel pipe
5. White Rock	180"	1,120	0.67	3,500	Single steel pipe
6. Chili Bar	169"	75	0.31	1,900	Single steel pipe

SUPPLEMENT TO AMENDED APPLICATION

Paragraphs 11 and 14 - Place of Use

Water appropriated will be utilized through power plants at the following locations for the production of electrical energy required for domestic, commercial, and industrial use within the Sacramento Municipal Utility District.

Power Plant	Max. Static Head (ft.)	Max. Flow (Sec.ft.)	Max. Theoretical HP (H.P.)	Location
1. Loon Lake	1,145	1,120	145,730	NE $\frac{1}{4}$, NE $\frac{1}{4}$, Sec. 18 T 13 N, R 15 E, MDB&M
2. Robbs Peak	356	1,120	45,310	NE $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 11 T 12 N, R 14 E, MDB&M
3. Union Valley	420	1,450	69,200	SW $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 20 T 12 N, R 14 E, MDB&M
4. Jaybird	1,530	1,330	231,230	NE $\frac{1}{4}$, NW $\frac{1}{4}$, Sec. 4, T 11 N, R 13 E, MDB&M
5. Camino	1,065	2,050	248,100	SW $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 15 T 11 N, R 12 E, MDB&M
6. White Rock	852.5	3,500	339,060	NW $\frac{1}{4}$, NE $\frac{1}{4}$, Sec. 31, T 11 N, R 11 E, MDB&M
7. Chili Bar	61	1,900	13,170	NE $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 25, T 11 N, R 10 E, MDB&M
Total	5,429.5		1,091,800	

DO NOT WRITE IN THIS SPACE
ATTACH EXTRA SHEETS HERE

15. Municipal Use. This application is made for the purpose of serving _____
Name city or cities, town or towns. Urban areas only
_____ having a present population of _____

The estimated average daily consumption during the month of maximum use at the end of each five-year period until the full amount applied for is put to beneficial use is as follows:

16. Mining Use. The name of the mining property to be served is _____
Name of claim
_____ and the nature of the mines is _____
Gold placer, quartz, etc.

The method of utilizing the water is _____

It is estimated that the ultimate water requirement for this project will be _____
Cubic feet per second, gallons per minute. State basis of estimate

The water ^{will} be polluted by chemicals or otherwise _____
will not Explain nature of pollution, if any
and it ^{will} be returned to _____ in _____ of
will not Name stream State 40-acre subdivision

Sec. _____, T. _____, R. _____, B. & M. _____

17. Other Uses. The nature of the use proposed is _____
Industrial, recreational, domestic, stockwatering, fish culture, etc.

State basis of determination of amount needed. _____
Number of persons, residences, area of domestic lawns and gardens, number and kind of stock, type

_____ industrial use, and unit requirements

General

18. Are the maps as required by the Rules and Regulations filed with Application? yes If not, state specifically the time required for filing same. _____
Yes or No

19. Does the applicant own the land at the proposed point of diversion? --- If not, give name and address of owner and state what steps have been taken to secure right of access thereto. See statement in petition
Yes or No

20. What is the name of the post office most used by those living near the proposed point of diversion?

Georgetown, Camino and Placerville, California

21. What are the names and addresses of claimants of water from the source of supply below the proposed point of diversion? See records of State Water Rights Board

[SIGNATURE OF APPLICANT]

SACRAMENTO MUNICIPAL UTILITY DISTRICT

and J. Hansen
General Mgr. & Chief Engr.

APPLICANT MUST NOT FILL IN BLANKS BELOW

PERMIT No. 10704

This is to certify that the application of which the foregoing is a true and correct copy has been considered and approved by the State Water Rights Board SUBJECT TO VESTED RIGHTS and the following limitations and conditions:

1. The amount of water appropriated shall be limited to the amount which can be beneficially used, and shall not exceed one thousand two hundred (1200) cubic feet per second by direct diversion to be diverted from January 1 to December 31 of each year, and three hundred fourteen thousand (314,000) acre-feet per annum by storage to be collected from about October 1 of each year to about July 31 of the succeeding year; all as more explicitly set forth in Paragraph 2 of this approved application.

9. Permittee shall maintain the following minimum stream flows in the interest of fish life.

a. In the Rubicon River below Rubicon River Diversion Dam; six cubic feet per second or the natural flow, whichever is less, in addition to the 491 acre-feet stored and released from streamflow maintenance dams constructed by the California Department of Fish and Game on Lakes Clyde, Middle Velma, Schmidell, and Lois.

b. In the outlet stream from Buck Island Lake; one cubic foot per second at all times, in addition to such amounts and at such rates as the California Department of Fish and Game may determine from the 633 acre-feet, stored and regulated by the Department in Rockbound, Buck Island, and Highland Lakes.

c. In Gerle Creek, below Loon Lake Dam; eight cubic feet per second at all times.

d. In South Fork Rubicon River below Sawmill Diversion; five cubic feet per second during the period May 1 to October 31, inclusive, and two and one-half cubic feet per second during the period November 1 to April 30, inclusive.

e. In Silver Creek between Union Valley Dam and Junction Reservoir, no minimum flow required.

f. In Silver Creek below Junction Dam (Jaybird Powerhouse Intake Dam) and below Camino Intake Dam;

(1) For those years the April 1 forecast of the California Department of Water Resources for the unimpaired runoff of the American River at Fair Oaks is 2,000,000 acre-feet or greater; 20 c.f.s. during the period May 1 to October 31, inclusive, and 10 c.f.s during the period November 1 to April 30, inclusive.

(2) For those years the April 1 forecast of the California Department of Water Resources for the unimpaired runoff of the American River at Fair Oaks is 1,500,000 acre-feet or greater, but less than 2,000,000 acre-feet; 15 c.f.s. during the period May 1 to October 31, inclusive, and 8 c.f.s during the period November 1 to April 30, inclusive.

(3) For those years when the April 1 forecast of the California Department of Water Resources for the unimpaired runoff of the American River at Fair Oaks is greater than 1,000,000 acre-feet, but less than 1,500,000 acre-feet; 10 c.f.s during the period May 1 to October 31, inclusive, and 6 c.f.s during the period November 1 to April 30, inclusive.

(4) For those years when the April 1 forecast of the California Department of Water Resources for the unimpaired runoff of the American River at Fair Oaks is less than 1,000,000 acre-feet; 5 c.f.s. during the following period of May 1 to April 30, inclusive.

Provided that all streamflows specified above shall be measured at a point not to exceed one-fourth mile below the indicated project structure.

Provided further, that minimum streamflows maintained by the Permittee as stated in Permit term 9(d) during the period May 1 to October 31, inclusive, may be reduced by one-half in those years in which the April 1 forecast of the Department of Water Resources for the unimpaired runoff for the American River at Fair Oaks is less than 1,500,000-acre-feet.

g. Provided further that the Permittee shall release from its Slab Creek Reservoir sufficient water to maintain a flow of at least 30 c.f.s (in addition to the releases from New Chute Camp Diversion Dam made by Pacific Gas and Electric Company under Article 27 (a) of the F.P.C. license for Project No. 78) as measured at the existing gaging station approximately one mile downstream from New Chute Camp Diversion Dam at all times when such water would have been available under pre-project conditions in excess of the Pacific Gas and Electric Company's diversion rights at New Chute Camp Diversion Dam; provided, however, that permittee shall not be required to make such releases out of water which it has itself stored or imported from another watershed, and provided further that in dry years the figure "15 c.f.s." shall be deemed substituted for the figure "30 c.f.s." in the foregoing clause. A dry year within the meaning of

...the water year unimpaired runoff of the American River at Fair Oaks, California, as estimated by the State of California on May 1, will be 1,500,000 acre-feet, or less. The dry year schedule shall apply over the twelve-month period commencing on June 1, thereafter.

h. Provided further that the Permittee shall construct below its White Rock powerhouse an afterbay dam providing a storage capacity of not less than 400 a.f. and, to the extent permitted under its F.P.C. license, will schedule releases from that afterbay dam in whatever manner is most agreeable to State and Federal agencies having the responsibility for the conservation and preservation of fish life and other recreational values.

2. The maximum amount herein stated may be reduced in the license if investigation so warrants.
3. Actual construction work shall begin on or before July 1, 1959, and shall thereafter be prosecuted with reasonable diligence, and if not so commenced and prosecuted this permit may be revoked.
4. Said construction work shall be completed on or before December 1, 1967.
5. Complete application of the water to the proposed use shall be made on or before December 1, 1975.
6. Progress reports shall be filed promptly by permittee on forms which will be provided annually by the State Water Rights Board until license is issued.
7. All rights and privileges under this permit including method of diversion, method of use and quantity of water diverted are subject to the continuing authority of the State Water Rights Board in accordance with law and in the interest of the public welfare to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said water and to prevent unreasonable interference with vested rights.
8. No diversion or use of water shall be made under the permits which will in any way interfere with diversion or use of water for irrigation or domestic purposes, whether such higher uses are made either prior or subsequent rights.

(For Permit term No. 9, see attached sheets.)

This permit is issued and permittee takes it subject to the following provisions of the Water Code:

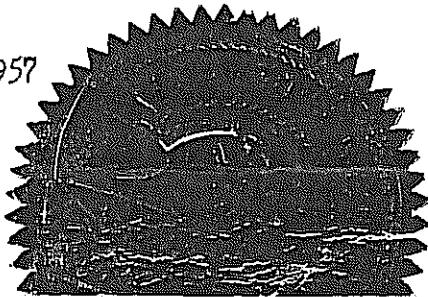
Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code), but no longer.

Section 1391. Every permit shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a permit is issued takes it subject to the conditions therein expressed.

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Dated: April 30, 1957

STATE WATER RIGHTS BOARD



By

Leslie C. Jopson
Leslie C. Jopson
Chief Engineer

15. Municipal Use. This application is made for the purpose of serving _____
Name city or cities, town or towns. Urban areas only
_____ having a present population of _____

The estimated average daily consumption during the month of maximum use at the end of each five-year period until the full amount applied for is put to beneficial use is as follows:

16. Mining Use. The name of the mining property to be served is _____
Name of claim
_____ and the nature of the mines is _____
Gold placer, quartz, etc.

The method of utilizing the water is _____

It is estimated that the ultimate water requirement for this project will be _____
Cubic feet per second, gallons per minute. State basis of estimate

The water ^{will} be polluted by chemicals or otherwise _____
will not Explain nature of pollution, if any

and it ^{will} be returned to _____ in _____ of
will not Name stream State 40-acre subdivision

Sec. _____, T. _____, R. _____, B. & M. _____

17. Other Uses. The nature of the use proposed is _____
Industrial, recreational, domestic, stockwatering, fish culture, etc.

State basis of determination of amount needed. _____
Number of persons, residences, area of domestic lawns and gardens, number and kind of stock, type

Industrial use, and unit requirements.

General

18. Are the maps as required by the Rules and Regulations filed with Application? Yes Yes or No. If not, state specifically the time required for filing same _____

19. Does the applicant own the land at the proposed point of diversion? No Yes or No. If not, give name and address of owner and state what steps have been taken to secure right of access thereto. Right of access will be secured

20. What is the name of the post office most used by those living near the proposed point of diversion?
Georgetown, Camino and Placerville, California

21. What are the names and addresses of claimants of water from the source of supply below the proposed point of diversion? From Loon Lake and Gerle Creek:
Georgetown Divide Public Utility District, Georgetown, California

From North Fork of American:

North Fork Ditch Company, Forum Bldg., Sacramento

[SIGNATURE OF APPLICANT]

SACRAMENTO MUNICIPAL UTILITY DISTRICT
James E. McCaffrey
Gen. Mgr. & Chief Engineer

STATE OF CALIFORNIA - THE RESOURCES AGENCY
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS
77 CADILLAC DRIVE
SACRAMENTO, CALIFORNIA 95804

FILE

24 8 34 AM '80

REQUEST FOR LICENSE

DIV. OF WATER RIGHTS
SACRAMENTO

APPLICATION 12624

PERMIT 10704

SUBJECT TO APPROVAL BY THE STATE WATER RESOURCES CONTROL BOARD

SACRAMENTO MUNICIPAL UTILITY DISTRICT AND PACIFIC GAS AND ELECTRIC COMPANY
P. O. BOX 15830, SACRAMENTO, CALIFORNIA 95813

HAVING MADE PROOF AS OF OCTOBER 16, 1970 AND (THE DATE OF INSPECTION)
MAY 30, 1980

HEREBY REQUEST LICENSE ACTION AS LISTED BELOW:

ACCORDING TO THE BEST KNOWLEDGE AND BELIEF OF THE UNDERSIGNED, A RIGHT HAS BEEN
ESTABLISHED TO USE OF THE WATERS OF

(1) RUBICON RIVER, (2) UNNAMED STREAM (AKA ROCKBOUND CREEK AND LITTLE RUBICON RIVER),
(3A)(3B) GERLE CREEK AND (4) SOUTH FORK RUBICON RIVER IN EL DORADO COUNTY

TRIBUTARY TO (1) MIDDLE FORK AMERICAN RIVER, (2)(4) RUBICON RIVER, AND
(3A)(3B) SOUTH FORK RUBICON RIVER

FOR THE PURPOSE OF: POWER USE

UNDER PERMIT 10704 THE PRIORITY OF WHICH DATES FROM JULY 29, 1948

BY BENEFICIAL USE IN THE AMOUNT OF: (A) ONE THOUSAND TWO HUNDRED (1,200) CUBIC FEET
PER SECOND BY DIRECT DIVERSION, TO BE DIVERTED FROM JANUARY 1 TO DECEMBER 31 OF EACH
YEAR AS FOLLOWS:

POINT OF DIVERSION (1) - 500 CUBIC FEET PER SECOND
POINT OF DIVERSION (2) - 200 CUBIC FEET PER SECOND
POINTS OF DIVERSION (3A)(3B)(4) - 500 CUBIC FEET PER SECOND
(NOT TO EXCEED 325 CUBIC FEET PER SECOND FROM (3A) AND (3B) AND 175 CUBIC FEET
PER SECOND FROM (4); AND

(B) TWO HUNDRED TWENTY-SIX THOUSAND NINE HUNDRED (226,900) ACRE-Feet PER ANNUM BY
STORAGE, TO BE COLLECTED FROM ALL SOURCES FROM OCTOBER 1 OF EACH YEAR TO JULY 31 OF
THE SUCCEEDING YEAR AS FOLLOWS:

LOON LAKE - 92,000 ACRE-Feet PER ANNUM
UNION VALLEY RESERVOIR - 141,500 ACRE-Feet PER ANNUM

THE TOTAL AMOUNT OF WATER TO BE APPROPRIATED IN ANY ONE SEASON BY COLLECTION TO STORAGE
IN BOTH RESERVOIRS SHALL NOT EXCEED TWO HUNDRED TWENTY-SIX THOUSAND NINE HUNDRED
(226,900) ACRE-Feet PER ANNUM. THE TOTAL AMOUNT OF WATER TO BE APPROPRIATED BY DIRECT
DIVERSION AND COLLECTION TO STORAGE SHALL NOT EXCEED TWO HUNDRED EIGHTY-ONE THOUSAND
ONE HUNDRED (281,100) ACRE-Feet PER YEAR. THE TOTAL AMOUNT OF WATER TO BE PLACED TO
BENEFICIAL USE (FLOW THROUGH ROBBS PEAK POWERHOUSE) SHALL NOT EXCEED TWO HUNDRED FIFTY
THOUSAND (250,000) ACRE-Feet PER YEAR.

THE POINTS OF DIVERSION OF SUCH WATER ARE LOCATED

(1) RUBICON RIVER

RUBICON DIVERSION DAM - NORTH 4°30' EAST 1,850 FEET FROM SW CORNER OF SECTION 9, T13N, R16E, MDB&M, BEING WITHIN NW1/4 OF SW1/4 OF SAID SECTION 9,

(2) UNNAMED STREAM (AKA ROCKBOUND CREEK AND LITTLE RUBICON RIVER)

BUCK ISLAND DAM - SOUTH 27°20' EAST 2,050 FEET FROM NW CORNER OF SECTION 6, T13N, R16E, MDB&M, BEING WITHIN SW1/4 OF NW1/4 OF SAID SECTION 6,

(3) GERLE CREEK

(A) LOON LAKE DAM - SOUTH 3°59'36" WEST 2,083.30 FEET FROM NE CORNER OF SECTION 5, T13N, R15E, MDB&M, BEING WITHIN SE1/4 OF NE1/4 OF SAID SECTION 5,

(B) GERLE DAM - SOUTH 89°53'06" WEST 2,166.79 FEET FROM SE CORNER OF SECTION 15, T13N, R14E, MDB&M, BEING WITHIN LOT 14 OF SAID SECTION 15, AND

(4) SOUTH FORK RUBICON RIVER

ROBBS PEAK DAM - SOUTH 42°28'52" WEST 2,037.57 FEET FROM NE CORNER OF SECTION 27, T13N, R14E, MDB&M, BEING WITHIN SW1/4 OF NE1/4 OF SAID SECTION 27.

THE POINTS OF REDIVERSION OF SUCH WATER ARE LOCATED AS FOLLOWS:

(5) SILVER CREEK

(A) UNION VALLEY DAM - NORTH 12°28'13" EAST 712.79 FEET FROM SW CORNER OF SECTION 20, T12N, R14E, MDB&M, BEING WITHIN SW1/4 OF SW1/4 OF SAID SECTION 20,

(B) JUNCTION DAM - NORTH 47°16'41" EAST 1,986.05 FEET FROM SW CORNER OF

SECTION 30, T12N, R14E, MDB&M, BEING WITHIN SW1/4 OF SW1/4 OF SAID SECTION 30,

(C) CAMINO DAM - SOUTH 12°38'03" EAST 2,856.36 FEET FROM NW CORNER OF SECTION 4, T11N, R13E, MDB&M, BEING WITHIN LOT 9 OF SAID SECTION 4,

(6) BRUSH CREEK DAM - NORTH 35°00' WEST 2,450 FEET FROM SE CORNER OF SECTION 10, T11N, R12E, MDB&M, BEING WITHIN NW1/4 OF SE1/4 OF SAID SECTION 10,

(7) SOUTH FORK AMERICAN RIVER

(A) SLAB CREEK DAM - NORTH 35°39'55" EAST 3,622.27 FEET FROM SW CORNER OF SECTION 25, T11N, R11E, MDB&M, BEING WITHIN SE1/4 OF NW1/4 OF SAID SECTION 25, AND

(B) CHILI BAR DAM - NORTH 52°36'08" EAST 3,163.80 FEET FROM SW CORNER OF SECTION 25, T11N, R10E, MDB&M, BEING WITHIN NE1/4 OF SW1/4 OF SAID SECTION 25.

DESCRIPTION OF THE LANDS OR THE PLACE OF USE WHERE SUCH WATER IS PUT TO BENEFICIAL USE IS AS FOLLOWS:

LOON LAKE POWER PLANT	- WITHIN NE1/4 OF NE1/4 OF SECTION 18, T13N, R15E, MDB&M.
ROBBS PEAK POWER PLANT	- WITHIN NE1/4 OF SW1/4 OF SECTION 11, T12N, R14E, MDB&M.
UNION VALLEY POWER PLANT	- WITHIN SW1/4 OF SW1/4 OF SECTION 20, T12N, R14E, MDB&M.
JAYBIRD POWER PLANT	- WITHIN NE1/4 OF NW1/4 OF SECTION 4, T11N, R13E, MDB&M.
CAMINO POWER PLANT	- WITHIN SW1/4 OF SE1/4 OF SECTION 15, T11N, R12E, MDB&M.
WHITE ROCK POWER PLANT	- WITHIN NW1/4 OF NE1/4 OF SECTION 31, T11N, R11E, MDB&M.
CHILI BAR POWER PLANT	- WITHIN NE1/4 OF SW1/4 OF SECTION 25, T11N, R10E, MDB&M.

CLAUSES REQUIRED PERMIT TERMS 7, 8, 9A TO 9I INCL., AS AMENDED 6/29/62 AND 1/8/65.

THIS REQUEST FOR LICENSE IS MADE SUBJECT TO BOARD APPROVAL OF ANY PETITION NOTED ABOVE AND, IF ANY REDUCTION IN AMOUNT, SEASON, OR LAND DESCRIPTION BECOMES NECESSARY WHEN THESE ROUGH CALCULATIONS ARE CHECKED, THE OWNER WILL BE NOTIFIED AND ALLOWED 30 DAYS WITHIN WHICH TO PROTEST SUCH CHANGES.

PLEASE NOTE BEFORE SIGNING:

A LICENSE IS THE FINAL CONFIRMATION OF THE WATER RIGHT AND AMOUNTS AND SEASON AS LIMITED BY THE LICENSE CANNOT BE INCREASED. EXCEPT AS AUTHORIZED BY THE LICENSE, ALL OTHER RIGHTS UNDER THE PERMIT ARE EXTINGUISHED.

SIGNATURE

Wm. C. Walbridge

PERMITTEE OR HIS REPRESENTATIVE

DATE

OCT 22 1980

INSPECTED BY:

L. C. Spencer & C. C. Cawell

CHECKED BY:

Ernest M. Miller

SENIOR ENGINEER

J16) 920-6151

MAR 3 1980

In Reply Refer
to: 341:WCS:12323

Sacramento Municipal Utility District
1708 - 59th Street
Box 15830
Sacramento, CA 95818

Gentlemen:

PERMITS 10703 AND 10704 (APPLICATIONS 12323 AND 12624) UPPER AMERICAN RIVER
PROJECT IN EL DORADO COUNTY

In connection with our license processing, we are currently reviewing the calculations of amounts of water used and the Requests for Licenses submitted by the District in 1978 for the above permits. We have encountered some problems and apparent errors, so we wish to redraft the license requests and resubmit them for your approval. This may also give the District the opportunity to review their water use records to determine if any of the maximum diversion amounts previously presented were exceeded during the drought and post-drought periods.

The following is a summary of some of our preliminary findings with regard to the amounts of water to appear in the license:

Permit 10704

1. The total amount for direct diversion (1200 cfs) shown in the license request should be the maximum simultaneous diversion from all sources over a period of 14 days, rather than the sum of the various individual maximums. Please advise us of which period the District wishes to use for this calculation, or provide your calculations for our review.
2. Records for the period June 5 through June 18, 1974 substantiate the District's direct diversion of 585 cfs (14 day average) from the Rubicon River. We can license for the permitted 500 cfs, but wish to point out that it appears the District exceeded its rights for this diversion, as none of the water apparently was placed in storage in either Loon Lake or Union Valley Reservoir.
3. Average diversion of 786 cfs through the Buck-Loon tunnel during the period mentioned above will allow licensing of the permitted 200 cfs from Rockbound Creek (786 less 585 cfs).

MAR 3 1980

4. Storage records for Union Valley Reservoir show that most of the 500 cfs diverted during the period May 8 through May 21, 1973 from South Fork Rubicon River and Gerle Creek was diversion to offstream storage rather than direct diversion. Please advise us of another period of use for this calculation. If the water level in Union Valley Reservoir is rising, we will need daily records of flow through the Union Valley powerhouse to prorate the water being placed in storage, to be subtracted from the water diverted through Robbs Peak Powerhouse for a direct diversion amount. We also wonder if flow records are available which would enable us to determine how much water came from Gerle Creek and how much came from the South Fork Rubicon River.
5. With regard to storage under Permit 10704, we wish to recalculate the various amounts. The combined amount for storage, 313,190 acre-feet, shown in the license request was not collected in the same season, and we could find no basis for the storage amounts (75,000 afa from Rubicon River, for example) from the individual sources. We propose to show the maximum overall amount collected to storage in one season from all sources under this permit (in both Loon Lake and Union Valley Reservoirs), plus the maximum individual amounts, as in the permit. The individual amounts need not be maximized in any one year, and their total may very likely exceed the overall amount. The license would be set up similar to the permit, with the combined amounts in the main paragraph and the individual maximums set forth in a table below.

Reservoir inflow-outflow studies must be made to separate the storage between sources and for the case of Union Valley Reservoir, to separate water between Permits 10703 and 10704. Please advise us of the particular seasons in which total diversion to storage under Permit 10704 was maximized, and also the periods for maximum collection from each of the individual sources: Rubicon River, Rockbound Creek, Gerle Creek and South Fork Rubicon River. We can then make appropriate calculations, or review your calculations, if you wish. The records published by the USGS will be sufficient for the most part for us to make the calculations with the exception that we may need records of flows through Loon Lake and Union Valley Powerhouses.

Permit 10703

1. Since Jones Fork Powerhouse was not constructed, and there is no powerhouse on the Ice House Reservoir outlet works, we believe there has been no direct diversion from South Fork Silver Creek. Ice House Reservoir acts as a storage facility only, water that passes through is not taken under control until it reaches Silver Creek at Junction Reservoir.
2. We need records of discharge through the Union Valley Powerhouse during the period May 28 to June 10, 1974, inclusive to verify the maximum direct diversion of 649.3 cfs claimed at Union Valley dam. Also, we wish to point out that this 649.3 cfs includes 400 cfs authorized by License 10495 (Application 14983). We can either license this filing for 249.3 cfs and leave the 400 cfs with License 10495 (lesser priority) or license this filing for 400 cfs and reduce the Silver Creek portion of License 10495 to 249.3 cfs. Please advise.

MAR 3 1980

3. As with Permit 10704, in the main body of the paragraph describing the amount of water to be diverted, we wish to show the maximum collected to storage in both Union Valley and Ice House Reservoirs in any one year. We would then show separate maximum amounts (could be in separate years) in each of these reservoirs in a supplemental table.

We have been able to verify collection of 49,810 acre-feet during 1968-69 in Ice House Reservoir, an amount slightly higher than the amount shown in your December 1, 1975 letter. The USGS records show a collection of 265,100 acre-feet during 1962-63 in Union Valley Reservoir but we must subtract water imported through the Robbs Peak tunnel (including releases from the old Loon Lake in October 1962 when the dam was dismantled). We calculate that 104,072 acre-feet was imported between October 1, 1962 and June 9, 1963 when Union Valley was being first filled. However, we need releases through Union Valley Powerhouse for this period to prorate how much of this 104,072 acre-feet was placed into storage.

Please advise in what year total collection to storage was maximized for Permit 10703, and also if there were other years when collection exceeded the individual amounts mentioned above.

In licenses for direct diversion, the Board requires that a term be included limiting the total annual use, "the maximum amount diverted under this license shall not exceed _____ acre-feet per year". For storage licenses, the term states, "the maximum withdrawal in any one year shall not exceed _____ acre-feet". This limitation was included in the license requests which you previously approved. However, for your projects with both direct diversion and storage features, the appropriate limitations are as follows: "The total amount of water to be taken from the sources (direct diversions plus collections to storage) shall not exceed _____ acre-feet per year", and "the total amount of water to be placed to beneficial use (direct diversions plus withdrawals from storage) shall not exceed _____ acre-feet per year".

We propose to place such terms in each of the proposed licenses. Please advise us of the appropriate 12 month periods in which these maximum diversions and maximum uses occurred for Permit 10703 and Permit 10704.

We further note that under Permits 10703 and 10704, only Loon Lake, Ice House and Union Valley Reservoir are named as storage reservoirs. Apparently Rubicon Reservoir, Buck Island Lake, Gerie Reservoir, Robbs Peak Reservoir, Junction Reservoir, Camino Reservoir, Brush Creek Reservoir, Slab Creek Reservoir and Chili Bar Reservoir (PG&E) were considered regulatory only. If any of these reservoirs/diversion facilities are operated in such a manner as to have permanent seasonal drawdown and subsequent collection to storage, please let us know how the District proposes to cover such storage.

Sincerely,

/s/ Glenn K. Mork

Glenn K. Mork, Acting Program Manager
License Section

cc: Don E. Kienlen
Consulting Engineer
1107 Ninth Street, Room 600
Sacramento, CA 95814

WCSmith:lryder (3/3/80)

STATE OF CALIFORNIA - THE RESOURCES AGENCY
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS
2125 - 19TH STREET
SACRAMENTO, CALIFORNIA 95818

STATE WATER RESOURCES
CONTROL BOARD

MAY 18 9 05 AM '78

DIV. OF WATER RIGHTS
SACRAMENTO

REQUEST FOR LICENSE

APPLICATION 12624

PERMIT

10704

SUBJECT TO APPROVAL BY THE STATE WATER RESOURCES CONTROL BOARD
SACRAMENTO MUNICIPAL UTILITY DISTRICT
P. O. BOX 15830, SACRAMENTO, CALIFORNIA 95813

HAVING MADE PROOF AS OF OCTOBER 16, 1970 (THE DATE OF INSPECTION)

HEREBY REQUEST LICENSE ACTION AS LISTED BELOW:

ACCORDING TO THE BEST KNOWLEDGE AND BELIEF OF THE UNDERSIGNED, A RIGHT HAS BEEN
ABLISHED TO USE OF THE WATERS OF:

- (1) RUBICON RIVER, (2) ROCKBOUND CREEK, (3) GERLE CREEK AND (4) SOUTH FORK RUBICON RIVER IN
EL DORADO COUNTY
TRIBUTARY TO (1) MIDDLE FORK AMERICAN RIVER, (2) RUBICON RIVER, (3) SOUTH FORK
RUBICON RIVER AND (4) RUBICON RIVER

FOR THE PURPOSE OF: POWER USE

UNDER PERMIT 10704 THE PRIORITY OF WHICH DATES FROM JULY 29, 1948

BY BENEFICIAL USE IN THE AMOUNT OF:

ONE THOUSAND TWO HUNDRED (1200) CUBIC FEET PER SECOND BY DIRECT
DIVERSION, TO BE DIVERTED FROM JANUARY 1 TO DECEMBER 31 OF EACH YEAR; AND THREE
HUNDRED THIRTEEN THOUSAND ONE HUNDRED NINETY (313,190) ACRE-FEET PER ANNUM BY STORAGE,
TO BE COLLECTED FROM OCTOBER 1 OF EACH YEAR TO JULY 31 OF THE SUCCEEDING YEAR; ALL AS
MORE EXPLICITLY SET FORTH BELOW:

ITEM	SOURCE	RESERVOIR	TYPE OF DIVERSION	LIMITING RATE	CONFIRMED WITHDRAWAL
A	RUBICON RIVER		DIRECT	500 CFS	
B	ROCKBOUND CREEK		DIRECT	200 CFS	
C	GERLE CREEK		DIRECT	325 CFS	
D	SOUTH FORK RUBICON RIVER		DIRECT	175 CFS	
E	GERLE CREEK	LOON LAKE	STORAGE	88,190 AFA	99,180 AFA
F	RUBICON RIVER	LOON LAKE	STORAGE	75,000 AFA	
G	ROCKBOUND CREEK	LOON LAKE	STORAGE	14,000 AFA	
H	ALL OF ABOVE	UNION VALLEY	STORAGE	225,000 AFA	210,716 AFA

CFS = CUBIC FEET PER SECOND
AFA = ACRE-FEET PER ANNUM

THE POINTS OF DIVERSION OF SUCH WATER ARE LOCATED

- (1) NORTH 4° 30' EAST 1,850 FEET FROM SW CORNER OF SECTION 9, T13N, R16E, MDB&M, BEING WITHIN NW1/4 OF SW1/4 OF SAID SECTION 9,
- (2) SOUTH 27° 20' EAST 2,050 FEET FROM NW CORNER OF SECTION 6, T13N, R16E, MDB&M, BEING WITHIN SW1/4 OF NW1/4 OF SAID SECTION 6,
- (3) LOON LAKE DAM - SOUTH 3° 59' 36" WEST 2,083.30 FEET FROM NE CORNER OF SECTION 5, T13N, R15E, MDB&M, BEING WITHIN SE1/4 OF NE1/4 OF SAID SECTION 5,
GERLE DAM - SOUTH 89° 53' 06" WEST 2,166.79 FEET FROM SE CORNER OF SECTION 15, T13N, R14E, MDB&M, BEING WITHIN LOT 14 OF SAID SECTION 15 AND
- (4) ROBBS PEAK DAM- SOUTH 42° 28' 52" WEST 2,037.57 FEET FROM NE CORNER OF SECTION 27, T13N, R14E, MDB&M, BEING WITHIN SW1/4 OF NE1/4 OF SAID SECTION 27.

THE POINTS OF REDIVERSION OF SUCH WATER ARE LOCATED AS FOLLOWS:

- (5) SILVER CREEK
 - (A) UNION VALLEY DAM - NORTH 12° 28' 13" EAST 712.79 FEET FROM SW CORNER OF SECTION 20, T12N, R14E, MDB&M, BEING WITHIN SW1/4 OF SW1/4 OF SAID SECTION 20,
 - (B) JUNCTION DAM - NORTH 47° 16' 41" EAST 1,986.05 FEET FROM SW CORNER OF SECTION 30, T12N, R14E, MDB&M, BEING WITHIN SW1/4 OF SW1/4 OF SAID SECTION 30,
 - (C) CAMINO DAM - SOUTH 12° 38' 03" EAST 2,856.36 FEET FROM NW CORNER OF SECTION 4, T11N, R13E, MDB&M, BEING WITHIN LOT 9 OF SAID SECTION 4,
- (6) BRUSH CREEK - NORTH 35° 00' WEST 2,450 FEET FROM SE CORNER OF SECTION 10, T11N, R12E, MDB&M, BEING WITHIN NW1/4 OF SE1/4 OF SAID SECTION 10,
- (7) SOUTH FORK AMERICAN RIVER
 - (A) SLAB CREEK DAM - NORTH 35° 39' 55" EAST 3,622.27 FEET FROM SW CORNER OF SECTION 25, T11N, R11E, MDB&M, BEING WITHIN SE1/4 OF NW1/4 OF SAID SECTION 25 AND
 - (B) CHILI BAR DAM - NORTH 52° 36' 08" EAST 3,163.80 FEET FROM SW CORNER OF SECTION 25, T11N, R10E, MDB&M, BEING WITHIN NE1/4 OF SW1/4 OF SAID SECTION 25.

A DESCRIPTION OF THE LANDS OR THE PLACE OF USE WHERE SUCH WATER IS PUT TO BENEFICIAL USE IS AS FOLLOWS:

LOON LAKE POWER PLANT	- WITHIN NE1/4 OF NE1/4 OF SECTION 18, T13N, R15E, MDB&M.
ROBBS PEAK POWER PLANT	- WITHIN NE1/4 OF SW1/4 OF SECTION 11, T12N, R14E, MDB&M.
UNION VALLEY POWER PLANT	- WITHIN SW1/4 OF SW1/4 OF SECTION 20, T12N, R14E, MDB&M.
JAYBIRD POWER PLANT	- WITHIN NE1/4 OF NW1/4 OF SECTION 4, T11N, R13E, MDB&M.
CAMINO POWER PLANT	- WITHIN SW1/4 OF SE1/4 OF SECTION 15, T11N, R12E, MDB&M.
WHITE ROCK POWER PLANT	- WITHIN NW1/4 OF NE1/4 OF SECTION 31, T11N, R11E, MDB&M.
CHILI BAR POWER PLANT	- WITHIN NE1/4 OF SW1/4 OF SECTION 25, T11N, R10E, MDB&M.

CLAUSES REQUIRED _____ SPECIAL FISH FLOW REQUIREMENTS. _____

IF ANY REDUCTION IN AMOUNT, SEASON, OR LAND DESCRIPTION BECOMES NECESSARY WHEN THESE ROUGH CALCULATIONS ARE CHECKED, THE OWNER WILL BE NOTIFIED AND ALLOWED 30 DAYS WITHIN WHICH TO PROTEST SUCH CHANGE.

PLEASE NOTE BEFORE SIGNING:

A LICENSE IS THE FINAL CONFIRMATION OF THE WATER RIGHT AND AMOUNTS AND SEASON AS LIMITED BY THE LICENSE CANNOT BE INCREASED. EXCEPT AS AUTHORIZED BY THE LICENSE, ALL OTHER RIGHTS UNDER THE PERMIT ARE EXTINGUISHED.

SIGNATURE Wm. C. Walbridge
PERMITTEE OR HIS REPRESENTATIVE
Wm. C. Walbridge, General ManagerDATE May 15, 1978

INSPECTED BY: _____

CHECKED BY: _____
SENIOR ENGINEER

PROGRESS REPORT BY PERMITTEE FOR 1976

OWNER OF RECORD

APPLICATION

12624

SACRAMENTO MUNICIPAL UTILITY DISTRICT
P. O. BOX 15830,
SACRAMENTO, CALIF 95813

(916) 452-3211

Telephone Number (Include Area Code)

If the owner or address shown above is wrong, please correct

SOURCE

(1) RUBICON RIVER (2) ROCKBOUND LAKE (3) LOON LAKE (4) GERLE CREEK
(5) SOUTH FORK RUBICON RIVER

COUNTY

EL DORADO

AMOUNT

314,000 AC-FT/ANN

1200 CU-FT/SEC

PURPOSE

POWER

12-01-75

PERMIT

10704

TIME TO COMPLETE USE OF
WATER EXPIRES THIS DATE

IMPORTANT!

EVERY permit is issued subject to the conditions therein expressed. I have currently reviewed my permit.
YES ☒ NO ☐ I am complying with the conditions under which my permit has been issued. YES ☒ NO ☐ Identify any
non-compliance by permit term number under "remarks" on reverse side. This report is important in providing the record of
use needed in establishing your water right. It should be filled out carefully and returned promptly to the

STATE WATER RESOURCES CONTROL BOARD, DIVISION OF WATER RIGHTS
2125 Nineteenth Street, Sacramento, California 95818

THE PROJECT HAS BEEN ABANDONED AND I REQUEST REVOCATION OF THIS PERMIT. YES ☐ NO ☒

CONSTRUCTION WORK

1. Has construction work commenced? YES ☒ NO ☐ If YES, is construction completed? YES ☒ NO ☐

2. If incomplete, describe briefly the work done, including cost:

3. If not completed, give estimated date of completion:

4. What percent of construction work remains to be done? Explain:

USE OF WATER

5. Has use of water commenced? YES ☒ NO ☐ Check appropriate box(es) below and explain how water was used:

(a) ☐ Irrigation

Total acres irrigated

Name of crops served and acreage of each

(b) ☐ Stockwatering

Number of animals

(f) ☒ Recreational See remarks

Boating, fishing, water contact sports

(c) ☐ Industrial

Nature of Use

(g) ☒ Power generation

842,500

Installed horsepower capacity

(d) ☐ Domestic

Number of persons, area of garden, lawn, etc.

(h) ☐ Other

(e) ☐ Municipal

Approximate population

6. Amount of water used each month under this permit in ~~gallons~~ acre-feet. (If not known, check months water was used.)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
9.1	9.0	10.3	7.5	5.2	7.6	9.2	10.3	6.3	0.0	11.0	1.7	87.2

7. Has use of water, both amount and season, been as great as you expect in any future year under this permit? YES ☐ NO ☒
If "No," explain on reverse side under "remarks"

8. Has location of the intake, place of use, or type of use been changed? YES ☐ NO ☒ Explain on reverse side under "remarks"

9. Did the source go dry? YES ☐ NO ☒ If so, during what months?

STORAGE PROJECTS ONLY

10. Did your reservoir spill this year? YES ☐ NO ☒ If not, how many feet below spillway vertically was the water level at maximum storage? 18' Have you emptied the reservoir? YES ☐ NO ☒ If not, how many feet below spillway vertically was it drawn down at end of season? 75'

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief.

Dated: April 1, 1977

at Sacramento, California

Sign here:

Sacramento Municipal Utility District

General Manager

PLEASE ANSWER ONLY THOSE QUESTIONS BELOW WHICH ARE APPLICABLE TO YOUR PROJECT.

MUNICIPAL, COMMUNITY, OR SUBDIVISION PROJECTS ONLY

11. How many service connections to date? _____ Total population served by the water system _____
12. Estimated number of service connections under full use _____
13. Are the connections individually metered? YES ☐ NO ☐
14. Do you plan to meter the connections? YES ☐ NO ☐ When? _____
15. Sewage generated by those to whom you deliver water is disposed of by: Septic tanks and leach lines ☐ Seepage pits ☐ Central treatment plan ☐ operated by _____ Other ☐ (specify under "remarks") _____

PURVEYORS OF WATER ONLY

16. Water service is provided to an area or subdivision including a recreational reservoir? YES ☐ NO ☐
17. Name of area or subdivision so served _____
18. State surface area of recreational reservoir(s) at maximum water level referred to in 16 and 17. Identify surface area(s) by name of dam or reservoir _____

NOTE: The following questions relate to the Board's continuing responsibility to insure that appropriate water is best developed, conserved, and utilized in the public interest as required by the Water Code.

CONSERVATION OF WATER

19. What measures are you using or planning to reduce water losses in conveyance systems? (1) Seepage or leak detection program ☐ (2) Lining canals ☐ (3) Phreatophyte and aquatic vegetation control ☐ (4) Other (describe in remarks) ☐
20. What measures are used to encourage consumers to conserve water in agricultural use? (1) Program to encourage more efficient irrigation systems (sprinkler, drip, etc.) where applicable ☐ (2) Return flow systems on individual farms ☐ (3) Return flow system areawide ☐ (4) Water pricing to encourage reduced use ☐ (5) Charges for drainage of irrigated lands ☐ (6) Other (describe in remarks) ☐
21. What measures are used to encourage municipal and industrial consumers to conserve water? (1) Regulations to control wasteful use ☐ (2) Public education program on water conservation ☐ (3) Pricing to encourage reduced use ☐ (4) Assistance to industry in design of recycle systems ☐ (5) Other (describe in remarks) ☐
22. What records are maintained on water use and conservation? (1) Loss rate from conveyance system ☐ (2) Water use for major crops by each farm ☐ (3) Other (describe in remarks) ☐

WATER QUALITY AND WASTEWATER RECLAMATION

23. Describe methods you are using to minimize erosion and to prevent the entry of silt into surface waters: _____
24. After use, the water is (1) retained in reservoir ☐ (2) discharged into a stream or lake ☒ (3) discharged into settling ponds ☐ (4) Other ☐ Describe: _____
25. Does or will water being discharged contain waste materials? ☐ Yes ☒ No
(1) Domestic ☐ (2) Municipal ☐ (3) Industrial ☐ (4) Agricultural ☐ (5) Other ☐ Describe: _____
26. Does or will water being discharged contain any specific material which is deleterious to fish and wildlife or which would impair the water for beneficial uses? ☐ Yes ☒ No Describe: _____
27. Describe what steps you are, have been, or can take to reclaim or indirectly reuse the water sought being appropriated: _____

REMARKS

Please designate by number the question you are answering.

#5 (f) At Loon Lake and Union Valley Reservoirs water is used domestically for picnic and camp grounds. In addition, both of these reservoirs are used for fishing, boating, swimming, and other water sports.

#6 Includes water released from storage in Loon Lake. Data is thousands of acre feet.

#7 Refer to our 12/1/75 letter to Division of Water Rights.

Items 11 thru 23 and Item 27 are not applicable to our operation.

STATE WATER RESOURCES
CONTROL BOARD
DIVISION OF WATER RIGHTS
SACRAMENTO
APR 5 10 59 AM '77

PROGRESS REPORT BY PERMITTEE FOR 1977

file

APPLICATION:

12624

PERMIT:

10704

OWNER OF RECORD:

(916) 452-3211

Area Code and Telephone Number

SACRAMENTO MUNICIPAL UTILITY DISTRICT
P. O. BOX 15830,
SACRAMENTO, CALIF 95813

If the owner or address shown above is wrong, please correct.

SOURCE:

(1) RUBICON RIVER (2) ROCKBOUND LAKE (3) LOON LAKE (4) GERLE CREEK
(5) SOUTH FORK RUBICON RIVER

COUNTY:

EL DORADO

AMOUNT:

1200 CU FT/SEC

314,000 AC-FT/ANN

PURPOSE:

POWER

TIME TO COMPLETE USE OF WATER EXPIRES ON:

12-01-75

IMPORTANT! EVERY permit is issued subject to the conditions therein expressed. I have currently reviewed my permit. YES ☒ NO ☐ I am complying with the conditions under which my permit has been issued. YES ☒ NO ☐ Identify any noncompliance by permit term number under "Remarks" on reverse side. This report is important in providing the record of use needed in establishing your water right. It should be filled out carefully and returned promptly to the above listed address.

THE PROJECT HAS BEEN ABANDONED AND I REQUEST REVOCATION OF THIS PERMIT. YES ☐ NO ☒

CONSTRUCTION WORK

1. Has construction work commenced? YES ☒ NO ☐ If YES is construction completed? YES ☒ NO ☐
2. If incomplete, describe briefly the work done, including cost.

3. If not completed, give estimated date of completion.

4. What percent of construction work remains to be done? Explain.

USE OF WATER

5. Has use of water commenced? YES ☒ NO ☐ Check appropriate box(es) below and explain how water was used.

(a) ☒ Irrigation

Total acres irrigated

Name of crops served and acreage of each

(b) ☐ Stockwatering

Number of animals

(f) ☒ Recreational See remarks

Boating, fishing, water contact sports

(c) ☐ Industrial

Nature of Use

(g) ☒ Power generation 842,500

Installed horsepower capacity

(d) ☒ Domestic

Number of persons, area of garden, lawn, etc.

(h) ☐ Other

(e) ☐ Municipal

Approximate population

6. Amount of water used each month under this permit in gallons or acre-feet (If not known, check months water was used.)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
0.5	0.9	1.4	3.0	4.5	2.3	1.1	4.8	5.5	2.8	2.5	9.6	38.9

7. Has use of water, both amount and season, been as great as you expect in any future year under this permit? YES ☐ NO ☐ If "No" explain on reverse side under "Remarks".

8. Has location of the intake, place of use, or type of use been changed? YES ☐ NO ☒ Explain on reverse side under "Remarks".

9. Did the source go dry? YES ☐ NO ☒ If so, during what months?

STORAGE PROJECTS ONLY

10. Did your reservoir spill this year? YES ☐ NO ☒ If not, how many feet below spillway vertically was the water level at maximum storage? LL 31' ± UV 83' Have you emptied the reservoir? YES ☐ NO ☒ If not, how many feet below spillway vertically was it drawn down at end of season? LL 53' ± UV 89' See attached note.

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief.

Dated March 30, 1978

at Sacramento, California

Sign here

Sacramento Municipal Utility District

General Manager

PROGRESS REPORT BY PERMITTEE FOR 1977—PAGE 2

PLEASE ANSWER ONLY THOSE QUESTIONS BELOW WHICH ARE APPLICABLE TO YOUR PROJECT:

MUNICIPAL, COMMUNITY, OR SUBDIVISION PROJECTS ONLY

11. How many service connections to date? Total population served by the water system STATE WATER RESOURCES CONTROL BOARD
12. Estimated number of service connections under full use
13. Are the connections individually metered? YES ☐ NO ☐ APR 5 8 53 AM '78
14. Do you plan to meter the connections? YES ☐ NO ☐ When?
15. Sewage generated by those to whom you deliver water is disposed of by: Septic tanks and leach lines ☐ Seepage pits ☐ DIV. OF WATER RIGHTS
Central treatment plant ☐ operated by Other ☐ (specify under "Remarks")

PURVEYORS OF WATER ONLY

16. Water service is provided to an area or subdivision including a recreational reservoir: YES ☐ NO ☐
17. Name of area or subdivision so served:
18. State surface area of recreational reservoir(s) at maximum water level referred to in 16 and 17. Identify surface area(s) by name of dam or reservoir:

NOTE: The following questions relate to the Board's continuing responsibility to insure that appropriate water is best developed, conserved, and utilized in the public interest as required by the Water Code.

CONSERVATION OF WATER

19. What measures are you using or planning to reduce water losses in conveyance systems? (1) Seepage or leak detection program ☐ (2) Lining canals ☐ (3) Phreatophyte and aquatic vegetation control ☐ (4) Other (describe in "Remarks") ☐
20. What measures are used to encourage consumers to conserve water in agricultural use? (1) Program to encourage more efficient irrigation systems (sprinkler, drip, etc.) where applicable ☐ (2) Return flow systems on individual farms ☐ (3) Return flow system areawide ☐ (4) Water pricing to encourage reduced use ☐ (5) Charges for drainage of irrigated lands ☐ (6) Other (describe in "Remarks") ☐
21. What measures are used to encourage municipal and industrial consumers to conserve water? (1) Regulations to control wasteful use ☐ (2) Public education program on water conservation ☐ (3) Pricing to encourage reduced use ☐ (4) Assistance to industry in design of recycle systems ☐ (5) Other (describe in "Remarks") ☐
22. What records are maintained on water use and conservation? (1) Loss rate from conveyance system ☐ (2) Water use for major crops by each farm ☐ (3) Other (describe in "Remarks") ☐

WATER QUALITY AND WASTEWATER RECLAMATION

23. Describe methods you are using to minimize erosion and to prevent the entry of silt into surface waters:
24. After use, the water is (1) retained in reservoir ☐ (2) discharged into a stream or lake ☒ (3) discharged into settling ponds ☐ (4) other ☐ Describe
25. Does or will water being discharged contain waste materials? ☐ Yes ☒ No
(1) Domestic ☐ (2) Municipal ☐ (3) Industrial ☐ (4) Agricultural ☐ (5) Other ☐ Describe
26. Does or will water being discharged contain any specific material which is deleterious to fish and wildlife or which would impair the water for beneficial uses? ☐ Yes ☒ No Describe
27. Describe what steps you are taking, have been taking, or can take to reclaim or indirectly reuse the water being appropriated

REMARKS

Please indicate the number of the item you are explaining:

#5 (5) At Loon Lake and Union Valley Reservoirs water is used domestically for picnic and camp grounds. In addition, both of these reservoirs are used for fishing, boating, swimming, and other water sports.

#6 3. Includes water released from storage in Loon Lake. Data is thousands of acre feet.

#7 Refer to our 12/11/75 letter to Division of Water Rights.

Items 11 thru 23 and Item 27 are not applicable to our operation.

RECEIVED

DEC 15 1977

(If additional space is needed for remarks, attach numbered sheets)

OFFICE OF GENERAL MANAGER

STANDARD FORM 100-100

Application 12624

Question 10

NOTE: Union Valley had its maximum elevation for the year on December 31, 1977.

The greatest drawdown below spillway was 172' on January 13, 1977.

CONTACT REPORT**DIVISION OF WATER RIGHTS**

STATE WATER RESOURCES CONTROL BOARD

Division Personnel

Dick Kerfoot

Subject

P-10703 (A-12323) and P-10704 (A-12624)

Date Sept. 20, 1975

Time 1:45 PM

Personal ☒

Where Division Office

Telephone ☐

Number

Individual(s)/Agency Contacted

Donald E. Kienlen representing Sacramento Municipal

Utility District (SMUD)

Conversation Description

The Requests for license attached were reviewed along with the information within the Dec. 1, 1975 letter from William Walbridge, SMUD general Manager. It was explained that the amounts were limited by either that limit within the respective permit or that amount entered in the letter of Dec. 1.

The amounts entered on the respective requests for license are all substantiated by the appropriated USGS records for the source and particular reservoir in question. The records are presented today in more detail than previously available.

Mr. Kienlen took the original request for license forms with him to discuss with SMUD. He will also inform us as to what kind of action may be necessary to transfer Chili Bar to PG & E.

Decision(s)

Hang Fire

Action Items

Put on 30 day call up

SURNAME

Kerfoot 9/20/76

**SMUD**

SACRAMENTO MUNICIPAL UTILITY DISTRICT □ 6201 S Street, Box 15830, Sacramento, California 95813; (916) 452-3211

April 16, 1976

Reference: 333:AAC:14963

Mr. J. M. Page, Supervising Engineer
Division of Water Rights
2125 - 19th Street
Sacramento, CA 95818

Dear Mr. Page:

In response to the request made in your April 12, 1976 letter,
the following information is supplied:

Maximum flow capacities for listed powerhouses:

<u>Powerhouse</u>	<u>Maximum Head</u> <u>CFS</u>	<u>Minimum Head</u> <u>CFS</u>
Loon Lake	1004	1077
Jones Fork (Not Built)	-	-
Robbs Peak	992	992
Union Valley	1307	1755
Jaybird	1345	1345
Camino	1345	1345
White Rock	3620	3620
Chili Bar (Belongs to PG&E)	1725	1725

Sincerely yours,

Wm. C. Walbridge
General Manager

cc: Mr. D. E. Kienlen
Murray, Burns and Kienlen
Room 600, Forum Building
1107 Ninth Street
Sacramento, CA 95814

COPY

MAY 10 10 03 AM '76

COPY

State Water Resources Control Board
DIVISION OF WATER RIGHTS
2125 - 19th Street, Sacramento, California 95818

PROGRESS REPORT BY PERMITTEE FOR 1975

OWNER OF RECORD:

APPLICATION 12624

SACRAMENTO MUNICIPAL UTILITY DISTRICT
P O BOX 15830,
SACRAMENTO, CALIF 95813

(916) 452-3211

Telephone Number (Include Area Code)

If the owner or address shown above is wrong, please correct

MAR 10 10 19 AM '76

SOURCE: (1) RUBICON RIVER (2) ROCKBOUND LAKE (3) LOON LAKE (4) GERLE CREEK
(5) SOUTH FORK RUBICON RIVER

AMOUNT: 1200 CUFET/SEC 314,000 AC-FT/ANN

PURPOSE: POWER

PERMIT: 10704

12-01-75

IMPORTANT! EVERY permit is issued subject to the conditions therein expressed. I have currently reviewed my permit. YES ☒ NO ☐ I am complying with the conditions under which my permit has been issued. YES ☒ NO ☐ Identify any non-compliance by permit term number under "remarks" on reverse side. This report is important in providing the record of use needed in establishing your water right. It should be filled out carefully and returned promptly to the

STATE WATER RESOURCES CONTROL BOARD, DIVISION OF WATER RIGHTS
2125 Nineteenth Street, Sacramento, California 95818

THE PROJECT HAS BEEN ABANDONED AND I REQUEST REVOCATION OF THIS PERMIT. YES ☐ NO ☒

CONSTRUCTION WORK

1. Has construction work commenced? YES ☒ NO ☐ If YES, is construction completed? YES ☒ NO ☐
2. If incomplete, describe briefly the work done, including cost:

3. If not completed, give estimated date of completion:

4. What percent of construction work remains to be done? Explain:

USE OF WATER

5. Has use of water commenced? YES ☒ NO ☐ Check appropriate box(es) below and explain how water was used:

(a) ☐ Irrigation

Total acres irrigated:

Name of crops served and acreage of each

(b) ☐ Stockwatering

Number of animals

(f) ☒ Recreational See remarks

Boating, fishing, water contact sports

(c) ☐ Industrial

Nature of Use

(g) ☒ Power generation 842,500

Installed horsepower capacity

(d) ☐ Domestic

Number of persons, area of garden, lawn, etc.

(h) ☐ Other

(e) ☐ Municipal

Approximate population

6. Amount of water used each month under this permit in gallons or acre-feet. (If not known, check months water was used)

Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Total Annual

3.6 22.3 23.4 33.7 46.5 39.7 5.5 11.5 12.1 2.0 11.1 19.6 231.0

7. Has use of water, both amount and season, been as great as you expect in any future year under this permit? YES ☐ NO ☒
If "No", explain on reverse side under "remarks"

8. Has location of the intake, place of use, or type of use been changed? YES ☐ NO ☒ Explain on reverse side under "remarks"

9. Did the source go dry? YES ☐ NO ☒ If so, during what months?

STORAGE PROJECTS ONLY

10. Did your reservoir spill this year? YES ☐ NO ☒ If not, how many feet below spillway vertically was the water level at maximum storage? 0.4' Have you emptied the reservoir? YES ☐ NO ☒ If not, how many feet below spillway vertically was it drawn down at end of season? 29.8'

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief.

Dated: March 5, 1976

at Sacramento

California

Sign here:

W. C. Hall

General Manager

Sacramento Municipal Utility District

MUNICIPAL, COMMUNITY, OR SUBDIVISION PROJECTS ONLY

11. How many service connections to date? _____ Total population served by the water system _____
12. Estimated number of service connections under full use _____
13. Are the connections individually metered? YES ☐ NO ☐
14. Do you plan to meter the connections? YES ☐ NO ☐ When? _____
15. Sewage generated by those to whom you deliver water is disposed of by: Septic tanks and leach lines ☐; Seepage pits ☐;
Central treatment plan ☐ operated by _____; Other ☐ (specify under "remarks") _____

PURVEYORS OF WATER ONLY

16. Water service is provided to an area or subdivision including a recreational reservoir: YES ☐ NO ☐
17. Name of area or subdivision so served: _____
18. State surface area of recreational reservoir(s) at maximum water level referred to in 16 and 17. Identify surface area(s) by name of dam or reservoir: _____

NOTE: The following questions relate to the Board's continuing responsibility to insure that appropriate water is best developed, conserved, and utilized in the public interest as required by the Water Code.

CONSERVATION OF WATER

19. What measures are you using or planning to reduce water losses in conveyance systems? (1) Seepage or leak detection program ☐; (2) Lining canals ☐; (3) Phreatophyte and aquatic vegetation control ☐;
(4) Other (describe in remarks) ☐
20. What measures are used to encourage consumers to conserve water in agricultural use? (1) Program to encourage more efficient irrigation systems (sprinkler, drip, etc.) where applicable ☐; (2) Return flow systems on individual farms ☐;
(3) Return flow system areawide ☐; (4) Water pricing to encourage reduced use ☐; (5) Charges for drainage of irrigated lands ☐; (6) Other (describe in remarks) ☐
21. What measures are used to encourage municipal and industrial consumers to conserve water? (1) Regulations to control wasteful use ☐; (2) Public education program on water conservation ☐; (3) Pricing to encourage reduced use ☐;
(4) Assistance to industry in design of recycle systems ☐; (5) Other (describe in remarks) ☐
22. What records are maintained on water use and conservation? (1) Loss rate from conveyance system ☐; (2) Water use for major crops by each farm ☐; (3) Other (describe in remarks) ☐

WATER QUALITY AND WASTEWATER RECLAMATION

23. Describe methods you are using to minimize erosion and to prevent the entry of silt into surface waters: _____
24. After use, the water is: (1) retained in reservoir ☐; (2) discharged into a stream or lake ☒; (3) discharged into settling ponds ☐; (4) Other ☐ Describe: _____
25. Does or will water being discharged contain waste materials? ☐ Yes ☒ No
(1) Domestic ☐; (2) Municipal ☐; (3) Industrial ☐; (4) Agricultural ☐; (5) Other ☐ Describe: _____
26. Does or will water being discharged contain any specific material which is deleterious to fish and wildlife or which would impair the water for beneficial uses? ☐ Yes ☒ No Describe: _____
27. Describe what steps you are, have been, or can take to reclaim or indirectly reuse the water sought being appropriated: _____

REMARKS

Please designate by number the question you are answering:

#5 (f) At Loon Lake and Union Valley Reservoirs water is used domestically for picnic and camp grounds. In addition, both of these reservoirs are used for fishing, boating, swimming, and other water sports.

#6 Includes water released from storage in Loon Lake. Data is thousands of acre feet.

Items 11 thru 23 and item 27 are not applicable to our operation

#7 Refer to our 12/1/75 letter to Division of Water Rights.

(916) 445-2055
APR 12 1976

In Reply Refer
to:333:AAC:14963

Mr. William Walbridge, General Manager
Sacramento Municipal Utility District
P. O. Box 15830
Sacramento, CA 95813

PERMITS 10703, 10704, LICENSES 438, 10495,,10496
10513 AND 10704
(APPLICATIONS 12323, 12624, 654, 14963, 20522,
22110 AND 12624)
AMERICAN RIVER TRIBUTARIES

The above-numbered water rights concern waters
utilized at SMUD's American River Project and PG&E's
water use at Chile Bar Powerhouse.

In order to reconcile the various flows of water
involved in the system, please advise us of the as-
built maximum water flow capacities through the
following Powerhouses:

1. Loon Lake Powerhouse
2. Jones Fork Powerhouse
3. Robbs Peak Powerhouse
4. Union Valley Powerhouse
5. Jaybird Powerhouse
6. Camino Powerhouse
7. White Rock Powerhouse
8. Chili Bar Powerhouse

We are enclosing a copy of our letter to PG&E
regarding the Chile Bar Unit.

Original Signed by
J. M. Page

J. M. Page
Supervising Engineer

— Enclosure

cc: Mr. D. E. Kienlen
Murray, Burns and Kienlen
Room 600, Forum Building
1107 Ninth Street
Sacramento, CA 95814

AAChesler:abingaman



SMUD

SACRAMENTO MUNICIPAL UTILITY DISTRICT ☐ 6201 S Street, Box 15830, Sacramento, California 95813; (916) 452-3211

March 4, 1975

State Water Resources Control Board
Division of Water Rights
2125 - 19th Street
Sacramento, California 95818

Dear Sirs:

Enclosed are the 1974 Progress Report forms for Permit 16171 (Application #23404), Permit 10704 (Application #12624), and Permit 10703 (Application #12323).

We received a form for Permit 15088 (Application #22110). A license has been requested for this permit and also for Permit 10705 (Application #14963) and Permit 13746 (Application 20522). These are currently being processed and we have been advised by Mr. Carroll that it is not necessary to file progress reports for them.

Very truly yours,

E. K. Davis
General Manager

Enclosures (7)

COPY

COPY
m m c

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

2125 Nineteenth Street, Sacramento, California 95818

PROGRESS REPORT BY PERMITTEE FOR 1974

OWNER OF RECORD

APPLICATION

12624

SACRAMENTO MUNICIPAL UTILITY DISTRICT
P O BOX 15830,
SACRAMENTO, CALIF 95813(916) 452-3211
Telephone Number (Include Area Code)

If the owner or address shown above is wrong, please correct

SOURCE: (1) RUBICON RIVER (2) ROCKBOUND LAKE (3) LOON LAKE (4) GERLE CREEK
(5) S FK RUBICON RIVERAMOUNT: 1200 CU FT/SEC 314,000 AC-FT/ANN
PURPOSE: POWER

PERMIT: 10704

12-01-75

IMPORTANT! EVERY permit is issued subject to the conditions therein expressed. I have currently reviewed my permit: YES ☒ NO ☐.
I am complying with the conditions under which my permit has been issued: YES ☒ NO ☐. Identify any non-compliance by permit term number under "marks" on reverse side. This report is important in providing the record of use needed in establishing your water right. It should be filled out carefully and returned promptly to the **STATE WATER RESOURCES CONTROL BOARD, DIVISION OF WATER RIGHTS,**
2125 Nineteenth Street, Sacramento, California 95818

THE PROJECT HAS BEEN ABANDONED AND I REQUEST REVOCATION OF THIS PERMIT: YES ☐ NO ☒.

CONSTRUCTION WORK

1. Has construction work commenced? YES ☒ NO ☐. If YES, is construction completed? YES ☒ NO ☐.
2. If incomplete, describe briefly the work done, including cost: _____

3. If not completed, give estimated date of completion: _____

4. What percent of construction work remains to be done to complete the project? _____ Explain: _____

USE OF WATER

5. Has use of water commenced? YES
- ☐
- NO
- ☒
- Check appropriate box(es) below and explain how water was used.

(a) ☐ Irrigation _____	Total acres irrigated _____	Name of crops served and acreage of each _____
(b) ☐ Stockwatering _____	Number of animals _____	(f) ☐ Recreational _____
(c) ☐ Industrial _____	Nature of Use _____	(g) ☐ Recreational _____
(d) ☐ Domestic _____	Number of persons, area of garden, lawn, etc. _____	(h) ☒ Power generation _____
(e) ☐ Municipal _____	Approximate population _____	(i) ☐ Other _____

842,500
Installed horsepower capacity

6. What quantity of water was used each month in 1974 under this permit in gallons or acre-feet? (If not known, check months water was used.)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
25.2	19.7	24.7	34.0	43.3	37.2	18.5	7.2	1.6	0.3	0.5	1.8	214.0

7. Has use of water, both amount and season, been as great as you expect in any future year under this permit? YES ☐ NO ☒ If "No", explain on reverse side under "remarks".
8. Has location of the intake, place of use, or type of use been changed? YES ☐ NO ☒. Explain on reverse side under "remarks".
9. Did the source go dry? YES ☐ NO ☒. If so, during what months? _____

STORAGE PROJECTS ONLY

10. Did your reservoir spill this year? YES ☐ NO ☒. If not, how many feet below spillway vertically was the water level at maximum storage? 0.1' Have you emptied the reservoir? YES ☐ NO ☒. If not, how many feet below spillway vertically was it drawn down at end of season? 11.3'

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief.

dated: MAR 4 1975 at Sacramento California
(location) (state)

Sign here: _____

Permittee

General Manager

1974

MUNICIPAL, COMMUNITY, OR SUBDIVISION PROJECTS ONLY

11. How many service connections to date? _____ Total population served by the water system _____
12. Estimated number of service connections under full use: _____
13. Are the connections individually metered? YES ☐ NO ☐ .
14. Do you plan to meter the connections? YES ☐ NO ☐ When? _____
15. Sewage generated by those to whom you deliver water is disposed of by: Septic tanks and leach lines ☐ ; Seepage pits ☐ ;
Central treatment plant ☐ operated by _____ ; Other ☐ (specify under "remarks") _____

PURVEYORS OF WATER ONLY

16. Water service is provided to an area or subdivision including a recreational reservoir: YES ☐ NO ☐ .
17. Name of area or subdivision so served: _____
18. State surface area of recreational reservoir(s) at maximum water level referred to in 16 and 17. Identify surface area(s) by name of dam or reservoir: _____

NOTE: The following questions relate to the Board's continuing responsibility to insure that appropriated water is best developed, conserved, and utilized in the public interest as required by the Water Code.

CONSERVATION OF WATER

19. What measures are you using or planning to reduce water losses in conveyance systems? (1) Seepage or leak detection program ☐ ;
(2) Lining canals ☐ ; (3) Phreatophyte and aquatic vegetation control ☐ ; (4) Other (describe in "remarks") ☐ ;
20. What measures are used to encourage consumers to conserve water in agricultural use? (1) Program to encourage more efficient irrigation systems (sprinkler, drip, etc.), where applicable ☐ ; (2) Return flow systems on individual farms ☐ ; (3) Return flow system areawide ☐ ;
(4) Water pricing to encourage reduced use ☐ ; (5) Charges for drainage of irrigated lands ☐ ; (6) Other (describe in "remarks") ☐ ;
21. What measures are used to encourage municipal and industrial consumers to conserve water? (1) Regulations to control wasteful use ☐ ;
(2) Public education program on water conservation ☐ ; (3) Pricing to encourage reduced use ☐ ; (4) Assistance to industry in design of recycle systems ☐ ; (5) Other (describe in "remarks") ☐ .
22. What records are maintained on water use and conservation? (1) Loss rate from conveyance system ☐ ; (2) Water use for major crops by each farm ☐ ;
(3) Other (describe in "remarks") ☐ .

WATER QUALITY AND WASTEWATER RECLAMATION

23. Describe methods you are using to minimize erosion and to prevent the entry of silt into surface waters: _____

24. After use, the water is (1) retained in reservoir ☐ ; (2) discharged into a stream or lake ☒ ; (3) discharged into settling ponds ☐ .
(4) Other ☐ Describe: _____

25. Is or will water being discharged contain waste materials? YES ☐ NO ☒ .
(1) Domestic ☐ ; (2) Municipal ☐ ; (3) Industrial ☐ ; (4) Agricultural ☐ ; (5) Other ☐ Describe: _____

26. Is or will water being discharged contain any specific material which is deleterious to fish and wildlife or which would impair the water for beneficial uses? YES ☐ NO ☒ . Describe: _____

27. Describe what steps you are, have been, or can take to reclaim or directly reuse the water sought to be appropriated: _____

REMARKS

Please designate by number the question you are answering:

#6 - Includes water released from storage in Loon Lake. Data is thousands of acre feet.

Items 11 thru 23 and item 27 are not applicable to our operation; however, see attached addendum for our efforts in the area of water conservation.

At Loon Lake and Union Valley Reservoirs water is used domestically for picnic and camp grounds. In addition, both of these reservoirs are used for fishing, boating, swimming, and other water sports.

#7 - Full use of water under storage provisions of permit has not been made.

WATER RIGHTS PROGRESS REPORT - 1974 - PERMIT 10704

Item 6 - Water Use by Months

<u>Month</u>	(1) Water through Robbs P.H.	(2) Storage Water from <u>Loon Lake</u>	(3) = (1)-(2) Water from Direct <u>Diversion</u>
January	25.2	0	25.2
February	19.7	8.3	11.4
March	24.7	0	24.7
April	34.0	1.3	32.7
May	43.3	0	43.3
June	37.2	0	37.2
July	18.5	2.2	16.3
August	7.2	8.1	0.0
September	1.6	2.1	0.0
October	0.3	1.0	0.0
November	0.5	0.2	0.3
December	<u>1.8</u>	<u>0</u>	<u>1.8</u>
	214.0	23.2	192.9

Note: All quantities are thousands of acre-feet.

ADDENDUM FOR PERMIT 10704

The program that has been developed at the Sacramento Municipal Utility District to insure maximum utilization of water and to minimize waste is primarily one to avoid spills. The basic effort we have made to achieve this goal is the development of a computer runoff forecast program tied to real-time information on precipitation quantities, water content of the snow, etc.

In order to have real-time data available as input to our computer program, the District has installed six meteorological data gathering stations. These are scattered throughout our watershed at varying elevations. They report automatically by radio three times a day to the District's Sacramento office.

As evidence of the success of this system, we have not experienced any major avoidable spills since the computer forecast program was developed.

STATE OF CALIFORNIA - THE RESOURCES AGENCY
ST. WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

PROGRESS REPORT BY PERMITTEE FOR 1973

OWNER OF RECORD

APPLICATION

12624

SACRAMENTO MUNICIPAL UTILITY DISTRICT
P O BOX 15830,
SACRAMENTO, CALIF 95813

Telephone Number

If the owner or address shown above is wrong, please correct.

SOURCE: (1) RUBICON RIVER (2) ROCKBOUND LAKE (3) LOON LAKE
(4) GERLE CREEK (5) S FK RUBICON RIVER

452-3211

AMOUNT: 1200 CU FT/SEC 314,000 AC-FT/ANN
PURPOSE: POWER

PERMIT 10704

12-01-75

IMPORTANT! Every permit is issued subject to the conditions therein expressed. I have currently reviewed and am complying with the conditions under which my permit has been issued. ☒ Yes ☐ No

This report is important in providing the record of use needed in establishing your water right. It should be filled out carefully and returned promptly to the State Water Resources Control Board, Division of Water Rights, Room 1015, Resources Building, 1416 Ninth Street, Sacramento, California 95814.

The project has been abandoned and I request revocation of this permit. ☐ Yes ☒ No

CONSTRUCTION WORK

1. Has construction work commenced? ☒ Yes ☐ No If yes, is construction completed? ☒ Yes ☐ No
2. If incomplete, describe briefly the work done, including cost.

3. If not completed, give estimated date of completion.

4. What percent of construction work remains to be done to complete the project? Explain:

USE OF WATER

5. Has use of water commenced? ☒ Yes ☐ No Explain how water was used under "remarks" on reverse side.
6. What quantity of water was used each month in 1973 under this permit in gallons or acre-feet? (1,000's of acre-feet) (See Remarks)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
28.0	25.6	11.9	22.5	29.7	22.7	13.0	14.1	2.1	0.3	11.0	14.7	195.6

7. Has use of water, both amount and season, been as great as you expect in any future year under this permit? ☐ Yes ☒ No
8. Has location of the intake, place of use, or type of use been changed? ☐ Yes ☒ No Explain on reverse side, under "remarks".
9. Did the source go dry? ☐ Yes ☒ No If so, during what months?

STORAGE PROJECTS ONLY

10. Did your reservoir spill this year? ☐ Yes ☒ No If not, how many feet below spillway vertically was the water level at maximum storage? 2' Have you emptied the reservoir? ☐ Yes ☒ No If not, how many feet below spillway vertically was it drawn down at end of season?

MUNICIPAL, COMMUNITY, OR SUBDIVISION PROJECTS ONLY

11. How many service connections to date? Total population served by the water system
12. Estimated number of service connections under full use
13. Are the connections individually metered? ☐ Yes ☐ No
14. Do you plan to meter the connections? ☐ Yes ☐ No When?
15. Sewage generated by those to whom you deliver water is disposed of by: ☐ Septic tanks and leach lines; ☐ Seepage pits;
☐ Central treatment plant operated by ; ☐ Other (specify under "remarks" on reverse side)

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief.

Dated: April 5, 1974

Sign Here:

Permittee GENERAL MANAGER

1973

(Report continues on reverse side)

NOTE: The following questions relate to the Board's continuing responsibility to insure that appropriated water is best developed, conserved, and utilized in the public interest as required by the Water Code.

CONSERVATION OF WATER

16. What measures are you using or planning to reduce water losses in conveyance systems? (1) Seepage or leak detection program ☒ (2) Lining canals ☒ (3) Phreatophyte and aquatic vegetation control ☐ (4) Other (describe in remarks) ☐.
17. What measures are used to encourage consumers to conserve water in agricultural use? (1) Program to encourage more efficient irrigation systems (sprinkler, drip, etc.), where applicable ☐ (2) Return flow systems on individual farms ☐ (3) Return flow system areawide ☐ (4) Water pricing to encourage reduced use ☐ (5) Charges for drainage of irrigated lands ☐ (6) Other (describe in remarks) ☐.
18. What measures are used to encourage municipal and industrial consumers to conserve water? (1) Regulations to control wasteful use ☐ (2) Public education program on water conservation ☐ (3) Pricing to encourage reduced use ☐ (4) Assistance to industry in design of recycle systems ☐ (5) Other (describe in remarks) ☐.
19. What records are maintained on water use and conservation? (1) Loss rate from conveyance system ☐ (2) Water use for major crops by each farm ☐ (3) Other (describe in remarks) ☐.

WATER QUALITY AND WASTEWATER RECLAMATION

20. Describe methods you are using to minimize erosion and to prevent the entry of silt into surface waters:
- _____
- _____
21. After use, the water is (1) retained in reservoir ☐ (2) discharged into a stream or lake ☒ (3) discharged into settling ponds ☐ (4) Other ☐ Describe: _____
22. Is or will water being discharged contain waste materials? ☐ Yes ☐ No
(1) Domestic ☐ (2) Municipal ☐ (3) Industrial ☐ (4) Agricultural ☐ (5) Other ☐ Describe: _____
23. Is or will water being discharged contain any specific material which is deleterious to fish and wildlife or which would impair the water for beneficial uses? ☐ Yes ☐ No Describe: _____
24. Describe what steps you are, have been, or can take to reclaim or directly reuse the water sought to be appropriated: _____
- _____
- _____

REMARKS

Please designate by number the question you are answering:

#5 - Water was used for power generation. *

#6 - Includes water released from storage in Loon Lake.

Items 17, 18, 19, 20, & 24 are not applicable to our operation; however, see attached addendum for our efforts in the area of water conservation.

*At Loon Lake and Union Valley Reservoirs water is used domestically for picnic and camp grounds. In addition, both of these reservoirs are used for fishing, boating, swimming, and other water sports.

STATE WATER RESOURCES
CONTROL BOARD
SACRAMENTO

APR 9 10 39 AM '74

WATER RIGHTS PROGRESS REPORT - 1973 - PERMIT 10704

Item 6 - Water Use by Months

<u>Month</u>	(1) Water through Robbs P.H.	(2) Storage Water from Loon Lake	(3)=(1)-(2) Water from Direct Diversion
Jan.	28.0	6.8	21.2
Feb.	25.6	20.0	5.6
March	11.9	4.2	7.7
April	22.5	0.0	22.5
May	29.7	0.0	29.7
June	22.7	0.0	22.7
July	13.0	12.4	0.6
Aug.	14.1	16.1	0.0
Sept.	2.1	2.9	0.0
Oct.	0.3	0.0	0.3
Nov.	11.0	0.0	11.0
Dec.	<u>14.7</u>	<u>0.0</u>	<u>14.7</u>
	195.6	62.4	136.0

Note: All quantities are thousands of acre-feet.

ADDENDUM FOR PERMIT 10704

The program that has been developed at the Sacramento Municipal Utility District to insure maximum utilization of water and to minimize waste is primarily one to avoid spills. The basic effort we have made to achieve this goal is the development of a computer runoff forecast program tied to real-time information on precipitation quantities, water content of the snow, etc.

In order to have real-time data available as input to our computer program, the District has installed six meteorological data gathering stations. These are scattered throughout our watershed at varying elevations. They report automatically by radio three times a day to the District's Sacramento office.

As evidence of the success of this system, we have not experienced any major avoidable spills since the computer forecast program was developed.

DEC 14 1973

Mr. E. K. Davis, General Manager
Sacramento Municipal Utility District
Post Office Box 15830
Sacramento, CA 95813

Dear Mr. Davis:

Permits 10703 and 10704 (Applications 12323 and
12624) Various Creeks, Rivers and Lakes in
El Dorado County

This refers to your letter of November 20, 1973 concerning procedures which might be used in licensing the water rights developed under these permits.

Criteria used by the Board for licensing storage projects require that the largest amount diverted to storage in any permitted season during the life of the permit be included in the license. However, the annual amount of withdrawal and use considered for licensing has been restricted to such maximum annual withdrawal which has been used within the three-year period immediately prior to the expiration of the permit or the inspection of the project, whichever occurs first. If maximum withdrawal does occur subsequent to expiration of the time to complete use under the permit, an extension of time is usually granted to cover such use.

Eligibility criterion for licensing of direct diversion use is the same as withdrawal from storage, except that here the maximum average 14-day rate is used for evaluation of the amount.

Authority for use of the above criteria is Section 1241 of the California Water Code which provides for loss of post-1914 appropriate water rights after three years of nonuse.

The supposition contained in the next-to-last paragraph of your letter is therefore not necessarily correct insofar as amounts of direct diversion and withdrawal from storage are concerned. The maximum amount collected to storage during any season back to the date the permit was issued could be used, but amounts of withdrawal from storage and direct diversion would be limited to the maximum seasonal occurrence within the three years immediately preceding the inspection or conclusion of the time allowed to make full use, whichever is earliest.

Thus, for the amount collected to storage, the seasons 1964-65, 1966-67, and/or 1968-69 could be used, but if license is taken

Mr. E. K. Davis

-2-

DEC 14 1973

after 1972 the direct diversion and withdrawal amounts cannot go back to 1969 unless it can be shown that the available supply was insufficient to meet use in these amounts during the intervening period.

Please let me know if we can be of any further assistance.

Sincerely,

Original Signed by
J. M. Page

J. M. Page
Supervising Engineer

DECarroll:JMPage:lpbrew

DEC 14 1973

Mr. E. K. Davis, General Manager
Sacramento Municipal Utility District
Post Office Box 15830
Sacramento, CA 95813

Dear Mr. Davis:

Permits 10703 and 10704 (Applications 12323 and
12624) Various Creeks, Rivers and Lakes in
El Dorado County

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Thus, for the amount collected to storage, the seasons 1964-65, 1966-67, and/or 1968-69 could be used, but if license is taken

Mr. E. K. Davis

-2-

DEC 14 1973

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Please let me know if we can be of any further assistance.

Sincerely,

Original Signed by
J. M. Page

J. M. Page
Supervising Engineer

DECarroll:JMPage:lpbrew

STATE OF CALIFORNIA—THE RESOURCES AGENCY
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

PROGRESS REPORT BY PERMITTEE FOR 1972

OWNER OF RECORD:

APPLICATION

12624

SACRAMENTO MUNICIPAL UTILITY DISTRICT
P O BOX 15830,
SACRAMENTO, CALIF 95813

452-3211
TELEPHONE NUMBER

If the owner or address shown above is wrong, please correct

SOURCE: (1) RUBICON RIVER (2) ROCKBOUND LAKE (3) LOON LAKE
(4) GERLE CREEK (5) S FK RUBICON RIVER

AMOUNT: 1200 CU FT/SEC 314,000 AC-FT/ANN
PURPOSE: POWER

PERMIT 10704 EXPIRATION DATE: 12-01-75

This report is important in establishing your water right. It should be filled out carefully and returned promptly to the State Water Resources Control Board, Division of Water Rights, Room 1015, Resources Building, 1416 Ninth Street, Sacramento, California 95814.

Neither the filing of an application nor issuance of a permit in approval thereof constitutes a water right. A water right is established only by beneficial use of water in accordance with the terms and conditions of the permit. This report provides a record of the development of your project. If the project is diligently completed a license will be issued to confirm the right developed by beneficial use.

The project has been abandoned and I request revocation of this permit. ☐ Yes ☒ No

CONSTRUCTION WORK

- Has construction work commenced? Yes
- Has all construction work been completed? Yes If not, describe briefly the portions of the project completed including cost of work done: _____
- If not completed, give estimated date of completion: _____
- What construction work remains to be done to complete the project? _____

USE OF WATER

- Has use of water commenced? Yes It was used for:

(a) ☐ Irrigation	Total acres irrigated	Name of crops served and acreage of each
(b) ☐ Stockwatering	Number of animals	Method of water use
(c) ☐ Industrial	Nature of use	(g) ☒ Recreational See Addendum
(d) ☐ Domestic	Number of persons, area of garden, lawn, etc.	(h) ☒ Power generation 852,200
(e) ☐ Municipal	Approximate population	Installed horsepower capacity
		(i) ☐ Other

- Has use of water, both amount and season, been as great as you expect in any future year under this permit? No
- Has location of the intake, place of use or type of use been changed? No
- Did the source go dry? No If so, during what months? _____
- What quantity of water was used each month in 1972 under this permit in gallons or acre-feet? (If not known check months water was used.) (1,000's of AF) (See Remarks)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
26.0	4.6	21.4	16.1	20.7	27.1	12.6	13.3	0.1	1.0	2.7	21.3	166.9

STORAGE PROJECTS ONLY

Did your reservoir spill this year? No If not, how many feet below spillway vertically was the water level at maximum storage? 2' Have you emptied the reservoir? No If not, how many feet below spillway vertically was it drawn down at end of season? 61'

REMARKS Includes water released from storage in Loon Reservoir.
(If more space is needed, use reverse side)

Date August 8, 1973

Sign Here E. K. Davis
Permittee

1972

SUPPLEMENTAL REPORT TO
PROGRESS REPORT BY PERMITTEE FOR 1972
PERMIT 10704

(To be completed for all permits for use of water of
10 or more cubic feet per second direct diversion
and/or 1,000 or more acre-feet per annum by storage)

This supplemental report is to obtain information on water use practices. In particular, the State Water Resources Control Board seeks data on efficiency of water use. This information is requested pursuant to the Board's reservation of continuing authority, in accordance with law and the public interest, to prevent waste, unreasonable use, and unreasonable method of use or unreasonable method of diversion of water. Additional information may be stated on the reverse side of this questionnaire.

GENERAL

1. In the use of water under this permit what program has been developed to insure maximum utilization of water and to minimize waste? To what extent has the program been implemented? What evidence is available that water use efficiency has increased as a result of this program? What programs have been developed or implemented to control excessive degradation of water quality during use?

See Attached

IRRIGATION USE

2. To what extent does the method of use or proposed method of use of water include programs for utilizing best irrigation practices and minimizing losses, such as from evaporation and seepage?

Not Applicable

MUNICIPAL USE (including domestic in subdivisions)

3. To what extent does the method of use or projected method of use of water include programs for reuse and for improving efficiency of use, such as by installation of water meters and proper design of water pricing rate structure?

Not Applicable

ADDENDUM FOR PERMIT 10704

Item 1 (g) Recreational under "Use of Water

At Loon Lake and Union Valley Reservoirs water is used domestically for picnic and camp grounds. In addition, both of these reservoirs are used for fishing, boating, swimming, and other water sports.

GENERAL

The program that has been developed at the Sacramento Municipal Utility District to insure maximum utilization of water and to minimize waste is primarily one to avoid spills. The basic effort we have made to achieve this goal is the development of a computer runoff forecast program tied to real-time information on precipitation quantities, water content of the snow, etc.

In order to have real-time data available as input to our computer program, the District has installed six meteorological data gathering stations. These are scattered throughout our watershed at varying elevations. They report automatically by radio three times a day to the District's Sacramento office.

As evidence of the success of this system, we have not experienced any major avoidable spills since the computer forecast program was developed.