



PSX

SENT VIA U.S. POSTAL SERVICE

June 7, 2013

STATE WATER RESOURCES CONTROL BOARD
2013 JUN -7 PM 12:56
DIV OF WATER RIGHTS
SACRAMENTO

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

RE: Petition for Temporary Change under License 845 (Application 1739)

Dear Ms. Mrowka:

On behalf of the Thermalito Water and Sewer District ("District"), enclosed please find the following documents:

1. Petition for Temporary Change Involving Water Transfers, with attachment, pursuant to Water Code section 1725 (one original and one copy).
2. Environmental Information Form, with attachment (one original and one copy).
3. A check in the amount of \$2,747 to cover the Division of Water Rights' fee (\$2,000) plus \$0.30 per each acre-foot greater than 10 acre feet based on the total annual amount of water sought to be transferred annually (\$747, based on a total annual amount of water to be diverted of 2,500 af, less 10 acre feet).
4. A check in the amount of \$850 to cover the Department of Fish and Wildlife's fee.

The purpose of the petition is to authorize the temporary transfer of water from the District to Westlands Water District ("Westlands") during July 1 through September 30 of 2013, to provide an additional water supply for irrigation purposes. This proposed transfer is pursuant to and would effectuate the State's policy of encouraging voluntary transfer of water and water rights by using water in an efficient manner consistent with the public welfare as described in Water Code section 109.

R/cvl
\$850
CHK # 2445
6/7/13
CH

R/cvl
\$2,747
CHK # 2446
6/7/13
CH

The District proposes to provide up to 2,500 acre-feet (AF) of water to Westlands through release of water stored in Concow Reservoir. The District intends to release up to 2,500 AF from Concow Reservoir into the State Water Project's Oroville Reservoir. Water will then be released from Oroville into the Feather River, then through the State Water Project's Clifton Court Forebay. From the Clifton Court Forebay, water will pass through Skinner Fish Protection Facility and enter the intake channel of the California Aqueduct leading to Harvey O. Banks Pumping Plant. Banks Pumping Plant will pump the water south of the Delta via the California Aqueduct. The water will then pass through O'Neill Forebay and continue moving south on the State Water Project's side of the San Luis Canal for delivery into the Westlands Water District's CVP service area.

Transferring water from the District's storage will not jeopardize releases in future years, nor will it violate any existing Department of Fish and Wildlife requirements. The District also understands and is aware of possible Department of Water Resources ("DWR") refill criteria and is currently in negotiations with the DWR to arrive at an agreement to facilitate this transfer.

Based upon the District's current projections, the quantity of surface water available for use within the District will be within the historical range, and the proposed transfer will not require the District to pump supplemental groundwater nor reduce deliveries or service in any way. As such, in-District uses will not change as a result of the proposed transfer. Further, since the water for the proposed transfer will come from District's storage in Concow Reservoir, the flows of Concow Creek, the Feather River and the Sacramento River will be greater with the proposed transfer than they would in the absence of the proposed transfer. Finally, the quantity of water released, the rate of water released, and the timing of water released will be in accordance with the requirements established in an agreement entered into between the District and the California Department of Fish and Wildlife for the protection of fish and wildlife resources located in Concow Creek and Concow Reservoir. Therefore, the proposed transfer of up to 2,500 AF will not harm any legal user of water, nor unreasonably affect any fish, wildlife or other instream beneficial uses.

As required by Water Code section 1726, copies of the petition have been sent to the counties where the water is currently used and stored, and to the counties in which water is proposed to be used. Copies have additionally been provided to Tina Bartlett of the California Department of Fish and Wildlife, North Central Region, and George Day of the Central Valley Regional Water Quality Control Board, Redding Branch.

Please let me know if you have any questions.

Very truly yours,

O'LAUGHLIN & PARIS LLP



WILLIAM C. PARIS, III

WCP/tlb

Kathy Mrowka

June 7, 2013

Page 3

cc: Jayme Boucher, GM, TWSD
Thomas W. Birmingham, GM, WWD
Board of Supervisors, Butte County
Board of Supervisors, Fresno County
Board of Supervisors, Kings County
George Day, Central Valley Regional Water Quality Control Board
Tina Bartlett, California Department of Fish and Wildlife, North Central Region
Tom Fossum, Butte County Department of Public Works

Please indicate County where your project is located here:

Butte

MAIL FORM AND ATTACHMENTS TO:
State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. Box 2000, Sacramento, CA 95812-2000
Tel: (916) 341-5300 Fax: (916) 341-5400
http://www.waterboards.ca.gov/waterrights

STATE WATER RESOURCES CONTROL BOARD
2013 JUN -7 PM 2:59
DIV OF WATER RIGHTS
SACRAMENTO

PETITION FOR CHANGE INVOLVING WATER TRANSFERS

Separate petitions are required for each water right. Mark all areas that apply to your proposed change(s). Incomplete forms may not be accepted. Location and area information must be provided on maps in accordance with established requirements. (Cal. Code Regs., tit. 23, § 715 et seq.) Provide attachments if necessary.

- Point of Diversion, Point of Rediversion, Place of Use, Purpose of Use, Temporary Urgency, Temporary Change, Long-term Transfer, Instream Flow Dedication

Application 1759 Permit 1911 License 845 Statement

I (we) hereby petition for change(s) noted above and described as follows:

Point of Diversion or Rediversion - Provide source name and identify points using both Public Land Survey System descriptions to 1/4-1/4 level and California Coordinate System (NAD 83).

Present: See attached.
Proposed: See attached.

Place of Use - Identify area using Public Land Survey System descriptions to 1/4-1/4 level; for irrigation, list number of acres irrigated.

Present: The service area of Thermalito Water and Sewer District, about 13,800 acres, T19-20N, R3-4E, MDB&M, as shown on maps on file with the SWRCB dated August 1985, and revised July 6, 1994.
Proposed: See attached.

Purpose of Use

Present: Domestic, Municipal and Recreation
Proposed: Irrigation

Instream Flow Dedication - Provide source name and identify points using both Public Land Survey System descriptions to 1/4-1/4 level and California Coordinate System (NAD 83).

Upstream Location:
Downstream Location:

Table with 12 columns for months (Jan-Dec) and rows for cubic feet per second and gallons per day.

Will the dedicated flow be diverted for consumptive use at a downstream location? Yes No
If yes, provide the source name, location coordinates, and the quantities of flow that will be diverted from the stream.

Proposed New User(s)

Provide the names, addresses, and phone numbers for all proposed new user(s) of the water right.

Westlands Water District, 3130 N. Fresno Street, P.O. Box 6056, Fresno, CA 93703-6056. (559) 224-1523.

Amount of Water to be Transferred

2500 acre-feet will be transferred. If the basis of right is direct diversion, the average rate of diversion for the maximum 30-day period of use is 19 cfs cubic feet per second or million gallons per day.

General Information – Provide the following information, if applicable to your proposed change(s).

Have you attached an analysis which documents that the amount of water to be transferred or exchanged would have been consumptively used or stored in the absence of the proposed temporary change or long-term transfer? Yes No

Have you attached an analysis of any changes to streamflow, water quality, timing of diversion or use, return flows, or effects on legal users from the proposed temporary change or long-term transfer? Yes No

Have you attached an analysis that shows the proposed temporary change or long-term transfer will not unreasonably affect fish, wildlife, or other instream beneficial uses? Yes No

I (we) have access to the proposed point of diversion or control the proposed place of use by virtue of:
 ownership lease verbal agreement written agreement

If by lease or agreement, state name and address of person(s) from whom access has been obtained.

See attached.

Give name and address of any person(s) taking water from the stream between the present point of diversion or redirection and the proposed point of diversion or redirection, as well as any other person(s) known to you who may be affected by the proposed change.

See files at Division of Water Rights, State Water Resources Control Board.

All Right Holders Must Sign Below: I (we) declare under penalty of perjury that this involves only the amount of water which would have been consumptively used or stored in the absence of the proposed temporary change, and that the above is true and correct to the best of my (our) knowledge and belief.

Dated June 5, 2013 at Chico, California

W.C.A. II
Right Holder or Authorized Agent Signature

Right Holder or Authorized Agent Signature

NOTE: All petitions must be accompanied by:
(1) the form Environmental Information for Petitions, available at: http://www.waterboards.ca.gov/waterrights/publications_forms/forms/docs/pet_info.pdf
(2) Division of Water Rights fee, per the Water Rights Fee Schedule, available at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/fees/
(3) Department of Fish and Wildlife fee of \$850 (Pub. Resources Code, § 10005)

ATTACHMENT TO PETITION FOR CHANGE
TO LICENSE 845 (APPLICATION 1739)
HELD BY THERMALITO WATER AND SEWER DISTRICT

General

The purpose of this temporary change petition is to (1) add those portions of the service areas of Westlands Water District (“Westlands”) that are within the Central Valley Project (“CVP”) service area as places of use, and (2) add the Harvey O. Banks Pumping Plant facility as a point of redirection to License 845. This petition is necessary to enable a one-year transfer of up to 2,500 acre-feet (“AF”) of surface water from the Thermalito Water and Sewer District (“District”) to Westlands in order to provide an additional irrigation water supply in 2013.

Responses to Petition Form

- Current Point of Diversion.

The current point of diversion is Concow Dam, located at South 33° 15' West, 1920 feet from the NE corner of Section 16, T22N, R4E, MDB&M, being within the SE ¼ of NE ¼ said Section 16. Also described as California Coordinate System, Zone 2, North 764,000 and East 2,133,000.

Oroville Dam is the current Point of Rediversion No. 2, within Section 1, T19N, R4E, MDB&M, being within the NW ¼ of the NW ¼ of said Section 1. Also described as California Coordinate System Zone 2, North 681,581 and East 2,145,832.

Thermalito Diversion Dam is the current Point of Rediversion No. 3, within Section 5, T19N, R4E, MDB&M, being within the SW ¼ of the SE ¼ of Section 5. Also described as California Coordinate System, Zone 2, North 678,538 and East 2,128,276.

- Proposed Point of Rediversion.

The petition proposes to add Banks Pumping Plant located at N 2,126,440 ft., E 6,256,425 ft., California Coordinate System Zone 3, NAD 83, being within the NW 1/4 of SE 1/4 of Projected Section 20, T1S, R4E, MDB&M

- Proposed Place of Use.
 - Westlands Water District

Westlands encompasses more than 600,000 acres in Fresno and Kings Counties. Westlands' CVP service area is depicted on Map 214-208-12581 on file with the Division of Water Rights under Application 5626.

- Amount of Water to Be Transferred.

The District proposes a reservoir release transfer of up to 2,500 AF from Concow Reservoir during the period of July 1 through September 30, 2013. The transfer would be accomplished by releasing a maximum steady, continuous flow of approximately 19 cfs from Concow Dam. Such amount is more than the minimum release required by District's license, which is 2 cfs for fish and aquatic resources in Concow Creek, and less than the maximum stream flow of 50 cfs also set forth in District's license.

The District's storage right is limited to a maximum of 8,200 AF, to be collected between December 1 and April 1. As of April 1, 2013, Concow Reservoir was full and spilling.

- Access to Proposed Point of Rediversion.

The proposed point of rediversion is owned by the State of California. By letter dated May 24, 2013, Westlands has requested a conveyance agreement enabling it to convey the water released by the District through the Harvey O. Banks Pumping Plant and down the California Aqueduct. (A copy of the letter is attached hereto as Exhibit A).

Analysis Documenting Water Would Be Consumptively Used or Stored Absent the Transfer

The District proposes to transfer up to 2,500 AF of surface water from July 1 through September 30, 2013 through a release of water from Concow Reservoir. Since 1948, Concow Reservoir has filled and spilled in every year except one. Water released from Concow Reservoir flows into Concow Creek, which flows directly into Lake Oroville. Once the water is in Lake Oroville, it is released from Oroville Dam into the Feather River, then into the Power Canal. The District has intakes on the Power Canal from which it diverts approximately 2,000 AF water and conveys it to its treatment plant for distribution to its customers on an annual basis. The District does not have any effluent, wastewater or other flow return to the Feather River or any other SWP facility.

Pursuant to an agreement with the California Department of Water Resources ("DWR") dated August 16, 1965, and amended on November 21, 1989 and again February 2, 1994 ("Exchange Agreement"), the District provides DWR with a statement of the amount of water available in Concow Reservoir for beneficial use by March 1 of each year. DWR then provides the District with a proposed release schedule from Concow Reservoir. An accounting of the quantity of water taken by District and the amount released from Concow Reservoir is made annually, and any shortfall between the amount taken by District and the amount released is made up by additional releases from Concow Reservoir into Lake Oroville in the month of September each year.

Except when Concow Reservoir is spilling, the District controls flows in Concow Creek. Under normal operations, the District releases the amount of water necessary to (1) satisfy its fish flow requirement (2 cfs in Concow Creek) and (2) repay DWR for the amount diverted from the SWP for use by its customers pursuant to the terms and conditions of the Exchange Agreement. Also, for the past six years the District has released additional water in September to accomplish maintenance in the reservoir; these excess releases, however, are not projected to continue.

All other inflow remains in storage. Thus, absent the transfer, the water proposed for transfer would be consumptively used by District's customers or retained in storage. (Attached hereto as Exhibit B are reservoir operations data going back more than 5 years, including end of month storage, end of month elevation, releases, and water temperatures, and a Resolution declaring a surplus of water).

Analysis of the Potential Changes in Flow, Quality, Timing or Effects on Other Legal Users of Water Resulting from the Proposed Transfer.

The proposed transfer will result in a shift in timing of releases from Concow Reservoir, as the District will be releasing more water from the Concow Reservoir in July and August than normal, and releasing less water in September than recent operations. The water released for the proposed transfer will be in addition to the required fish flow release of 2 cfs, and therefore the flow in Concow Creek will be higher during July and August than would occur absent the transfer. In September, flow will likely be less because there will not be as great of a need to pay back DWR for water taken from the SWP under the Exchange Agreement and previous maintenance releases will have ceased. Nonetheless, the amount released in September will still be in addition to the minimum fish flow release of 2 cfs, and so there will be sufficient flow in Concow Creek for fish and aquatic resources.

The earlier releases will have the effect of lowering the storage level of Concow Reservoir in July and August below the level it would be absent the transfer. However, since Concow Reservoir was full and spilling as of April 1, 2013, and is continuing to spill as of the date of this petition, the additional release from storage will not (a) lower the surface elevation of Concow Reservoir below gage reading 49.9 feet, which corresponds to 1,000 AF, or (b) cause the reservoir level to fluctuate more than two feet during any three week period during the bass spawning and hatching season as required by the District's March 22, 1993 Agreement with the California Department of Fish and Wildlife.

While the releases will be made earlier than would be made absent the transfer, given the historic hydrology it is expected that Concow Reservoir will nonetheless fill by April 1 of 2014, subject to possible Department of Water Resources refill criteria.

Although there are legal users of water taking water from Concow Creek, the Feather River, the SWP, the Sacramento River and the Delta downstream of the existing points of diversion and redirection and upstream of the proposed point of redirection, all such users are diverting pursuant to existing water rights or contracts. The releases from storage at Concow Reservoir pursuant to the temporary transfer will not reduce the available supply to any other legal user of water.

To ensure that future refill of storage space created in Concow Reservoir by the proposed transfer will not harm any legal users of water, the District has been negotiating the terms and conditions of a refill agreement with DWR. Although the specific terms and conditions of the refill agreement have not yet been finalized, the District is aware of and supportive of a refill agreement and expects to enter into such agreement as part of this petition.

Since this release will be made from storage, there will be no change or reduction of in-District demand or usage. The quality, quantity and timing of water delivered to the District's customers will not be affected by the proposed transfer.

Analysis of Potential Effects on Fish, Wildlife and Other Instream Beneficial Uses

As further explained and described in the attached Environmental Information Form accompanying this Petition, the proposed transfer would not adversely affect fish, wildlife or other instream uses or requirements.

Concow Creek flows into Lake Oroville, which exists as a result of Oroville Dam. Since there is no fish ladder or other passage at Oroville Dam, there are no anadromous fish species living in Concow Creek. The increased flows in Concow Creek below Concow Dam in July and August, and the lower flows in September, resulting from the transfer, will not affect any anadromous species in Concow Creek.

The timing of the proposed transfer would increase flows marginally in the Feather River downstream of the Oroville Complex in July, August and September (flows released downstream of Oroville in September, as opposed to being released into Lake Oroville in September). The timing of the proposed transfer avoids the primary life cycle timing of upstream migration and reproduction of anadromous fish in the Feather River. Upstream migration and spawning of steelhead and fall-run Chinook salmon occur during the fall and winter. Upstream migration of spring-run Chinook salmon primarily occurs during the spring, and to a lesser extent, the early fall with reproduction occurring in the early fall. Green sturgeon upstream migration occurs during the winter and spring with reproduction occurring in the spring. The proposed transfer period avoids adverse impacts to these species by timing the increased flows in the Feather River downstream of Lake Oroville when the fish are not seasonally present.

Since there are no anadromous fish in Concow Reservoir or in Concow Creek between Concow Reservoir and Lake Oroville, any changes in water temperatures will not adversely affect anadromous fish species. A change in temperatures in Concow Reservoir itself is expected to occur, as water is released from storage in July and August in greater amounts than absent the transfer. However, the transfer is timed to occur after the spawning and hatching period of the bass living in Concow Reservoir, and thus any change in temperature or surface level will not affect the fish, wildlife or aquatic resources associate with Concow Reservoir, or violate any DFW requirements. The transfer will comply with all requirements of the District's March 22, 1993 Agreement with DFW designed to protect aquatic species in and around Concow Reservoir.

Westlands intends to divert the transferred water through the State Water Project's Clifton Court Forebay, the Skinner Fish Protection Facility and enter the intake channel of the California Aqueduct leading to the Harvey O. Banks Pumping Plant. Since the proposed diversion is located downstream of the fish screen at the Skinner Fish Protection Facility, the proposed transfer should not result in any harm to Delta fish species.

Finally, once diverted from Banks Pumping Plant, the transferred water will be conveyed south through the California Aqueduct through the O'Neill Forebay and continue moving south on

the SWP's side of the San Luis Canal for delivery into Westlands' service area. This design will avoid impacts on Delta smelt or other species of concern existing in the Delta. Moreover, the proposed transfer will not affect the rights, duties or obligations of any party under the applicable SWRCB Water Quality Control Plan, SWRCB Decision 1614, federal Biological Opinions, or any other state or federal requirement.

EXHIBIT A

EXHIBIT A



Westlands Water District

3130 N. Fresno Street, P.O. Box 6056, Fresno, California 93703-6056, (559) 224-1523, FAX (559) 241-6277

May 24, 2013

Mr. Robert Cooke
Chief of DWR's State Water Projects Analysis Office
State Water Project Analysis Office
P.O. Box 942836
Sacramento, CA 94236-0001

Re: Conveyance Agreement for Thermalito Water and Sewer District 2,500 AF Transfer to Westlands Water District through Harvey O. Banks Pumping Plant and State Aqueduct

Dear Mr. Cooke,

As you are certainly aware, California has experienced extremely dry hydrologic conditions in 2013. Consequently, Westlands Water District's (District) 2013-2014 CVP allocation is only 20 percent. In an effort to mitigate impacts from lost supply, the District has an agreement to transfer water from Thermalito Water and Sewer District (TWSD) that it has right to pursuant to Water Rights Licenses 645 and 737. In support of the transfer, TWSD has filed a Change in Place of Use and Point of Rediversion to divert its water right south of the Delta into the District's service area. The District and TWSD propose releasing this water into the Delta and diverting at Harvey O. Banks Pumping Plant, and conveying down the state side of the California Aqueduct into the District.

By this letter the District requests an agreement for conveyance through Harvey O. Banks Pumping Plant and down the California Aqueduct. Based on preliminary projections, it appears that capacity is available at the pumping plant to divert non project water July 1, 2013 through September 30, 2013. This conveyance is estimated at up to 13 cubic feet per second, for a total of approximately 1,750 acre-feet, after incurring Delta carriage losses (currently assumed at 30 percent).

Please call me at 559-241-6215 regarding any additional information needed or questions related to this agreement.

Sincerely,

Jose Gutierrez, P.E.
Deputy General Manager of Resources

Enclosed: Transfer Proposal

Cc: Thermalito Water and Sewer District
William C. Paris, III of O'Laughlin & Paris LLP

Transfer Proposal

Thermalito Water and Sewer District 2,500 AF Surface Water Transfer to Westlands Water District

Thermalito Water and Sewer District (TWSD) proposes to transfer up to 2,500 acre-feet (AF) of water currently stored in its Concow Reservoir on the West Branch of the Feather River to Westlands Water District (District) for irrigation use within the service area of the District. To accomplish this transfer, the temporary Changes in the Place of Use and Points of Rediversion under TWSD's Concow Creek Water Right Licenses 645 & 737 are required. Described below is the preferred route to deliver TWSD water into the District's service area.

Conveyance Route

TWSD proposes to release up to an additional 2,500 AF of water stored in its Concow Reservoir for transfer to the District (Transfer Water). The Transfer Water will be released from Concow Reservoir on the West Branch of the Feather River, and will be routed to Oroville Reservoir. TWSD will verify the amount of Transfer Water diverted into Oroville Reservoir by measuring the releases made from Concow Reservoir's orifice at the end of the flume. Approximately 19 CFS of daily water releases from Concow Reservoir will be dedicated to this transfer. TWSD will report the amount of Transfer Water to Department of Water Resources (DWR), and the District in monthly reports. DWR will verify the total amount delivered based upon the actual October storage low point. TWSD has projected the October low point to occur when storage levels reach 4,725 AF (7,225 AF without this transfer).

Transfer Water is expected to be released from Concow Reservoir July through September 2013. DWR will schedule the releases from Oroville Reservoir July 1, 2013 to September 30, 2013. Figure 1 includes the proposed transfer schedule for each month.

	July	August	September
Released Amount from Oroville Reservoir (AF)	1,168	1,168	164

Figure 1- Proposed Schedule

After the Transfer Water is release from Oroville Reservoir, the Transfer Water will flow down the Feather Rivers and redivert, less Delta carriage losses (currently assumed at 30 percent), through the State Water Project's Clifton Court Forebay, the Skinner Fish Protection Facility and enter the intake channel of the California Aqueduct leading to Harvey O. Banks Pumping Plant (Banks PP). Banks PP will pump the water south of the Delta via the California Aqueduct (CA). The Transfer Water will pass through O'Neill Forebay and continue moving south on the State

Water Project’s side of the San Luis Canal (SLC) for delivery into the District’s service area, less conveyances losses (currently assumed at 2 percent from Banks to O’Neill and 3 percent downstream of O’Neill). Figure 2 includes the required capacity at State facilities to complete this transfer.

Facility	July	August	September
Banks Pumping Plant (AF)	818	818	115
O’Neill Forebay (AF)	801	801	113
State side of the San Luis Canal (AF)	777	777	109

Figure 2- Conveyance Facility Conveyance

Required Analysis

In order to accomplish the transfer, TWSD determined that a surplus exists, met the refill agreement criteria and completed the appropriate environmental documents. TWSD has determined that it has at least 2,500 AF of surplus water stored in Concow Reservoir. TWSD reached this conclusion by comparing their historical water deliveries and their total annual appropriative right of 8,200 AF of surface water stored in Concow Reservoir. TWSD customers total annual average water services demands are approximately 2,000 AF. The difference between TWSD appropriative water right and average demand results in approximately 6,200 AF in surplus supply. This water is diverted from Concow Creek to storage in Concow Reservoir pursuant to Water Right Permits nos. 645 and 737.

End of Season Target Carryover

After the additional 2,500 AF is released, Concow Reservoir’s forecasted end of season target carryover storage level reduces to approximately 4,725 AF. This proposed with-transfer carryover level remains above the minimum carryover level of 1,000 AF, per the March 22, 1993 Agreement with the California Department Fish and Wildlife (DFW). The 2,500 AF of additional water, released from Concow storage, which would have otherwise remained from storage in the absence of this transfer, is the water that is proposed to be transferred.

Impacts Analyzed

As a requirement of this transfer, TWSD will sign a reservoir refill agreement with DWR, ensuring that future refill of any storage space in TWSD Concow Reservoir created by the water transfer will not come from water that TWSD would not otherwise have been entitled to in accordance with its water rights. The refill agreement will ensure that other legal users of water with vested rights to water from the Feather River watershed are not unreasonably affected or

negatively impacted by the proposed transfer. This transfer will only result in a slight increase, not decrease, in streamflows below Concow Reservoir into the West Branch of the Feather River. Any increase would be minor and would not cause any water flows to increase above normal seasonal levels, or to violate any regulatory requirements. The released water would have been stored by TWSD in accordance with its water rights and would not otherwise be available to any legal user of water.

This Transfer Water will not impact Butte County, or fish and wildlife. Butte County will not be impacted by this Transfer Water because this Transfer Water is surplus water and TWSD has entered into a refill agreement to replace the Transfer Water. Under the surplus analysis, TWSD has evaluated the Transfer Water potential effect to Butte County's recreational activities and economic impacts as required by section 1810(d). Concow Reservoir supports a small recreation economy. Recreational fishing includes three bank permit locations. Since the reduction in water level from this Transfer Water is expected to remain above the DFW minimum requirements, the transfer will still allow full operation of the bank permit locations. Since this Transfer Water will result in a slight increase to streamflows, fisheries and aquatic resources will not be notably affected by implementation of the proposed action, resulting in no cumulative effects relative to not releasing the Transfer Water.

The revenues associated with the release of this Transfer Water will pay for required capital improvements and improve the water infrastructure within Butte County without having to increase water fees and charges. As a direct result of TWSD transferring 2,500 AF out of Concow Reservoir to the District, the carry over supply will be reduced by 2,500 AF.

As required for water transfer release from reservoir storage the following items are enclosed:

- A minimum of five years' reservoir operating data, including end-of-month storage.
- End-of-season reservoir storage projections.
- Historic and forecast inflows with monthly updates.
- Historic and forecast water demands with monthly updates.
- Historic reservoir releases.
- Instream requirements.
- Surplus Analysis.
- Flood control diagram

**Thermalito Water and Sewer District (formally Thermalito Irrigation District)
Concow (Wilenor) Reservoir Operations**

End of Month Storage

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1947	1052.00	3568.00	6984.00	8062.00	8062.00		6550.00	5509.00	4170.00	2749.00	1550.00	614.00
1958	7327.00	7327.00	7327.00	8060.00	8020.00	7531.00	3764.00	2600.00	1572.00	640.00	0.00	0.00
1959	3940.00	7327.00	7327.00	6800.00	6000.00	4944.00	3764.00	2600.00	1572.00	640.00	0.00	0.00
1960		7327.00	7327.00	7472.00	7184.00	6133.00	4944.00	3725.00	2510.00	1517.00	1873.00	3089.00
1961	3268.00	6484.00	7913.00	7765.00	7379.00	6592.00	4992.00	3726.00	2526.00	1372.00	1220.00	2749.00
1962	3947.00	7472.00	7765.00	7618.00	7184.00	6080.00	4944.00	3844.00	2749.00	7327.00	7041.00	7327.00
1963	7327.00	7327.00	7472.00	7472.00	8062.00	7560.00	6484.00	5433.00	4596.00	3453.00	4483.00	3743.00
1964	6213.00	6348.00	6430.00	6348.00	6260.00	5636.00	4528.00	3844.00	2916.00	1362.00	1629.00	7327.00
1965	7327.00	7327.00	7765.00	8212.00	7618.00			5061.00	4050.00	3002.50	3360.50	4597.00
1966	7618.00	7765.00	7618.00	7327.00	6213.00	5064.00	4156.00	3183.00	2102.00	808.00	3179.00	7327.00
1967	7618.00	7327.00	7913.00	8063.00	7618.00	7184.00	5433.00	3844.00	2284.00	1313.00	1412.00	2284.00
1968	5947.00	7618.00	7913.00	7327.00	6622.00	5687.00			1748.00	1220.00	2046.00	7041.00
1969	7472.00	7472.00	7618.00	8063.00	7618.00	7327.00	5560.00	4262.00	2505.00	1748.00	1267.00	7472.00
1970	7327.00	7327.00	7618.00	8212.00	8212.00	8212.00	6760.00	5185.00	1363.00	1313.00	5185.00	7327.00
1971	7327.00	7327.00	7327.00	8212.00	8212.00	8212.00	7618.00	6080.00	2025.00	521.00	976.00	1748.00
1972	4373.00	6213.00	7473.00	8212.00	8212.00	8063.00	6760.00	5433.00	1968.00	692.00	2064.00	4263.00
1973	7618.00	7618.00	7618.00	7327.00	7356.00	7385.00	7070.00	6080.00	1443.00	1423.00	7327.00	7327.00
1974	7327.00	7327.00	7327.00	7913.00	8153.00	7618.00	7184.00	5739.00	1573.00	976.00	1412.00	2064.00
1975	3268.00	6760.00	6760.00	8212.00	8063.00	7768.00	7184.00	6213.00	1629.00	1313.00	2141.00	2833.00
1976	3268.00	4483.00	5433.00	6348.00	6484.00	6484.00	5739.00	5358.00	3052.00	2388.00	1748.00	2213.00
1977	2284.00	2433.00	2916.00	3037.00	2733.00	2669.00	2521.00	2433.00	2433.00	2433.00	2816.00	5817.00
1978	7327.00	7327.00	7327.00	7913.00	7913.00	7913.00	7798.00	7766.00	0.00	170.00	614.00	1052.00
1979	3764.00	7473.00	7618.00	8063.00	8063.00	7943.00	7766.00	7618.00	5065.00	4483.00	5560.00	7618.00
1980	7385.00	7473.00	7385.00	8122.00	8063.00	8063.00	8033.00	7795.00	1761.00	1949.00	2097.00	3549.00
1981	6622.00	7414.00	7385.00	8063.00	8063.00	8003.00	7795.00	7531.00	4157.00	2866.00	7327.00	7414.00
1982	7327.00	7327.00	7560.00	8063.00	8063.00	8033.00	8033.00	7913.00	3988.00	4597.00	7443.00	7414.00
1983	7473.00	7618.00	7531.00	8212.00	8182.00	8092.00	7913.00	7184.00	1629.00	1861.00	5765.00	7473.00
1984	7356.00	7356.00	7414.00	8003.00	8003.00	7913.00	7736.00	7618.00	3784.00	4710.00	7327.00	7414.00
1985	7414.00	7414.00	7443.00	8003.00	8033.00	7766.00	5687.00	4351.00	4483.00	4483.00	5947.00	6760.00
1986	7414.00	7414.00	7414.00	7414.00	7356.00	7327.00	5585.00	5560.00	3947.00	4135.00	4285.00	5309.00
1987	6186.00	7414.00	7414.00	7913.00	7795.00	7707.00	7502.00	7070.00	3665.00	3745.00	3947.00	7414.00
1988	7414.00	7356.00	7414.00	8093.00	7945.00	7826.00	7356.00	7356.00	5185.00	3906.00	5947.00	6760.00
1989	7356.00	7356.00	7443.00	8152.00	8063.00	7884.00	7677.00	7502.00	5687.00	4827.00	5137.00	5309.00
1990	7356.00	7443.00	7854.00	6788.00	8063.00	7825.00	7618.00	7356.00	4944.00	1220.00	1229.00	1412.00
1991	1010.00	3109.00	7225.00	7019.00	7019.00	6902.00	6589.00	6340.00	4816.00	4720.00	4744.00	5060.00
1992	5881.00	6450.00	6395.00	7019.00	6873.00	6702.00	6506.00	6258.00	4576.00	4648.00	4648.00	6450.00
1993	6450.00	6506.00	6506.00	7078.00	7078.00	6930.00	6788.00	6645.00	4914.00	4962.00	4962.00	6340.00

1994	6423.00	6506.00	6506.00	6930.00	6930.00	6759.00	6506.00	6231.00	4576.00	4435.00	4744.00	6450.00
1996	6506.00	6505.00	6505.00	7225.00	7225.00	7078.00	6816.00	6648.00	6068.00	5988.00	5988.00	6506.00
1996	6534.00	6645.00	6788.00	7166.00	7166.00	7137.00	6930.00	6702.00	5619.00	5828.00	6478.00	6788.00
1997	6645.00	6506.00	7225.00	6960.00	6960.00	7107.00	7078.00	6930.00	6095.00	6231.00	6395.00	6395.00
1998	6506.00	6450.00	6788.00	6731.00	6731.00	7166.00	7107.00	7078.00	6367.00	6367.00	6674.00	6395.00
1999	6367.00	6506.00	6930.00	6873.00	6873.00	7136.00	6989.00	6930.00	6312.60	5593.00	6422.00	6422.00
2000	6423.00	6478.00	6989.00	7107.00	7107.00	7107.00	6989.00	6873.00	4026.00	5776.00	6150.00	6367.00
2001	6367.00	6367.00	6367.00	6592.00	6592.00	7166.00	6989.00	7107.00	6645.00	5311.00	5530.00	6367.00
2002	6475.00	6504.00	7107.00	7196.00	7196.00	7156.00	6508.00	6673.00	5671.40	5643.80	5880.20	6930.00
2003	6478.20	6478.20	7077.50	7224.50	7224.50	7195.00	7077.50	6935.00	9176.60	6095.00	6422.60	6533.80
2004	6506.00	6394.80	6901.50	7224.50	7224.50	7136.50	6880.00	6787.50	5801.90	5854.10	6232.10	6589.40
2005	6203.80	6231.60	6231.60	7224.50	7224.50	7166.00	7107.00	6960.00	5541.40	5567.00	6203.80	6645.00
2006	6645.00	6645.00	7077.50	6935.00	6935.00	7225.00	7225.00	6935.00	5828.00	5828.00	6095.00	6367.00
2007	6367.00	6367.00	6645.00	7077.50	7077.50	7077.50	6935.00	6673.50	5439.00	5490.20	5593.10	6422.60
2008	6645.00	6450.40	6478.20	6702.00	6702.00	6759.00	6617.20	6394.00	5260.80	5185.50	5593.10	6506.00
2009	6478.20	6959.50	7166.00	7166.00	7166.00	7166.00	7048.00	6617.20	5135.30	5311.00	5490.20	6450.40
2010	6506.00	6506.00	6589.40	7077.50	7077.50	7195.40	7136.50	7018.50	4840.40	5671.40	6506.00	6645.00
2011	6367.00	6645.00	6645.00	7225.00	7225.00	7431.50	7284.00	7136.50	4341.00	4816.00	5185.50	5490.20
2012	6506.00	6450.40	7048.00	7225.00	7225.00	7166.00	7136.50	7107.00	5311.00	5311.00	6176.60	6506.00
2013												

End of Month Elevation

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1947	45.0	63.6	77.8	81.5	81.5	79.7	76.3	72.4	66.5	59.0	50.3	38.5
1958	79.0	79.0	79.0	81.6	81.3	79.7	64.6	58.3	50.5	38.5	0.0	0.0
1959	65.4	79.0	79.0	77.1	74.2	70.0	64.6	58.3	57.5	50.0	53.0	61.0
1960		79.0	79.0	79.5	78.5	74.7	70.0	64.4	57.6	48.6	47.0	59.0
1961	62.0	76.0	81.0	80.5	79.2	75.4	70.2	65.0	59.0	79.0	78.0	79.0
1962	65.5	79.5	80.5	80.0	78.5	74.5	70.0	72.0	68.5	63.0	68.0	64.5
1963	79.0	79.0	79.5	79.5	81.5	79.8	76.0	65.0	60.0	48.5	51.0	79.0
1964	75.0	75.5	75.8	75.5	75.2	72.8	68.2	69.5	66.0	60.5	62.5	68.5
1965	79.0	79.0	80.5	82.0	80.0			61.5	54.5	41.5	61.5	79.0
1966	80.0	80.5	80.0	79.0	75.0	70.5	66.5	65.0	56.0	48.0	49.0	56.0
1967	80.0	79.0	81.0	81.5	80.0	78.5	72.0	65.0	52.0	47.0	54.0	78.0
1968	74.0	78.5	80.0	79.0	76.5	73.0		67.0	59.5	52.0	47.5	79.5
1969	79.5	79.5	80.0	81.5	80.0	79.0	72.5	71.0	49.5	48.0	71.0	79.0
1970	79.0	79.0	80.0	82.0	82.0	82.0	77.0	74.5	53.8	36.0	44.0	52.0
1971	79.0	79.0	79.0	82.0	82.0	82.0	80.0	72.1	54.6	47.9	54.0	66.9
1972	67.5	75.0	79.5	81.3	81.3	81.5	77.0	74.5	50.7	49.1	79.0	79.0
1973	80.0	80.0	80.0	79.0	79.1	79.2	76.0	74.8	51.4	44.0	49.0	54.0
1974	79.0	79.0	79.0	81.0	81.0	80.0	78.5	74.8	51.0	48.0	55.0	59.5
1975	62.0	77.0	77.0	82.0	81.5	80.5	78.5	75.0				

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2001	7.23	6.69	4.03	10.46	0.02	0.36	0.00	0.00	1.20	2.80	9.16	15.46
2002	10.46	3.99	6.08	3.42	2.56	0.00	0.00	0.00	0.00	0.00	3.61	22.51
2003	9.28	1.51	2.66	9.44	5.69	0.00	0.03	0.69	0.00	0.00	3.86	10.60
2004	6.31	13.51	1.54	1.56	0.02	0.16	0.00	0.00	0.32	4.99	2.13	11.11
2005	7.48	4.31	6.71	6.74	8.37	2.15	0.00	0.00	0.04	1.67	5.25	23.95
2006	14.20	2.89	24.02	8.99	0.70	0.61	0.00	0.00	0.00	0.00	5.80	6.84
2007	0.56	6.11	3.39	3.67	0.40	0.00	0.65	0.00	0.49	3.82	3.13	8.34
2008	7.21	7.86	0.72	0.85	0.18	0.00	0.00	0.00	0.00	2.80	4.15	6.86
2009	4.22	22.08	6.27	0.88	0.47	0.00	0.00	0.00	0.42	3.51	0.56	6.21
2010	18.31	7.89	5.85	12.19	3.18	0.04	0.00	0.00	0.08	2.32	4.67	16.10
2011	1.29	6.39	17.11	5.28	7.21	2.26	1.18	0.00	0.55	5.80	2.89	0.24
2012	7.26	2.37	14.74	5.31	0.10	0.74	0.13	0.00	0.00	2.65	6.25	8.72
2013												

Release

58.41 55 Yr. Av.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1947	181.7											
1958	221.2	190.4	189.6	217.2	419.2	570.6	854.7	971.6	816.2	691.0	516.3	431.8
1959	308.0	221.8	192.1	259.8	456.2	600.6	715.2	672.4	369.0	300.8	188.3	92.3
1960		65.1	63.4	76.2	231.0	454.2	479.6	430.4	351.0	202.6	91.3	71.6
1961	54.6	59.0	69.8	97.9	220.7	384.7	502.3	445.3	458.4	248.8	117.7	75.7
1962	43.5	71.1	68.4	137.5	259.4	352.7	361.5	348.2	307.0	153.1	68.3	65.6
1963	55.8	69.7	82.4	78.2	224.2	366.5	432.6	418.3	301.2	142.5	123.0	155.2
1964	103.8	102.7	109.2	128.6	229.5	326.3	401.9	402.7	300.3	268.2	101.1	111.1
1965	98.3	62.0	82.6	83.6	255.8				298.7	231.7	96.3	86.5
1966	104.0	105.3	84.4	180.6	261.3	370.6	374.6	380.3	298.7	191.6	85.0	80.7
1967	75.0	56.0	69.3	48.4	173.0	221.3	353.4	372.8	300.9	166.6	87.5	71.0
1968	68.47	52.6	62.33	177.85	278.61	320.71			302.4	156.8	85.77	81.57
1969	89.82	80.22	96.89	104.64	278.67	359.87	394.67	338.53	310.86	222.65	94.65	101.07
1970	178.769	246.10	270.33	192.00	340.96	354.62	439.40	415.896	327.71	186.74	77.09	102.48
1971	244.27	230.09	267.35	123.76	217.54	351.55	438.01	403.04	331.01	186.23	93.4	219.57
1972	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1973	NA	NA	NA	NA	NA	NA	NA	NA	NA	557.00	0.00	NA
1974	0.00	0.00	0.00	0.00	0.00	594.00	905.00	1865.00	4421.00	1170.00	0.00	0.00
1975	0.00	0.00	0.00	0.00	0.00	1264.00	1008.00	1227.00	4971.00	640.00	0.00	0.00
1976	0.00	0.00	0.00	0.00	0.00	0.00	468.00	0.00	2864.00	210.00	793.00	0.00
1977	0.00	0.00	0.00	0.00	510.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1978	2203.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7900.00	0.00	0.00	0.00
1979	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2714.00	1056.00	0.00	0.00
1980	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6190.70	0.00	0.00	0.00

1981	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3708.00	1828.00	0.00	0.00
1982	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4091.63	0.00	0.00	0.00
1983	0.00	0.00	0.00	0.00	0.00	0.00	767.72	5556.98	0.00	0.00	0.00	0.00	0.00
1984	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4024.08	0.00	0.00	0.00	0.00	0.00
1985	0.00	0.00	0.00	0.00	0.00	2079.00	1618.04	0.00	0.00	0.00	0.00	0.00	0.00
1986	0.00	0.00	0.00	0.00	0.00	1815.26	57.42	1817.64	0.00	0.00	0.00	0.00	0.00
1987	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3802.90	0.00	0.00	0.00	0.00	0.00
1988	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2200.00	1865.47	0.00	0.00	0.00	0.00
1989	0.00	0.00	0.00	0.00	118.80	122.76	134.64	1830.84	1591.23	0.00	0.00	0.00	0.00
1990	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2412.00	3695.00	0.00	0.00	0.00	0.00
1991	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1654.60	0.00	0.00	0.00	0.00	0.00
1992	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1650.64	0.00	0.00	0.00	0.00	0.00
1993	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1654.60	0.00	0.00	0.00	0.00	0.00
1994	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1654.00	0.00	0.00	0.00	0.00	0.00
1995	0.00	0.00	0.00	0.00	0.00	0.00	0.00	522.95	0.00	0.00	0.00	0.00	0.00
1996	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1169.00	0.00	0.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00	0.00	0.00	0.00	835.00	0.00	0.00	0.00	0.00	0.00
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	711.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	617.40	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2728.20	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1332.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1080.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	758.40	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1284.79	0.00	0.00	0.00	0.00	0.00
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1418.10	0.00	0.00	0.00	0.00	0.00
2006	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1102.00	0.00	0.00	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1115.49	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	888.60	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1529.44	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2178.10	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2555.36	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00
2013													

Fish Flow Minimum of 2cfs

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	41.58	25.74	61.38	59.4	122.76	122.76	15.84	0	0	122.76
1991	122.76	110.88	122.76	118.8	122.76	118.8	122.76	122.76	118.8	122.76	118.8	122.76

1992	122.76	114.84	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1993	122.76	110.88	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1994	122.76	110.88	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1995	122.76	110.88	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1996	122.76	114.84	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1997	122.76	110.88	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1998	122.76	110.88	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1999	122.76	110.88	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
2000	122.76	114.84	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
2001	122.76	110.88	122.76	122.76	122.76	122.76	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
2002	122.76	122.76	122.76	122.76	122.76	122.76	122.76	122.76	122.76	122.76	122.97	120.20	135.27	135.27
2003	184.46	166.61	184.46	178.51	122.97	122.97	122.97	122.97	119.01	122.97	148.76	148.76	153.72	153.72
2004	156.79	172.56	148.76	148.76	153.72	153.72	153.72	123.00	119.01	122.98	119.01	122.98	119.01	153.72
2005	153.72	138.84	153.72	148.76	153.71	153.71	122.75	122.75	130.90	122.75	119.01	122.98	119.01	217.67
2006	184.46	167.00	184.00	178.51	184.46	178.51	153.72	122.98	178.51	122.98	124.96	124.96	119.01	122.98
2007	153.72	138.84	122.98	133.88	122.98	121.81	122.98	122.98	121.81	122.98	119.01	122.96	121.98	126.05
2008	153.72	143.80	153.72	119.10	122.97	119.01	122.98	122.98	119.01	122.98	119.00	161.00	156.50	167.25
2009	217.67	196.60	217.05	209.45	217.67	208.26	199.83	210.90	208.26	217.66	208.26	217.66	156.50	217.66
2010	217.66	196.60	217.66	210.64	217.67	210.64	217.67	217.67	210.64	217.67	210.64	167.25	167.80	217.67
2011	217.67	196.60	217.67	210.64	217.67	210.64	217.67	215.21	210.64	167.25	210.64	167.25	130.90	135.26
2012	135.26	770.78	1174.41	1136.53	977.65	624.80	324.70	265.63	119.01	159.87	182.08	1174.41		

End of Month Water Temperature 2 feet below surface Started recording in 1994

Year	Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1994	N/A	N/A	54.00	59.50	71.00	78.00	80.00	73.00	70.00	N/A	N/A	N/A
1995	N/A	N/A	51.00	57.00	69.00	76.00	80.00	74.00	72.00	60.00	56.00	N/A
1996	N/A	54.00	54.00	60.00	66.00	76.00	81.00	76.00	68.00	59.00	54.00	50.00
1997	47.00	48.00	58.00	63.00	70.00	74.00	78.00	81.10	71.00	60.00	54.00	47.00
1998	48.00	46.00	54.00	60.00	60.00	72.00	80.00	78.00	72.00	69.00	50.00	40.00
1999	46.00	50.00	53.00	62.00	72.00	73.00	76.00	75.00	70.00	60.00	56.00	44.00
2000	43.00	46.00	58.00	61.00	76.00	80.00	82.00	71.00	69.00	62.00	49.00	45.00
2001	40.00	39.00	60.00	58.00	76.00	72.00	76.00	77.00	72.00	N/A	N/A	44.00
2002	46.00	46.00	50.00	62.00	72.00	76.00	80.00	76.00	68.00	61.00	53.00	46.00
2003	48.00	46.00	53.00	52.00	70.00	76.00	82.00	74.00	68.00	60.00	49.00	44.00
2004	44.00	46.00	56.00	64.00	69.00	76.00	78.00	75.00	68.00	57.00	50.00	46.00
2005	44.00	48.00	50.00	58.00	69.00	70.00	80.00	75.00	70.00	52.00	48.00	40.00
2006	40.00	50.00	49.00	61.00	68.00	80.00	75.00	75.00	68.00	60.00	53.00	47.00
2007	44.00	41.00	56.00	59.00	69.00	71.00	74.00	74.00	68.00	60.00	43.00	44.00
2008	43.00	48.00	52.00	58.00	68.00	70.00	72.00	72.00	68.00	58.00	53.00	43.00
2009	48.00	44.00	55.00	65.00	76.00	78.00	83.00	80.00	73.00	62.00	52.00	49.00
2010	48.00	54.00	54.00	54.00	50.00	72.00	79.00	74.00	70.00	51.00	41.00	38.00
2011	42.00	41.00	40.00	54.00	58.00	72.00	74.00	75.00	69.00	58.00	48.00	42.00
2012	40.00	45.00	46.00	46.00	54.00	66.00	70.00	73.00	72.00	69.00	56.00	51.00

November 1959 Wilenor Reservoir went dry night of 16th. New 16" valve installed on face of dam. Deliveries to PG&E now are curtailed until rains and have additional storage in reservoir.

December 1959 record not complete, no Wilenor water delivered to BW27.

No record for January 1960.

All water releases before 1972 was for TID only. For 1972 through 1986 the Water releases were for TID and TMWD both.

June, July and August of 1965 no records

July and August no records.

September 1978 Lake was lowered to 0 level and in October replaced two 16" release valves and cones.

Recording of fish flows where not required prior to 1990 Department of Fish and Game required a minimum flow of 2-cfs to be released into the Concow Creek and a paper recording chart from a flow meter be retained. The District did buy a Stevens flow meter June of 1990 and DWR from Oroville did calibrated the flow meter after it was installed.

1990 Lake capacity study was completed by Rolls Rolls and Anderson Engineering and calculated the capacity of the Reservoir was 7200 Acre feet. Made a release to validate the study in the fall of 1990.

EXHIBIT B

**Thermalito Water and Sewer District (formally Thermalito Irrigation District)
Concow (Wilenor) Reservoir Operations**

End of Month Storage

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1947	1052.00	3568.00	6984.00	8062.00	8062.00							
1958	7327.00	7327.00	7327.00	8060.00	8020.00	7531.00	6550.00	5509.00	4170.00	2749.00	1550.00	614.00
1959	3940.00	7327.00	7327.00	6800.00	6000.00	4944.00	3764.00	2600.00	1572.00	640.00	0.00	0.00
1960		7327.00	7327.00	7472.00	7184.00	6133.00	4944.00	3725.00	2510.00	1517.00	1873.00	3089.00
1961	3268.00	6484.00	7913.00	7765.00	7379.00	6592.00	4992.00	3726.00	2526.00	1372.00	1220.00	2749.00
1962	3947.00	7472.00	7765.00	7618.00	7184.00	6080.00	4944.00	3844.00	2749.00	7327.00	7041.00	7327.00
1963	7327.00	7327.00	7472.00	7472.00	8062.00	7560.00	6484.00	5433.00	4596.00	3453.00	4483.00	3743.00
1964	6213.00	6348.00	6430.00	6348.00	6260.00	5636.00	4528.00	3844.00	2916.00	1362.00	1629.00	7327.00
1965	7327.00	7327.00	7765.00	8212.00	7618.00			5061.00	4050.00	3002.50	3360.50	4597.00
1966	7618.00	7765.00	7618.00	7327.00	6213.00	5064.00	4156.00	3183.00	2102.00	808.00	3179.00	7327.00
1967	7618.00	7327.00	7913.00	8063.00	7618.00	7184.00	5433.00	3844.00	2284.00	1313.00	1412.00	2284.00
1968	5947.00	7618.00	7913.00	7327.00	6622.00	5687.00		1748.00	1220.00	2046.00	2046.00	7041.00
1969	7472.00	7472.00	7618.00	8063.00	7618.00	7327.00	5560.00	4262.00	2505.00	1748.00	1267.00	7472.00
1970	7327.00	7327.00	7618.00	8212.00	8212.00	8212.00	6760.00	5185.00	1363.00	1313.00	5185.00	7327.00
1971	7327.00	7327.00	7327.00	8212.00	8212.00	8212.00	7618.00	6080.00	2025.00	521.00	976.00	1748.00
1972	4373.00	6213.00	7473.00	8212.00	8212.00	8063.00	6760.00	5433.00	1968.00	692.00	2064.00	4263.00
1973	7618.00	7618.00	7618.00	7327.00	7356.00	7385.00	7070.00	6080.00	1443.00	1423.00	7327.00	7327.00
1974	7327.00	7327.00	7327.00	7913.00	8153.00	7618.00	7184.00	5739.00	1573.00	976.00	1412.00	2064.00
1975	3268.00	6760.00	6760.00	8212.00	8063.00	7768.00	7184.00	6213.00	1629.00	1313.00	2141.00	2833.00
1976	3268.00	4483.00	5433.00	6348.00	6484.00	6484.00	5739.00	5358.00	3052.00	2388.00	1748.00	2213.00
1977	2284.00	2433.00	2916.00	3037.00	2733.00	2669.00	2521.00	2433.00	2433.00	2433.00	2816.00	5817.00
1978	7327.00	7327.00	7327.00	7913.00	7913.00	7913.00	7798.00	7766.00	0.00	170.00	614.00	1052.00
1979	3764.00	7473.00	7618.00	8063.00	8063.00	7943.00	7766.00	7618.00	5065.00	4483.00	5560.00	7618.00
1980	7385.00	7473.00	7385.00	8122.00	8063.00	8063.00	8033.00	7795.00	1761.00	1949.00	2097.00	3549.00
1981	6622.00	7414.00	7385.00	8063.00	8063.00	8003.00	7795.00	7531.00	4157.00	2866.00	7327.00	7414.00
1982	7327.00	7327.00	7560.00	8063.00	8063.00	8033.00	8033.00	7913.00	3988.00	4597.00	7443.00	7414.00
1983	7473.00	7618.00	7531.00	8212.00	8182.00	8092.00	7913.00	7184.00	1629.00	1861.00	5765.00	7473.00
1984	7356.00	7356.00	7414.00	8122.00	8003.00	7913.00	7736.00	7618.00	3784.00	4710.00	7327.00	7414.00
1985	7414.00	7414.00	7443.00	8003.00	8033.00	7766.00	5687.00	4351.00	4483.00	4483.00	5947.00	6760.00
1986	7414.00	7414.00	7414.00	7414.00	7356.00	7327.00	5585.00	5560.00	3947.00	4135.00	4285.00	5309.00
1987	6186.00	7414.00	7414.00	7913.00	7795.00	7707.00	7502.00	7070.00	3665.00	3745.00	3947.00	7414.00
1988	7414.00	7356.00	7414.00	8093.00	7945.00	7826.00	7356.00	7356.00	5185.00	3906.00	5947.00	6760.00
1989	7356.00	7356.00	7443.00	8152.00	8063.00	7884.00	7677.00	7502.00	5687.00	4827.00	5137.00	5309.00
1990	7356.00	7443.00	7854.00	6788.00	8063.00	7825.00	7618.00	7356.00	4944.00	1220.00	1229.00	1412.00
1991	1010.00	3109.00	7225.00	7019.00	7019.00	6902.00	6589.00	6340.00	4816.00	4720.00	4744.00	5060.00
1992	5881.00	6450.00	6395.00	7019.00	6873.00	6702.00	6506.00	6258.00	4576.00	4648.00	4648.00	6450.00
1993	6450.00	6506.00	6506.00	7078.00	7078.00	6930.00	6788.00	6645.00	4914.00	4962.00	4962.00	6340.00

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1994	6423.00	6506.00	6506.00	6930.00	6930.00	6759.00	6506.00	6231.00	4576.00	4435.00	4744.00	6450.00
1996	6506.00	6505.00	6505.00	7225.00	7137.00	7078.00	6816.00	6648.00	6068.00	5988.00	5988.00	6506.00
1996	6534.00	6645.00	6788.00	7166.00	7166.00	7137.00	6930.00	6702.00	5619.00	5828.00	6478.00	6788.00
1997	6645.00	6506.00	7225.00	6960.00	6960.00	7107.00	7078.00	6930.00	6095.00	6231.00	6395.00	6395.00
1998	6506.00	6450.00	6788.00	6731.00	7019.00	7166.00	7107.00	7078.00	6367.00	6367.00	6674.00	6395.00
1999	6367.00	6506.00	6930.00	6873.00	6873.00	7136.00	6989.00	6930.00	6312.60	5593.00	6422.00	6422.00
2000	6423.00	6478.00	6989.00	7107.00	7107.00	7107.00	6989.00	6873.00	4026.00	5776.00	6150.00	6367.00
2001	6367.00	6367.00	6367.00	6592.00	7166.00	7107.00	6989.00	7107.00	6645.00	5311.00	5530.00	6367.00
2002	6475.00	6504.00	7107.00	7196.00	7156.00	7107.00	6508.00	6673.00	5671.40	5643.80	5880.20	6930.00
2003	6478.20	6478.20	7077.50	7224.50	7195.00	7195.00	7077.50	6935.00	9176.60	6095.00	6422.60	6533.80
2004	6506.00	6394.80	6901.50	7224.50	7224.50	7136.50	6880.00	6787.50	5801.90	5854.10	6232.10	6589.40
2005	6203.80	6231.60	6231.60	7224.50	7136.50	7166.00	7107.00	6960.00	5541.40	5567.00	6203.80	6645.00
2006	6645.00	6645.00	7077.50	6935.00	7225.00	7225.00	7225.00	6935.00	5828.00	5828.00	6095.00	6367.00
2007	6367.00	6367.00	6645.00	7077.50	7225.00	7077.50	6935.00	6673.50	5439.00	5490.20	5593.10	6422.60
2008	6645.00	6450.40	6478.20	6702.00	6759.00	6617.20	6394.00	6232.10	5260.80	5185.50	5593.10	6506.00
2009	6478.20	6959.50	7166.00	7166.00	7166.00	7166.00	7048.00	6617.20	5135.30	5311.00	5490.20	6450.40
2010	6506.00	6506.00	6589.40	7077.50	7195.40	7136.50	7107.00	7018.50	4840.40	5671.40	6506.00	6645.00
2011	6367.00	6645.00	6645.00	7225.00	7431.50	7284.00	7136.50	7107.00	4341.00	4816.00	5185.50	5490.20
2012	6506.00	6450.40	7048.00	7225.00	7166.00	7136.50	7107.00	6930.00	5311.00	5311.00	6176.60	6506.00
2013												

End of Month Elevation

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1947	45.0	63.6	77.8	81.5	81.5	79.7	76.3	72.4	66.5	59.0	50.3	38.5
1958	79.0	79.0	79.0	81.6	81.3	79.7	76.3	72.4	66.5	59.0	50.3	38.5
1959	65.4	79.0	79.0	77.1	74.2	70.0	64.6	58.3	50.5	38.5	0.0	0.0
1960		79.0	79.0	79.5	78.5	74.7	70.0		57.5	50.0	53.0	61.0
1961	62.0	76.0	81.0	80.5	79.2	75.4	70.2	64.4	57.6	48.6	47.0	59.0
1962	65.5	79.5	80.5	80.0	78.5	74.5	70.0	65.0	59.0	79.0	78.0	79.0
1963	79.0	79.0	79.5	79.5	81.5	79.8	76.0	72.0	68.5	63.0	68.0	64.5
1964	75.0	75.5	75.8	75.5	75.2	72.8	68.2	65.0	60.0	48.5	51.0	79.0
1965	79.0	79.0	80.5	82.0	80.0			69.5	66.0	60.5	62.5	68.5
1966	80.0	80.5	80.0	79.0	75.0	70.5	66.5	61.5	54.5	41.5	61.5	79.0
1967	80.0	79.0	81.0	81.5	80.0	78.5	72.0	65.0	56.0	48.0	49.0	56.0
1968	74.0	78.5	80.0	79.0	76.5	73.0			52.0	47.0	54.0	78.0
1969	79.5	79.5	80.0	81.5	80.0	79.0	72.5	67.0	59.5	52.0	47.5	79.5
1970	79.0	79.0	80.0	82.0	82.0	82.0	77.0	71.0	49.5	48.0	71.0	79.0
1971	79.0	79.0	79.0	82.0	82.0	82.0	80.0	74.5	53.8	36.0	44.0	52.0
1972	67.5	75.0	79.5	81.3	81.3	81.5	77.0	72.1	54.6	47.9	54.0	66.9
1973	80.0	80.0	80.0	79.0	79.1	79.2	76.0	74.5	50.7	49.1	79.0	79.0
1974	79.0	79.0	79.0	81.0	81.0	80.0	78.5	74.8	51.4	44.0	49.0	54.0
1975	62.0	77.0	77.0	82.0	81.5	80.5	78.5	75.0	51.0	48.0	55.0	59.5

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual totals
1976	62.0	68.0	72.0	75.5	76.0	76.0	73.2	72.3	60.8	56.7	52.0	55.5	
1977	56.0	57.0	60.0	60.7	58.9	58.5	57.5	57.0	57.0	57.0	59.4	73.5	
1978	79.0	79.0	79.0	81.0	81.0	81.0	80.6	80.5	0.0	23.0	38.0	45.0	
1979	64.6	79.5	80.0	81.5	81.5	81.1	80.5	80.0	70.50	68.00	72.50	80.00	
1980	79.2	79.5	79.2	81.7	81.5	81.5	81.4	80.6	52.10	53.40	54.70	63.50	
1981	76.5	79.3	79.2	81.5	81.5	81.3	80.6	79.7	66.50	59.70	79.00	79.30	
1982	79.3	79.3	79.8	81.5	81.5	81.4	81.4	81.0	65.70	68.50	79.40	79.30	
1983	79.5	80.0	79.7	82.0	81.9	81.6	81.0	78.5	51.00	52.90	73.30	79.50	
1984	79.1	79.1	79.3	81.7	81.3	81.0	80.4	80.0	64.70	69.00	79.00	79.30	
1985	79.3	79.3	79.4	81.3	81.4	80.5	73.0	67.5	68.0	68.0	74.0	77.0	
1986	79.1	79.3	79.2	79.1	79.1	79.1	74.3	72.4	67.3	66.1	67.1	68.6	
1987	74.9	79.3	79.3	81.0	80.6	80.3	79.6	78.1	64.5	64.5	65.5	79.3	
1988	79.3	79.1	79.3	81.6	81.1	80.7	79.1	79.2	71.0	65.3	74.0	77.0	
1989	79.1	79.1	79.4	81.8	81.5	80.9	80.2	79.6	73.0	69.5	70.8	71.5	
1990	79.1	79.4	80.8	77.1	81.5	80.7	80.0	79.1	70.0	47.0	47.1	49.0	
1991	50.0	65.1	82.0	81.3	81.3	80.9	79.8	78.9	73.0	72.6	72.7	74.0	
1992	77.2	79.3	79.1	81.3	80.8	80.2	79.5	78.6	72.0	72.3	72.3	79.3	
1993	79.3	79.5	79.5	81.5	81.5	81.0	80.5	80.0	73.4	73.6	73.6	78.9	
1994	79.2	79.5	79.5	81.0	81.0	80.4	79.5	78.5	72.0	71.4	72.7	79.3	
1995	79.5	79.5	79.5	82.0	81.7	81.5	80.6	80.0	77.9	77.6	77.6	79.5	
1996	79.6	80.0	80.5	81.8	81.8	81.7	81.0	80.2	76.2	77.0	79.4	80.5	
1997	80.0	79.5	82.0	81.1	81.1	81.6	81.5	81.0	78.0	78.5	79.1	79.1	
1998	79.5	79.3	80.5	80.3	81.3	81.8	81.6	81.5	79.0	79.0	80.1	79.1	
1999	79.0	79.8	81.0	81.8	81.8	81.7	81.2	81.0	78.8	78.0	79.0	79.0	
2000	79.2	79.4	81.2	81.6	81.6	81.6	80.0	80.8	69.6	76.8	78.2	79.0	
2001	79.0	79.0	81.6	79.4	81.6	81.2	81.2	80.0	75.0	75.9	79.0	79.8	
2002	79.4	79.5	81.7	81.9	81.8	81.6	80.3	80.1	76.4	76.3	77.2	81.0	
2003	79.4	79.4	81.5	81.9	81.8	81.8	81.5	81.0	78.3	78.0	79.2	79.6	
2004	79.5	79.1	80.9	81.9	81.9	81.7	80.8	80.5	76.9	77.1	78.5	79.8	
2005	79.4	79.5	79.5	81.9	81.7	81.8	81.6	81.1	75.9	76.0	79.4	80.0	
2006	80.0	80.0	81.5	80.0	82.0	82.0	82.0	81.0	77.0	77.0	78.0	79.0	
2007	79.0	79.0	80.0	81.5	82.0	81.5	81.0	80.1	76.5	75.7	76.1	79.2	
2008	79.4	79.3	79.4	80.2	80.4	79.9	79.1	78.5	74.8	74.5	76.1	79.5	
2009	79.3	81.1	81.8	81.8	81.8	81.8	81.4	80.9	74.3	75.0	75.7	79.3	
2010	79.5	79.5	79.8	81.5	81.9	81.7	81.6	81.3	73.1	76.4	79.6	80.0	
2011	79.0	80.0	80.0	82.0	82.7	82.2	81.7	81.6	71.0	73.0	74.5	75.7	
2012	79.5	79.3	81.4	82.0	81.8	81.7	81.6	81.0	75.0	75.0	78.3	79.5	
2013													
Average	75.5	78.0	79.4	80.4	80.2	79.4	77.6	75.8	65.0	63.0	66.5	71.5	
Last 12 yr. Average	79.4	79.5	80.8	81.4	81.8	81.6	81.1	80.6	74.9	75.9	77.7	79.3	

1947																				
1948	10.43	16.30	12.25	5.87	1.42	2.43	1.60	0.00	0.62	0.82	1.53	3.96	57.23							
1949	11.45	9.35	3.03	1.16	0.70	0.00	0.00	0.38	2.46	0.00	0.00	3.55	32.08							
1950		9.25	9.07	3.64	2.36	0.00	0.00	0.00	0.70	0.78	10.41	3.99	40.20							
1951	5.56	5.16	7.55	2.41	2.36	0.52	0.00	0.00	0.23	0.72	6.80	5.48	36.79							
1952	3.94	16.73	6.72	1.48	0.57	0.55	0.00	0.19	0.22	10.04	3.08	6.70	50.22							
1953	4.51	3.44	7.55	10.54	1.84	0.00	0.00	0.00	0.65	3.97	9.81	1.05	43.36							
1954	6.75	0.64	5.35	0.66	2.28	1.78	0.01	0.00	1.02	2.41	10.72	17.72	49.34							
1955	7.50	1.62	3.86	9.74	0.25				0.28	0.15	12.70	5.17	41.27							
1956	13.46	5.12	2.75	1.97	0.35	0.06	0.02	0.00	0.02	0.00	16.13	8.65	48.53							
1957	19.49	2.01	10.31	10.78	0.66	2.55	0.00	0.01	1.03	2.07	5.41	5.41	59.73							
1958	11.59	9.90	6.47	0.53	1.10	0.00			0.08	6.27	10.47	12.81	59.22							
1959	22.98	16.88	2.68	4.58	0.21	0.77	0.40	0.00	0.21	4.18	3.29	20.40	76.58							
1960	31.21	5.23	5.94	1.23	0.00	0.00	0.00	0.00	0.03	5.00	15.46	13.80	77.90							
1961	5.23	0.61	8.62	2.71	1.96	0.53	0.00	0.00	1.07	1.40	4.09	0.00	26.22							
1962	5.05	3.40	2.00	4.75	1.47	0.81	0.00	0.06	0.00	4.63	13.90	6.80	42.87							
1963	24.88	15.63	8.86	0.21	1.03	0.05	0.00	0.00	1.1	6.1	27.63	11.51	97.00							
1964	13.64	6.23	18.95	5.97	0.17	0.51	2.98	0.03	0	2.68	3.5	6.09	60.75							
1965	5.19	15.58	16.88	6.43	0.47	0.69	0.62	1.55	0	5.91	3.21	4.36	60.89							
1966	1.13	7.71	1.72	3.81	0.05	0.4	0.04	2.35	1.24	0.00	5.1	4.95	28.50							
1967	4.05	4.65	3.8	2.4	4.4	0.00	0.00	1.30	4.55	1.00	7.6	16.7	50.45							
1968	27.5	13.2	16.85	14.63	0.95	0.50	0.15	0.20	3.15	0.00	5.00	2.60	84.73							
1969	14.25	20.3	8.06	6.05	3.35	0.25	0.30	1.50	0.15	9.55	6.75	14.80	85.31							
1970	20.00	18.75	6.13	4.40	3.50	0.82	0.50	0.00	0.70	2.15	2.80	11.30	71.05							
1971	14.80	4.50	9.30	2.00	3.20	0.00	0.00	0.00	2.20	9.35	26.95	20.58	92.88							
1972	10.10	8.50	17.90	9.05	0.00	2.23	0.10	0.00	2.50	8.05	15.05	11.20	84.68							
1973	12.50	20.65	25.73	8.15	0.95	1.15	3.20	0.15	1.08	0.00	19.04	24.95	117.55							
1974	0.70	5.87	6.30	3.35	0.90	2.18	0.00	1.35	0.76	4.70	18.90	4.00	49.01							
1975	2.65	1.9	10.35	1.55	0.0	0.00	0.00	0.2	3.53	1.65	10.9	5.7	38.43							
1976	18.15	25.1	14.18	3.18	2.58	0.23	0.00	0.0	8.7	1.6	1.55	4.33	79.60							
1977	11.18	7.9	15.18	1.05	0.1	0.1	0.2	0.0	0.0	1.92	8.63	25.23	71.49							
1978	14.4	0.65	2.8	8.0	4.88	1.18	0.0	0.0	0.0	0.2	18.7	9.3	60.11							
1979	4.38	4.25	26.68	3.59	1.52	0.72	0	0.16	3.88	7.56	3.43	0	56.17							
1980	13.72	2.98	3.6	0.88	8.98	0.15	0.07	0.15	0.16	1.43	1.45	2.41	35.98							
1981	1.57	4.44	25.75	1.59	2.13	0.82	0	0	0	3.17	2.76	5.7	47.93							
1982	4.11	15.48	6.30	3.48	0.07	2.27	0.00	0.00	0.00	5.15	0.54	17.56	54.96							
1983	17.71	13.82	8.19	4.84	2.86	0.00	0.00	0.97	0.00	2.71	3.70	8.35	63.15							
1984	4.51	11.03	1.04	5.33	2.40	1.34	0.00	0.00	0.07	0.67	8.66	11.27	46.32							
1985	33.98	2.32	23.76	9.80	4.93	3.71	0.00	0.00	0.00	0.00	0.29	16.12	94.91							
1986	12.86	16.46	4.15	6.84	5.69	0.78	0.00	0.00	1.53	3.04	7.11	26.94	85.40							
1987	17.94	0.31	3.70	1.91	0.77	1.18	0.31	0.85	0.40	3.87	12.52	3.75	47.51							
1988	21.34	23.57	7.92	5.41	8.78	1.64	0.00	0.00	0.79	2.04	12.51	3.40	87.40							
1989	15.78	17.91	10.49	1.60	0.17	0.56	0.00	0.33	0.00	2.72	5.09	4.94	59.59							
2000	10.05	23.75	5.51	2.91	2.03	0.70	0.00	0.00	0.35	7.74	1.81	3.37	58.22							

Release

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2001	7.23	6.69	4.03	10.46	0.02	0.36	0.00	0.00	1.20	2.80	9.16	15.46
2002	10.46	3.99	6.08	3.42	2.56	0.00	0.00	0.00	0.00	0.00	3.61	22.51
2003	9.28	1.51	2.66	9.44	5.69	0.00	0.03	0.69	0.00	0.00	3.86	10.60
2004	6.31	13.51	1.54	1.56	0.02	0.16	0.00	0.00	0.32	4.99	2.13	11.11
2005	7.48	4.31	6.71	6.74	8.37	2.15	0.00	0.00	0.04	1.67	5.25	23.95
2006	14.20	2.89	24.02	8.99	0.70	0.61	0.00	0.00	0.00	0.00	5.80	6.84
2007	0.56	6.11	3.39	3.67	0.40	0.00	0.65	0.00	0.49	3.82	3.13	8.34
2008	7.21	7.86	0.72	0.85	0.18	0.00	0.00	0.00	0.00	2.80	4.15	6.86
2009	4.22	22.08	6.27	0.88	0.47	0.00	0.00	0.00	0.42	3.51	0.56	6.21
2010	18.31	7.89	5.85	12.19	3.18	0.04	0.00	0.00	0.08	2.32	4.67	16.10
2011	1.29	6.39	17.11	5.28	7.21	2.26	1.18	0.00	0.55	5.80	2.89	0.24
2012	7.26	2.37	14.74	5.31	0.10	0.74	0.13	0.00	0.00	2.65	6.25	8.72
2013												
1947	181.7											
1958	221.2	190.4	189.6	217.2	419.2	570.6	854.7	971.6	816.2	691.0	516.3	431.8
1959	308.0	221.8	192.1	259.8	456.2	600.6	715.2	672.4	369.0	300.8	188.3	92.3
1960		65.1	63.4	76.2	231.0	454.2	479.6	430.4	351.0	202.6	91.3	71.6
1961	54.6	59.0	69.8	97.9	220.7	384.7	502.3	445.3	458.4	248.8	117.7	75.7
1962	43.5	71.1	68.4	137.5	259.4	352.7	361.5	348.2	307.0	153.1	68.3	65.6
1963	55.8	69.7	82.4	78.2	224.2	366.5	432.6	418.3	301.2	142.5	123.0	155.2
1964	103.8	102.7	109.2	128.6	229.5	326.3	401.9	402.7	300.3	268.2	101.1	111.1
1965	98.3	62.0	82.6	83.6	255.8				298.7	231.7	96.3	86.5
1966	104.0	105.3	84.4	180.6	261.3	370.6	374.6	380.3	298.7	191.6	85.0	80.7
1967	75.0	56.0	69.3	48.4	173.0	221.3	353.4	372.8	300.9	166.6	87.5	71.0
1968	68.47	52.6	62.33	177.85	278.61	320.71			302.4	156.8	85.77	81.57
1969	89.82	80.22	96.89	104.64	278.67	359.87	394.67	338.53	310.86	222.65	94.65	101.07
1970	178.769	246.10	270.33	192.00	340.96	354.62	439.40	415.896	327.71	186.74	77.09	102.48
1971	244.27	230.09	267.35	123.76	217.54	351.55	438.01	403.04	331.01	186.23	93.4	219.57
1972	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1973	NA	NA	NA	NA	NA	NA	NA	NA	NA	557.00	0.00	NA
1974	0.00	0.00	0.00	0.00	0.00	594.00	905.00	1865.00	4421.00	1170.00	0.00	0.00
1975	0.00	0.00	0.00	0.00	0.00	1264.00	1008.00	1227.00	4971.00	640.00	0.00	0.00
1976	0.00	0.00	0.00	0.00	0.00	0.00	468.00	0.00	2864.00	210.00	793.00	0.00
1977	0.00	0.00	0.00	0.00	510.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1978	2203.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7900.00	0.00	0.00	0.00
1979	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2714.00	1056.00	0.00	0.00
1980	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6190.70	0.00	0.00	0.00

1981	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3708.00	1828.00	0.00	0.00
1982	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4091.63	0.00	0.00	0.00
1983	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5556.98	0.00	0.00	0.00
1884	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4024.08	0.00	0.00	0.00
1985	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2079.00	1618.04	0.00	0.00	1817.64	0.00	0.00	0.00
1986	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1815.26	57.42	0.00	0.00	3802.90	0.00	0.00	0.00
1987	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2200.00	1865.47	0.00	0.00
1988	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1830.84	1591.23	0.00	0.00
1989	0.00	0.00	0.00	0.00	0.00	118.80	122.76	134.64	0.00	0.00	0.00	2412.00	3695.00	0.00	0.00
1990	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1654.60	0.00	0.00	0.00
1991	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1650.64	0.00	0.00	0.00
1992	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1654.60	0.00	0.00	0.00
1993	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1654.00	0.00	0.00	0.00
1994	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	522.95	0.00	0.00	0.00
1995	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1169.00	0.00	0.00	0.00
1996	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	835.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	711.00	0.00	0.00	0.00
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	617.40	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2728.20	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1332.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1080.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	758.40	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1284.79	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1418.10	0.00	0.00	0.00
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1102.00	0.00	0.00	0.00
2006	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1115.49	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	888.60	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1529.44	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2178.10	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2555.36	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1400.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Fish Flow_Minimum of 2cfs

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	41.58	25.74	61.38	59.4	122.76	122.76	15.84	0	0	122.76
1991	122.76	110.88	122.76	118.8	122.76	118.8	122.76	122.76	118.8	122.76	118.8	122.76

1992	122.76	114.84	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1993	122.76	110.88	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1994	122.76	110.88	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1995	122.76	110.88	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1996	122.76	114.84	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1997	122.76	110.88	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1998	122.76	110.88	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
1999	122.76	110.88	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
2000	122.76	114.84	122.76	118.80	122.76	118.80	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
2001	122.76	110.88	122.76	122.76	122.76	122.76	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
2002	122.76	122.76	122.76	122.76	122.76	122.76	122.76	122.76	118.80	122.76	118.80	122.76	118.80	122.76
2003	184.46	166.61	184.46	178.51	122.97	119.01	122.97	122.97	148.76	122.97	148.76	122.97	148.76	153.72
2004	156.79	172.56	148.76	148.76	153.72	119.00	123.00	122.98	119.01	122.98	119.01	122.98	119.01	153.72
2005	153.72	138.84	153.72	148.76	153.72	130.90	122.75	122.75	119.01	122.98	119.01	122.98	119.01	217.67
2006	184.46	167.00	184.00	178.51	184.46	178.51	153.72	122.98	124.96	122.98	124.96	122.96	119.01	122.98
2007	153.72	138.84	122.98	133.88	122.98	121.81	122.98	122.98	119.01	122.98	119.01	122.96	121.98	126.05
2008	153.72	143.80	153.72	119.10	122.97	119.01	122.98	149.41	119.00	161.00	156.50	167.25	167.25	167.25
2009	217.67	196.60	217.05	209.45	217.67	208.26	199.83	210.90	208.26	217.66	156.50	217.66	167.80	217.66
2010	217.66	196.60	217.66	210.64	217.67	210.64	217.67	217.67	210.64	167.25	167.80	217.67	167.80	217.67
2011	217.67	196.60	217.67	210.64	217.67	210.64	217.67	215.21	210.64	167.25	130.90	167.25	130.90	135.26
2012	135.26	770.78	1174.41	1136.53	977.65	624.80	324.70	265.63	119.01	159.87	182.08	159.87	182.08	1174.41

End of Month Water Temperature 2 feet below surface Started recording in 1994

Year	Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1994	N/A	N/A	54.00	59.50	71.00	78.00	80.00	73.00	70.00	N/A	N/A	N/A
1995	N/A	N/A	51.00	57.00	69.00	76.00	80.00	74.00	72.00	60.00	56.00	N/A
1996	N/A	54.00	54.00	60.00	66.00	76.00	81.00	76.00	68.00	59.00	54.00	50.00
1997	47.00	48.00	58.00	63.00	70.00	74.00	78.00	81.10	71.00	60.00	54.00	47.00
1998	48.00	46.00	54.00	60.00	60.00	72.00	80.00	78.00	72.00	69.00	50.00	40.00
1999	46.00	50.00	53.00	62.00	72.00	73.00	76.00	75.00	70.00	60.00	56.00	44.00
2000	43.00	46.00	58.00	61.00	76.00	80.00	82.00	71.00	69.00	62.00	49.00	45.00
2001	40.00	39.00	60.00	58.00	76.00	72.00	76.00	77.00	72.00	N/A	N/A	44.00
2002	46.00	46.00	50.00	62.00	72.00	76.00	80.00	76.00	68.00	61.00	53.00	46.00
2003	48.00	46.00	53.00	52.00	70.00	76.00	82.00	74.00	68.00	60.00	49.00	44.00
2004	44.00	46.00	56.00	64.00	69.00	76.00	78.00	75.00	68.00	57.00	50.00	46.00
2005	44.00	48.00	50.00	58.00	69.00	70.00	80.00	75.00	70.00	52.00	48.00	40.00
2006	40.00	50.00	49.00	61.00	68.00	80.00	75.00	75.00	68.00	60.00	53.00	47.00
2007	44.00	41.00	56.00	59.00	69.00	71.00	74.00	74.00	68.00	60.00	43.00	44.00
2008	43.00	48.00	52.00	58.00	68.00	70.00	72.00	72.00	68.00	58.00	53.00	43.00
2009	48.00	44.00	55.00	65.00	76.00	78.00	83.00	80.00	73.00	62.00	52.00	49.00
2010	48.00	54.00	54.00	54.00	50.00	72.00	79.00	74.00	70.00	51.00	41.00	38.00
2011	42.00	41.00	40.00	54.00	58.00	72.00	74.00	75.00	69.00	58.00	48.00	42.00
2012	40.00	45.00	46.00	46.00	54.00	66.00	70.00	73.00	72.00	69.00	56.00	51.00

**RESOLUTION DECLARING SURPLUS WATER AND
CERTIFICATION BY DISTRICT SECRETARY**

To: State Water Resources Control Board

The following resolution was adopted by the Board of Directors of Thermalito Water and Sewer District at its regular meeting conducted May 21, 2013 following closed session of the Board and by the unanimous consent of all five Directors:

RESOLVED that the Board of Districts of Thermalito Water and Sewer District hereby declares that 2,500 acre feet of its water rights to 8,200 acre feet of water diverted from Concow Creek into storage at Concow Reservoir is surplus to the needs of its customers and water users in 2013 in accordance with California Water Code Section 22259 and directs and authorizes its general manager to endeavor to negotiate and execute a transfer agreement for such surplus water consistent with instructions given him by the Board in closed session to (i) benefit the District's water users and landowners by meeting all of their needs, (ii) provide for the reasonable and beneficial use of the District's water supplies that are temporarily surplus to the needs of its customers and water users, (iii) safeguard the District's water rights for the long-term by ensuring that such rights are continually put to reasonable and beneficial use, and (iv) provide water determined to be temporarily surplus to its needs to a purchaser or purchasers needing such surplus water to compensate for an anticipated lack of delivery from the Central Valley project for irrigation.

RESOLVED FURTHER that the general manager of the District is directed and authorized to sign any and all documents reasonably necessary to effectuate the foregoing resolution.

I hereby certify that the foregoing is a true and correct copy of the resolution duly and regularly adopted by the Board of Directors of Thermalito Water and Sewer District on May 21, 2013.

Thermalito Water and Sewer District

By:


Jayne Boucher, Secretary

STATE WATER RESOURCES CONTROL BOARD
2013 JUN -7 PM 2:59
DIV OF WATER RIGHTS SACRAMENTO

ENVIRONMENTAL INFORMATION FOR PETITIONS

This form is required for all petitions.

Before the State Water Resources Control Board (State Water Board) can approve a petition, the State Water Board must consider the information contained in an environmental document prepared in compliance with the California Environmental Quality Act (CEQA). This form is not a CEQA document. If a CEQA document has not yet been prepared, a determination must be made of who is responsible for its preparation. As the petitioner, you are responsible for all costs associated with the environmental evaluation and preparation of the required CEQA documents. Please answer the following questions to the best of your ability and submit any studies that have been conducted regarding the environmental evaluation of your project. If you need more space to completely answer the questions, please number and attach additional sheets.

DESCRIPTION OF PROPOSED CHANGES OR WORK REMAINING TO BE COMPLETED

For a petition for change, provide a description of the proposed changes to your project including, but not limited to, type of construction activity, structures existing or to be built, area to be graded or excavated, increase in water diversion and use (up to the amount authorized by the permit), changes in land use, and project operational changes, including changes in how the water will be used. For a petition for extension of time, provide a description of what work has been completed and what remains to be done. Include in your description any of the above elements that will occur during the requested extension period.

There is no construction required to effectuate as a result of the proposed transfer. Water will be released from Concow Reservoir into the State Water Project's Oroville Reservoir. Water will then be released from Oroville into the Feather River, then through the State Water Project's Clifton Court Forebay. From the Clifton Court Forebay, water will pass through Skinner Fish Protection Facility and enter the intake channel of the California Aqueduct leading to Harvey O. Banks Pumping Plant. Banks Pumping Plant will pump the water south of the Delta via the California Aqueduct. The Water will then pass through O'Neill Forebay and continue moving south on the State Water Project's side of the San Luis Canal for delivery into the Westlands Water District's CVP service area.

Insert the attachment number here, if applicable:

Coordination with Regional Water Quality Control Board

For change petitions only, you must request consultation with the Regional Water Quality Control Board regarding the potential effects of your proposed change on water quality and other instream beneficial uses. (Cal. Code Regs., tit. 23, § 794.) In order to determine the appropriate office for consultation, see: http://www.waterboards.ca.gov/waterboards_map.shtml. Provide the date you submitted your request for consultation here, then provide the following information.

Date of Request

5.29.13

Will your project, during construction or operation, (1) generate waste or wastewater containing such things as sewage, industrial chemicals, metals, or agricultural chemicals, or (2) cause erosion, turbidity or sedimentation?

Yes No

Will a waste discharge permit be required for the project?

Yes No

If necessary, provide additional information below:

Message left with George Day of the Central Valley Regional Water Quality Control Board.

Insert the attachment number here, if applicable:

Local Permits

For temporary transfers only, you must contact the board of supervisors for the county(ies) both for where you currently store or use water and where you propose to transfer the water. (Wat. Code § 1726.) Provide the date you submitted your request for consultation here.

Date of Contact

6.5.13

For change petitions only, you should contact your local planning or public works department and provide the information below.

Person Contacted: Date of Contact:

Department: Phone Number:

County Zoning Designation:

Are any county permits required for your project? If yes, indicate type below. Yes No

- Grading Permit
- Use Permit
- Watercourse
- Obstruction Permit
- Change of Zoning
- General Plan Change
- Other (explain below)

If applicable, have you obtained any of the permits listed above? If yes, provide copies. Yes No

If necessary, provide additional information below:

Not applicable.

Insert the attachment number here, if applicable:

Federal and State Permits

Check any additional agencies that may require permits or other approvals for your project:

- Regional Water Quality Control Board Department of Fish and Game
- Dept of Water Resources, Division of Safety of Dams California Coastal Commission
- State Reclamation Board U.S. Army Corps of Engineers U.S. Forest Service
- Bureau of Land Management Federal Energy Regulatory Commission
- Natural Resources Conservation Service

Have you obtained any of the permits listed above? If yes, provide copies. Yes No

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

Agency	Permit Type	Person(s) Contacted	Contact Date	Phone Number
Not applicable.				

If necessary, provide additional information below:

Not applicable.

Insert the attachment number here, if applicable:

Construction or Grading Activity

Does the project involve any construction or grading-related activity that has significantly altered or would significantly alter the bed, bank or riparian habitat of any stream or lake? Yes No

If necessary, provide additional information below:

Not applicable.

Insert the attachment number here, if applicable:

Archeology

Has an archeological report been prepared for this project? If yes, provide a copy. Yes No

Will another public agency be preparing an archeological report? Yes No

Do you know of any archeological or historic sites in the area? If yes, explain below. Yes No

If necessary, provide additional information below:

Not applicable.

Insert the attachment number here, if applicable:

Photographs See attachment.

For all petitions other than time extensions, attach complete sets of color photographs, clearly dated and labeled, showing the vegetation that exists at the following three locations:

- Along the stream channel immediately downstream from each point of diversion
- Along the stream channel immediately upstream from each point of diversion
- At the place where water subject to this water right will be used


Maps See attachment.

For all petitions other than time extensions, attach maps labeled in accordance with the regulations showing all applicable features, both present and proposed, including but not limited to: point of diversion, point of redirection, distribution of storage reservoirs, point of discharge of treated wastewater, place of use, and location of instream flow dedication reach. (Cal. Code Regs., tit. 23, §§ 715 et seq., 794.)

Pursuant to California Code of Regulations, title 23, section 794, petitions for change submitted without maps may not be accepted.

All Water Right Holders Must Sign This Form:

I (we) hereby certify that the statements I (we) have furnished above and in the attachments are complete to the best of my (our) ability and that the facts, statements, and information presented are true and correct to the best of my (our) knowledge. Dated at .


Water Right Holder or Authorized Agent Signature

Water Right Holder or Authorized Agent Signature

NOTE:

- **Petitions for Change** may not be accepted unless you include proof that a copy of the petition was served on the Department of Fish and Game. (Cal. Code Regs., tit. 23, § 794.)
- **Petitions for Temporary Transfer** may not be accepted unless you include proof that a copy of the petition was served on the Department of Fish and Game and the board of supervisors for the county(ies) where you currently store or use water and the county(ies) where you propose to transfer the water. (Wat. Code § 1726.)

ATTACHMENT TO ENVIRONMENTAL INFORMATION
FOR PETITION FOR CHANGE TO LICENSE 845 (APPLICATION 1739)
HELD BY THERMALITO WATER AND SEWER DISTRICT

Photographs

The present and proposed points of diversion of existing facilities are well-known and documented with the Division of Water Rights, as are places of use. Therefore, photographs of the present and proposed points of diversion and places of use are not included.

Maps

The present point of diversion and place of use are shown on a map filed with the Division for License 845. The proposed additional point of diversion for the SWP Banks Pumping Plant is shown on maps filed with the Division for Application 5630. The proposed additional place of use is a portion of the Westlands Water District's Central Valley Project service area, as shown on Map 214-208-12581 on file with the Division of Water Rights under Application 5626.

Mrowka, Kathy@Waterboards

From: Audrey Patterson <apatterson@olaughlinparis.com>
Sent: Tuesday, June 11, 2013 11:25 AM
To: Mrowka, Kathy@Waterboards
Cc: jboucher@twsd.info; jeff@jccarterlaw.com; William Paris III; Katarina Buelna (kbuelna@westlandswater.org); jgutierrez@westlandswater.org; Glasgow, Andrea@DWR; Sergent, Maureen@DWR
Subject: RE: 2013 Water Transfers
Attachments: Copy of TenYearSummary.xlsx

Ms. Mrowka,

As we discussed, attached is the additional information that Thermalito Water and Sewer District ("TWSD") supplied to the Department of Water Resources ("DWR") in response to its request regarding to the proposed transfer (Application number 1739). Please supplement the Petition package TWSD filed on June 7, 2013 to include this information. TWSD is diligently working with DWR to arrive at an agreement regarding refill criteria to ensure the earliest possible transfer date and will keep the State Water Board informed of any new developments or information as this process continues.

Thank you for your time and assistance, please contact me with any questions.

Sincerely,

AUDREY K. PATTERSON
O'LAUGHLIN & PARIS LLP

E-mail: apatterson@olaughlinparis.com
Telephone No.: (916) 514-5237
Facsimile No.: (916) 993-3688

The information contained in this e-mail communication is privileged and/or confidential information intended only for the use of the individual or entity named above. If the reader of this communication is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication or the information contained herein is strictly prohibited. If you received this communication in error, please immediately notify me by return e-mail and then delete this e-mail from your system. Thank you.

From: Mrowka, Kathy@Waterboards [mailto:Kathy.Mrowka@waterboards.ca.gov]
Sent: Tuesday, June 11, 2013 10:48 AM
To: Audrey Patterson
Subject: 2013 Water Transfers

Katherine Mrowka, Senior
Inland Streams Unit
Division of Water Rights
PO Box 2000
Sacramento, CA 95814

(916) 341-5363

End of Month Fish releases

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual Totals
2003	184.46	166.61	184.46	178.51	122.97	119.01	122.97	122.97	148.76	122.97	148.76	153.72	1776.17
2004	156.79	172.56	148.76	148.76	153.72	119.00	123.00	122.98	119.01	122.98	119.01	153.72	1660.29
2005	153.72	138.84	153.72	148.76	153.71	130.90	122.75	122.75	119.01	122.98	119.01	217.67	1703.82
2006	184.46	167.00	184.00	178.51	184.46	178.51	153.72	122.98	124.96	122.96	119.01	122.98	1843.55
2007	153.72	138.84	122.98	133.88	122.98	121.81	122.98	122.98	119.01	122.96	121.98	126.05	1530.17
2008	153.72	143.80	153.72	119.10	122.97	119.01	122.98	149.41	119.00	161.00	156.50	167.25	1688.46
2009	217.67	196.60	217.05	209.45	217.67	208.26	199.83	210.90	208.26	217.66	156.50	217.66	2477.51
2010	217.66	196.60	217.66	210.64	217.67	210.64	217.67	217.67	210.64	167.25	167.80	217.67	2469.57
2011	217.67	196.60	217.67	210.64	217.67	210.64	217.67	215.21	210.64	167.25	130.90	135.26	2347.82
2012	135.26	770.78	1174.41	1136.53	977.65	624.80	324.70	265.63	119.01	159.87	182.08	1174.41	7045.13
Totals	1775.13	2288.23	2774.43	2674.78	2491.47	2042.58	1728.27	1673.48	1498.30	1487.88	1421.55	2686.39	
Average/ Month	177.51	228.82	277.44	267.48	249.15	204.26	172.83	167.35	149.83	148.79	142.16	268.64	

End of Month Reservoir Levels

Year	January	February	March	April	May	June	July	August	September	October	November	December
2003	6478.20	6478.20	7077.50	7195.50	7166.00	7195.00	7077.50	6930.00	6176.60	6095.00	6422.60	6533.80
2004	6506.00	6394.80	6901.50	7224.50	7224.50	7136.50	6880.00	6787.50	5801.90	5854.10	6232.10	6589.40
2005	6203.80	6231.60	6231.60	7224.50	7136.50	7166.00	7107.00	6960.00	5541.40	5567.00	6203.80	6645.00
2006	6645.00	6645.00	7077.50	6935.00	7225.00	7225.00	7225.00	6935.00	5828.00	5828.00	6095.00	6367.00
2007	6367.00	6367.00	6645.00	7077.50	7225.00	7077.50	6935.00	6673.50	5439.00	5490.20	5593.10	6422.60
2008	6645.00	6450.40	6478.20	6702.00	6759.00	6617.20	6394.00	6232.10	5260.80	5185.50	5593.10	6506.00
2009	6478.20	6959.50	7166.00	7166.00	7166.00	7166.00	7048.00	6617.20	5135.30	5311.00	5490.20	6450.40
2010	6506.00	6506.00	6589.40	7077.50	7195.40	7136.50	7107.00	7018.50	4840.40	5671.40	6506.00	6645.00
2011	6367.00	6645.00	6645.00	7225.00	7431.50	7284.00	7136.50	7107.00	4341.00	4816.00	5185.50	5490.20
2012	6506.00	6450.40	7048.00	7225.00	7166.00	7136.50	7107.00	6930.00	5311.00	5311.00	6176.60	6506.00
Average	6470.22	6512.79	6785.97	7105.25	7169.49	7114.02	7001.70	6819.08	5367.54	5512.92	5949.80	6415.54

Year	Annual Fish Release	Annual Powers Canal Extraction	Sept. Release	Fish Plus Sept. Release	Overage	Reservoir Level End of Sept.
2003	1776.17	2391.5	758.4	2534.57	-143.07	6176.60
2004	1660.29	2706.6	1284.8	2945.09	-238.49	5801.90
2005	1703.82	2429.7	1418.1	3121.92	-692.22	5541.40
2006	1843.55	2034.1	1102	2945.55	-911.45	5828.00
2007	1530.17	1831.6	1115.5	2645.67	-814.07	5439.00
2008	1688.46	2275.7	888.6	2577.06	-301.36	5260.80
2009	2477.51	2051.7	1529.44	4006.95	-1955.25	5135.30
2010	2469.57	1958.6	2178.1	4647.67	-2689.07	4840.40
2011	2347.82	1796.7	2555.4	4903.22	-3106.52	4341.00
2012	7045.13	1975.35	1400	8445.13	-6469.78	5311.00

Summary:

From 2003 through 2011 the fish release weir was able to record a flow from 0.30 to 3.54 cfs. From 2003 through 2008 the District logged monthly readings between 2.0 and 2.5 cfs release even when the recorded release was greater. From 2009 through 2011 The District logged the recording capability of the weir up to 3.54 cfs for each month. January 2012 the District replaced the old 0.5'x3.0' weir with a new 1.5'x 4.0' weir and is able to record a maximum 19.1 cfs.

From the table above it is evident that the District has the capability of recording a release (fish flow) equal to or greater than its demand at the Powers Canal. From the Fish Flow table above it is also evident that generally the District would equal or exceed its demand by the end of April of each year. It is also apparent from May through August the District could utilize the fish flow release for water transfers and the September release could be utilized to complete any water transfers in place.

Just a reminder we are subtracting the water usage and transfers from an 8200 AF water right not a 7200 AF capacity reservoir. By metering the winter over flow allows the District to utilize its full water right.