

**Attachment No. 1
to Petition for Change Involving Water Transfers
to License 11118 (Application 14804)
held by South Sutter Water District**

PURPOSE OF PETITION

The purpose of this Petition for Change Involving Water Transfers (Petition) is to; (1) add the State Water Project's (SWP) Harvey O. Banks Pumping Plant, SWP's Barker Slough Pumping Plant, and San Luis Reservoir as points of rediversion, (2) add a portion of the service area of the SWP as an additional place of use, and (3) add municipal and industrial as additional purposes of use under South Sutter Water District's (District) License 11118 (Application 14804). This petition is being filed to facilitate a temporary transfer of up to 10,000 acre-feet (AF) of surface water from the District, which will be made available by reservoir release, to participating State Water Contractor (SWC) Agencies in order to provide an additional water supply for irrigation, municipal, industrial, and domestic purposes. The District proposes a reservoir release transfer of up to 10,000 AF from Camp Far West Reservoir (Reservoir) and Camp Far West Diversion Dam (Diversion Dam) under water right License 11118. Absent the proposed temporary transfer, the District would have released the stored water for delivery to the District's service area or retained that water in storage.

POINT OF DIVERSION OR REDIVERSION

POINT OF DIVERSION

Present Point of Diversion:

No change to the present point of diversion is proposed. The District's authorized point of diversion under License 11118 is listed below:

Camp Far West Dam - North 60° 30' West 4,450 feet from SE corner of Section 21, T14N, R6E, MDB&M, being within NE ¼ of SW ¼ of said Section 21 (California Coordinate System, Zone 2, N 504,600 and E 2,194,500);

POINT OF REDIVERSION

Present Point of Rediversion:

No change to the present point of rediversion is proposed. The District's authorized point of rediversion under License 11118 is listed below:

Camp Far West Diversion Dam – South 400 feet and West 2,850 feet from the corner NE corner of Section 29, T14N, R6E, MDB&M., being within the NE ¼ of NW ¼ of said Section 29 (California Coordinate System, Zone 2, N 501,550 and E 2,189,600).

Proposed Points of Rediversion:

The District proposes to add the following points of rediversion:

Banks Pumping Plant via the Clifton Court Forebay

N 2,126,440 ft., E 6,256,425 ft., California Coordinate System Zone 3, NAD 83, being within the NW ¼ of SE ¼ of Projected Section 20, T1S, R4E, MDB&M. This proposed additional point of diversion is identified on maps filed with the Division under Application 5630.

Barker Slough Pumping Plant

N 567,682, E 2,017,761, California Coordinate System Zone 2, within the NE ¼ of SW ¼ of Projected Section 18, T5N, R2E, MDB&M. This proposed additional point of diversion is identified on maps filed with the Division of Water Rights (Division) under Application 5630.

San Luis Reservoir

N 1,845,103 ft., E 6,393,569 ft., California Coordinate System Zone 3, NAD 83, being within the SW ¼ of SE ¼ of Projected Section 15, T10S, R8E, MDB&M. This proposed additional point of diversion is identified on maps filed with the Division under Application 5630.

PLACE OF USE

Present:

The present place of use is 59,000 net acres within a gross acreage of 65,796 acres, within the boundaries of the District; and Irrigation of a net acreage of 4,180 acres (including 102 acres located outside of District boundaries and served by contract) within Camp Far West Irrigation District (CFWID) and a power plant located on the Conveyance Canal within the NW ¼ of SW ¼ of Section 1, T13N, R5E, MDB&M, as shown on the map filed with the State Water Resources Control Board.

Proposed:

No change in the present place of use is proposed. The District proposes to add a portion of the SWP service as an additional place of use in order to facilitate the temporary water transfer. This portion of the service area of the SWP is shown on Map 1878 – 2 and – 3 on file with the Division under Application 5630.

PURPOSE OF USE

Present:

The present purposes of use are irrigation, domestic, and incidental power.

Proposed:

No change in the present purpose of use is proposed. The District proposes to add municipal and industrial as purposes of use.

PROPOSED NEW USERS

The proposed new users will be water users within the following five SWC Agencies listed below:

COUNTY OF KINGS
1001 Chase Avenue
Fresno, CA 93711-6162
Tom Glover
(559) 992-4127
tglover@ppeng.com

DUDLEY RIDGE WATER DISTRICT
286 W. Cromwell Avenue
Fresno, CA 93711-6162
Tom Glover
cc: Rick Besecker
(559) 449-2700

KERN COUNTY WATER AGENCY
P.O. Box 58
Bakersfield, CA 93302
Lara Kimm
Direct (661) 634-1419
lkimm@kcwa.com

OAK FLAT WATER DISTRICT
P.O. Box 1596
Patterson, CA 95363
Anthea Hansen
(209) 892-4470

**NAPA COUNTY FLOOD CONTROL &
WATER CONSERVATION DISTRICT**
804 First Street
Napa, CA 94559
Phillip Miller
(707) 259-8600

GENERAL INFORMATION

The District's Reservoir and facilities (i.e., Diversion Dam, canals, service area, etc.) are located within Yuba, Nevada, Placer and Sutter counties. The District proposes to transfer up to

10,000 AF of surface water between July 1, 2014 and September 30, 2014 through reservoir release. The Reservoir fills and spills in most years of operation. Releases made at the Reservoir flow downstream to the Diversion Dam, where water is diverted to CFWID, the fish flow bypass release structure and the main canal for deliveries within the District service area. Except at times the Reservoir is spilling Camp Far West Dam controls flows in the Bear River. Under normal operations the District releases from the Reservoir only the quantity of water required to meet the fish bypass flow requirement, their obligation to CFWID, deliveries within the District's service area, and any releases required under its Bay-Delta Settlement Agreement (Settlement Agreement) with the Department of Water Resources and CFWID. Therefore; absent the proposed transfer, all water proposed to be transferred would be delivered for use within the District's service area. Under historical operational conditions and absent a water transfer, all water not utilized for meeting the in-stream fish flow requirement and obligations to CFWID, would have been diverted to the District's main canal for delivery to its service area. If circumstances occur such that it was not delivered through its main canal, the water would be retained in storage.

The proposed temporary transfer will not result in a shift in timing of releases from the Reservoir. Absent the transfer, the District would release the transfer quantity of up to 10,000 AF from the Reservoir for diversion into the main canal during the months of July, August and September for consumptive uses within the District. Thus, the quantity of stored water released from the Reservoir would be the same as compared with the conditions absent the proposed temporary transfer. However, the proposed transfer will result in an increase in stream flow in the Bear River below the Diversion Dam during the proposed transfer period from approximately July 1 through September 30.

The water released for the proposed transfer will be in addition to the required fish bypass flow and any releases required under the District's Settlement Agreement. Therefore, the flow in the channel between the Diversion Dam and the proposed points of rediversion will be higher during the transfer period than would occur absent the proposed transfer. The release pattern for the proposed temporary transfer quantity will be coordinated with the Department of Fish and Wildlife (DFW), and fisheries biologists to minimize fishery concerns within the Bear River.

Each year landowners receive supplemental surface water supplies as a result of Reservoir releases. Irrigation requirements above the supplemental surface water supply provided by the District are met through groundwater pumping within the District. The quantity of supplemental surface water supplied to landowners varies from year to year based on hydrologic and other factors. The quantity of supplemental surface water to be delivered to District landowners in 2014 assuming the proposed transfer will be within historical levels. Landowners within the District will not alter their cropping patterns as a result of the proposed transfer. The District operates the system's outflow structures to maintain surface water levels within delivery and drainage channels to facilitate deliveries upstream. The outflow structures during the 2014 proposed temporary transfer will be operated to maintain water levels at their historical levels. Therefore, because there will be no change in landowner or District operations,

there will be no change in the timing, quality, or quantity of tailwater as a result of the transfer.

As previously identified, the releases made pursuant to the proposed temporary transfer will not reduce the water supply available to other users. In addition, according to the Division's eWRIMS website database, no active authorized points of diversion exist along the Bear River from the Diversion Dam to the confluence with the Feather River.

As further identified in the attached Environmental Information Form for Petitions, accompanying this Petition, the information below identifies the potential effects the proposed transfer would have on fish, wildlife, or other instream beneficial uses. The principal concern of effects on instream beneficial uses resulting from the proposed water transfer relate to the potential for deleterious artificial attraction of fish species of concern into the lower Bear River. Possible effects on wildlife and other beneficial uses resulting from the proposed transfer are considered negligible or positive due to increased water available for wildlife and riparian habitats. Under present conditions, the lower Bear River does not provide suitable habitats for anadromous fish known to occur elsewhere in the Feather River system: fall-run Chinook salmon, spring-run Chinook salmon, steelhead trout, and green sturgeon. The latter three species are listed by the federal government as threatened species under the Endangered Species Act. Reproduction of the salmonid species in the lower Bear River is limited by silted spawning gravels, high winter flood flows, and high water temperatures (SWRCB Order WR 2000-10). Additionally, habitats are unsuitable for green sturgeon due to the lack of deep pools and cool water necessary for reproduction.

Because the proposed transfer would increase instream flows in the lower Bear River, there is the potential for these fish species to be artificially attracted from the Feather River into the Bear River where habitats are hostile and fish production would be poor compared to those fish remaining in the Feather River. This potential circumstance is dependent on the timing of the increased flows relative to the seasonal presence of the fish species of concern. The analyses of potential effects on fish included an examination of the life cycle periodicity of anadromous fish in the Feather River system, the magnitude and timing of the instream flows in the lower Bear River resulting from the proposed transfer, the timing and magnitude of Feather River flows during the proposed transfer, and physical habitat conditions for anadromous fish in the lower Bear River.

The timing of the proposed transfer would be during July, August, and September. This period avoids the primary life cycle timing of the 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 primarily occurs during the spring, and to a lesser extent, the early fall with reproduction occurring during the early fall. Green sturgeon upstream migration occurs during the winter and spring with reproduction occurring during the spring. The proposed water transfer period avoids adverse impacts to these species by timing the increased instream flows when the fish are not seasonally present.

Because the proposed transfer would occur during July, August, and September, water temperature data during this period within the Reservoir and the river downstream of the dam were examined to determine suitability for anadromous fish. Prior studies conducted for the District demonstrated that the water temperatures in front of the Dam at both the power outlet and the low-water outlet during the summer and early fall exceed the range for successful salmonid reproduction. Additionally, water temperatures recorded downstream of the Dam at the District's diversion facility showed that water temperatures do not cool to tolerable levels for salmon spawning until mid- to late-November. These circumstances are attributable to the fact that the Reservoir is a relatively low-elevation impoundment and subject to high summer water temperatures and intense solar radiation. Prior studies demonstrated that a shift in water layers in the reservoir does not occur until the late fall/early winter as early, cooler water runoff enters the reservoir. Therefore, increased reservoir releases during July, August, and September resulting from the proposed water transfer would not be expected to lower water temperatures in the lower Bear River to a tolerable range for anadromous fish and, therefore, would not attract fish into the river if the fish were present during that period. Additionally, juvenile anadromous fish would not be expected to be present during July, August, and September due to unsuitably high water temperatures and lack of or inferior physical rearing habitats, a condition attributable to a river channel formed by very high and frequent winter-time scouring flows.

Therefore, we concluded that the proposed water transfer during July, August, and September would not adversely impact fishery resources because the fish species of concern are not seasonally present, and the combination of low proportional contribution to the Feather River flows and unsuitably warm water temperatures would be unlikely to inadvertently attract fish into the Bear River if the fish were present.

See files of the State Water Resources Control Board for more information regarding other legal water users, which may include the Delta water users, the CVP, the SWP, and the Cities of Sacramento and West Sacramento. The Central Valley Regional Water Quality Control Board (CVRWQCB) was contacted in order to discuss the proposed temporary water transfer; and no comments were provided at this time. DFW has been contacted; however, was not available by phone in order to discuss the proposed temporary water transfer. Copies of this petition have been provided for review and comment to Paul Forsberg and Beth Lawson of DFW and Elizabeth Lee (916-464-4787) of the CVRWQCB.