

Attachment A

Environmental Information for Petitions

Attachment A

Executive Summary

Placer County Water Agency (PCWA) proposes to transfer 20,000 acre-feet (AF) of water currently stored in its Middle Fork Project (MFP) reservoirs on the Rubicon and American rivers to the Westlands Water District (WWD) for irrigation use within the service area of WWD. To accomplish this transfer, the following temporary changes in the Place of Use (POU) and points of rediversion under PCWA's MFP Water Right Permits 13856 & 13858 are needed:

- 1) Allow re-diversion of transfer water at the Harvey O. Banks Pumping Plant and/or Bill Jones Pumping Plant (**Attachment B**).
- 2) Allow use of transfer water within the WWD service area (**Attachment C**).

Placer County Water Agency

Placer County Water Agency is a public agency created and existing pursuant to the provisions of the Placer County Water Agency Act (Water Code Appx. Ch. 81.). PCWA owns and operates the MFP and holds appropriative water rights for that project pursuant to Permits 13856 and 13858, issued on Applications 18085 and 18087, by the State Water Rights Board, predecessor to the State Water Resources Control Board (SWRCB). SWRCB Permits 13856 and 13858, both issued in 1963 and amended in 1975, allow for the combined diversion and storage of 315,000 Acre Feet per Annum (AFA) of MFP water held in two onstream storage reservoirs (French Meadows and Hell Hole Reservoir).

PCWA's MFP is a multi-purpose project designed to conserve waters of the Middle Fork American River, the Rubicon River and tributaries thereto for beneficial Domestic, Municipal & Industrial, Recreational, and Irrigation uses as well as for the generation of electrical energy. Principal project features include two storage reservoirs, five associated diversion dams (Duncan, North Fork Long Canyon, South Fork Long Canyon, Middle Fork Interbay, and Ralston Afterbay), and five power plants (French Meadows, Hell Hole, Middle Fork, Ralston, and Oxbow).

PCWA's consumptive use of its MFP water rights is limited under an agreement with U.S. Department of the Interior-Bureau of Reclamation (USBR) to no greater than 120,000 AFA. Of the 120,000 AFA of MFP water available to PCWA, a combined total of up to 55,000 AFA has been contracted to San Juan Water District (SJWD) (25,000 AFA) and the City of Roseville (30,000 AFA). Additionally, in years when the projected March to November unimpaired inflow to Folsom Reservoir is greater than 1,600,000 AF, PCWA has contracted to deliver up to 29,000 AFA to Sacramento Suburban Water District (SSWD); deliveries to SSWD will not occur in 2013.

Westlands Water District

WWD (or “the District”) was formed in 1952 and encompasses more than 600,000 acres of farmland in western Fresno and Kings Counties. The District serves approximately 600 family-owned farms that average 900 acres in size.

Water is delivered to WWD through the Central Valley Project, a federal water project that stores water in large reservoirs in Northern California for use by cities and farms throughout California. After it is released from CVP reservoirs, the water is typically pumped from the Sacramento-San Joaquin Delta via the USBR Bill Jones Pumping Plant and delivered 70 miles through the Delta-Mendota Canal to San Luis Reservoir. During the spring and summer, the water is released from San Luis Reservoir and delivered to WWD farmers through the San Luis Canal and the Coalinga Canal. Once it leaves the CVP canals, water is delivered to farmers through 1,034 miles of underground pipe and more than 3,300 water meters. WWD farmers produce more than 60 high quality commercial food and fiber crops sold for the fresh, dry, canned and frozen food markets, both domestic and export. More than 50,000 people live and work in the communities dependent on the District's agricultural economy. The communities in and near the District's boundaries include Mendota, Huron, Tranquillity, Firebaugh, Three Rocks, Cantua Creek, Helm, San Joaquin, Kerman, Lemoore and Coalinga.

WWD is interested in augmenting its water supply through this transfer based on the reduced availability of their CVP contract water (20% south of Delta contracted allocations in 2013) to provide their agricultural customers a critical water supply for irrigation of their crops during the 2013 growing season. Transfer water that PCWA provides to WWD will be used entirely within the WWD service area for irrigation of agricultural crops (**Attachment C**).

Description of Proposed Transfer

PCWA proposes to release up to 20,000 AF of water stored in its MFP for transfer to WWD (“Transfer Water”). The Transfer Water will be released from PCWA’s Ralston Afterbay Reservoir on the Middle Fork American River, and will be routed through Folsom Reservoir (Point of Delivery), thence the Lower American River, thence the Sacramento River, thence the Sacramento-San Joaquin Delta to points of rediversion at the Harvey O. Banks Pumping Plant and/or Bill Jones Pumping Plant (**Attachment B**). The Transfer Water releases from the Point of Delivery and point(s) of rediversion will be scheduled in cooperation with the Department of Water Resources (DWR) and the USBR such that it will use available surplus pumping and transmission capacity and will not disrupt normal Central Valley Project (CVP) or SWP operations.

As of April 1, 2013, PCWA has determined that it has at least 20,000 AF of surplus water stored in the MFP. PCWA reached this conclusion by reviewing current and projected MFP inflow,

storage, and modeled project operations data for 2013. Specifically, PCWA had approximately 206,000 AF of water held in storage in its MFP reservoirs as of April 1, 2013 (French Meadows and Hell Hole reservoirs) while the projected runoff from April 1 through the end of June is an additional 70,000 AF, resulting in a peak 2013 MFP storage of 251,000 AF at the end of May. The planned (without-transfer) carryover storage target (January 31, 2013) is 150,000 AF, thus the estimated total of MFP water planned releases (e.g. water supply, recreation, minimum instream flows, and hydropower generation) in 2013 is approximately 101,000 AF of “dispatchable supply”. Of this dispatchable water, PCWA anticipates supplying the following quantities of water to its MFP wholesale customers in 2013: City of Roseville – 9,266 AF and San Juan Water District – 12,000 AF. In addition, PCWA anticipates diverting 11,945 AF for its own retail customers in 2013 at the American River Pump Station (ARPS). Deducting the total MFP consumptive demand of 33,211 AF from the amount of planned release (101,000 AF) leaves an estimated 67,789 AF of water to be dispatched for hydro-electric power generation purposes, which becomes available for CVP use after reaching Folsom Reservoir.

In order to accomplish the transfer, PCWA proposes to release an additional 20,000 AF from MFP storage reservoirs (during the “shoulder” hours (e.g. prior to and following) of scheduled, peak power generation periods), during the period of approximately July 1, 2013 through September 30, 2013; reducing the end of year (December 31, 2013) MFP storage level to approximately 130,000 AF. This proposed with-transfer carryover level remains well above the minimum carryover level required by FERC (50,000 to 100,000 AF depending upon the amount of inflow). The 20,000 AF of additional water, released from MFP storage, which would have otherwise remained in storage in the absence of this transfer, is the water that is proposed to be transferred (i.e., “Transfer Water”).

After release from the MFP, the Transfer Water would flow into Folsom Reservoir. The release of the Transfer Water from Folsom Reservoir will be scheduled by USBR, in cooperation with DWR, such that this transfer will take advantage of available release, pumping, and conveyance capacity that will not disrupt normal CVP or SWP operations. WWD would receive the Transfer Water after its redirection at the Harvey O. Banks Pumping Plant and/or Bill Jones Pumping Plant (**Attachment B**).

The amount of Transfer Water delivered under this Agreement will be measured as releases are made from Ralston Powerhouse, and will be the difference between releases from the MFP with and without the transfer described herein, which PCWA will report to USBR, DWR, and WWD in monthly reports. USBR will verify the total amount delivered based upon the actual MFP January storage low point as stipulated in the Refill Agreement between PCWA and USBR.

Amount of Water to be Transferred

20,000 AF.

Period of Transfer/Exchange

Physical transfer / rediversion of Transfer Water may occur between June 1, 2013 and December 31, 2013, but is most likely to occur during July, August, and September, which are the targeted months for transfer based on PCWA MFP operational constraints, available pumping capacity at the points of re-diversion, and the ability of the USBR to release water from Folsom Reservoir. Transfer Water will be used in the WWD service area within one year from SWRCB approval of the transfer pursuant to Water Code § 1728.

Place of Use of Transfer Water

The 20,000 AF of Transfer Water, less conveyance losses, will be put to reasonable and beneficial use within the WWD service area (**Attachment C**)

Agency Coordination

As a requirement of this transfer, PCWA will enter into a reservoir refill agreement with USBR. The refill agreement will ensure that other legal users of water with vested rights to water from the American River watershed are not unreasonably affected or negatively impacted by the proposed transfer.

Furthermore, to accomplish this transfer, WWD will be executing a Warren Act contract or other wheeling/storage agreement with USBR in order to provide operational flexibility to first store the Transfer Water in Folsom Lake prior to its release and conveyance through the Delta. Additionally, DWR and USBR will coordinate SWP and CVP operations to convey the Transfer Water through the Delta. Transfer Water will be rediverted from the Delta and delivered, less Delta carriage and conveyance losses, to WWD facilities in its service area.

Point of Diversion or Rediversion

Current:

A. PCWA's current points of diversion (POD) are located at California Grid Coordinates, Zone II, NAD 27, Mount Diablo B&M:

Water Body	POD Location	N	E	Quart.	Sec.	T-N	R-E
Duncan Creek	Duncan Creek	538,130	2,431,040	NW SW	24	15	13
M.F. American River	French Meadows	530,100	2,434,250	NW NE	36	15	13
Rubicon River	Hell Hole	510,750	2,452,000	SW SE	16	14	14
S.F. Long Canyon	Long Canyon	507,675	2,434,250	SW NE	24	14	13
N.F. Long Canyon	Long Canyon	506,970	2,431,250	NW SW	24	14	13
M.F. American River	Ralston Interbay	498,137	2,397,300	NW NE	35	14	12
M.F. American River	Ralston Afterbay	490,160	2,357,100	NW NW	3	13	11
N.F. American River	Auburn	444,400	2,267,400	NE SW	23	12	8

B. PCWA's current points of rediversion (PORD) are located at California Grid Coordinates, Zone II, NAD 27, Mount Diablo B&M:

Water Body	PORD	N	E	Quart.	Sec.	T-N	R-E
M.F. American River	French Meadows	530,100	2,434,250	NW NE	36	15	13
Rubicon River	Hell Hole	510,750	2,452,000	SW SE	16	14	14
M.F. American River	Ralston Interbay	498,137	2,397,300	NW NE	35	14	12
M.F. American River	Ralston Afterbay	490,160	2,357,100	NW NW	3	13	11
N.F. American River	Auburn	444,400	2,267,400	NE SW	23	12	8
American River	Folsom Dam	380,461	2,240,626	SW NE	24	10	7

Proposed Point(s) of Rediversion:

C. No change in the present points of diversion or points of rediversion is proposed.

After release from the Point of Delivery (Folsom Reservoir), the Transfer Water will flow down the lower American and Sacramento Rivers and be rediverted, less Delta carriage and conveyance losses, at the SWP Harvey O. Banks Pumping Plant and/or CVP Bill Jones Pumping Plant, both of which, are situated in the southwest Sacramento-San Joaquin Delta. After such rediversion, Transfer Water would be conveyed to WWD using USBR facilities.

Accordingly, PCWA proposes to add the following points of rediversion under this Petition:

K. Banks Pumping Plant

This SWP Point of Rediversion is located N 21159901 and E 6237838, California Coordinate System, Zone 3, NAD 83, being within the SW ¼ of Section 35, T1S, R3E, MDB&M. This proposed point of rediversion is identified on maps filed with the Division of Water Rights (Division) under Application 5630 and Map 1 (**Attachment B**).

J. Jones Pumping Plant

This CVP Point of Rediversion is located N 2114400 and E 6248073, California Coordinate System, Zone 3, NAD 83, being within the SW ¼ of Section 35, T1S, R3E, MDB&M. This proposed point of rediversion is identified on maps filed with the Division under Application 5630 and Map 1 (**Attachment B**).

PCWA Place of Use

Current: Western Placer County and northern Sacramento County, as shown on a map set dated July 31, 1996 on file with the Division and as shown in **Attachment D**.

Proposed: No change in PCWA's current POU is proposed; PCWA proposed to add the service area of WWD as an additional POU in order to facilitate the temporary water transfer to WWD. This proposed temporary addition to the PCWA POU includes service area of the CVP is shown on Map 214-208 – 12581 on file with the Division under Application 5626. The WWD service area is shown in **Attachment C**.

Purpose of Use

Current: Domestic, Municipal & Industrial, Recreational, Irrigation.

Proposed: Irrigation.

Season of Use, Direct Diversion Use (cfs), and Storage (AF)

Current: See project description and water rights permit.

Proposed: No change requested.

The proposed transfer/exchange water is presently used or stored within the county/counties of:

Placer and Sacramento.

The proposed transfer/exchange water will be placed to beneficial use within the following county/counties:

Fresno and Kings.

1a. Would the transfer/exchange water have been consumptively used or stored in the absence of the proposed temporary change (See WC 1725)?

Yes. The 20,000 AF of proposed Transfer Water is currently in storage in PCWA's MFP reservoirs and would remain in storage absent this transfer as described above.

1b. Provide an analysis which provides documentation that the amount of water to be transferred/exchanged would have been consumptively used or stored in the absence of the proposed temporary change.

To provide the 20,000 AF of Transfer Water under this petition, PCWA proposes to transfer 20,000 AF of MFP storage surplus. The release of this surplus water would be accomplished in synchronization with PCWA's hydroelectric power generation operations model for the anticipated period of transfer (July 1 through September 30). **Attachment E** shows the 2013 MFP operational plan both with and without the transfer. Please refer to the *Description of the Proposed Transfer* above for justification that the Transfer Water would have been consumptively used or stored in the absence of the proposed temporary change.

2a. If the point of diversion/diversion is being changed, are there any person(s) taking water from the stream between the present point of diversion/diversion and the proposed point?

Yes.

2b. Are there any persons taking water from the stream between the present point of diversion or return flow and the proposed point of diversion or return flow?

Not Applicable. Although there are water users taking water from the stream between PCWA's current points of return flow and the points at which an export water user would return water to the system, we have answered question No. 2b as "not applicable." PCWA would not transfer water such that it would adversely impact MFP water users within the PCWA service area; PCWA will continue MFP surface water deliveries (Roseville, SJWD, and PCWA Zones 1 and 5 via ARPS) as described above to its existing customers with or without the proposed temporary water transfer. Therefore, there will be no change in the return flow pattern to water users within PCWA's service area.

- 2c. If the answer to 2a. or 2b. is yes, provide the name and address. Also provide the name and address of other persons known to you who may be affected by the proposed change.**

PCWA does not know the identities of the other legal users of water between its present point of diversion and storage at its MFP reservoirs and the proposed point of rediversion at the Harvey O. Banks Pumping Plant and/or Bill Jones Pumping Plant. Given the geographic scope of this water transfer, it is impractical to list all other legal users of water between the MFP and the proposed points of rediversion. Furthermore, as explained in response to Question 3.a, flows downstream of PCWA points of diversion (e.g. MFP Reservoirs) and above points of rediversion will be minimally or negligibly increased by the release of Transfer Water. Therefore, there will be no adverse effects on legal users of water between existing points of diversion, existing points of rediversion, and proposed points of rediversion.

- 3a. Provide an analysis of any changes in streamflow, water quality, timing of diversion or use, return flows, or effects on legal users resulting from the proposed transfer/exchange.**

Middle Fork and North Fork American Rivers

This transfer will not significantly affect flows, water quality, or legal users of water on the Middle Fork and North Fork American rivers. During the transfer period, PCWA will generate power using the MFP. When peak power generation is needed to meet bulk electric power system demand, PCWA uses the full 1,000 cfs of MFP hydro generation capacity. The release of Transfer Water will occur at times when PCWA is not using the full 1,000 cfs of MFP hydro generation release capacity. PCWA's release of Transfer Water will therefore have the effect of dampening the fluctuations in the Middle Fork and North Fork American rivers triggered by summer power generation activities. Instead of river flows abruptly decreasing when power generation demands are reduced, flows will remain more stable and will not decrease when compared to baseline conditions.

PCWA's release of an additional 20,000 AF from the MFP over a three month period (July 1 through September 30) is a modest increment (20 percent) of the 101,000 AF that will be dispatched from the MFP this year. Of this, approximately 70,000 AF will be released from the MFP for scheduled M&I contract deliveries, hydropower generation, and minimum instream flow requirements during the anticipated July 1 through September 30 transfer period; therefore, the release of Transfer Water will increase the scheduled MFP dispatch release by about 29% over this three month transfer period. Further, the scheduled transfer will account for an average daily increase in Middle Fork

American River flows below Ralston Afterbay Reservoir approximating 131 cfs in July, 87 cfs in August, and 111 cfs in September.

Physical and water chemistry conditions in the streams and rivers associated with the MFP are of high quality, with low concentrations of mineral constituents and other substances generally conforming to regulatory water quality objectives and standards. Historical data shows that generally all of the constituents analyzed in project-affected waters (within and downstream of project impoundments) complied with current regulatory standards; Water Quality Technical Study Report -AQ 11.1 prepared in support of the Federal Energy Regulatory Commission (FERC) Environmental Impact Statement (EIS) for PCWA's MFP FERC Relicensing Project No. 2079 is provided electronically as **Attachment F** for a detailed description of general water quality conditions within the MFP watershed.

In addition, as owner and operator of a Public Water System, PCWA conducts routine California Code of Regulations (CCR) Title 22 water quality sampling at the American River Pump Station (ARPS) (approximately four miles upstream of the Point of Delivery) pursuant to Section 116275 of the California Safe Drinking Water Act which is contained in Part 12, Chapter 4 of the California Health and Safety Code. PCWA's California Department of Public Health and Safety (DPHS) Monitoring requirements set forth in California Department of Public Health and Safety Permit No. 01-02-07(P) 003 issued on December 10, 2007 are set to ensure that MFP surface water diverted from the North Fork American River at the ARPS meets current DPHS drinking water standards as well as Central Valley Regional Water Quality Control Plan (Basin Plan) Water Quality Standards and Objectives. The previous three years (2010-2012) of data from the ARPS DPHS water quality sampling is also attached electronically in **Attachment F**.

Based on the clean, cold, generally high quality water released from the MFP, the increase in magnitude of flows during the transfer period will benefit water temperature, water quality, and instream flow conditions. As such, the proposed transfer will likely have a positive effect on downstream aquatic habitats and the species that these habitats support.

Lower American River, Sacramento River, and Delta

After release at Oxbow Powerhouse, Transfer Water will flow first into Folsom Lake where it will be held in storage by the USBR and scheduled for release to points of rediversion in the south Delta at the Harvey O. Banks Pumping Plant and/or Bill Jones Pumping Plant (**Attachment B**). While this supplemental water will decrease the temperature of the water entering Folsom Reservoir, the USBR and DWR will be responsible for coordination and scheduling of the volume and timing of releases from

the Point of Delivery to the Point of Rediversion so that optimal thermal conditions are realized in the receiving water bodies consistent with existing state and federal regulations, endangered species acts, and all biological opinions in effect at the time of the transfer. These releases from Folsom will first enter the Lower American River which in turn flows into the Sacramento River, then the Delta. For reference, the average flows in the Lower American and Sacramento rivers experienced historically during the July-September transfer period are shown in **Table 1** below. It is anticipated that the release of transfer water as scheduled by the USBR will not significantly deviate from these historic flow patterns. As such, it is unlikely that the transfer releases from Folsom will have any adverse effect in stage or discharge of these receiving water bodies given the magnitude of stream flows compared to the volume of transfer water.

Table 1

Historic Mean Monthly Flows in cubic feet per-second (cfs)
for the Lower American and Sacramento Rivers

USGS 11446500 AMERICAN R A FAIR OAKS CA Monthly mean in cfs (Calculation Period: 1955-10-01 -> 2012-09-30)											
January	February	March	April	May	<i>June</i>	<i>July</i>	<i>August</i>	<i>September</i>	October	November	December
5,020	5,220	4,900	4,350	4,380	3,930	3,670	2,740	2,200	1,920	2,300	3,780
USGS 11447650 SACRAMENTO R A FREEPORT CA Monthly mean in cfs (Calculation Period: 1955-10-01 -> 2012-09-30)											
January	February	March	April	May	<i>June</i>	<i>July</i>	<i>August</i>	<i>September</i>	October	November	December
34,200	39,400	37,300	28,400	23,500	18,500	16,400	15,700	15,500	12,500	15,600	25,700
USGS 11455420 SACRAMENTO R A RIO VISTA CA Monthly mean in cfs (Calculation Period: 1995-05-01 -> 2007-09-30)											
January	February	March	April	May	<i>June</i>	<i>July</i>	<i>August</i>	<i>September</i>	October	November	December
30,615	57,083	48,086	32,015	30,338	17,046	13,815	11,279	10,792	8,173	9,603	23,883

Source: USGS, 2013; <http://waterdata.usgs.gov>

Although Transfer Water may be released by PCWA and rediverted by WWD for a period of up to one year or less from the date of SWRCB approval (Water Code § 1728), it is anticipated that the water will be transferred in July, August, and September of 2013. During these summer months, stream flows in the American River, Sacramento

River, and Sacramento-San Joaquin Delta are dominated by CVP and SWP deliveries as well as temporary water transfers. This is largely due to the fact that the normal, historical unimpaired hydrology of the American and Sacramento rivers, as well as that of the Delta and its tributaries, would typically support a declining hydrograph during these summer months.

Thus, while the exact USBR operations at Folsom Reservoir required to implement the proposed transfer cannot be stated with precision at this time, it is clear that the transfer will not cause substantial changes in streamflow, water quality, timing of diversion or use, return flows, nor would it have a detrimental effect on legal users of water within the MFP area or PCWA's current deliveries within their permitted POU. The only effects of this transfer on other legal users of water downstream of the Point of Delivery will be a very slight increase in river flows from PCWA's MFP to the proposed point of redirection at the Delta pumping facilities. Furthermore, when the Transfer Water is diverted at the Delta pumping facilities, all existing state and federal regulations will be followed, including Decision 1641, State and Federal endangered species acts, in addition to all Biological Opinions and take permits associated with the conveyance facilities used to complete this temporary transfer. As such, the transfer will cause no adverse economic, physical, or environmental effects within the geographic scope of this transfer.

3b. State reasons you believe the proposed temporary change will not injure any legal user of the water, see Water Code Section 1727(b)(1).

No legal user of water will be injured because PCWA's transfer of water will only slightly increase, not decrease, streamflows below PCWA's MFP reservoirs. Any such increase will be minor and will not cause any water flows to increase above normal seasonal levels, or to violate any regulatory requirements. The 20,000 AF of proposed Transfer Water is currently in storage in accordance with PCWA's water rights and, with or without this proposed transfer, would not be available to any other legal user of water. Additionally, PCWA will enter into a reservoir refill agreement with USBR, ensuring that future refill of any storage space in PCWA's MFP reservoirs created by the transfer will not reduce the amount of water USBR or other water users could otherwise divert under their water rights.

4. Consult with staff of the applicable Regional Water Quality Control Board concerning the proposed temporary change. State the name and phone number of person(s) contacted. Summarize their opinion concerning compliance with CCR 794(b) and any Regional Board requirements.

PCWA has not contacted the Regional Board staff, but intends to do so during the review process if Division of Water Rights staff requests it. PCWA has executed similar transfers in the past without any adverse change in water quality. The MFP water proposed for transfer is very high quality runoff derived predominantly from snowmelt and rains falling in largely undeveloped higher elevation portions of Placer County in the Sierra Nevada. If anything, the slight increase in flows in downstream reaches that could result from this transfer should improve water quality by decreasing water temperature, increasing dissolved oxygen levels and decreasing the concentration of dissolved solids and other constituents of concern in downstream waters as previously described.

5a. Consult with the California Department of Fish and Wildlife (CDFW) pursuant to 14 CCR 794(b) concerning the proposed temporary change. State the name and phone number of the person(s) contacted and their opinion concerning the potential effect(s) of the proposed temporary change on fish, wildlife, or other instream beneficial uses, and state any measures recommended for mitigation.

Consistent with Water Code § 1726, a copy of this petition was sent to the CDFW North Central Regional Manager Tina Bartlett at 1701 Nimbus Road, Rancho Cordova, CA 95670 Phone: (916) 358-2900, FAX: (916) 358-2912. PCWA has not received CDFW's opinion regarding the proposed transfer, but will provide this information to the appropriate SWRCB staff when available. PCWA expects CDFW to indicate that the transfer will not unreasonably affect fish or wildlife resources because very similar transfers have occurred in the past with no adverse impacts identified by CDFW. In fact, in the past CDFW has advocated such transfers as part of the transfer of water to the CAL-FED Environmental Water Account (EWA). CDFW also reviewed a similar transfer from PCWA to WWD in 2008, and did not indicate that instream beneficial uses would be adversely affected.

5b. Does the proposed use serve to preserve or enhance wetlands habitat, fish and wildlife resources, or recreation in or on the water (See WC 1707)?

Generally yes; while the primary purpose of the Transfer of Water will be for consumptive use within the WWD service area for agricultural irrigation, the release of Transfer Water from PCWA's MFP reservoirs will provide up to 20,000 AF of supplementary flows in the Middle Fork and North Fork American rivers to the proposed Point of Rediversion. As such, these increased flows may enhance some aquatic habitats and white-water boating recreation within those reaches and facilitate persistence of the cold water pool in Folsom Reservoir. Furthermore, the addition of the Transfer Water into the Sacramento-San Joaquin Delta system may incrementally improve wetlands, fish and wildlife habitat, or recreational opportunities or aesthetics in San Luis Reservoir.

5c. Provide an analysis of potential effect(s) on fish, wildlife, or other instream beneficial uses which may arise from the proposed change.

As explained above, the proposed transfer may improve water quality and thereby benefit instream beneficial uses including fish and wildlife resources. There is no evidence that the proposed transfer will negatively affect fish and wildlife or other beneficial instream uses in any unreasonable, significant, or measurable way. In addition, the proposed releases are in addition to PCWA's existing downstream requirements and commitments.

When the Transfer Water is diverted at the Harvey O. Banks Pumping Plant and/or Bill Jones Pumping Plant (**Attachment B**), all existing state and federal regulations will be followed, including Decision 1641, State and Federal endangered species acts and all biological opinions and take permits. USBR has agreed to implement all reasonable and prudent alternatives that will be triggered in 2013 contained in the applicable biological opinions. Additionally, there is close monitoring and coordination between DWR, USBR, USFWS, and the National Marine Fisheries Service ("NMFS"), and the CADFW regarding the effects of combined project operations on the host of species inhabiting the Delta. This allows the relevant agencies to quickly deal with circumstances as they arise, and to avoid significant impacts to species of special concern (i.e., listed and protected under state or federal laws).

Given the small amount of water involved in this transfer relative to the amount of water in the system and pumped by the projects, it is not expected that any fish species will be adversely affected by the proposed additional releases from PCWA's reservoirs. Almost identical change petitions and transfers have been granted by the SWRCB in the past.

5d. State reasons you believe the proposed temporary change will not unreasonably affect fish, wildlife, or other instream beneficial uses, see Water Code Section 1727(b)(2).

See response to Question 5c above.

6a. Does any agency involved in the proposed transfer/exchange rely upon section 382 of the Water Code to allow the delivery of water outside of the agency's service area?

No. PCWA has independent legal authority for this transfer under its organic act. (See Water Code Appx. Ch. 81.)

6b. If yes, provide an analysis of the effect of the proposed transfer/exchange on the overall economy of the area from which the water is being transferred. N/A.