

# Attachment A

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## Environmental Information for Petitions

# Attachment A

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## Introduction

Placer County Water Agency (PCWA) proposes to transfer 35,000 acre-feet (AF) of Middle Fork American River Project (MFP) water (Transfer Water) currently stored in Hell Hole Reservoir on the Rubicon River and French Meadows Reservoir on the Middle Fork American River (MFAR) to the Westlands Water District (WWD) for designated beneficial uses within the WWD service area. To accomplish this transfer, the following temporary (one year or less) changes in Place of Use (POU) and Point(s) of Rediversion (PORD) are being sought by Petition pursuant to PCWA Water Right Application 18085 (Permit No. 13856) and consistent with California Water Code §1725-§1732, which includes:

- 1) The temporary addition of United States Department of the Interior Bureau of Reclamation (Reclamation) Central Valley Project (CVP) Bill Jones Pumping Plant (Jones) intake facility and/or the California Department of Water Resources (DWR) State Water Project (SWP) Harvey O. Banks Pumping Plant (Banks) (**Attachment B**) as Point(s) of Rediversion for WWD to receive PCWA Transfer Water under P13856,
- 2) The temporary addition of San Luis Reservoir (SLR), a Reclamation CVP facility (**Attachment B**), as a point for the temporary storage and rediversion of Transfer Water by WWD under P13856, and
- 3) The temporary addition of the WWD service area (**Attachment C**) to P13856 authorizing consumptive and beneficial uses of Transfer Water within the WWD service area.

## Transferring Agencies Overview

### **Placer County Water Agency**

PCWA 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 the MFP 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 on-stream storage reservoirs (French Meadows and Hell Hole Reservoir).

PCWA's MFP is a multi-purpose project designed to manage waters of the MFAR, the Rubicon River and tributaries thereto for beneficial Domestic, Municipal & Industrial, Recreational, and Irrigation uses as well as hydro-electrical power generation. 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).

For the purposes of this proposed 35,000 AF transfer, PCWA will be solely exercising Permit 13856, which allows for the storage and consumptive use of 249,000 AF of MFP water (25,000 AF at Duncan Creek diversion; 95,000 AF in French Meadows; and 129,000 in Hell Hole Reservoir).

### **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 Reclamation’s 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 non-availability of their CVP contract water (zero percent south of Delta contracted CVP allocations in 2014) to provide their agricultural customers a critical water supply for irrigation of their crops during the 2014 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 35,000 AF of previously stored water from the MFP for transfer to WWD (“Transfer Water”). The Transfer Water will be released to the MFAR from Ralston Afterbay through Oxbow Powerhouse, a 6.1 Mega Watt (MW) hydroelectric generation facility that discharges approximately 1,040 cubic feet per second (cfs) at peak generating capacity. Ralston Afterbay is PCWA’s most downstream regulating reservoir on the MFAR. Water released from Ralston Afterbay via the Oxbow Powerhouse flows for approximately 24 miles to confluence with the North Fork American River (NFAR) and then another 8 miles into Folsom Reservoir (Point of Delivery). The travel time for a release of 1,000 cfs (ramped up from a 200 cfs base flow) for this 32 mile stretch of the MFAR (between Ralston Afterbay and Folsom Reservoir) is approximately 14 hours. Because Folsom Reservoir is a POD and PORD under PCWA’s water rights, including P13856, the use of Folsom Reservoir to temporarily store

and subsequently release Transfer Water will be covered under a Warren Act Agreement between WWD and Reclamation

Reclamation would provide the Transfer water from the Point of Delivery to WWD on a schedule that is mutually agreeable and/or beneficial to Reclamation, WWD, and the environment such that it will not disrupt normal CVP or State Water Project (SWP) operations and will adhere to all current flow standards for the LAR (from Lake Natoma to the confluence with the Sacramento River) as well as the most up-to-date requirements for the Delta as directed by the SWRCB.

Water released from Folsom Reservoir will be re-operated via Lake Natoma into the LAR; water released from Lake Natoma flows for an additional 22 miles to confluence with the Sacramento River. The Sacramento River flows approximately 55 miles where it meets the San Joaquin River at the head of the Sacramento-San Joaquin Delta. From this location, Transfer Water would move east via counter flow back up the San Joaquin River and then south, meandering for an additional 45 miles to points of rediversion at either the Harvey O. Banks Pumping Plant (Banks) and/or Bill Jones Pumping Plant (Jones) (**Attachment B**). Utilization of the Delta Cross Channel, when available, cuts approximately 18 miles off the total distance to the CVP/SWP South Delta Pumps, PORD's sought under this Petition.

WWD would receive the Transfer Water following rediversion at the CVP Jones intake facility (**Attachment B**). Water would be rediverted at the Jones intake facility and conveyed south for approximately 70 miles via the Delta Mendota Canal to San Luis Reservoir. Transfer Water would be temporarily stored in San Luis Reservoir, a PORD sought under this petition, and then delivered via the San Luis Canal, which runs through the heart of the WWD service area, thence the Coalinga Canal (**Attachment C**).

WWD will coordinate with Reclamation CVO staff to determine the timing and flow rate of Transfer Water releases from the Point of Delivery for rediversion at the Jones intake facility. In the instance that Banks is used as the PORD WWD and PCWA will need to consult with DWR. As described in **Attachment G**, Reclamation could release the Transfer Water: (1) on top of (in addition to) projected operations resulting in increased LAR flows; (2) as part of operations consistent with the Flow Management Standard (FMS) resulting in increased (by 35,000 AF) end-of-September Folsom storage; or (3) some combination of (1) and (2).

## **PCWA 2014 Operations**

As part of the Petition approval process, PCWA must ensure that the needs of their Placer County customers are met prior to determining that surplus water is available for out-of-county transfer. As such, the volume of Transfer Water delivered under this Agreement must be measured against PCWA's baseline operations plan for 2014, which takes the following factors into account:

1. All serviceable demands within Placer County based on American River Pump Station (ARPS) pumping limitations,
2. Contractual obligations to meet San Juan Water District (SJWD) and Roseville demands,
3. Recreational rafting releases,
4. MFP minimum instream flow requirements,
5. Minimum carryover storage requirements,
6. The most up-to-date B-120 hydrologic inflow forecasts (May 1, 2014),
7. Discretionary power releases, and
8. Evaporative losses.

Due to the current drought, PCWA is being allocated 59% of their 110,400 AF contracted Pacific Gas & Electric Drum-Spaulding Project supply in 2014, resulting in a 45,264 AF supply deficit. The Drum-Spaulding Project supply is the main source (and in some areas the sole source) for PCWA Service Zones 1, 3, and 5. As such, PCWA will be taking 34,000 AF of its 35,500 AF pumping capacity at the ARPS in 2014 to help replace the reduced supplies in the areas that are typically served by the Drum-Spaulding Project. Based upon the amount of water pumped in 2014 at the ARPS, PCWA must send "replacement" water downstream, from MFP storage, to benefit the LAR as established by the 2000 Water Forum Agreement (WFA).

As a result of the WFA commitments, a portion of the water proposed to be transferred by PCWA for this Petition under Permit 13856 will be "Replacement" or environmental releases pursuant to the WFA. The WFA specifies that, given PCWA's demands at the ARPS during the driest years, PCWA will re-operate its MFP and replace water to the LAR, conditioned upon PCWA's ability to sell this replacement water to a willing buyer downstream of the mouth of the American River, under terms acceptable to PCWA. The WFA also requires that the source of this replacement water in drier years would be water not normally released from the MFP (e.g. previously stored water).

PCWA's Purveyor Specific Agreement within the WFA was formally adopted by the PCWA Board of Directors in 2000 and further established in 2002 under the 'Operations and Maintenance' section of the Mitigation Monitoring and Reporting Program (MMRP) / Environmental Commitments Plan pursuant to the California Environmental Quality Act (CEQA) EIS/EIR for the construction and operation of the ARPS.

Of the approximately 40,000 AF of surplus water intended to be released from MFP storage by PCWA in 2014, an initial 5,000 AF was transferred to East Bay Municipal Utility District (EBMUD) consistent with the SWRCB Order dated April 2, 2014 approving PCWA's Transfer Petition. After diverting the initial

5,000 AF of transfer water, EBMUD rescinded their option to take the remaining 15,000 AF of MFP water approved in the SWRCB Order. This 15,000 AF of water previously approved for transfer to EBMUD by the SWRCB Order is, therefore, being made available to WWD as part of this Transfer. As such, PCWA intends to transfer a total of 35,000 AF to WWD as the total volume of Transfer Water sought under this Petition.

On May 1, 2014, PCWA's Board of Directors passed Resolution No. 14-15 declaring that PCWA has at least 35,000 AF of surplus water stored in the MFP. PCWA reached this conclusion by reviewing current MFP storage levels, modeled inflow, and projected MFP operations data for 2014 and accounting for downstream demands (e.g., water supply deliveries, recreation releases, minimum instream flow requirements, evaporative losses, and discretionary (planned) hydropower generation, etc.). Based on operations projections that include the withdrawal of an additional 35,000 AF from MFP storage to transfer with WWD, the 2014/2015 MFP carryover storage target would be 90,000 AF, as described in detail below.

### **MFP Carryover Storage/Refill Reservation**

PCWA has a typical end-of-the-year (December-February) combined carryover target (storage low point) of 150,000 AF in its MFP reservoirs (French Meadows and Hell Hole). As a result of the refill agreement associated with the 20,000 AF 2013 WWD transfer and the 5,000 AF 2014 EBMUD transfer, PCWA's MFP current carryover target for 2014/2015 is 125,000 AF. Following the proposed Transfer, PCWA would carry an additional 35,000 AF deficit in its carryover target forward in time until conditions identified in the refill agreement allow refill of the deficit (e.g., Folsom Reservoir reaches flood control levels or fills completely). This 35,000 AF carryover deficit would be in addition to the refill reservation currently being carried by PCWA as a result of the 2013 and 2014 transfers noted above. In total, the 2014 carryover deficit for the MFP would be 60,000 AF resulting in a 2014/2015 carryover target of 90,000 AF (instead of the typical 150,000 AF), after the 35,000 AF transfer is carried out.

In order to accomplish the transfer, PCWA proposes to release 35,000 AF of surplus water from MFP storage reservoirs during the months of June, July, August, and September of 2014. This proposed with-transfer carryover level of 90,000 AF remains well above the minimum carryover level required by FERC of 54,000 AF of total combined storage (28,000 AF in French Meadows & 26,000 AF in Hell Hole) and is sufficient to meet PCWA's 2015 downstream demands (e.g., consumptive water supply, minimum instream flow requirements, etc.) should the water year 2015 be dry. The 35,000 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.

### **Amount of Water to be Transferred**

35,000 AF

### **Period of Transfer/Exchange**

As modeled in **Attachment G**, PCWA is planning on the release of Transfer Water beginning in mid-June (via Oxbow Powerhouse) at an average rate of 200 cfs, for a period of approximately 100 days, ending approximately on September 26, 2014 (totaling 35,000 AF). It is currently anticipated that Reclamation will initiate the release of Transfer Water from Folsom Reservoir on July 1, 2014 continuing to September 30, 2014; this equates to an average daily release flow rate of 240 cfs.

These are the preliminary dates targeted for transfer based on PCWA MFP operational constraints, points of rediversion, and the ability of Reclamation to release water from Folsom Reservoir to meet contractual obligations and support fisheries resources in the LAR. Ultimately, the water will be released by Reclamation to balance Folsom Reservoir storage and downstream conditions. 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 35,000 AF of Transfer Water, less conveyance losses, will be put to reasonable and beneficial uses within the WWD service area (**Attachment C**).

### **Agency Coordination and Consultation**

As a requirement of this transfer, PCWA will enter into a reservoir refill agreement with Reclamation. The refill agreement will ensure that other downstream legal users of water with vested rights in the American River watershed are not unreasonably affected or negatively impacted by the proposed transfer. PCWA will be sending a copy of this Petition to the California Department of Fish and Wildlife (CDFW) who acts as a responsible agency consistent with Water Code §1726(c).

To accomplish this transfer, WWD will be executing a Warren Act contract with Reclamation in order to temporarily store (less than 30 days) the Transfer Water in Folsom Reservoir prior to its release. As part of this Warren Act contract (federal action), and as the Federal Lead Agency, Reclamation holds the discretion to declare whether consultation with NMFS and/or the USFWS is necessary under Section 7 of the Federal Endangered Species Act (FESA) for federally listed threatened and endangered species. As shown in **Attachment G**, modeling indicates this Transfer would not harm, and would potentially benefit, FESA listed species and aquatic habitat conditions in the LAR. Reclamation would ensure that Transfer releases adhere to applicable requirements LAR and delta.

Further, by way of a Refill Agreement to be executed by and between Reclamation and PCWA, Reclamation will coordinate with DWR to ensure refill conditions are met so as not to negatively impact SWP or CVP storage conditions. Reclamation will also coordinate SWP and CVP operations with DWR to ensure that Transfer Water is consistent with the Coordinated Operations Agreement.

**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 changes are requested in this Petition for PCWA’s current points of diversion or points of rediversion.

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 carriage and conveyance losses, at the Jones intake facility, one of the PORD requested by this Petition. After such rediversion, Transfer Water would be conveyed to San Luis Reservoir (another PORD requested by this Petition) and then released into the San Luis Canal for delivery throughout the WWD service area using WWD owned facilities, the Coalinga

Canal, or facilities covered in the Warren Act contract to be executed between WWD and Reclamation.

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

**Harvey O. Banks Pumping Plant**

This SWP Point of Rediversion is located 37°48'1.41"N/ 121°37'17.50"W, 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 shown in **Attachment B**.

**Bill Jones Pumping Plant**

This CVP Point of Rediversion is located 37°47'47.22"N/ 121°35'8.06"W, 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 9368, and shown in **Attachment B**.

**San Luis Reservoir**

This CVP Point of Rediversion is located 37° 4'27.36"N/121° 0'54.55"W California Coordinate System, Zone 3, NAD 83, being within the SE ¼ of Section 7, T10S, R9E, MDB&M. This proposed point of temporary storage and rediversion is identified on maps filed with the Division under Reclamation Application 15764 (Permit 12860) for the use of San Luis Reservoir, and shown in **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 proposes to add the service area of WWD as an additional POU in order to facilitate the temporary water transfer to WWD. This proposed temporary (one year) addition to the PCWA POU includes the WWD service area as shown in **Attachment C**.

**Purpose of Use**

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

**Proposed:** No change is being requested in PCWA's current purpose of use within its designated POU; WWD would use the Transfer Water predominantly for Agricultural Irrigation uses in its service area.

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

**Current:** See project description and water rights permit.

**Proposed:** No change requested.

**Access to Proposed Point(s) of Rediversion**

All PORs and conveyance facilities are owned by the Federal Government and will be covered in the Warren Act contract with Reclamation.

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

Placer & Sacramento

**The proposed transfer/exchange water will be beneficially used within the following county/counties:**

Fresno & 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 35,000 AF of proposed Transfer Water is currently stored 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 WWD with the Transfer Water sought under this Petition, PCWA proposes to transfer a surplus 35,000 AF of MFP storage which is currently (May 21, 2014) at its 2014 peak of 221,600 AF. As stated above, the release of this surplus water would be accomplished in synchronization with PCWA's hydroelectric power generation between June and September 2014. **Attachment E** shows the 2014 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/rediversion is being changed, are there any person(s) taking water from the stream between the present point of diversion/rediversion 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?**

There are a number of water users taking water from the American River, Sacramento River, Sacramento-San Joaquin Delta, and CVP facilities south of the Delta pumps between PCWA's current points of return flow and the points at which any downstream water user would return water to the system. PCWA would not transfer water such that it would adversely impact water users within the PCWA service area and PCWA will continue MFP stored water deliveries

(Roseville, SJWD, and PCWA Zones 1 and 5 via ARPS) as described above to its existing Placer County customers with or without the proposed temporary water transfer. In addition, PCWA will be entering into a refill agreement with Reclamation to ensure that there are no adverse impacts to the SWP/CVP or any other downstream users during the refill of the MFP reservoirs. Therefore, there will be no change in the return flow pattern to water users within PCWA's service area.

**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 alter flows, water quality, or reduce the ability for legal users to lawfully take water on the Middle Fork and/or North Fork American rivers when compared to baseline conditions of PCWA's MFP. During the transfer period, PCWA will be generating power as they always do during periods of peak summer energy demand. Peak power generation at the point of transfer release, at Oxbow Powerhouse, is 6 megawatts (MW) which equates to a discharge of approximately 1,040 cfs. The release of Transfer Water would generally occur at times when PCWA is not using the full generation capacity at Oxbow Powerhouse and would occur within the 'shoulder hours' or off-peak times when generation is typically not scheduled. As such, PCWA's release of Transfer Water will, therefore, fall into the same range of flows (approximately 150 cfs to 1100 cfs) that occur normally in the Middle Fork and North Fork American rivers, during recreational flow releases or during periods of peak generation common for the spring and summer months that support the whitewater rafting community.

Physical habitat and water chemistry conditions in the tributary 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 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 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 four years (2010-2014) of data from the ARPS DPHS water quality sampling is also attached electronically in **Attachment F** as an example of the high quality water received from the American River Basin.

Based on the clean, cold, generally high-quality water released from the MFP, the increase in timing, duration, and magnitude of flows during the transfer period will benefit downstream water temperatures and instream flow conditions as alluded to in **Attachment F**. Further, as detailed in **Attachment G**, the proposed transfer will have a positive effect on downstream temperatures, aquatic habitats, and the public trust species that these habitats support.

### **Receiving Water Bodies: Lower American and Sacramento Rivers**

After release at Oxbow Powerhouse, Transfer Water will flow first into Folsom Reservoir where it will be temporarily held in storage by Reclamation and scheduled for release to the Jones intake facility (**Attachment B**). **Attachment G** shows that Transfer Water will, in general, decrease the temperature of the water entering Folsom Reservoir. Reclamation 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 LAR which in turn flows into the Sacramento River.

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 currently anticipated that the water will be released from the MFP by PCWA in June (8,750 AF), July (8,750 AF), August (8,750 AF) and September (8,750 AF) of 2014. During these summer months, stream flows in the American River, Sacramento River, and Sacramento-San Joaquin Delta are typically 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 those of the Delta and its tributaries, would typically support a declining hydrograph during these summer months. In a year like 2014 when CVP/SWP deliveries will be significantly cut, PCWA's 'supplemental' Transfer releases will have a greater ability to benefit the aquatic environment downstream of the MFP. As shown in **Attachment G**, modeling indicates that the Transfer will benefit water temperatures by achieving a lower ATSP schedule.

Due to the persistent drought conditions, Reclamation is currently releasing approximately 1750 cfs to the LAR. The 2014 operational plan released by Reclamation in May for Folsom Reservoir shows LAR flows at 2109 cfs, 1759 cfs, and 1240 cfs for the months of July, August, and

September of 2014, respectively. Based on an anticipated, constant release of approximately 200 cfs of MFP Transfer water from Folsom Reservoir starting July 1 through September 30, the Transfer would account for 9, 11, and 16 percent of the LAR flows, respectively, if released as part of the projected operational releases.

As described in **Attachment G**, Transfer water released as part of Reclamation's operations would result in a 35,000 AF increase in storage at the end-of-September. Alternatively, if released on top of Reclamations operational releases for Folsom Reservoir the LAR would see an increase in flows over the summer period as detailed above. Should Reclamation choose to operate using a combination of flows and reservoir storage would both increase but to a lesser degree. Regardless of the actual scenario that is utilized to move the Transfer water, there will be benefits to temperatures in the LAR and/or benefits to Folsom Reservoir storage, both positively affecting designated beneficial uses within the American River Basin. As such, it is highly unlikely that the transfer releases from Folsom Reservoir made by Reclamation during the transfer period would cause any adverse effects to the LAR.

Thus, while the exact schedule and daily volume of transfer releases that will be implemented by Reclamation operations for Folsom Reservoir 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 would be a slight increase in flows from Transfer releases at Folsom Reservoir to the proposed Point of Rediversion at the Jones intake facility, depending on how Reclamation operates. The diversion of Transfer Water at the Jones intake facility would comply with current standards and all state and federal regulations and permits that apply to the proposed Point (s) of Rediversion. 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, streamflow below PCWA's MFP reservoirs. Any such increase will be minor and will not cause any water flows to increase above normal seasonal levels, nor would the increased flows violate regulatory flow requirements as Reclamation will be adhering to their CVP Biological Opinion and the FMS for the LAR. The 35,000 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. The Transfer will not affect PCWA's ability to meet future obligations. Additionally, PCWA will enter into a reservoir refill agreement with Reclamation, ensuring that future refill of any storage space in PCWA's

MFP reservoirs created by the transfer will not reduce the amount of water the SWP/CVP or other water users could otherwise divert under senior 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 formally contacted the Regional Board staff, but intends to send a copy of this Petition prior to the posting of the Public Notice and opening of the 15 day comment period. 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. As detailed above and as referenced in **Attachment G**, the slight increase in flows in downstream reaches resulting from this transfer will improve water quality by decreasing or moderating water temperatures in the LAR

- 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 will be sent prior to Public Notice 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 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 PCWA transfers as part of the transfer of water to the CAL-FED Environmental Water Account (EWA). CDFW has reviewed many similar transfers from PCWA since the early 1990's and have never indicated that instream beneficial uses would be adversely affected by the introduction of PCWA Transfer Water to downstream reaches.

- 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)?**

No. This Petition is not for instream flow dedication pursuant to WC § 1707

While the primary purpose of this Petition will be for designated beneficial uses within the WWD service area, the release of Transfer Water from PCWA's MFP reservoirs will provide up to 35,000 AF of supplementary flows in the Middle Fork and North Fork American rivers to the proposed Point of Rediversion providing multiple benefits along the as described below.

Releasing 35,000 AF of transfer water in a drier year provides additional benefits including, achieving drier year flow augmentation objectives in the Water Forum Agreement, enhancing drier year hydropower generation, and enhancing commercial and recreational rafting in the MFAR.

PCWA's purveyor-specific Water Forum Agreement calls for replacement of water by PCWA into the LAR under certain conditions in drier years to benefit the LAR. This is contingent on PCWA's ability to find a willing buyer for the water. The Transfer to WWD provides an avenue to release this water into the LAR. The Water Forum Agreement was developed by a diverse group of American River stakeholders to provide a reliable water supply for the region's economic health and development and to preserve the environmental values of the LAR.

Making additional water available to PCWA's and Reclamation's powerhouses during the peak summer power load period of a drier year is important for grid regulation in California. Hydroelectric power generation is the primary source of flexible generation used by the California ISO to regulate the fluctuations of the electric grid in California. As a consequence of the drought, there currently is and will continue to be a significant reduction in hydroelectric generation capacity throughout the state until hydrologic conditions stabilize. The MFP is regularly called upon by California ISO to provide critical grid support services when abrupt changes in load occur.

PCWA's summer power generation releases support the regional whitewater economy and a whitewater rafting industry of 20,000 user-days on the MFAR. The prime rafting season starts on Memorial Day weekend (May 24-26) and extends through the summer to Labor Day (September 1). Without the Transfer in the 2014 summer period this recreational resource will be limited.

**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 will improve water quality and provide numerous benefits for many 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. The proposed Transfer releases are in addition to PCWA's existing downstream flow requirements and meet commitments provided for in the Water Forum Agreement for PCWA to release additional water under certain conditions in dry years to preserve and protect the LAR.

When the Transfer Water is diverted at the Jones intake facility (**Attachment B**), all applicable existing state and federal regulations will be followed for the operation of the facility.

Additionally, there is close monitoring and coordination between Reclamation, USFWS, NMFS, and the CDFW regarding the effects of project operations on the sensitive aquatic species

inhabiting the LAR currently based on the drought conditions and water levels of Folsom Reservoir. Because all state and federal resource agencies are currently working closely on LAR flow conditions if any adverse condition arises they will be quick to react to avoid significant impacts to species of special concern (i.e., listed and protected under state or federal laws).

PCWA has submitted numerous change petitions for temporary transfers over the years, which have all been granted by the SWRCB without cause for concern, and have never been associated with or responsible for identifiable adverse water quality or flow conditions resulting in take of any listed species nor have these transfers ever adversely affected downstream beneficial uses.

**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.**

PCWA's summer power generation releases support the regional whitewater economy and a whitewater rafting industry of 20,000 user-days on the MFAR. The prime rafting season starts on Memorial Day weekend (May 24-26) and extends through the summer to Labor Day (September 1). This Transfer potentially will result in enhanced rafting opportunities in terms of hours per day as well as additional days during September, when there is no current commitment for rafting flows past Labor Day.