

Attachment A

Introduction

Placer County Water Agency (PCWA) proposes to transfer a maximum of 12,000 acre-feet (AF) of Middle Fork 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 to the East Bay Municipal Utility District (EBMUD) for designated beneficial use within the EBMUD service area. To accomplish this transfer, the following temporary changes in Place of Use (POU) and points of redirection under PCWA's MFP Water Right Permit 13856 are being requested by Petition to:

- 1) Allow for redirection of Transfer Water by EBMUD at the Freeport Regional Water Project (Freeport) Intake (**Attachment B**), and
- 2) Allow for the consumptive use of Transfer Water within the EBMUD service area boundaries (**Attachment C**) consistent with existing beneficial use designations.

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 onstream storage reservoirs (French Meadows and Hell Hole).

PCWA's MFP is a multi-purpose project designed to manage 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 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 12,000 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 AF in Hell Hole Reservoir).

East Bay Municipal Water District

EBMUD, a public utility, was formed under the Municipal Utility District (MUD) Act, passed by the California Legislature in 1921. EBMUD supplies water to 1.34 million people plus industrial, commercial, institutional, and irrigation water users in the East Bay region of the San Francisco Bay Area. EBMUD's 332-square-mile water service area encompasses incorporated and unincorporated areas within Alameda and Contra Costa Counties. EBMUD's principal raw water source is the Mokelumne River in the Sierra Nevada, with a diversion point at Pardee Reservoir in Calaveras and Amador Counties. EBMUD's existing water supplies are sufficient in non-drought years. To meet customer demands in dry years, EBMUD's water supplies can be supplemented with up to 133,000 AF of water from the Central Valley Project (CVP) or purchased via transfer water using the recently completed Freeport Facility with an intake located on the Sacramento River.

As a result of California's exceptional drought conditions, EBMUD is experiencing historically low water supply storage levels in Pardee Reservoir for 2015. As a result, EBMUD's Board of Directors declared a continuing water shortage emergency within EBMUD's service area, declared a Stage 4 critical drought (EBMUD's highest level), adopted a mandatory District-wide water use reduction goal of 20%, declared the need to use the Freeport Facility to deliver supplemental supplies to EBMUD's service area, and increased mandatory restrictions on potable water use. Due to the fact that EBMUD's 2015 request for CVP dry-year contract deliveries only resulted in a 25 percent (33,250 AF) allocation, EBMUD needs to supplement its Mokelumne River and CVP supplies via the Transfer Water sought under this Petition to meet 2015 demands even with the currently imposed District-wide restrictions in place. As such, the Transfer Water that PCWA intends to deliver to EBMUD will provide supplemental water to meet EBMUD customer demands during the declared Stage 4 critical drought and will be used entirely within the EBMUD service area (**Attachment C**). It is intended that the Transfer Water sought under this Petition would be diverted immediately following delivery of EBMUD's CVP water to avoid shutting down Freeport Facility deliveries to EBMUD and restarting at a later date.

Description of Proposed Transfer

PCWA proposes to release up to 12,000 AF of water stored in its MFP for transfer to EBMUD ("Transfer Water"). The Transfer Water will be released from Ralston Afterbay, PCWA's most downstream reservoir on the Middle Fork American River (MFAR), through Oxbow Powerhouse and down the MFAR and North Fork American River (NFAR), and then will be routed through Folsom Reservoir (Point of Delivery), the lower American River, the Sacramento River, and to the Freeport Intake, the Point of Rediversion for EBMUD sought under this Petition (**Attachment B**). The Freeport Intake and Freeport Joint Pipeline are jointly owned and operated by the Freeport Regional Water Authority (FRWA), a joint powers authority between Sacramento County and EBMUD. The Freeport Intake is the existing Point of Diversion for EBMUD's diversions of Central Valley Project (CVP) contract water in dry years. EBMUD will coordinate with the United States Bureau of Reclamation (Reclamation) Central Valley Operations (CVO) staff to ultimately determine the timing and flow rate of Transfer Water releases from the Point of Delivery for rediversion at the Freeport Intake. Notwithstanding, it is anticipated that Reclamation will release the Transfer Water in a manner to achieve dry year flow objectives for the lower American River consistent with the Water Forum Flow Management Standard (FMS), as done in previous years.

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 sale. As such, the volume of Transfer Water delivered under this Agreement must be measured against PCWA's baseline operations plan for 2015, 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 City of Roseville (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;
7. Hydroelectric power generation; and
8. Evaporative losses.

It should be noted that, due to the current hydrologic conditions (as of June 24, 2015), PCWA is only being allocated 58% (64,259 AF) of its Drum-Spauldung supply (110,400 AF) in 2015 which is the main source for western Placer County. Based on the Drum-Spauldung supply allocation numbers, PCWA has projected diverting approximately 16,000 AF of stored MFP water at the ARPS in 2015 to help offset the reduced Drum-Spauldung supply in the water service zones served by the PG&E supply. Based upon the amount of water to be pumped in 2015 at the ARPS, PCWA must send approximately 12,000 AF of supplemental, previously stored MFP water downstream to benefit the lower American River, consistent with Purveyor Specific Agreement (PSA) terms of the 2000 Water Forum Agreement (WFA).

As a result of the WFA commitments described above, the water proposed to be transferred by PCWA under Permit 13856, pursuant to this Petition, will constitute PCWA's environmental releases pursuant to the WFA, also accounting for SJWD's and Roseville's projected MFP deliveries in 2015. The WFA specifies that, given PCWA's demands at the ARPS, in the driest or 'conference' years, when the March through November Unimpaired Inflow to Folsom Reservoir (UIFR) is less than 400,000 AF (e.g., 2015 March-November UIFR is 321,000 AF), PCWA will re-operate its MFP and replace water to the lower American River, 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/mitigation water in drier years would be water not normally released from the MFP.

In addition, PCWA's PSA within the WFA was formally adopted by the PCWA Board of Directors in June of 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/R for the construction and operation of the ARPS. Of the approximately 12,000 AF of surplus water that PCWA intends to release from MFP storage to satisfy its WFA obligations and ARPS CEQA MMRP requirements in 2015, PCWA intends to deliver all as Transfer Water sought by this Petition to EBMUD.

As of June 24, 2015, PCWA has determined that it has at least 12,000 AF of surplus water stored in the MFP. PCWA reached this conclusion by reviewing current MFP storage levels, projected inflow, and modeled project operations data for 2015. The peak Water Year (WY) 2015 combined storage level for the MFP occurred May 25, 2015, measuring 170,315 AF. Currently, PCWA has approximately 157,000 AF of water held in storage in its MFP reservoirs as of June 24, 2015. The estimated total of MFP planned/baseline releases (e.g., water supply deliveries, recreation releases, minimum instream flow releases, evaporative losses, and planned hydropower generation) for the July – December 2015 period will require approximately 62,500 AF of stored MFP water, when accounting for accretion between reservoirs, as well as tributary inflows (using a conservative 90% exceedance to generate unimpaired hydrology). These releases will result in a planned (without-transfer) carryover storage target (December 31, 2015) of 94,500 AF pursuant to Term 5(a) of the Refill Agreements executed by and between Reclamation and PCWA for the 2014 transfers to EBMUD and Westlands Water District (WWD). As a result, the carryover storage target (December 31, 2015) for the purposes of demonstrating the release of Transfer Water sought under this Petition, such that the Transfer Water will be identified as 'New Water', will be 82,500 AF; **Attachment E** shows the 2015 MFP operational plan both with and without the transfer.

In order to accomplish the transfer, PCWA proposes to release an additional 12,000 AF from MFP storage reservoirs, above that of baseline operations, during the months of July and August of the year 2015; reducing the end of year (December 31, 2015) MFP storage level to approximately 82,500 AF. These proposed with-transfer carryover levels will remain well above the minimum dry-year carryover level(s) established by the Federal Energy Regulatory Commission (FERC) (MFP combined storage of 14,200 AF) under PCWA's current license. The 12,000 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 Reclamation, in cooperation with EBMUD, such that this transfer will not disrupt normal CVP or State Water Project (SWP) operations and will adhere to all current flow standards for the lower American River (from Lake Natoma to the confluence with the Sacramento River). EBMUD would divert the Transfer Water at the Freeport Intake (**Attachment B**). Transfer Water diverted at the Freeport Intake travels east via underground pipeline to the Folsom South Canal which flows south, and would then be pumped to the Mokelumne Aqueducts, which flow west into the EBMUD service area.

Provisional measurement of PCWA’s MFP transfer releases will be conducted using a power generation rating curve that correlates generator megawatt output with discharge. These values will be verified using calibrated gage data downstream of Ralston Afterbay following transfer releases from Oxbow Powerhouse. PCWA will also verify Transfer releases with reservoir storage traces using a daily and monthly time step and shall make final verification of the Transfer releases based upon the actual MFP December/January storage low point as stipulated in a forthcoming Refill Agreement to be executed between PCWA and Reclamation; the Refill Agreement and subsequent MFP carryover storage report shall be distributed to the SWRCB, Reclamation and EBMUD upon completion.

Period of Transfer/Exchange

PCWA is anticipating release of the 12,000 AF of Transfer Water beginning on July 1, 2015 through the Oxbow Powerhouse at an approximate rate of 100-200 cfs for a period of 30-60 days, and ending by August 31, 2015. It is currently anticipated that Reclamation will release Transfer Water from the Point of Delivery in August and September of 2015, at a rate no greater than 155 cfs for diversion by EBMUD at the Freeport Intake. While EBMUD’s maximum rate of diversion at the Freeport Intake is 155 cfs; based on 2014 Freeport Facility operations, EBMUD’s preferred rate of diversion to take Transfer Water is 140 cfs (277 AF/day) such that it would take approximately 43 days of 24/7 operations for EBMUD to divert the water at the Freeport Intake.

These are the preliminary dates targeted for transfer based on PCWA MFP operational constraints, points of diversion, and the ability of Reclamation to release water from Folsom Reservoir to meet contractual obligations and protect fisheries resources in the lower American River. Ultimately, the water released by Reclamation will be dependent on Folsom Reservoir storage, the unprecedentedly poor hydrologic conditions, and lower American, Delta, and CVP system-wide fisheries conditions. Ultimately, Transfer Water will be used in the EBMUD service area within one year from SWRCB approval of the transfer pursuant to Water Code § 1728.

Place of Use of Transfer Water

The 12,000 AF of Transfer Water, less conveyance losses, will be put to reasonable and beneficial municipal and industrial uses within the EBMUD service area (**Attachment C**). The EBMUD service area encompasses the cities of Alameda, Albany, Berkeley, El Cerrito, Emeryville, Hercules, Oakland, Piedmont, Pinole, Richmond, San Leandro, San Pablo, Walnut Creek, and the City of Brentwood and unincorporated areas in Alameda and Contra Costa Counties; generally located within T1, 2, 3 S and 1 and 2 N, R 1, 2, 3, 4, and 5 W, and 1, 2, and 3 E, MDB&M, as shown on EBMUD Map 1932-R dated December 6, 2010 filed with the State Water Board.

Agency Coordination and Consultation

As a requirement of this transfer, PCWA will enter into a reservoir refill agreement with Reclamation specific to the MFP storage reservoirs. The refill agreement will ensure that other downstream legal users of water with vested rights in American River watershed, in addition to Reclamation, are not unreasonably affected or negatively impacted as a result of carrying out the proposed transfer.

PCWA will be sending a copy of this Petition to the Region 2 Manager of California Department of Fish and Wildlife (CDFW) who acts as the responsible agency consistent with Water Code §1726(c).

In addition, EBMUD will be executing a Warren Act contract with Reclamation in order to temporarily store Transfer Water, for a period of no greater than one year, in Folsom Reservoir prior to its release, and further convey Transfer Water, once diverted at the Freeport Intake, to the EBMUD service area. As part of this Warren Act contract, which is a federal action, Reclamation will informally consult with NMFS and/or the USFWS to obtain a not likely to adversely affect concurrence under Section 7 of the Endangered Species Act (ESA) for federally listed threatened and endangered species. Furthermore, EBMUD has obtained Biological Opinions issued by NMFS and USFWS pursuant to Section 7 of the ESA and an Incidental Take Permit issued by the CDFW pursuant to the California ESA (CESA) for the operation and maintenance of the Freeport Intake (**see discussion in 3a**).

DWR and Reclamation will coordinate SWP and CVP operations to ensure Transfer Water does not interfere with the Reclamation/DWR Coordinated Operation 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 to be rediverted, less carriage and conveyance losses (600 AF), at the Freeport Intake. After such rediversion, Transfer Water would be conveyed to the EBMUD service area using EBMUD-owned facilities or facilities covered in the Warren Act contract with Reclamation.

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

Freeport Regional Water Project Intake

This Point of Rediversion is located 38° 28’ 21.28” N; 121° 30’ 23.44” W, California Coordinate System, Zone 3, NAD 83, being within the SW ¼ of NE ¼ of Section 11, T7N, 4E, MDB&M. This proposed Point of Rediversion is identified on maps filed with the Division of Water Rights (Division) under the Reclamation CVP Water Rights and is also 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 temporarily add the service area of EBMUD as an additional POU in order to facilitate the temporary water transfer to EBMUD. This proposed temporary addition to the PCWA POU includes the EBMUD service area as shown in **Attachment C**.

Purpose of Use

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

Proposed: No change in PCWA’s current purpose of use in its POU. EBMUD would use the Transfer Water for Municipal and Industrial purposes within 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 of Rediversion

EBMUD is a member of the FRWA, which owns and operates the facilities at the proposed new point of rediversion. PCWA and EBMUD have an agreement under which EBMUD would divert water made available for transfer by PCWA in 2015. EBMUD, therefore, would divert the water at the proposed point of rediversion using EBMUD's allocated portion of the Freeport Intake capacity. For purposes of the rediversion of water under Permit 13856, PCWA would have access to that location through its agreement with EBMUD; EBMUD's address and Point of Contact for this purpose are as stated in the petition.

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:

Contra Costa and Alameda.

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 12,000 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 12,000 AF of Transfer Water under this Petition, PCWA proposes to transfer 12,000 AF of previously stored and surplus MFP water. The release of this surplus water would be accomplished in synchronization with PCWA's hydroelectric power generation operations between July 1, 2015 and August 31, 2015. **Attachment E** shows the 2015 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. In addition, all proposed Transfer Water was diverted to MFP storage prior to the State Water Resources Control Board's (SWRCB) May 1, 2015 Curtailment Notice and PCWA has submitted all compliance certification information pursuant to this formal Curtailment Notice.

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 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, nor would the PCWA Board of Directors be able to approve any Transfer such that it would adversely impact 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 and will meet full demands to its existing Placer County customers (under current SWRCB mandated water conservation measures) 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 other legal users of water downstream of the MFP during the refill cycle of 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 (OPH), is 6 megawatts (MW) which equates to a discharge of approximately 1,000 cfs. The release of Transfer Water would generally occur at times when PCWA is not using the full generation capacity at OPH 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.

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) (now administered by the SWRCB - Department of Drinking Water) 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 five years (2010-2014) 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.

Receiving Water Bodies: Lower American and Sacramento Rivers

Although Transfer Water may be released by PCWA and rediverted by EBMUD 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 released from MFP reservoirs to Folsom Reservoir in July (6,000 AF) and August (6,000 AF) of 2015 (**Attachment E**). 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 2015 when CVP/SWP deliveries will be significantly reduced (M&I to 25% of the contract amount), PCWA's 'supplemental' releases will have a greater ability to benefit the aquatic environment downstream of the MFP, as described above.

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 Freeport Intake (**Attachment B**) along the Sacramento River. 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 to enhance fish habitat to the extent feasible in the receiving water bodies consistent with the adopted Water Forum stakeholder engagement process in the lower American, the FMS off-ramp¹, existing state and federal regulations, endangered species acts, and all biological opinions in effect at the time of the transfer in coordination with state and federal fisheries resource agencies. As such, it is extremely unlikely that transfer releases from Folsom Reservoir made by Reclamation during the transfer period would cause any adverse effects in either stage or discharge to the lower American River resulting in impacts to the fisheries resources.

Thus, while the exact schedule and volume of transfer releases 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 in any way reduce PCWA's current or future 2015 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 an incremental increase in river flows from PCWA's MFP to the proposed Point of Rediversion at the Freeport Intake. The diversion of Transfer Water at the Freeport Intake would

¹ When Folsom Reservoir storage is projected to fall below 200,000 ac-ft, as is currently projected, an "off-ramp" is triggered for Folsom Reservoir such that minimum flow requirements in the lower American River can be as low as 250 cfs from January through September 15 and 500 cfs from September 16 through December 31.

comply with Decision 1641 and all state and federal regulations and permits that apply to the proposed Point of Rediversion, including:

- California Endangered Species Act Incidental Take Permit No. 2081-2010-031-03 and, particularly, that permit's Term 9.1, which limits total FRWA diversions to 185 mgd of 286 cfs and a maximum annual volume of 147,000 acre-feet.
- Lake and Streambed Alteration agreement notification no. 1600-2006-0321-R2.
- All biological opinions issued by either the USFWS or NMFS that apply to diversions at the Freeport Intake.

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. The 12,000 AF of proposed Transfer Water is currently held 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 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 downstream could otherwise divert under their water rights. A copy of the 2015 PCWA/EBMUD 12,000 AF Transfer Refill Agreement will be sent to the SWRCB upon its execution at a future date.

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 to staff within the timeframe allotted under CA Water Code following submittal and subsequent SWRCB Public noticing of the Petition. 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 resulting from this transfer should improve water quality by decreasing or moderating water temperatures, 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 will be sent to the CDFW North Central Regional Manager 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. 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 consumptive and beneficial Municipal and Industrial uses within the EBMUD service area, the release of Transfer Water from PCWA's MFP reservoirs will provide up to 12,000 AF of supplementary flows in the Middle Fork and North Fork American rivers to the proposed Point of Rediversion. These supplemental releases are also being made pursuant to PCWA's Purveyor Specific Water Forum Agreement which requires transfer water to flow through the lower American River in drier water years to offset pumping at the ARPS.

As such, these increased flows will likely enhance aquatic habitats, white-water boating and recreational opportunities, as well as potentially lengthening persistence of the cold water pool in Folsom Reservoir given the current storage levels. Furthermore, the addition of the Transfer Water will likely have the same benefits for the Sacramento River to the Point of Rediversion at Freeport Intake.

- 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 likely 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 flow requirements and meet commitments provided for in the Water Forum Agreement for PCWA to release additional water in dry years to preserve and protect the environmental resources of the lower American River.

In addition, the Technical Memorandum included as **Attachment G**, reports that CE-QUAL-W2 water temperature modeling results using Reclamation's current Folsom Operations Projections for 2015 indicates that the Transfer Water would decrease the water temperature of the NFAR inflow into Folsom Reservoir by 1.6 – 2.2° Fahrenheit (F) and aid LAR temperature management to meet downstream temperature targets at Watt Avenue. Depending on the release pattern implemented (**Appendix G**), modeling results specify that an approximate 1°F reduction of water temperature could be achieved in the Lower American River at Watt Avenue during the warmest part of the year. Because of the extreme drought conditions, the Reclamation forecasted Folsom Reservoir storage and LAR flow scenarios result in temperature regimes above the highest

Automated Temperature Selection Procedure (ATSP) schedule (78 ATSP schedule; 72°F summer) at Watt Avenue. The proposed Transfer would help to slightly reduce the temperature, but not enough to meet an existing ATSP schedule.

When the Transfer Water is diverted at the Freeport Intake (**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 issued for the construction and operation of the facility (**see discussion in 3a**). Reclamation has agreed to implement all reasonable and prudent alternatives that will be triggered in 2015 contained in the applicable biological opinions. Additionally, there is close monitoring and coordination between Reclamation, USFWS, NMFS, and the CDFW regarding the effects of project operations on the host of species inhabiting the lower American River currently based on the drought conditions and near record low levels projected for Folsom Reservoir. Because all state and federal resource agencies are currently working closely on lower American River 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).

In addition, PCWA has submitted numerous change petitions since the early 1990's for temporary transfers, 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.

N/A.