Please indicate County where your project is located here:

Sacramento

See Attachment 1

MAIL FORM AND ATTACHMENTS TO: State Water Resources Control Board DIVISION OF WATER RIGHTS

P.O. Box 2000, Sacramento, CA 95812-2000

Tel: (916) 341-5300 Fax: (916) 341-5400 http://www.waterboards.ca.gov/waterrights

PETITION FOR CHANGE INVOLVING WATER TRANSFERS

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

Point of Diversion Wat. Code, § 1701		of Rediversion ode, § 1701		ace of Use at. Code, § 1701		urpose of Use /at. Code, § 1701		
Temporary Urgency Wat. Code, § 1435		orary Change Code, § 1725		n g-term Transf t. Code, §§ 382, 1		Instream Flow Wat. Code, § 17		
Application 1	138	Permit	67	License	1387	Statement		
I (we) hereby petition for ch	ange(s) not	ted above and c	lescribed	as follows:				
Point of Diversion or Red to ¼-¼ level and California Co Present: See Attacment 1			ame and id	entify points using	g both P	Public Land Survey S	System descripti	on
Proposed: See Attachment 1								
Place of Use – Identify area Present: See Attachment 1	using Public	: Land Survey Sy	stem descr	riptions to ¼-¼ lev	vel; for ir	rrigation, list numbe	r of acres irrigate	ed
Proposed: See Attachment 1								
Purpose of Use Present: See Attachment 1								
Proposed: See Attachment 1								
Instream Flow Dedication level and California Coordinate Upstream Location:			identify poi	nts using both Pu	iblic Lan	d Survey System de	escriptions to ¼	-1/4
Downstream Location:								
List the quantities dedicated Jan Feb Mar		n flow in either: May	☐ cub Jun	ic feet per secol Jul Aug		gallons per e	day: Nov De	С
Will the dedicated flow be of the source in						Yes No I be diverted from	the stream.	
Proposed New User(s) Provide the names, address	ses, and ph	one numbers fo	or all prope	osed new user(s	s) of the	e water right.		

Amount of Water to be Transferred

**

	nt is direct diversion, the average rate of diversion for the ubic feet per second or million gallons per day.				
General Information – Provide the following information, if applicable to your proposed change(s).					
Have you attached an analysis which documents that the amountainsferred or exchanged would have been consumptively used absence of the proposed temporary change or long-term transferred.	d or stored in the				
Have you attached an analysis of any changes to streamflow, volversion or use, return flows, or effects on legal users from the change or long-term transfer?					
Have you attached an analysis that shows the proposed tempo term transfer will not unreasonably affect fish, wildlife, or other					
I (we) have access to the proposed point of diversion or contro	I the proposed place of use by virtue of: agreement written agreement				
If by lease or agreement, state name and address of person(s)	from whom access has been obtained.				
Give name and address of any person(s) taking water from the rediversion and the proposed point of diversion or rediversion, affected by the proposed change. See Attachment 1					
All Right Holders Must Sign Below: I (we) declare under per which would have been consumptively used or stored in the ab above is true and correct to the best of my (our) knowledge and Dated May 10, 2018 at Sacraments	sence of the proposed temporary change, and that the				
Right Holder or Authorized Agent Signature	Right Holder or Authorized Agent Signature				
NOTE: All petitions must be accompanied by: (1) the form Environmental Information for Petitions, available at: http://www.waterboards.ca.gov/waterrights/publications_forms/fo (2) Division of Water Rights fee, per the Water Rights Fee Schedule, a http://www.waterboards.ca.gov/waterrights/water_issues/progran (3) Department of Fish and Wildlife fee of \$850 (Pub. Resources Code	vailable at: ns/fees/				

Attachment 1 Petition for Change Involving Transfer 2018 American River Region Temporary Groundwater Substitution Transfer Program

Carmichael Water District - License 1387

Introduction

Several American River water purveyors ("Sellers") have joined together to transfer up to 12,098 acre-feet of surface water during July, August, and September 2018 to State Water Project ("SWP") contractors Kern County Water Agency and Dudley Ridge Water District ("Buyers"). Sellers will forego using the surface supplies that they would otherwise divert from the American River to serve municipal water demands and instead pump groundwater to serve their municipal demands. This document describes the proposed temporary groundwater substitution transfer ("Transfer") and the agencies participating in the Transfer.

Temporary Groundwater Substitution Transfer

The Transfer will include participation of six public agencies that rely on surface water diverted from the American River watershed and groundwater pumped from the portion of the North American Groundwater Basin within Sacramento County north of the American River. This Transfer reflects the regional cooperation among the participating public agencies to conjunctively manage their water supply operations.

The following public entities are participating in this Transfer either by providing surface water for delivery to the Buyers and/or pumping and delivering groundwater in lieu of the transferred surface water to meet local demands that otherwise would have been served with the transferred surface water ("groundwater pumper"):

- City of Sacramento Seller and groundwater pumper
- Carmichael Water District Seller and groundwater pumper
- Citrus Heights Water District groundwater pumper
- Fair Oaks Water District groundwater pumper
- Sacramento Suburban Water District groundwater pumper
- San Juan Water District Seller

The Sellers are entering into a single agreement with the Buyers that sets forth the terms for the temporary groundwater substitution transfer. The groundwater pumpers will provide the groundwater that will be used in lieu of the transferred surface water supplies. The surface water supplies that will be transferred are diverted under three post-1914 appropriative rights and one pre-1914 appropriative right.

Each post-1914 appropriative water right requires the filing of a separate Petition for Change Involving Water Transfers ("Petition") under Water Code sections 1725 through 1732 in order to request a temporary change to the point of diversion, place of use, and purpose of use from the State Water Resources Control Board ("State Water Board"). The pre-1914 appropriative water

right will be transferred under Water Code section 1706 and is subject to review under the California Environmental Quality Act ("CEQA").

The Buyers will take delivery of the Sellers' surface water as part of the State Water Contractors' ("SWC") 2018 dry-year water transfer program that is purchasing water from several willing sellers in Northern California. DWR will convey the Sellers' surface water to the Buyers' places of use pursuant to a separate agreement. The requested temporary changes to each Seller's post-1914 appropriative water right include the following:

- 1. <u>Proposed New Users</u>: Kern County Water Agency and Dudley Ridge Water District.
- 2. Proposed Additional Point of Diversion: The SWP's Harvey O. Banks Pumping Plant ("Banks") will be added as a point of diversion to allow the Department of Water Resources ("DWR") to wheel the water to Buyers' service areas. The proposed additional point of diversion is identified on maps filed with the Division of Water Rights under Application 5630 (SWP). Specifically, the point of diversion is described as: Banks Pumping Plant via Clifton Court Forebay: N 2,126,440 ft., E 6,256,425 ft., California Coordinate System Zone 3, NAD 83, being within the NW 1/4 of SE 1/4 of Projected Section 20, T1S, R4E, MDB&M.
- 3. Proposed Point of Rediversion: The San Luis Reservoir ("SLR") will be added as a point of rediversion to allow DWR to wheel and remanage delivery of the Transfer water to the Buyers. SLR is identified on maps filed with the Division of Water Rights under Application 5630 (SWP). Specifically, the point of rediversion is described as: N 1,845,103 ft., E 6,393,569 ft., California Coordinate System Zone 3, NAD 83, being within the NW 1/4 of SE 1/4 of Projected Section 20, T1S, R4E, MDB&M.
- 4. <u>Proposed Additional Places of Use</u>: The transferred water will be used within the Buyers' specific service areas contained within the SWP service area. The service areas are shown on the SWP service area map, Map 1878-1, 2, and 3 on file with the Division of Water Rights under Application 5630.
- 5. <u>Proposed Additional Purposes of Use</u>: Domestic, Municipal and Industrial, and Irrigation (for any such purposes not included as a purpose of use on each unique petitioner's water rights).

The proposed American River regional groundwater substitution transfer involves surface water rights and groundwater production with established beneficial use histories and system interties that allow regional groundwater deliveries where necessary to facilitate the regional transfer approach. **Table 1** summarizes the participants' surface water and groundwater assets and how they are integrated for the Transfer.

This Petition for Change Involving Transfer is specific to Carmichael Water District. Separate petitions will be submitted to the State Water Board by the City of Sacramento and the San Juan Water District, unique to each water right involved in the Transfer.

2

Table 1 – Groundwater Substitution and Surface Water Transfer Quantities by Seller

Groundwater Substitution quantity (acre-feet)							
	FOWD	CHWD	SSWD		City of Sac	CWD	Total
	own serv.	own serv.	own serv.	into City	own serv.	own serv.	GW Sub
Jul	725	725	800	700	1,300	200	4,450
Aug	725	725	1,000	700	1,300	200	4,650
Sep	725	725	400	700	1,300	200	4,050
	2,175	2,175	2,200	2,100	3,900	600	13,150

Surface water transfer quantity with 8% stream depletion adjustment (acre-feet)						
	SJWD		City of Sa	cramento	CWD	Total SW
	to FOWD	to CHWD	to SSWD	own serv.	own serv.	to Transfer
Jul	667	667	736	1,840	184	4,094
Aug	667	667	920	1,840	184	4,278
Sep	667	667	368	1,840	184	3,726
	2,001	2,001	2,024	5,520	552	12,098

Sellers Surface Water Rights Information

Each of the participating Seller's specific surface water right(s) information is uniquely provided in three (3) separate Petitions for Change Involving Transfer; one each for Carmichael Water District, the City of Sacramento, and San Juan Water District.

This petition is unique to Carmichael Water District.

The petition presented below will follow the transfer rules under California Water Code sections 1725 through 1732 and California Code of Regulations section 794 *et seq*.

Carmichael Water District

Carmichael Water District ("CWD") seeks State Water Board approval for temporary changes to its point of diversion, place of use, and purposes of use for water right License 1387.

1. Current Points of Diversion: CWD's points of diversion are located at 4 subsurface infiltration diversions on the floor of the American River (Ranney collectors) that provide water to the Bajamont Water Treatment Plan. The locations of these diversion points are as follows: (a) At intersection of American River and Landis Avenue N85E and 7,000 feet from the NE Corner of Section 55 within NW¼ of NE¼ of projected section 22, T9N, R6E, MDB&M; (b) within a strip along the left bank of the American River approximately 2000 feet in length with center of strip at N85E and 7,600 feet from NE Corner of Section 55 within NW¼ of NE¼ and NE¼ of NE¼ of projected Section 22, T9N, R6E, MDB&M; and (c) within a strip along the right bank of the American River approximately 3000 feet in length with center of strip at S29E and 8,200 feet from NE Corner of Section 55 within SE¼ of NW¼, SW¼ of NW¼, and NW¼ of SW¼ of

projected Section 27, T9N, R6E, MDB&M and NE¼ of SW¼ of projected Section 28, T9N, R6E, MDB&M.

- 2. <u>Current Place of Use</u>: CWD's place of use includes 4,500 acres comprising the service area of CWD as shown on map filed with SWRCB on December 21, 1964.
- 3. Current Purpose of Use: Irrigation and Domestic uses.

Carmichael will forgo diverting 600 acre-feet of surface water under License 1387 at its Ranney collectors on the American River for diversion by the Buyers. This water, less a stream depletion factor of 8%, will be taken control of by Buyers (as stipulated in a separate conveyance agreement between the Buyers, the Sellers and DWR) at Carmichael's point of diversion located furthest downstream on the American River. DWR will convey this water for diversion at Banks for use in Buyer's service areas. Upon State Water Board approval of the petition, the transfer will be exempt from CEQA review under Water Code section 1729.

Groundwater Pumper Information

The Transfer will include groundwater pumping by five participating public agencies that conjunctively use groundwater supplies pumped from the portion of the North American Groundwater Basin within Sacramento County north of the American River. Figure 1 shows the location of the production wells that will be used for the entire Transfer associated with all of the Sellers. The groundwater pumping will total 13,150 acre-feet of water in the months of July, August and September.

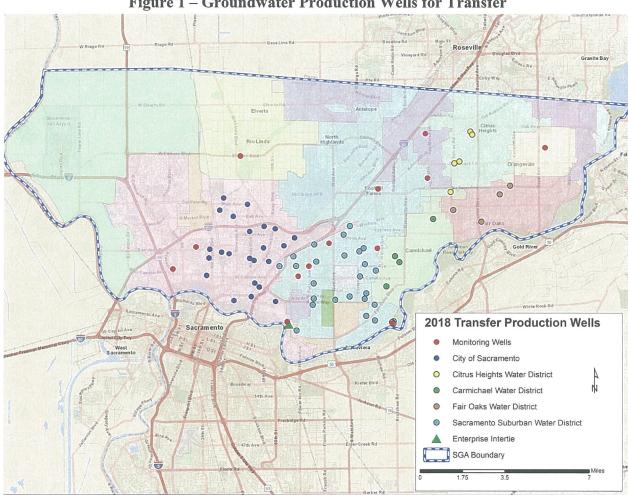


Figure 1 – Groundwater Production Wells for Transfer

This pumping amount equals the total amount of surface water to be transferred plus the 8% stream depletion factor that DWR and Reclamation agreed to apply to groundwater substitution transfers by Sacramento and SSWD in 2010, and 2013, and proposed but not finalized transfers in 2016, in accordance with an extensive technical analysis and review led by the Sacramento Groundwater Authority ("SGA").

The quantity proposed for the Transfer reflects the historical baseline use of surface water by the proponents in previous years. Table 1 (above) shows the quantities of surface water to be transferred and the amount of groundwater to be pumped to service the demands that otherwise

would have been supplied by the foregone surface water, and **Table 2** (below) lists the production well information for all of the groundwater pumpers involved in the entire Transfer.

The groundwater pumpers are:

- 1. City of Sacramento,
- 2. Sacramento Suburban Water District,
- 3. Carmichael Water District,
- 4. Fair Oaks Water District, and
- 5. Citrus Heights Water District.

The groundwater pumping and use details of each groundwater pumper related to this Transfer are described below. Only wells which have been approved by DWR and Reclamation will be used for the proposed Transfer, following the guidelines issued in the *Draft Technical Information for Preparing Water Transfer Proposals*, dated December 2015. The Sellers will enter into a conveyance agreement with DWR that will further define the acceptable groundwater pumping, quantification protocols, monitoring requirements and any mitigating requirements.

In accordance with Water Code Section 1745.10, the groundwater pumping necessary to facilitate the Transfer is within historical pumping baselines for each participating agency and within the safe yield as determined by SGA under its 2014 and prior groundwater management plans. In addition, the six agencies participating in the Transfer are actively participating in conjunctive use efforts in the region as part of SGA's groundwater management regime administered through the 2014 Groundwater Management Plan and the Groundwater Accounting Framework. These efforts are also consistent with the agencies' obligations under the 2000 Water Forum Agreement. As a result, the pumping required for the Transfer will not result in overdraft of the underlying basin. As a condition of participation in the proposed temporary transfer, the Sellers have developed a groundwater monitoring, reporting, and mitigation plan to ensure the proposed transfer does not result in any unreasonable and adverse impacts to the groundwater basin or third parties.

Carmichael Water District

CWD will pump a total of 600 acre-feet of groundwater to replace surface water used under License 1387. CWD will use the wells identified in **Table 2** to pump the substitution groundwater. As described above in the Groundwater Pumper Information section and as agreed by DWR and Reclamation, CWD's proposed groundwater pumping is within its historical groundwater pumping and use, and the wells it will pump from to facilitate the Transfer have passed all certification requirements.

¹ http://wdl.water.ca.gov/watertransfers/docs/2016 Water Transfer White Paper.pdf

Table 2 – Groundwater Production Wells for Transfer

	dwater Production W		Y
Agency	Well Name	Latitude [N]	Longitude [W]
Carmichael Water District	Willow Park Well	38.60489219170	<u> </u>
Carmichael Water District	Winding Way Well	38.64512426910	
Carmichael Water District	Garfield Well	38.62298535340	-121.33597058500
Carmichael Water District	La Vista Well	38.61941834630	-121.33262614200
Citrus Heights Water District	PALM	38.66130116700	-121.29302634000
Citrus Heights Water District	SYLVAN	38.67944525550	-121.28609572900
Citrus Heights Water District	BONITA	38.69741700060	-121.27757300000
Citrus Heights Water District	MITCHELL	38.67839100000	-121.28991700000
Citrus Heights Water District	SUNRISE	38.69555154500	-121.27609875000
City of Sacramento	WELL 133	38.64699297210	-121.46844702100
City of Sacramento	WELL 134	38.64688496360	-121.45758271200
City of Sacramento	WELL 131	38.63798455310	-121.44546910300
City of Sacramento	WELL 155	38.63432585390	-121.41147825400
City of Sacramento	WELL 137	38.62961386050	-121.41979985500
City of Sacramento	WELL 138	38.64099160550	-121.43448812200
City of Sacramento	WELL 129	38.62654727030	-121.42841081600
City of Sacramento	WELL 126	38.62827991410	-121.43490401600
City of Sacramento	WELL 094	38.62723463840	-121.47588640000
City of Sacramento	WELL 123	38.62559802150	-121.46695784100
City of Sacramento	WELL 123	38.62202368580	-121.47660227600
City of Sacramento	WELL 124		-121.46122723100
City of Sacramento	WELL 124 WELL 120	38.62472301630 38.62070263660	-121.46122723100
			ļ
City of Sacramento	WELL 143	38.62217609400	-121.44580062200
City of Sacramento	WELL 122	38.62023752700	-121.43163558500
City of Sacramento	WELL 112	38.60715625750	-121.44245545000
City of Sacramento	WELL 114	38.60489571800	-121.43891420300
City of Sacramento	WELL 156	38.59938466800	-121.44519656400
City of Sacramento	WELL 091	38.61146806600	-121.47856963100
City of Sacramento	WELL 139	38.59656304410	-121.45821037200
City of Sacramento	WELL 158	38.59632290450	-121.42694293800
City of Sacramento	WELL 153	38.65432461420	-121.44684056400
City of Sacramento	WELL 164	38.65797256210	-121.46456191100
Fair Oaks Water District	Heather	38.65041466500	-121.29098779500
Fair Oaks Water District	Town	38.64326621040	-121.26965510700
Fair Oaks Water District	Northridge School	38.65958068840	-121.25551074500
Fair Oaks Water District	Madison	0.00000000000	0.00000000000
Sacramento Suburban Water District	Sierra / Blacmer	38.57880746280	-121.41142110200
Sacramento Suburban Water District	Merrily / Annadale	38.63608429470	-121.37516930800
Sacramento Suburban Water District	Auburn / Yard	38.63027338190	-121.39761483800
Sacramento Suburban Water District	Edison / Truax	38.62326746620	-121.41358237800
Sacramento Suburban Water District	Albatros / Iris	38.61741742220	-121.42423138400
Sacramento Suburban Water District	Calderwood / Marconi	38.62001059210	-121.39613973200
Sacramento Suburban Water District	Beccerra / Woodcrest	38.62360465710	
Sacramento Suburban Water District	Watt / Arden	38.59703982690	1
Sacramento Suburban Water District	Kubel / Armstrong	38.59790209690	
Sacramento Suburban Water District	Hillsdale / Cooper	38.59408748570	-121.39905222800
Sacramento Suburban Water District	Auburn / Norris	38.64120720350	
Sacramento Suburban Water District	Whitney / Concetta	38.62783151300	-121.36001550100
Sacramento Suburban Water District	Eastern / Woodside Church	38.62591674490	-121.36333566300
Sacramento Suburban Water District	Greenwood / Marconi	38.61835397890	
Sacramento Suburban Water District	Eden / Root	38.61447046700	-121.35907247800
Sacramento Suburban Water District	Ravenwood / Eastern	38.61098611930	-121.36290171300
Sacramento Suburban Water District	Riding Club / Ladino	38.59900720900	-121.37082157600
			ļ
Sacramento Suburban Water District	Thor / Mercury	38.59757152770	-121.35938521800
Sacramento Suburban Water District	Ulysses / Mercury	38.60085426450	-121.35813449000
Sacramento Suburban Water District	Copenhagen / Arden	38.59391292730	-121.35180794400
Sacramento Suburban Water District	Bell / Marconi	38.61742199610	-121.41155213200
Sacramento Suburban Water District	El Prado / Park Estates	38.60691391530	
	River Walk / East	38.58395887030	-121.33726797200
Sacramento Suburban Water District			
Sacramento Suburban Water District	River Walk / North	38.58346671270	
······································		38.58346671270 38.58260381590	-121.33859844100 -121.33752194900
Sacramento Suburban Water District	River Walk / North		

{00065454.1}

*

General Transfer Information

The following information describes the entire Transfer proposal between the Sellers and the Buyers, and is inclusive of this petitioner's contribution of surface water to the Transfer water quantity. All of the information provided below applies similarly to each petitioner.

The surface water that will be delivered under the Transfer would have been consumptively used but for the Transfer. Specifically, each Seller has historically used its surface water supply to meet consumptive uses within each respective service area. In this instance, the Sellers will forego using this surface water and use groundwater in lieu of the surface water transferred. Thus, the only water transferred will be water that otherwise would have been consumptively used.

In addition, absent the Transfer, neither the Sellers nor groundwater pumpers would use the groundwater that will be pumped as part of this transaction as part of the participating agencies' on-going conjunctive use efforts consistent with SGA's groundwater management program. The Sellers and groundwater pumpers would have used the surface water supplies described in this document to meet their customers' demands. As such, the groundwater that will be used in lieu of the transferred surface water will only be pumped because of the Transfer.

Analysis of Streamflow, Water Quality and Other Affects

The amount of potential changes in streamflow, water quality, timing of diversion or use, return flows, and effects on legal users of water will be insignificant or non-existent and therefore will not cause adverse economic, physical, or environmental effects. The transfer of up to 12,098 AF from the lower American River is a small increment of the water that will be bypassed from direct diversion along the American River or from Folsom Reservoir during the transfer period of July 1 through September 30. Cumulatively, the bypass of direct diversion of the water rights held by Sacramento, SJWD and CWD would equate to approximately 65 cfs daily of additional flow in the lower American River below the Fairbairn Diversion.

Downstream of City of Sacramento's Fairbairn Water Treatment Plant – the most downstream of the current points of diversion of the Sellers along the American River – the Transfer will increase the flow in the lower reach of the lower American River and in the Sacramento River by about 65 cfs. Once being left in the river, the Transfer water, which will be released over several months on the same pattern it would have been diverted and used, will comprise an increasingly small increment of water as it flows downstream when compared to the average flows in the lower American River, Sacramento River and the Delta.

As explained below, the Transfer involves a small quantity of water compared to the volumes of water moving through these river systems. **Table 3** presents the average daily Delta outflow, river flows, and SWP and CVP pumping rates as average flow rates during the period July through September, which includes the proposed transfer period.

The data presented in **Table 3** is for 2015, an extremely dry condition with SWP allocation to the Buyers set at 20%, and represents recent data for the relevant months provided by Reclamation's Central Valley Operations (CVO) in various monthly reports.² This information provides

² CVO reports are available at: https://www.usbr.gov/mp/cvo/index.html

context for the approximate average flow of 65 cfs from the transfer for SWRCB consideration as required by Water Code §1727(b)(1).

Table 3 – Representative Average Monthly Flow Conditions for Various Locations along the Proposed Transfer Pathway (all values in cfs)

Location	July	August	September
Lower American River	3,077	2,145	819
Sacramento River at Freeport	7,532	7,523	7,894
Delta Inflow	8,523	8,264	8,517
Combined SWP/ CVP Pumping	744	1,417	2,257
Delta Outflow	3,295	3,560	3,083

The 12,098 AF of Transfer Water will not be transferred all at once, but will be left in the lower American River and conveyed across the Delta to Banks at the rate of approximately 65 cfs (approx.130 acre-feet per day) over the three-month July through September 2018 period. As indicated in **Table 3** above, in comparison to the amount proposed for transfer, much larger volumes of water are expected to move through the lower American and Sacramento Rivers and the Delta. Thus, the transfer of an additional approximately 12,000 AF during this period would increase flows by only a very small amount compared to the total in any of the water bodies listed, and would also cause only a very small increase to SWP and CVP Delta pumping. Thus, while the exact operations required to implement the proposed transfer cannot be stated with precision at this time, the transfer will not affect streamflow or water quality. And, given the transfer of water consistent with the historic and documented diversion rates of the Sellers, the transfer will not affect timing of diversion or use. The use of groundwater in-lieu of the surface diversions will not change the patterns and use of water by Sellers' customers. Thus, to the extent they exist, any return flows to the American River would remain unchanged.

Because of the minimal changes to existing conditions, other legal users of water will not be adversely affected by the proposed Transfer. The only effects of the Transfer on other legal users of water will be a very slight increase in river flows from the current points of diversion at Folsom Lake (for SJWD) or along the lower American River (for the City and CWD) to the proposed points of diversion and rediversion at the SWP Facilities. It should be noted that any increases in flows resulting from the Transfer will be well within historical average flows in the affected streams. Furthermore, when the Transfer water is diverted by the SWP Facilities, DWR will divert all water in compliance with all existing state and federal regulations, including the salmon and smelt biological opinions, Decision 1641, and existing regulatory requirements. Given the negligible flow rate compared to existing and historic operations (see Table 3), the Transfer will not unreasonably affect fish, wildlife or other instream beneficial uses.

Proposed New Users Information

Kern County Water Agency Lara Kimm P.O. Box 58 Bakersfield, CA 93302

Dudley Ridge Water District c/o Rick Besecker Provost & Pritchard Engineering Group, Inc. 286 W. Cromwell Avenue

Fresno, CA 9371

{00065454.1}

10