

500 CAPITOL MALL, SUITE 1000, SACRAMENTO, CA 95814 OFFICE: 916-446-7979 FAX: 916-446-8199 SOMACHLAW.COM

January 5, 2016

#### Via Email and First Class Mail

State Water Resources Control Board Division of Water Rights Attn: California WaterFix Hearing Staff P.O. Box 2000 Sacramento, CA 95812-2000 Email: CWFhearing@waterboards.ca.gov

#### Re: Sacramento County Water Agency's Protest and Notice of Intent to Appear - California WaterFix Petition for Change Hearing

Dear California WaterFix Hearing Staff:

Protestant, Sacramento County Water Agency (SCWA) hereby submits the enclosed Protest, and accompanying Notice of Intent to Appear, related to the Department of Water Resources' and the United States Bureau of Reclamation's water rights change petition for the California WaterFix Project.

As explained in the enclosed protest, SCWA has previously coordinated and collaborated with other North State Water Alliance (NSWA) and American River Water Agencies (ARWA) parties in preparing and submitting detailed comments on the Bay-Delta Conservation Plan Draft EIR/EIS (DEIR/EIS), and the California WaterFix Recirculated DEIR/Supplemental DEIS (RDEIR/SDEIS). SCWA will similarly be coordinating with the NSWA and ARWA parties, as well as the East Bay Municipal Utility District, to present a consolidated case-in-chief during the SWRCB's hearing on certain common issues, including issues regarding whether the requested changes would operate to the injury of any legal user of the water involved and whether the requested changes would unreasonably affect fish and wildlife. Consistent with this approach, SCWA and other NSWA and ARWA parties have identified in their respective Notices of Intent to Appear both witnesses who will be providing testimony to support their respective protests, and witnesses who will be providing testimony on certain common issues.

State Water Resources Control Board Re: Sacramento County Water Agency's Protest and Notice of Intent to Appear Page 2 January 5, 2016

Other parties, with concerns similar to those of the NSWA and ARWA parties, may adopt, in whole or in part, these expert witnesses' testimony to support their respective protests. For this reason, these experts also may be listed on those other parties' Notices of Intent to Appear.

We are seeking to adhere to the SWRCB's directive that only witnesses for Part I be identified in the current Notices of Intent to Appear. However, many of us have endeavored to take environmental matters, including instream flow and fisheries, into account including in our water planning, operations, and impact analyses. Please be aware that it may not be possible in all respects to separate the intertwined topics of water supply and environment.

If you have any questions regarding the enclosed protest or notice of intent to appear, please do not hesitate to contact the undersigned.

Sincerely,

Ham Herr

Aaron A. Ferguson, Attorney Authorized Representative

Enclosure(s)

cc: Amy Aufdemberge (w/encls.) James Mizell (w/encls.) Michael Peterson, SCWA

# State of California State Water Resources Control Board DIVISION OF WATER RIGHTS

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

Info: (916)341-5300, FAX (916)341-5400, Web: http://www.waterboards.ca.gov/waterrights

# **PROTEST – PETITION**

## This form may also be used for objections

## PETITION FOR TIME EXTENSION, CHANGE, TEMPORARY URGENT CHANGE OR TRANSFER ON

APPLICATION \_\_\_\_ PERMIT \_\_\_\_ LICENSE \_\_\_\_ (see Attachment 1)

## of the California Department of Water Resources ("DWR") and the United States Department of the Interior, Bureau of Reclamation ("Reclamation")

I (We) have carefully read the NOTICE OF PETITION, REQUESTING CHANGES IN WATER RIGHTS OF THE DEPARTMENT OF WATER RESOURCES AND U.S. BUREAU OF RECLAMATION FOR THE CALIFORINA WATERFIX PROJECT, dated October 30, 2015

Address, email address and phone number of protestant or authorized agent:

Protestant: Sacramento County Water Agency Michael Peterson, Agency Engineer 827 7<sup>th</sup> Street, Room 301 Sacramento, CA 95814 Petersonmi@saccounty.net 916-874-6851

Authorized Agent: Somach Simmons & Dunn, PC Daniel Kelly, Esq. Aaron A. Ferguson, Esq. 500 Capitol Mall, Suite 1000 Sacramento, CA 95814 dkelly@somachlaw.com aferguson@somachlaw.com (916) 446-7979

Supplemental sheets are attached. To simplify this form, all references herein are to protests and protestants although this form may be used to file comments on temporary urgent changes and transfers.

Protest based on ENVIRONMENTAL OR PUBLIC INTEREST CONSIDERATIONS (Prior right protests should be completed in the section below):

- the proposed action would not best serve the public interest
- the proposed action would be contrary to law
- the proposed action would have adverse environmental impacts

State facts which support the foregoing allegations: see Attachment 2

Under what conditions may this protest be disregarded and dismissed? (Conditions should be of a nature that the petitioner can address and may include mitigation measures.) **see Attachment 3** 

Protest based on INJURY TO PRIOR RIGHTS:

To the best of my (our) information and belief the proposed change or transfer would result in injury as follows: **see Attachment 4** 

Protestant claims a right to the use of water from the source from which petitioners are diverting, or propose to divert, which right is based on (identify type of right protestant claims, such as permit, license, pre-1914 appropriative right or riparian right): **see Attachment 5** 

List permit or license or statement of diversion and use numbers, which cover your use of water (if adjudicated right, list decree): **see Attachment 5** 

Where is your diversion point located? see Attachment 5

If new point of diversion is being requested, is your point of diversion downstream from petitioners' proposed point of diversion? **see Attachment 5** 

The extent of present and past use of water by protestant or its predecessors in interest is as follows: **see Attachment 5** 

Under what conditions may this protest be disregarded and dismissed? **see** Attachment 3

All protests must be signed by the protestant or authorized representative:

Signed: Aaron A. Ferguson Date: 1/5/16 Authorized Representative

All protests must be served on the petitioner. Provide the date served and method of service used: see Attachment 6

# ATTACHMENTS TO SACRAMENTO COUNTY WATER AGENCY'S PROTEST TO WATER RIGHTS CHANGE PETITION OF DWR AND RECLAMATION FOR CALIFORNIA WATERFIX PROJECT

## Attachment 1 (Petitioners' Permits)

<u>DWR</u>: Permits 16478, 16479, 16481 and 16482 (Applications 5630, 14443, 14445A, 17512)

<u>Reclamation</u>: Permits 11315, 11316, 11967, 11968, 11969, 11971, 11973, 12364, 12721, 12722 and 12723 (Applications 13370, 13371, 5628, 15374, 15375, 16767, 17374, 17376, 5626, 9363 and 9364)

## <u>Attachment 2</u> (Facts supporting protest based on environmental or public interest considerations)

#### Introduction

Sacramento County Water Agency (SCWA) has previously coordinated and collaborated with other North State Water Alliance (NSWA) parties and other American River Water Agency (ARWA) parties preparing and submitting detailed comments on the Bay-Delta Conservation Plan Draft EIR/EIS (DEIR/EIS), and the California WaterFix Recirculated DEIR/Supplemental DEIS (RDEIR/SDEIS). SCWA similarly will be coordinating with the other NSWA and ARWA parties, as well as the East Bay Municipal Utility District (EBMUD) to present consolidated cases-in-chief during the SWRCB's hearing on certain common issues, including issues regarding whether the requested changes would operate to the injury of any legal user of the water involved and whether the requested changes would unreasonably affect fish and wildlife. Consistent with this approach, SCWA, the other NSWA and ARWA parties, as well as EBMUD, have identified in their respective Notices of Intent to Appear both witnesses who will be providing testimony to support their individual protests and witnesses who will be providing testimony on certain common issues.

#### Fish and Wildlife Impacts

Water Code section 1701.2, subdivision (c), requires a water rights change petition to include "all information reasonably available to the petitioner, or that can be obtained from the Department of Fish and Game, concerning the extent, if any, to which fish and wildlife would be affected by the change, and a statement of any measures proposed to be taken for the protection of fish and wildlife in connection with the change."

Although the supplement to DWR's and Reclamation's August 25, 2015 Petition (the "Petition") contains some general statements about the California WaterFix Project's alleged benefits to fish and wildlife (see Petition Supplement, pp. 14-15), the Petition does not contain sufficient information to satisfy the requirements of Water Code section 1701.2, subdivision (c).

The Petition does not discuss any of the evidence presented in SCWA's July 28, 2014 comments on the DEIR/DEIS, SCWA's October 30, 2015 comments on the RDEIR/SDEIS, NSWA's July 28, 2014 comments on the DEIR/DEIS or in NSWA's October 30, 2015 comments on the RDEIR/SDEIS. That evidence describes in great detail the adverse effects that the proposed California WaterFix Project would have on fish and wildlife.

NSWA's comments include detailed comments by fisheries expert Dave Vogel, which concluded that the California WaterFix Project would cause catastrophic adverse impacts on anadromous salmonids. Most notably, because of the proposed Project intakes' locations on the Sacramento River, there would not be sufficient sweeping velocities to avoid impingement of fish against the intake screens and associated injuries. The estimated fish exposure times in front of the proposed intakes (which is a measure of the threat to migrating salmonids) are very long, especially in comparison to exposure times for other fish screens in California.

NSWA's comments also include expert analyses by Professor Robert Latour, which describes how operation of the proposed new California WaterFix diversion facilities would have adverse impacts on Delta smelt life stages, including survival, growth, maturation schedules, and reproductive success over short, medium and long time periods. The Petition does not discuss any of this information and instead simply states that the proposed new points of diversion would be located outside of the primary habitat of Delta smelt and longfin smelt. (Petition Supp., at pp. 7-8.)

NSWA's comments also state that operation of the California WaterFix Project's proposed north Delta diversion could adversely affect Sacramento Valley waterfowl and the Pacific Flyway by reducing diversions of water in the Sacramento Valley that support avian habitat values on both irrigated cropland and wetlands. Mark Petrie of Ducks Unlimited described these impacts in detail in his comments submitted to the State Water Resources Control Board in 2012. (See http://www.waterboards.ca.gov/waterrights/water\_issues/programs/bay\_delta/docs/com

ments111312/mark petrie.pdf.)

#### Public Interest Considerations – SCWA Conjunctive Use Program

SCWA's July 28, 2014 and October 30, 2015 comments state that the California WaterFix Project may adversely impact SCWA's conjunctive use program. SCWA's ability to accommodate projected and planned growth within SCWA's Zone 40 service area and to support sustainable groundwater management objectives for the South American groundwater basin depends on the availability of groundwater and surface water supplies. The DEIR/DEIS discusses the potential for the BDCP to result in "minor decreases in water supply availability to CVP water users in the Sacramento Valley . . . (See Analysis of Groundwater Conditions in Areas that Use SWP/CVP Water Supplies, DEIR/DEIS, p. 7-32, lines 30-40.) The estimated decrease in supply is 50,000 AFY. The section concludes, "[a] 2% increase in groundwater use in the Sacramento Valley to make up for any shortfalls in surface water supply is not anticipated to substantially impact the groundwater resources as long as the additional pumping is not concentrated in a particular area of the valley." Neither the DEIR/DEIS nor the RDEIR/SDEIS provide any information as to where additional groundwater pumping will take place or whether it will interfere with SCWA's existing conjunctive use program. (See SCWA's July 28, 2014 Comments, pp. 48-49.) Similarly, the Petition does not discuss the scope of the impact on groundwater resources identified in the DEIR/DEIS. Because the California WaterFix Project has the potential to adversely impact SCWA's water management plan for Central Sacramento County, the Project is contrary to the public interest.

## <u>Attachment 3</u> (Conditions under which this protest may be dismissed)

SCWA is working with the other NSWA and ARWA parties, and EBMUD, to develop proposed conditions for DWR's and Reclamation's water right permits that would be sufficient to allow SCWA to dismiss its protest. SCWA and the NSWA and ARWA parties plan to submit those proposed conditions during the SWRCB's hearing on the Petition. In general, those conditions would require DWR and Reclamation to operate the State Water Project and the Central Valley Project in a manner that would eliminate the potential impacts described in Attachments 2 and 4 of this protest by avoiding adverse impacts to water supplies in the Sacramento and American River basins, and by avoiding adverse impacts to environmental resources in the Sacramento and American River basins.

## <u>Attachment 4</u> (Facts supporting protest based on injury to prior rights)

### Impacts to Surface Water Supplies

SCWA, and the NSWA and ARWA parties divert and use water under various water right permits and licenses, pre-1914 appropriative and riparian rights, and contracts with DWR and Reclamation. SCWA's specific rights are described in Attachment 5.

If the SWRCB were to grant DWR's and Reclamation's water rights change petition, and if DWR and Reclamation then were to operate the State Water Project ("SWP") and Central Valley Project ("CVP") to divert and re-divert water at the proposed new points of diversion, then SCWA and the other NSWA and ARWA parties could be injured in several ways, including the following: (a) the new operations of the SWP and CVP could result in lower SWP and CVP settlement contract and water service contract water supplies being available for diversion and use by SCWA and the other NSWA and ARWA parties than would occur without the California WaterFix project; (b) these new operations could change the amounts of storage in SWP and CVP reservoirs and the flows in rivers controlled by the SWP and CVP, and as a result, could create physical limitations on the abilities of SCWA and the other NSWA and ARWA parties to divert water under their SWP and CVP contracts, their Warren Act and other contracts or their water rights; and (c) the new Delta flow criteria required by Water Code section 85086, subdivision (c)(2) could be incorporated into a revised Bay/Delta Water Quality Control Plan, and SCWA and the other NSWA and ARWA parties could be required to contribute to the implementation of those new requirements.<sup>1</sup> If the SWRCB issues an order approving DWR's and Reclamation's petition, then the order should include sufficient conditions on DWR's and Reclamation's operations of the SWP and CVP to assure that such potential injuries to SCWA and the other NSWA and ARWA parties will not occur.

Water Code section 1702 provides that, before the SWRCB may issue an order granting a water rights change petition, "the petitioner must establish, to the satisfaction of the board, and it shall find, that the change will not operate to the injury of any legal user of the water involved." To meet the requirements in section 1702 that apply to petitioners, and to assist the SWRCB in meeting its obligations under Water Code section 1702, the SWRCB's regulations, California Administrative Code, title 23, section 794, subdivision (a), require each water rights change petition to provide various types of information, including the following:

<sup>&</sup>lt;sup>1</sup> Water Code section 85086, subdivision (c)(2), provides that any SWRCB order approving the California WaterFix petition "shall include appropriate Delta flow criteria." Water Code section 85086, subdivision (c)(1) provides that these criteria "shall include the volume, quality, and timing of water necessary for the Delta ecosystem under different conditions." Parts I and II of the SWRCB's hearing on the California WaterFix petition will need to address the issue of ensuring that the appropriate flow criteria contained in any SWRCB order on the petition are capable of being implemented without causing injury to other legal users of water and without causing any unreasonable effects on fish and wildlife.

- The amount(s) of water which would have been diverted, consumptively used, or stored under the water right in the absence of the proposed change(s), (a) during the period for which the change is requested, or (b) in a maximum year if the change is permanent;
- (2) The amount(s) of water proposed for change, transfer or exchange;

\* \*

(6) The existing and the proposed diversion, release and return flow schedules if stored water is involved or if the streamflow regime will be changed.

\* \* \*

(9) Information identifying any effects of the proposed change(s) on other known users of water, including identification in quantitative terms of any projected change in water quantity, water quality, timing of diversion or use, consumptive use of the water, reduction in return flows, or reduction in the availability of water within the streams affected by the proposed change(s).

DWR's and Reclamation's Petition for the California WaterFix Project does not contain this required information. Instead, the Petition simply states that it is "limited in scope" and "proposes only to add points of diversion and rediversion" and not to change "any other aspect of existing SWP/CVP permits." (Petition Supp., at p. 1.)

The Petition goes on to state that "operations both now and in the future will not impact the quantity of water available for water users in the watershed because these demands are accounted for prior to diversions to storage or export." (Petition Supp., at p. 19.) The Petition, however, does not demonstrate that the proposed changes would not operate to the injury of any legal user of the water involved because: (i) the Petition does not describe any definite operation plan for the CVP and the SWP with the proposed new points of diversion, and (ii) the modeling conducted by DWR and Reclamation during the CEQA/NEPA process was flawed (see SCWA's July 28, 2014 comments on the DEIR/DEIS, SCWA's October 30, 2015 comments on the RDEIR/SDEIS, NSWA's July 28, 2014 comments on the DEIR/EIS, and NSWA's Oct. 30, 2015 comments on the RDEIR/SDEIS.) Moreover, the modeling conducted by DWR and Reclamation demonstrates that storage levels in Folsom Reservoir will be lower with the project, particularly in peak summer months, adversely impacting water supplies in the American River basin.

As discussed in the MBK Engineers technical memoranda that were included in SCWA's and NSWA's comments, the modeling that DWR and Reclamation conducted for the DEIR/EIS and RDEIR/SDEIS has the following flaws:

1. The incorporation of climate change into the model improperly relies on only one climate change projection when many climate change scenarios are possible, and improperly ignores reasonably foreseeable adaptation measures.

- 2. The model was built on a benchmark study that had numerous inaccuracies.
- 3. The model coding and data issues significantly skew the analysis and conflict with actual real-time operational objectives and constraints.
- 4. The "high outflow scenario" is not sufficiently defined for analysis.
- 5. Delta Cross-Channel operational assumptions overestimate October outflow.
- San Luis Reservoir operational assumptions produce results inconsistent with real-world operations.

The Petition refers to the analysis of Alternative 4A in the California WaterFix RDEIR/SDEIS. (Petition Supp., at pp. 12, 13.) However, neither the Petition nor the RDEIR/SDEIS contains sufficient information regarding the details of how the CVP and SWP would be operated if the SWRCB were to grant the Petition, particularly with respect to the amounts of spring outflow and the quantity and timing of water diverted at the proposed new points of diversion and re-diversion. For example, the RDEIR/SDEIS and the Petition state that additional outflow may be required in order to meet the needs of threatened and endangered fish species (RDEIR/SDEIS at p. 4.1-13; Petition Supp., at p. 13), but neither the Petition nor the RDEIR/SDEIS describes the quantity, the timing or the source of water for this additional outflow. In addition, the Petition does not state when water would be diverted at each of the various existing and proposed points of diversion or what the quantities of diversions at each point of diversion would be. The Petition does not even state how DWR and Reclamation would make the decisions about where and when to divert water. As a result, neither interested parties nor the SWRCB can evaluate the potential effect of proposed Project operations, and the Petitioners have not made the required showing that their requested changes will not injure other users of water.

Moreover, the modeling runs used for the environmental analysis in the RDEIR/SDEIS: (i) do not comport with the proposed flows in Alternative 4A, and (ii) overestimate Delta outflow and underestimate exports by several hundred thousand acre-feet per year. For example, the model calculates compliance with salinity water quality objectives mandated by State Water Resources Control Board Revised Decision 1641 ("RD-1641") at Three Mile Slough. In contrast, Alternative 4A contemplates compliance with the same salinity requirement at Emmaton, which is located substantially downstream from Three Mile Slough. Compliance with this requirement at Three Mile Slough would require less outflow than would be required for compliance with the same requirement at Emmaton. Because the modeling analysis assumed compliance with this requirement would occur at Three Mile Slough while the proposed Alternative 4A now contemplates compliance with this requirement at Emmaton, the estimates of the outflows needed to meet salinity standards that were used in the modeling are too low.

Moreover, the flawed modeling that was used for the DEIR/S and not corrected for the RDEIR/SDEIS overestimated Delta outflows by about 200,000 acre-feet/year

and underestimated exports to the CVP South of Delta and SWP contractors by about the same amount. That flawed modeling further underestimated diversions at the North Delta Diversion by about 500,000 acre-feet/year, thereby overestimating flows into the Delta and concluding that Project operations in the Delta would be much more benign than they actually would be.

Operations of the SWP and CVP using the proposed points of diversion and rediversion must preserve water right priorities. (*El Dorado Irrigation Dist. v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.) Petitioners must demonstrate how future operations of the CVP and SWP would avoid requiring upstream senior diverters and CVP and SWP contractors that would not be benefitted by the proposed changes to forego diversions so that the CVP and SWP can meet their operational requirements.

For example, in dry years such as those experienced in the last two years, DWR and Reclamation have not been able to meet the D-1641 flow and salinity requirements and have had to file several temporary urgency change petitions, which asked the SWRCB to reduce these requirements. Meeting existing flow and salinity requirements therefore could require additional flows in the interior Delta during future dry years. However, the proposed new diversion of water north of the Delta would reduce freshwater inflows into the Delta. To meet even existing standards while reducing Delta inflows, the CVP and SWP would need some new source of water, but no new source of water is specifically described in the Petition or the accompanying RDEIR/SDEIS.

Instead, the RDEIR/SDEIS simply states that water necessary to ensure the CVP and SWP meet regulatory requirements would be obtained through water transfers, project reoperation or other sources. (RDEIR/SDEIS at p. 4.1-6.) However, this general statement does not meet the requirement that the petitioners demonstrate that the proposed California WaterFix Project would not injure other legal users of water. (See Cal. Code Regs., tit. 23, § 794(a)(9) [Petitioners must provide quantitative information identifying any effects of the proposed change(s) on other known users of water].) Petitioners must submit sufficient evidence and an adequate operational plan to establish that they would not operate facilities at the proposed points of diversion and re-diversion in a manner that would injure other legal users of water.

Finally, DWR and Reclamation must demonstrate that the future CVP and SWP operations with the proposed changes in points of diversion would not injure the ability of users within the area of origin to meet area of origin demands in the future. Protestants divert and use water within areas where water currently being exported originates. California law expressly recognizes the prior right of communities in these areas of origin to the water that is currently being exported, to the extent that water will be needed in the future to adequately supply the beneficial needs of those areas. (Wat. Code, §§ 10505, 10505.5, 11460, 11463, and 11128; *see also* §§ 12200-12220.) Demand for water in counties of origin is expected to increase in the future and the likelihood that less water will be available for export is reasonably foreseeable. To protect upstream communities, Petitioners must account for the area of origin demands when considering the amount of water available for export and the quantity necessary to

help the CVP and SWP meet Delta water quality standards with the proposed changes.

#### Impact on Freeport Regional Water Project Operations

The California WaterFix Project would adversely affect both the quantity and quality of water available at the intake of the Freeport Regional Water Project (FRWP) on the Sacramento River. SCWA uses the FRWP to divert water under the various rights and contracts listed in Attachment 5. SCWA shares its diversion capacity in the FRWP with EBMUD. The FRWP intake can divert 185 million gallons per day (MGD), of which 100 MGD is allocated to EBMUD and 85 MGD to SCWA.

The FRWP is a key component of SCWA's conjunctive use program in its Zone 40 service area and in supporting sustainable groundwater management objectives in the South American Subbasin. Currently, the volume of water that SCWA typically delivers through the FRWP represents about 30-40% of the volume that SCWA delivers to its customers in its Zone 40 service area. Over the long-term, surface water will account for approximately 60% of SCWA demand on average. In the case of reduced availability of surface water, SCWA must rely more heavily on groundwater.

The FRWP intake lies about 1.3 miles upstream of the discharge location of a wastewater treatment plant. Reverse flow events in the Sacramento River cause treated wastewater to flow upstream and thereby impact FRWP operations. A "reverse flow" event occurs when river water flows upstream during high (ocean) tides and low (river) flow conditions. Some reverse flows are sufficient to require the shutdown of the FRWP intake to prevent the diversion of Sacramento River water containing a wastewater fraction that has been determined to be unacceptable.<sup>2</sup>

Reverse flow shutdowns are temporary in nature and have been anticipated by the design engineers but complicate plant operation at SCWA's Vineyard Surface Water Treatment Plant when higher flow rates are demanded in the system. Multiple shutdowns on the same or subsequent days as a result of reverse flows or for other reasons reduce the agency's capability to fulfill its minimum level of service and force it to accommodate the increased risk through operational and capital expense. For this reason, an increase in reverse flow events significant enough to require SCWA to shut down the FRWP intake would injure SCWA and its customers.

EBMUD has undertaken independent modeling to evaluate the potential impact of the California WaterFix Project on reverse flow events in the Sacramento River in and around the FRWP intake. The results of the independent modeling show that the California WaterFix Project will cause a 16% increase in the frequency of reverse flow events large enough to shut down FRWP diversions. The predicted increase in reverse flow events is attributable to the reduction in downstream flows into the Delta caused by California WaterFix Project diversions.

<sup>&</sup>lt;sup>2</sup> The shutdowns are required by the domestic water supply permits issued by the State Water Resources Control Board Division of Drinking Water to EBMUD and SCWA.

The increased frequency of shutdowns alters the operation of the FRWP intake and of SCWA surface water and groundwater facilities. Altered operations may consist of the need for operations modeling and accelerated capital replacements in order to reduce the risks associated with additional shutdowns.

#### Interconnected Groundwater Supplies in SCWA's Zone 40

The California WaterFix Project is likely to injure SCWA's rights to interconnected groundwater supplies. SCWA extracts groundwater from the South American Subbasin (a.k.a., the Central Basin) under an appropriative groundwater right to serve municipal and industrial demands throughout Central Sacramento County. A prior appropriator of groundwater interconnected with a surface water supply is protected by a subsequent appropriator who seeks to divert water from the surface supply when the diversion activities adversely affect groundwater supplies in the aquifer from which the groundwater appropriator pumps. (See *Lodi v. EBMUD* (1936) 7 Cal.2d 316, 339; see also State Water Board Decision 886 (February 28, 1958).) The Sacramento River is interconnected with the South American Subbasin. (Central Sacramento County Groundwater Management Plan, February, 2006, p. 2-26.)

Long-term removal of water from the Sacramento River (i.e., reducing the wetted perimeter of river bed) and not allowing its movement downstream through the Delta is a specific impact of Alternative 4A of the California WaterFix Project. Over a single year the seepage impacts will be small. However, over a period of 50 or 60 years (life of the California WaterFix Project), the impacts may be considerable in terms of total volume of water not available for seepage through the riverbed and into underlying groundwater aquifers. This impact will likely injure SCWA, as a prior groundwater appropriator.

Further, Petitioners must consider the water quality impacts to groundwater resources associated with long-term project operations. Any decrease in fresh Sacramento River water not traveling downstream through the Delta increases the residency time and concentration of salt water moving east towards freshwater aquifers. It does not appear that the Petitioners have adequately addressed or quantified these types of water quality impacts to local groundwater aquifers. Petitioners must submit sufficient evidence and an adequate operational plan to establish that they would not operate facilities at the proposed points of diversion and re-diversion in a manner that would impair the water quality in local groundwater aquifers and injure legal users of interconnected groundwater supplies.

## <u>Attachment 5</u> (specific information regarding Protestant's water rights)

### Surface Water Rights

The Sacramento County Water Agency diverts surface water supplies under both an appropriative water right to Sacramento River water and contract rights for diversion of Central Valley Project water supplies.

Appropriative Water Right - Permit 21209 (A30454) Direct Diversion: Up to 71,000 af/yr Source: Sacramento River Points of Diversion:

- (1) City of Sacramento's Sacramento River Water Treatment Plant (CCS Zone 2, NAD 83: North 1977736, East 6702669).
- (2) Freeport Regional Water Project POD (CCS Zone 2, NAD 83:North1934251,East 6702931).

Relationship to Petitioner's Proposed POD: Both PODs are Upstream

USBR Contract No. 14-06-200-5198A (currently operating under Contract No. 14-06-200-5198B-IR2 (through February 28, 2017)) Quantity: 30,000 af/yr Source: Central Valley Project Points of Diversion:

- (1) City of Sacramento's Sacramento River Water Treatment Plant (CCS Zone 2, NAD 83: North 1977736, East 6702669)
- (2) Freeport Regional Water Project POD (CCS Zone 2, NAD 83:North 1934251, East 6702931)

Relationship to Petitioner's Proposed POD: Both PODs are Upstream

USBR Contract No. 6-07-20-W1372 Quantity: 15,000 af/yr Source: Central Valley Project Points of Diversion:

- (1) City of Sacramento's Sacramento River Water Treatment Plant (CCS Zone 2, NAD 83: North 1977736, East 6702669).
- (2) Freeport Regional Water Project POD (CCS Zone 2, NAD 83:North 1934251,East 6702931).

Relationship to Petitioner's Proposed POD: Both PODs are Upstream

## Interconnected Groundwater Rights

SCWA extracts groundwater from the South American Subbasin (a.k.a., the Central Basin) under an appropriative groundwater right to serve municipal and industrial demands throughout Central Sacramento County. The Sacramento River is interconnected with the South American Subbasin. The Central Basin is located east of Petitioners' proposed points of diversion.

## Extent of Surface and Groundwater Use

The extent of present and past use of water by SCWA is as follows:

Present and Past Water Use Within SCWA's Zone 40				
(in Acre-Feet)				
Calendar				
Year	Surface Water			Groundwater
	Appropriate Water Right	USBR-Contract Rights		
	(Apl 30454, pmt 21209)	Fazio (W1372)	SMUD (5198B)	
2004	0	4,202	0	25,243
2005	0	5,041	0	27,108
2006	0	4,826	0	29,021
2007	0	5,403	0	31,118
2008	0	3,344	0	34,226
2009	0	2,376	0	34,250
2010	0	1,496	0	32,171
2011	3,687	0	0	29,811
2012	9,922	0	0	25,407
2013	13,969	0	0	23,401
2014	2,314	0	0	23,070

#### Attachment 6 PROOF OF SERVICE

I am employed in the County of Sacramento; my business address is 500 Capitol Mall, Suite 1000, Sacramento, California; I am over the age of 18 years and not a party to the foregoing action.

On January 5, 2016, I served a true and correct copy of the PROTEST (By Sacramento County Water Agency)– PETITION (of Department of Water Resources and Bureau of Reclamation; California Water Fix):

XXX (electronically) by electronically transmitting a true copy to the person(s) at the electronic mailing addresses as set forth below.

California Department of Water Resources c/o James Mizell 1416 Ninth Street, Room 1104 Sacramento, CA 95818 James.Mizell@water.ca.gov

U.S. Bureau of Reclamation c/o Amy Aufdemberge U.S. Department of Interior Office of Regional Solicitor, Pacific Southwest Region 2800 Cottage Way Sacramento, CA 95825-1898 Amy.Aufdemberge@sol.doi.gov

I declare under penalty of perjury that the foregoing is true and correct. Executed on January 5, 2016, at Sacramento, California.

olanda De La Cruz