

Testimony of Ray Sahlberg

My name is Ray Sahlberg. I am the Water Rights Officer for the Mid-Pacific Region of the Bureau of Reclamation. I lead a group that administers and protects the water rights for the Reclamation facilities within the Region. I have a Bachelor's degree in Industrial Technology from San Jose State University, and a Juris Doctor degree from the Santa Clara University School of Law. I am a member of the State Bar of California. I started at the Bureau of Reclamation in October 2000, went to work for the Department of Interior's Office of the Solicitor in Washington, DC in November 2003, and became the Water Rights Officer for the Region in July 2006.

As the head of the Water Rights group, I review water right petitions and applications for impacts to the water rights of the Central Valley Project (CVP) and other Reclamation facilities in the Mid-Pacific Region, and prepare and file protests to those petitions and applications that have the potential to injure Reclamation's water rights. This group prepares petitions to implement Reclamation projects that require water right changes, and evaluates these petitions for the potential to impact other legal users of water. The Water Rights group prepares annual reports on diversion and use for Reclamation's water rights permits, and also prepares responses to protests against Reclamation's petitions, along with responses to complaints as requested by the State Water Resources Control Board (State Water Board). I also have experience in evaluating water transfers, and with negotiating, interpreting, and administering Reclamation water service and water right settlement contracts. I have testified before the State Water Board on the revocation of water rights for Auburn Dam and the results of a pilot program for recirculation of water from the Delta through the Delta-Mendota Canal and the San Joaquin River. (See Sahlberg Statement of Qualifications, DOI-1.)¹

I. Overview

Reclamation is joining in the California WaterFix (CWF) Petition for Change in order to add three new points of diversion/rediversion that are part of the CWF to certain water rights that it holds for the CVP (see SWRCB-1 and 2)². My testimony is in two parts.

¹ A true and correct copy is attached as DOI-1.

² True and correct copies have been provided by the SWRCB as SWRCB-1 and SWRCB-2.

For the Project Description section of Part 1 of the CWF hearing, I will describe the CVP. For the Water Rights section of the CWF hearing, I will describe the water rights permits held by Reclamation for the CVP and the contracts for delivering this water. The decisions on the timing and quantities of water that can be delivered are based on projected and real time hydrologic and hydrodynamic information more fully explained in testimony on the operations of the CVP by Mr. Ron Milligan. In managing the delivery of CVP water, Reclamation operates its facilities to meet all statutory and regulatory requirements prior to satisfying contractual obligations, including Water Rights Decision 1641 (D-1641) (SWRCB-21)³, the 2008 Fish and Wildlife Service (FWS) Biological Opinion for the protection of Delta Smelt (SWRCB-87)⁴ and the 2009 National Marine Fisheries Service (NMFS) Biological Opinion for the protection of anadromous fish species (SWRCB-84)⁵.

Reclamation joins in the testimony of Maureen Sergent of the Department of Water Resources on the changes requested in the CWF Petition for Change, the fact that this petition does not initiate a new water right, and that the requested changes will not injure other legal users of water. My testimony concludes with a description of the various CVP contracts and that the CWF Petition for Change does not affect the terms and conditions of those contracts.

II. Central Valley Project Description

The CVP was originally to be constructed by the State of California (see Water Code §11100 et. seq.). The State could not sell the bonds necessary to construct the project during the Great Depression;⁶ the CVP was subsequently authorized as a Reclamation project by section 2 of the Act of August 26, 1937. The original facilities of the CVP are Shasta and Friant Dams; the Delta-Mendota, Friant-Kern, and Madera Canals, and the

³ A true and correct copy has been provided by the SWRCB as SWRCB-21.

⁴ A true and correct copy has been provided by the SWRCB as SWRCB-87.

⁵ A true and correct copy has been provided by the SWRCB as SWRCB-84.

⁶ See http://www.usbr.gov/projects/Project.jsp?proj_Name=Central+Valley+Project (Authorization "The state legislature passed the California Central Valley Project Act in 1933. The act authorized the sale of revenue bonds to construct the project, but during the Great Depression, bonds didn't sell.")

Jones Pumping Plant in the south Delta. Since the construction of these facilities, the following units (with their date of authorization) have been added to the CVP:

Folsom Dam (Act of October 14, 1949)

Tehama-Colusa Canal (Act of September 26, 1950)

Trinity River Division (Act of August 12, 1955)

San Luis Unit (Act of June 3, 1960)

New Melones (Flood Control Act of 1962) (Act of October 23, 1962)

Auburn-Folsom South Unit (Act of September 2, 1965)

Today, the CVP consists of 20 dams and reservoirs with a total capacity of nearly 12 million acre-feet, 500 miles of canals and aqueducts and 11 hydroelectric powerplants that produce an average 4.5 million megawatts a year. The CVP serves an area from Lake Shasta in the north to Bakersfield in the south. It provides water for 3 million acres of crops, and 600,000 acre-feet for municipal and industrial uses. The CVP is integrated operationally and financially by mandate of Congress (see, e.g., §4 of the Act of September 26, 1950 ["The Secretary of the Interior is directed to cause the operation of said works and repayment thereof to be coordinated and integrated with the operation and repayment schedule for the existing features of the Central Valley Project in such manner as will effectuate the fullest and most economic utilization of the land and water resources of the Central Valley of California for the widest public benefit."])).

Runoff from rain and snowmelt in the Sacramento and San Joaquin River Basins and Trinity River flow into the CVP's reservoirs, where a portion is stored under the CVP's water rights for later use. When needed, this water is released from storage and typically flows down the river channel below the dam for redirection downstream at facilities such as the Tehama-Colusa Canal and the Jones Pumping Plant for delivery to its contractors. The CVP also directly diverts water for beneficial use at its facilities pursuant to its water rights. The CVP's operations are coordinated with the operations of the State Water Project (SWP) under the terms of the Coordinated Operations Agreement (COA) signed in November 1986. The CVP meets all senior rights and all regulatory requirements before diverting water for its use.

III. Reclamation Water Rights for the CVP

Reclamation holds 22 water rights permits for the CVP (plus nine permits for hydroelectric power). 11 of these permits are the subject of this petition: Permits 11315, 11316, 11967, 11968, 11969, 11971, 11973, 12364, 12721, 12722, and 12723 (SWRCB-10 through SWRCB-20)⁷. Water developed pursuant to these permits is used for irrigation, domestic, municipal, and industrial purposes. It is also used for recreation, salinity control and fish and wildlife enhancement purposes. A brief description of the currently authorized diversion amounts, season of use, place of use and point of diversion for each water rights permit is provided below.

A. CVP Permit Terms

Permit Priority Date	Type	Point(s) of Diversion	Amount	Season	Notes
P12721 7/30/27	Direct Diversion & Storage	Sacramento River at Shasta	8,000 cfs; 3.19 MA-F	Direct Diversion: Year Round Storage: 10/1 - 6/30	Total storage under P12721, P12722, P12723 not to exceed 4.493 MA-F.
P12722, P12723 8/2/38	Direct Diversion & Storage	Sacramento River at Shasta & Delta	P12722: 1,000 cfs; 310 KA-F P12723: 9,000 cfs; 1.303 MA-F	Direct Diversion: 9/1 – 6/30 (Year round in Delta & below Shasta) Storage: 10/1 - 6/30	Total storage under P12721, P12722, P12723 not to exceed 4.493 MA-F.
P11967, P11968, P11969 7/30/27 (P11967) 6/15/53 (P11968, P11969)	Direct Diversion & Storage	Trinity River at Clair Engle	P11967: 2,500 cfs; 1.54 MA-F P11968: 300 cfs; 200 KA-F P11969 1,700 cfs; 1.8 MA-F	Direct Diversion & Storage: Year Round	Total storage under P11967, P11969, P11971, and P11973 not to exceed 2.5 MA-F.

⁷ True and correct copies have been provided by the SWRCB as SWRCB-10, SWRCB-11, SWRCB-12, SWRCB-13, SWRCB-14, SWRCB-15, SWRCB-16, SWRCB-17, SWRCB-18, SWRCB-19, and SWRCB-20.

Permit Priority Date	Type	Point(s) of Diversion	Amount	Season	Notes
P11971 12/5/55	Storage	Trinity River at Clair Engle	700 KA-F	Year Round	
P11973 11/28/56	Direct Diversion	Trinity River at Lewiston	1,500 cfs	Year Round	Total storage under P11967, P11969, P11971, and P11973 not to exceed 2.5 MA-F.
P12364 11/28/56	Direct Diversion & Storage	Clear Creek at Whiskeytown	3,600 cfs; 250 KA-F	Direct Diversion & Storage: 11/1 -4/1	
P11315, P11316 10/1/49	Direct Diversion & Storage	American River at Folsom Dam	P11315: 8,000 cfs; 1 MA-F P11316: 700 cfs; 300 KA-F	Direct Diversion: 11/1 - 8/1 Storage: 11/1 - 7/1	Points of rediversion include Freeport.

These permits operate together to provide most of the water supply for the CVP. Water diverted under any of these permits can be delivered anywhere within the Consolidated Place of Use granted by D-1641. Reclamation annually submits information on its operations to the State Water Board.

Runoff stored under the CVP's water rights is released from storage and typically flows down the river channel below the dam for rediversion downstream at facilities such as the Tehama-Colusa Canal and the Jones Pumping Plant for delivery to its contractors. Storage releases can also be used for other beneficial purposes, such as temperature control and instream flow requirements, prior to rediversion.

Reclamation also coordinates operations with DWR under COA. Reclamation and DWR coordinate reservoir releases and Delta exports to allow the CVP and SWP to optimize operations to protect beneficial uses and each Project's water supply. The two

agencies are currently jointly responsible for meeting the Delta water quality and flow objectives contained in D-1641.

IV. Requested Change to Add Points of Diversion

Reclamation joins in and concurs with the testimony of Maureen Sergent of DWR on the changes requested by the CWF Petition for Change.

V. The Proposed Change Will Not Initiate a New Water Right

Reclamation joins in and concurs with the testimony of Maureen Sergent of DWR that the information provided supports a decision by the State Water Board that the change requested by Reclamation and DWR does not constitute a new water right.

Reclamation does not seek to increase the rate of diversion in its CVP permits for the Delta beyond currently permitted rates; it does not seek an expansion in current seasons of diversion or in the CVP Consolidated Place of Use. As such, Reclamation will be obligated to abide by current limits under existing water rights.

VI. The Proposed Change Will Not Injure Other Legal Users Of Water

Reclamation joins in and concurs with the testimony of Maureen Sergent of DWR that the information provided supports a decision by the State Water Board that the change requested by Reclamation and DWR will not injure other legal users of water. As was discussed in Mr. Milligan's testimony on CVP operations, as well as in the testimony on modeling, the CWF can be operated in a manner that will allow for all legal obligations of the CVP to be met, including the amount of water made available to Sacramento River and other water right settlement, operational agreements, Exchange, and CVP water service contractors. Reclamation will continue to honor State-granted senior water rights north of the Delta not subject to a settlement or other contract with Reclamation, and compliance with D-1641 will ensure that in-Delta water users are not impacted by CWF operations.

As discussed in the modeling testimony, CWF operations may cause minor changes to water quality. However, despite these changes, the modeling testimony supports that operation of the CWF will still result in full compliance with the terms of D-1641, and the CVP will continue to meet D-1641 Delta water quality objectives.

Contra Costa Water District (CCWD) and DWR entered into a settlement agreement that allows CCWD to use CWF facilities to convey a portion of the water it receives under its CVP contract and the water it diverts under its water rights for Los Vaqueros Reservoir (Permit Number 20749). The CVP water delivered to CCWD would be included in the water delivered to CVP contractors via the CWF. As discussed above, the CWF can be operated in a manner that will meet all legal obligations of the CVP – deliveries of a portion of CCWD’s CVP supply via the CWF will not change this. CCWD will not receive any additional CVP water as a result of this settlement – the CVP water delivered by the CWF would have been taken by CCWD at its other points of delivery.⁸

VII. CVP Water Service, Repayment, and Settlement/Operations Contracts

Reclamation provides water from its facilities pursuant to 127 CVP long-term water service and repayment contracts consistent with the terms and conditions of these contracts (DOI-13 through DOI-21)⁹. The CVP contractors are located within the Sacramento and San Joaquin Valleys and San Francisco and Monterey Bay areas. Water appropriated under the permits for the CVP (“Project Water”) is delivered to these contractors, who pay for it at a rate that is based on the cost of the CVP allocated to each contractor for repayment. The maximum amount of CVP water available under these contracts is approximately 6.1 million acre-feet; the actual amount made available each year varies due to a number of factors. Reclamation also has contracts to supply refuges with 422,000 acre-feet of Project Water (DOI-28, -29)¹⁰. Nothing in the water service, nor repayment contracts, governs the overall operations of the CVP as a whole.

⁸ See §3.1 of the ‘Agreement For Mitigation of Impacts to Contra Costa Water District From Construction and Operation of Bay Delta Conservation Plan/California WaterFix’ (DWR-334) – “This Agreement does not increase the total amount of water that CCWD otherwise would be entitled to divert pursuant to its CVP Contract Supply, Los Vaqueros water right, or any water transfers. This Agreement also does not change any existing approval process for identification, scheduling, or allocation of water diverted pursuant to CCWD’s CVP Contract Supply, Los Vaqueros water right, or any water transfers. Water conveyed to CCWD pursuant to this Agreement may be used as CCWD deems appropriate in its sole discretion.”

⁹ True and correct copies are attached as DOI-13, DOI-14, DOI-15, DOI-16, DOI-17, DOI-18, DOI-19, DOI-20, and DOI-21.

¹⁰ True and correct copies are attached as DOI-28 and DOI-29.

Nothing in the CWF Petition for Change alters the terms of these contracts.

Reclamation will continue to provide water to its CVP contractors consistent with its existing water service and repayment contracts and as those agreements may be amended in the future.

In addition to the CVP water supply contracts, as part of the protest resolution process for the CVP permits, Reclamation has entered into 136 water right settlement agreements with water users downstream of Shasta Lake on the Sacramento River (DOI-11, -12, -22)¹¹. These water users diverted water prior to the construction of Shasta Dam under claim of State-granted pre-1914, post 1914 and riparian water rights. Reclamation executed water rights settlement agreements with each contractor to resolve issues with Reclamation's applications to appropriate water from the Sacramento River. The terms of the agreements vary slightly depending on the specific contract, but each agreement provides a defined water supply with two components: Base Supply, which is an amount Reclamation and the contractor agree satisfies their State-granted senior water rights, and Project Water, which is an amount of CVP water that makes up for shortfalls in the amount of water available under their water rights during the summer months. These contracts contain deficiency provisions tied to hydrologic conditions at Shasta Lake. Under this so-called 'Shasta Criteria', the contractors get either 100% or 75% of their contract quantity depending on the inflow to Shasta Lake. The total amounts of Base Supply and Project Water made available in a year are as follows:

	<u>Base</u>	<u>Project</u>
100%	1.8 MA-F	380 KA-F
75%	1.35 MA-F	285 KA-F

In addition to the settlement contracts on the Sacramento River, Reclamation has the Exchange Contract with four districts that exchange their San Joaquin River water rights for a supply of water from the Delta (DOI-10)¹². The Exchange Contract is tied to the

¹¹ True and correct copies are attached as DOI-11, DOI-12, and DOI-22.

¹² A true and correct copy is attached as DOI-10.

Shasta Criteria; these contractors receive either 840,000 or 650,000 acre-feet annually, depending on Shasta inflow.

Other settlement contracts include nine settlement contracts with districts on the San Joaquin River tied to the Shasta Criteria (DOI-19)¹³. In addition, there are 128 so-called 'Holding Contracts' on the San Joaquin River between Friant Dam and Gravelly Ford that settled water rights disputes below Friant Dam (*Dugan v. Rank*) – these contracts require Reclamation to provide at least 5 cubic feet per second at each contractor's point of diversion with no shortage provision (DOI-31).¹⁴

Finally, there are five settlement contracts, or operating agreements, on the American and Stanislaus rivers, which again provide mechanisms to satisfy senior State-granted rights; each contract has unique provisions for handling shortages in water supply (DOI-23 through DOI-27)¹⁵.

As with its water service contracts, nothing in the CWF Petition for Change alters the terms of Reclamation's settlement\operation agreements. As Mr. Milligan's testimony shows, Reclamation will continue to operate its facilities to provide water to all its senior right settlement\operation agreement contractors consistent with the terms and conditions of those agreements.

VIII. Summary and Conclusion

Reclamation believes that sufficient information has been provided in the CWF Petition for Change, the BDCP DEIR/EIS, the REIR/SEIS and the BA and their Appendices, and DWR and Reclamation testimony to support the necessary findings required by the State Water Board to approve the CWF Petition for Change.

¹³ A true and correct copy is attached as DOI-19.

¹⁴ A true and correct copy is attached as DOI-31.

¹⁵ True and correct copies are attached as DOI-23, DOI-24, DOI-25, DOI-26, and DOI-27.