



BUREAU OF RECLAMATION  
2800 Cottage Way, E-1604  
Sacramento, California 95825



DEPARTMENT OF WATER RESOURCES  
1416 Ninth Street, Room 1115-1  
Sacramento, California 95814

STATE WATER RESOURCES CONTROL BOARD

2015 JAN 23 PM 4:32

DIV OF WATER RIGHTS SACRAMENTO

Mr. Thomas Howard  
Executive Director  
State Water Resources Control Board  
1001 I Street  
Sacramento, California 95814

Subject: Temporary Urgency Change Petition

Dear Mr. Howard:

The Department of Water Resources (DWR) and U.S Bureau of Reclamation (Reclamation) are submitting this Temporary Urgency Change Petition (TUCP) to request certain changes to the terms of the water rights permits for operation of the State Water Project and Central Valley Project from what is currently provided in Water Rights Decision 1641 (D-1641) for the next 180 days. This petition sets forth specific requests for the months of February and March and an anticipated future request for the remainder of the 2015 water year based on current forecasts, hydrology, and the lessons learned from 2014 drought operations.

The proposed changes described in the enclosed TUCP, if approved, would modify D-1641 requirements for February and March 2015. The specific request seeks 1) a change in minimum monthly average Net Delta Outflow Index to 4,000 cubic feet per second (cfs), 2) a change in San Joaquin River at Airport Way Bridge, Vernalis river flow minimum monthly average of 500 cfs, 3) modifying the closure requirement of the Delta Cross Channel gates to address Delta water quality concerns, and 4) an outflow related combined export rate that reflects an appropriate balance between competing beneficial needs. These changes would allow management of reservoir releases on a pattern that conserves upstream storage for fish and wildlife protection and Delta salinity control while providing critical water supply needs.

Reclamation and DWR are currently preparing a Biological Review of these proposed changes for Endangered Species Act (ESA) consultation purposes with the National Marine Fisheries Service and U.S. Fish and Wildlife Service. When the ESA consultations are completed and determinations are made, DWR will seek a Consistency Determination from the California Department of Fish and Wildlife. The final consultation information will be submitted to the State Water Resource Control Board once it is completed.

Sincerely,

David Murillo  
Regional Director  
Bureau of Reclamation

Mark W. Cowin  
Director  
Department of Water Resources

Date: 1-23-15

Date: 1.23.15

2015 JAN 23 PM 4:35

DIV OF WATER RIGHTS SACRAMENTO

Please indicate County where your project is located here:

various

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

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.

Form with checkboxes for Point of Diversion, Point of Rediversion, Place of Use, Purpose of Use, Distribution of Storage, Temporary Urgency, Instream Flow Dedication, Waste Water, Split, Terms or Conditions, and Other. Includes application type dropdowns for various, Permit, License, and Statement.

I (we) hereby petition for change(s) noted above and described as follows:

Point of Diversion or Rediversion - Provide source name and identify points using both Public Land Survey System descriptions to 1/4-1/4 level and California Coordinate System (NAD 83).

Form for Point of Diversion or Rediversion with Present and Proposed fields.

Place of Use - Identify area using Public Land Survey System descriptions to 1/4-1/4 level; for irrigation, list number of acres irrigated.

Form for Place of Use with Present and Proposed fields.

Purpose of Use

Form for Purpose of Use with Present and Proposed fields.

Split

Provide the names, addresses, and phone numbers for all proposed water right holders.

Form for Split with Present and Proposed fields.

In addition, provide a separate sheet with a table describing how the water right will be split between the water right holders: for each party list amount by direct diversion and/or storage, season of diversion, maximum annual amount, maximum diversion to offstream storage, point(s) of diversion, place(s) of use, and purpose(s) of use. Maps showing the point(s) of diversion and place of use for each party should be provided.

Distribution of Storage

Form for Distribution of Storage with Present and Proposed fields.

Handwritten notes: Rec'd ch# 612144 \$30,765.00 1/23/15 MS



**Temporary Urgency**

This temporary urgency change will be effective from  to

Include an attachment that describes the urgent need that is the basis of the temporary urgency change and whether the change will result in injury to any lawful user of water or have unreasonable effects on fish, wildlife or instream uses.

**Instream Flow Dedication** – Provide source name and identify points using both Public Land Survey System descriptions to ¼-¼ level and California Coordinate System (NAD 83).

Upstream Location:

Downstream Location:

List the quantities dedicated to instream flow in either:  cubic feet per second or  gallons per day:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Will the dedicated flow be diverted for consumptive use at a downstream location?  Yes  No  
If yes, provide the source name, location coordinates, and the quantities of flow that will be diverted from the stream.

**Waste Water**

If applicable, provide the reduction in amount of treated waste water discharged in cubic feet per second.

Will this change involve water provided by a water service contract which prohibits your exclusive right to this treated waste water?  Yes  No

Will any legal user of the treated waste water discharged be affected?  Yes  No

**General Information** – For all Petitions, provide the following information, if applicable to your proposed change(s).

Will any current Point of Diversion, Point of Storage, or Place of Use be abandoned?  Yes  No

I (we) have access to the proposed point of diversion or control the proposed place of use by virtue of:  
 ownership  lease  verbal 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 stream between the present point of diversion or redirection and the proposed point of diversion or redirection, as well as any other person(s) known to you who may be affected by the proposed change.

**All Right Holders Must Sign This Form:** I (we) declare under penalty of perjury that this change does not involve an increase in the amount of the appropriation or the season of diversion, and that the above is true and correct to the best of my (our) knowledge and belief. Dated  at

*[Handwritten Signature]*  
Right Holder or Authorized Agent Signature

*[Handwritten Signature]* for Ron Milligan  
Right Holder or Authorized Agent Signature  
CVP Operations Manager

- NOTE: All petitions must be accompanied by:
- (1) the form Environmental Information for Petitions, including required attachments, available at: [http://www.waterboards.ca.gov/waterrights/publications\\_forms/forms/docs/pet\\_info.pdf](http://www.waterboards.ca.gov/waterrights/publications_forms/forms/docs/pet_info.pdf)
  - (2) Division of Water Rights fee, per the Water Rights Fee Schedule, available at: [http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/fees/](http://www.waterboards.ca.gov/waterrights/water_issues/programs/fees/)
  - (3) Department of Fish and Wildlife fee of \$850 (Pub. Resources Code, § 10005)

State of California  
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>

## ENVIRONMENTAL INFORMATION FOR PETITIONS

This form is required for all petitions.

Before the State Water Resources Control Board (State Water Board) can approve a petition, the State Water Board must consider the information contained in an environmental document prepared in compliance with the California Environmental Quality Act (CEQA). This form is not a CEQA document. If a CEQA document has not yet been prepared, a determination must be made of who is responsible for its preparation. As the petitioner, you are responsible for all costs associated with the environmental evaluation and preparation of the required CEQA documents. Please answer the following questions to the best of your ability and submit any studies that have been conducted regarding the environmental evaluation of your project. If you need more space to completely answer the questions, please number and attach additional sheets.

### DESCRIPTION OF PROPOSED CHANGES OR WORK REMAINING TO BE COMPLETED

For a petition for change, provide a description of the proposed changes to your project including, but not limited to, type of construction activity, structures existing or to be built, area to be graded or excavated, increase in water diversion and use (up to the amount authorized by the permit), changes in land use, and project operational changes, including changes in how the water will be used. For a petition for extension of time, provide a description of what work has been completed and what remains to be done. Include in your description any of the above elements that will occur during the requested extension period.

See Attachment 1

Insert the attachment number here, if applicable:

1



**Coordination with Regional Water Quality Control Board**

For change petitions only, you must request consultation with the Regional Water Quality Control Board regarding the potential effects of your proposed change on water quality and other instream beneficial uses. (Cal. Code Regs., tit. 23, § 794.) In order to determine the appropriate office for consultation, see: [http://www.waterboards.ca.gov/waterboards\\_map.shtml](http://www.waterboards.ca.gov/waterboards_map.shtml). Provide the date you submitted your request for consultation here, then provide the following information.

Date of Request

n/a

Will your project, during construction or operation, (1) generate waste or wastewater containing such things as sewage, industrial chemicals, metals, or agricultural chemicals, or (2) cause erosion, turbidity or sedimentation?

Yes  No

Will a waste discharge permit be required for the project?

Yes  No

If necessary, provide additional information below:

Insert the attachment number here, if applicable:

**Local Permits**

For temporary transfers only, you must contact the board of supervisors for the county(ies) both for where you currently store or use water and where you propose to transfer the water. (Wat. Code § 1726.) Provide the date you submitted your request for consultation here.

Date of Contact

n/a

For change petitions only, you should contact your local planning or public works department and provide the information below.

Person Contacted:  Date of Contact:

Department:  Phone Number:

County Zoning Designation:

Are any county permits required for your project? If yes, indicate type below.  Yes  No

- Grading Permit     Use Permit     Watercourse     Obstruction Permit  
 Change of Zoning     General Plan Change     Other (explain below)

If applicable, have you obtained any of the permits listed above? If yes, provide copies.  Yes  No

If necessary, provide additional information below:

Insert the attachment number here, if applicable:

**Federal and State Permits**

Check any additional agencies that may require permits or other approvals for your project:

- Regional Water Quality Control Board       Department of Fish and Game
- Dept of Water Resources, Division of Safety of Dams       California Coastal Commission
- State Reclamation Board       U.S. Army Corps of Engineers       U.S. Forest Service
- Bureau of Land Management       Federal Energy Regulatory Commission
- Natural Resources Conservation Service

Have you obtained any of the permits listed above? If yes, provide copies.       Yes       No

For each agency from which a permit is required, provide the following information:

Agency	Permit Type	Person(s) Contacted	Contact Date	Phone Number
n/a				

If necessary, provide additional information below:

Insert the attachment number here, if applicable:

**Construction or Grading Activity**

Does the project involve any construction or grading-related activity that has significantly altered or would significantly alter the bed, bank or riparian habitat of any stream or lake?       Yes       No

If necessary, provide additional information below:

Insert the attachment number here, if applicable:

**Archeology**

Has an archeological report been prepared for this project? If yes, provide a copy.  Yes  No

Will another public agency be preparing an archeological report?  Yes  No

Do you know of any archeological or historic sites in the area? If yes, explain below.  Yes  No

If necessary, provide additional information below:

Insert the attachment number here, if applicable:

**Photographs**

For all petitions other than time extensions, attach complete sets of color photographs, clearly dated and labeled, showing the vegetation that exists at the following three locations:

- Along the stream channel immediately downstream from each point of diversion
- Along the stream channel immediately upstream from each point of diversion
- At the place where water subject to this water right will be used

**Maps**

For all petitions other than time extensions, attach maps labeled in accordance with the regulations showing all applicable features, both present and proposed, including but not limited to: point of diversion, point of redirection, distribution of storage reservoirs, point of discharge of treated wastewater, place of use, and location of instream flow dedication reach. (Cal. Code Regs., tit. 23, §§ 715 et seq., 794.)

Pursuant to California Code of Regulations, title 23, section 794, petitions for change submitted without maps may not be accepted.

**All Water Right Holders Must Sign This Form:**

I (we) hereby certify that the statements I (we) have furnished above and in the attachments are complete to the best of my (our) ability and that the facts, statements, and information presented are true and correct to the best of my (our) knowledge. Dated 1/23/2005 at Sacramento.

Michael Chief, SWP Water Ops  
Water Right Holder or Authorized Agent Signature

Paul Jentzen for Ron Milligan  
Water Right Holder or Authorized Agent Signature  
CVP Operations Manager

**NOTE:**

- Petitions for Change may not be accepted unless you include proof that a copy of the petition was served on the Department of Fish and Game. (Cal. Code Regs., tit. 23, § 794.)
- Petitions for Temporary Transfer may not be accepted unless you include proof that a copy of the petition was served on the Department of Fish and Game and the board of supervisors for the county(ies) where you currently store or use water and the county(ies) where you propose to transfer the water. (Wat. Code § 1726.)



ATTACHMENT 1

**SUPPLEMENT TO 2015 TEMPORARY URGENCY CHANGE PETITION TO CERTAIN DWR  
AND RECLAMATION PERMIT TERMS AS PROVIDED IN D-1641**

**California Department of Water Resources**

Application Numbers 5630, 14443, 14445A, 17512, 17514A, Permits 16478, 16479, 16481, 16482, 16483

**U.S. Bureau of Reclamation Permits for the Central Valley Project**

Application Numbers: 23, 234, 1465, 5626, 5628, 5638, 9363, 9364, 9366, 9367, 9368, 13370, 13371, 14858A, 14858B, 15374, 15375, 15376, 15764, 16767, 16768, 17374, 17376, 19304, 22316

License Number 1986 and Permit Numbers: 11885, 11886, 12721, 11967, 11887, 12722, 12723, 12725, 12726, 12727, 11315, 11316, 16597, 20245, 11968, 11969, 11970, 12860, 11971, 11972, 11973, 12364, 16600, 15735

**I. Requested Change**

Due to the exceptionally dry conditions in 2014 and continued dry conditions faced by California in the current water year, the Department of Water Resources (DWR) and the United States Bureau of Reclamation (Reclamation) (collectively Projects) request the State Water Resources Control Board (State Water Board) change the terms of the water rights permits for operation of the Projects from what is currently provided in Water Rights Decision 1641 (D-1641) for the next 180 days. This petition sets forth specific requests for the month of February and March 2015, and an anticipated future request for the remainder of the 2015 water year that will be submitted to the State Water Board prior to April 1, 2015, as determined through the existing multi-party coordination process, the Real-Time Drought Operations Management Team (RTDOT).

Reclamation and DWR request modification of D-1641 consistent with the lessons learned throughout 2014, the draft Interagency 2015 Drought Strategy for the Central Valley Project and State Water Project (2015 Drought Strategy), the January 15, 2015 Central Valley Project and State Water Project Drought Contingency Plan (2015 DCP), Governor Brown's January 17, 2014 Emergency Proclamation (January 2014 Proclamation), and the December 22, 2014 Emergency Proclamation (December 2014 Proclamation).

The changes would modify the D-1641 requirements identified in Table 3 for February and March. DWR and Reclamation request a Delta outflow of 4,000 cubic feet per second (cfs), a San Joaquin River at Airport Way Bridge, Vernalis river flow of 500 cfs, modifying the closure requirement of the Delta Cross Channel gates (DCC) to address Delta water quality concerns consistent with fish protections necessary as determined by the RTDOT, and a combined export rate that reflects an appropriate balance between competing beneficial needs in light of the drought. These changes will allow



management of reservoir releases on a pattern that will conserve upstream storage for fish and wildlife protection and Delta salinity control while allowing for critical water supply needs exports.

As set forth in the 2015 DCP, critical operational considerations for these and other changes includes providing essential human health and safety needs to CVP and SWP service areas throughout 2015 and 2016 if drought conditions continue, reducing critical economic losses to agriculture, municipal and industrial uses, maintaining protections for endangered species and other fish and wildlife resources, providing water for state, federal and privately managed wetlands, and maximizing operational flexibility within existing law and regulations. These critical operational considerations are detailed further in the 2015 DCP.

Before Reclamation implements any action that may be approved by the State Water Board, Reclamation will utilize the drought exception procedures described in the 2009 NMFS CVP/SWP Long Term Operation Biological Opinion, as applicable, and complete the regulatory process with the Fish and Wildlife Service related to delta smelt provided for in the 2008 CVP/SWP Long Term Operation Biological Opinion.

**1) Modification of February and March Delta Outflow**

D-1641 requires a Delta outflow minimum monthly average Net Delta Outflow Index (NDOI) of 7,100 cfs 3-day average and salinity requirements such that outflow may be as high as 29,200 cfs for short periods of time. Reclamation and DWR petition the State Water Board to adopt a Delta outflow standard of a minimum monthly NDOI during the months of February and March to be no less than 4,000 cfs, which is more consistent with the unprecedentedly and persistently dry conditions facing California than the levels currently contained within D-1641 Table 3 and footnotes. Approving this request will avoid the potential “starting gate” requirement as specified in footnote 10 of Table 3, which imposes a substantial water cost to upstream reservoir storage in order to meet 2.64 mmhos/cm for at least one day at Collinsville between February 1 and February 14. This modification is necessary because of the extraordinarily dry conditions of the past several years in combination with the forecasts of limited future precipitation, low reservoir storage, and the competing demands on water supply of fish and wildlife protection, Delta salinity control, and critical water supply needs.

**2) Modification of February and March San Joaquin River Flow**

D-1641 requires a San Joaquin River at Airport Way Bridge, Vernalis minimum monthly average flows. Reclamation and DWR petition the State Water Board to adopt a San Joaquin River at Airport Way Bridge, Vernalis river flow requirement for February and March of base flow period averages no less than 500 cfs (and consistent with footnote 12) which is more appropriate for the unprecedentedly and persistently dry conditions facing California than the levels currently contained within D-1641 Table 3 and

footnotes. This modification is necessary because of the extraordinarily dry conditions of the past several years in combination with the forecasts of limited future precipitation, extremely low reservoir storage, and the competing demands on water supply of fish and wildlife protection, Delta salinity control, and critical water supply needs.

### **3) Modification of DCC Gate Operations**

D-1641 requires the closure of the DCC gates from February 1 through May 20. Reclamation and DWR petition the State Water Board to modify the DCC operation requirements in D-1641 Table 3 such that the DCC gates may be opened during February and March as necessary to reduce intrusion of high salinity water into the Delta while preserving limited storage in upstream reservoirs and reducing impacts to migrating Chinook salmon. Requirements for closure of the DCC gates from February 15 through May 20 shall be determined through the RTDOT process. The DCC gate triggers matrix (as described in Appendix G of the April 2014 Drought Operations Plan and Operational Forecast) will be used to determine operation of the DCC gates. The triggers outlines in this matrix provide direction and a method that balances water quality and fishery objectives in the Delta. Normally, Delta flows would assist in meeting salinity requirements in the Delta with the DCC gates closed. Under current extremely low flow conditions, particularly on the San Joaquin River, DCC gate operations are a critical tool for protecting against Delta salinity intrusion that threatens water supplies for in-Delta water users and export users alike.

### **4) Modification of Export Limits**

D-1641 limits exports by the Projects up to a combined export rate not to exceed 35% or 45% of Delta inflow, depending upon the Eight River Index. Reclamation and DWR petition the State Water Board to adopt a modified Combined Export Rate reflective of the following.

- The maximum Export Limits included in Table 3 of D-1641 be modified as follows: During February and March when footnote 10 of Table 3 of D-1641 is not being met, the combined maximum SWP and CVP export rate for SWP and CVP contractors at the Clifton Court Forebay Intake and C.W. "Bill" Jones Pumping Plant will be no greater than 3,500 cfs on a 3-day running average. During February and March when an NDOI of at least 5,500 cfs is not being met, or the DCC gates are open during a period inconsistent with footnote 23 of Table 3 of D-1641, the combined maximum SWP and CVP export rate will be no greater than 1,500 cfs. When precipitation and runoff events occur that allow the DCC gates to be closed and footnote 10 of Table 3 of D-1641 is being met [3-day average Delta Outflow of 7,100 cfs, or electrical conductivity of 2.64 millimhos per centimeter on a daily or 14-day running average at the confluence of the Sacramento and the San Joaquin rivers (Collinsville station C2) if applicable], but any additional Delta Outflow requirements contained in Table 4 of D-1641 are not being met, then exports of natural and abandoned flows are permitted up to D-1641 Export Limits contained in Table 3 and, in compliance with applicable laws and regulations including federal Endangered Species Act (ESA) and California

ESA (CESA).

**5) Anticipated Future Amendment Requests**

Reclamation and DWR anticipate requests for amendment to the proposed temporary urgency change prior to April 1, 2015. Any amended request is likely to reflect a subset of the changes presented in the 2015 DCP Attachment 2, reproduced here for reference. The anticipated amendments are not included yet in this petition as the hydrologic conditions or other factors as set forth in the 2015 DCP, which may necessitate the amendments, are not yet know.

Attachment 2

**D-1641 Bay-Delta Standards**

With Likely 2015 TUCP Requests

CRITERIA	Feb 2015	Mar 2015	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015
<b>Jan 1 - 50% Hydrology</b>								
• Outflow Spring X2 Minimum Outflow - mon.	Near-Term TUCP							
• River Flows @ Rio Vista - min. mon. avg. @ Vernalis: Base -min. mon. avg. Pulse objective	Near-Term TUCP		710 cfs	T.B.D.	710 cfs	710 cfs	710 cfs	
• Delta Cross Channel Gates	N-T TUCP							
• Salinity EC - Emmaton								
<b>Jan 1 - 90% Hydrology</b>								
• Outflow Spring X2 Minimum Outflow - mon.	Near-Term TUCP		7100 cfs	7100 cfs	7100 cfs			
• River Flows @ Rio Vista - min. mon. avg. @ Vernalis: Base -min. mon. avg. Pulse objective	Near-Term TUCP		800 cfs	T.B.D.	500 cfs			2500 cfs
• Delta Cross Channel Gates	N-T TUCP							
• Salinity EC - Emmaton			Requirement Moved to Three Mile Slough					
<b>Jan 1 - 99% Hydrology</b>								
• Outflow Spring X2 Minimum Outflow - mon.	Near-Term TUCP		4000 cfs	4000 cfs	Suspended	Suspended		
• River Flows @ Rio Vista - min. mon. avg. @ Vernalis: Base -min. mon. avg. Pulse objective	Near-Term TUCP		T.B.D.	T.B.D.	T.B.D.	Suspended		
• Delta Cross Channel Gates	N-T TUCP		Conditional DCC Operating			Operational		
• Emergency Drought Barriers						Operational		
• Salinity EC - Emmaton			Suspended					

D:\1641Standards\Feb\_Sep\_2015\_011415\_draft.xlsx: 1/14/2015

Preliminary, Subject to Revision

During the continuing drought, operation of the CVP and SWP must provide for, at a minimum, essential human health and safety needs throughout the CVP and SWP service areas, and retain the capability to provide for such minimum needs throughout Water Year (WY) 2015 and WY 2016 if drought conditions continue. For clarity, Reclamation and DWR's consideration of these essential human health and safety



needs includes adequate water supplies and water quality for drinking water, sanitation, and fire suppression, but does not extend to other urban water demands such as outdoor landscape irrigation. While most California communities have adequate reserve supplies, some will require continued delivery of limited amounts of water through the CVP and SWP systems to meet these basic needs. Human health and safety concerns may drive specific consultation requests throughout WY 2015 if not considered in the existing exception procedures of the BiOps.

The description below is included to highlight specific actions and factors that may be considered throughout 2015, and identifies actions that may be included in future consultations, if necessary. This is not intended to be a fully inclusive list, nor does inclusion in the list mean the agencies will go forward with any action. Reclamation and DWR are not proposing these actions at this time, however these actions are considered in looking at the future status of the species in light of the actions proposed in February and March 2015.

Upstream Reservoirs: Upstream reservoirs will be operated through the winter and spring to preserve and build storage. Upstream reservoir storage, while improved from end of September 2014 storage, remains extremely low in the early part of WY 2015. Reclamation and DWR will be trying to develop cold water resources in the winter and spring in those reservoirs where temperature management is needed later in the year. This may include working with the Sacramento River Settlement Contractors to shift early spring demand later into the year to conserve water in Shasta Reservoir, if warranted.

Water Supply: Throughout dry conditions, CVP and SWP systems will be operated to lessen critical economic losses to agricultural, municipal, and industrial uses due to water shortages through project water deliveries and by facilitating voluntary water transfers and exchanges to the extent possible, while balancing the needs of upstream storage, fishery and wildlife resource protection, and operational flexibility. A key to minimizing water supply shortages for economic purposes will be to take advantage of opportunities to export natural or abandoned flow in the winter and spring while maintaining Delta water quality and minimizing adverse effects to listed fish. Release of stored water in summer and fall will be managed to concurrently benefit in-stream temperature objectives, wildlife objectives, meet Sacramento Valley in-basin needs, and preserve carry over storage to meet objectives in WY 2016.

Refuges: One of the requirements of the Central Valley Project Improvement Act (CVPIA) passed by Congress in 1992 included providing water for state, federal and private managed wetlands in order to maintain and improve wetland habitat areas. For south of Delta refuges, water from San Luis Reservoir can be made available to meet

refuge needs when total demand from direct diversions from the Delta are not feasible. The CVPIA and refuge water supply contracts allow for flexibility to transfer water from refuges both within basin as well as north of the Delta to south of the Delta. Water transfers from north of Delta refuges to south of Delta refuges would occur to support priority habitat needs of south of Delta refuges given available capacity to facilitate the transfer. This water would be directly diverted or could be stored in San Luis Reservoir and used when most needed by south of the Delta refuges. Refuge deliveries are included in CVP operational scenarios and forecasts, and calculations regarding anticipated reservoir levels into the late fall and early winter.

D-1641 Related Actions: Reclamation and DWR may seek adjustments under D-1641, including: (1) triggers for modified X2 criteria to balance upstream storage and fish protection, (2) triggers for moving Western Delta Ag compliance point (i.e., Emmaton to Three-Mile Slough), (3) San Joaquin flows at Vernalis, (4) Rio Vista flow requirements, and (5) Net Delta Outflow requirements. Additionally, Reclamation and DWR may exercise the flexibility provided in D-1641 to adjust the E/I ratio's averaging period for sporadic storm events (similar to 2014).

Preferential Pumping: The projects will consider a facility shift in exports in April and May so that minimal pumping will occur at the SWP's Banks Pumping Plant and the majority will occur at the CVP's Jones Pumping Plant. This export shift will increase survival of salmonids through these facilities, since fewer fish will enter the SWP, where loss is higher due to substantial pre-screen mortality associated with Clifton Court Forebay. Combined exports would remain the same. The amount of shifted pumping from Banks to Jones would be made available to the SWP.

Temporary Emergency Drought Barriers: If hydrologic forecasts show there will be insufficient water in upstream reservoirs to repel the saltwater and meet health and safety and other critical needs, then installation of Emergency Drought Barriers will be considered to lessen water quality impacts. Excessive salinity increases in the Delta could render the water undrinkable for 25 million Californians and unusable by farms reliant upon this source. Temporary rock (rip-rap) Emergency Drought Barriers may be installed at up to three locations in the Delta during drought conditions in 2015, or in a subsequent year if necessary, to manage salinity in the Delta when there is not enough water in upstream reservoirs to release to rivers to repel the saltwater. Consultation on installation and operation of the barriers will be conducted on the barriers prior to installation and may require additional adjustments to D-1641.

Hatchery Operations: Livingston Stone National Fish Hatchery (LSNFH) managers will coordinate with Delta Operations for Salmonids and Sturgeon (DOSS) to time the hatchery release of winter-run Chinook salmon to coincide with favorable hydrologic

conditions, and to track their movement down the Sacramento River into and through the Delta utilizing acoustically-tagged winter-run Chinook salmon released at approximately the same time and real-time acoustic receivers deployed in the Sacramento River and Delta at various locations. DOSS will review the real-time acoustic tag data to determine the likely migration timing and distribution of the hatchery winter-run in the Sacramento River and into the Delta, and advise NMFS and Water Operations Management Team (WOMT) of potential risks to hatchery winter-run salmon.

Transfers and Exchanges: Reclamation and DWR will continue to facilitate water transfers and exchanges. If these transfers or exchanges are conveyed through the Delta outside the transfer window described in the 2008 and 2009 BiOps (July-September), Reclamation and DWR will consult with USFWS and NMFS prior to conveyance of the transfer water and DWR will request a consistency determination from CDFW.

#### Trinity Releases

Spring flows on the Trinity River will be consistent with annual allocations as provided through the Trinity River Main-stem Fishery Restoration Record of Decision. Flows for the remainder of the year will make consistent with SWRCB Order WR 90-5. Consistent with fish health criteria, releases to augment flows in the Lower Klamath River may be considered.

## **II. Basis to Authorize Modification of Water Rights**

The California Water Code, Section 1435, authorizes the State Water Board to grant a temporary change order for any permittee or licensee who has an urgent need to change a permit or license, where the State Water Board finds: 1) the permittee has an urgent need for the proposed change, 2) the proposed change may be made without injury to any other lawful user of water, 3) the proposed change can be made without unreasonably affecting fish, wildlife, or other instream beneficial uses, 4) the proposed change is in the public interest. The law also requires consultation with representatives of the Department of Fish and Wildlife. DWR and Reclamation provide the information in this petition to support the findings necessary under California Water Code section 1435.

### **1) DWR and Reclamation Have an Urgent Need for the Change**

California is entering its fourth consecutive year of below-average rainfall and very low snowpack. 2015 is also the eighth of nine years with below average runoff, which has resulted in chronic and significant shortages to municipal and industrial, agricultural, and refuge supplies and historically low levels of groundwater. As of January, 78% of the state is experiencing an Extreme Drought and 39% is experiencing an Exceptional



Drought, as recorded by the National Drought Mitigation Center, U.S. Drought Monitor. Recent snow survey results indicate a snowpack between 31% and 34% of average, and declining. As a result of this prolonged drought, reservoir levels throughout the state are already significantly below average and alternative local supplies to surface storage for many communities are limited. Total storage in Lake Oroville is roughly 1.4 million acre-feet (MAF)(40% of capacity), and the total combined storage at Shasta and Folsom reservoirs is also very low at about 2.4 MAF (49% of capacity). The low initial storage and historically dry conditions will likely lead to critical water shortages in 2015.

Forecasts for Water Year 2015 indicate it is increasingly likely to again be one of the more severe drought years in California's history. For the purposes of this consultation, Reclamation and DWR are using the 90 percent exceedance forecast for Central Valley hydrology to predict what actions are necessary. At this point in time, the actual January 2015 hydrology is trending significantly drier than the 90 percent forecast.

The continuation of extremely dry conditions in the Bay-Delta watershed poses great challenges to the effective management of water resources, and Reclamation and DWR believe that there is great risk that water supplies will not be adequate to meet both the obligations under D-1641 and temperature requirements on the Sacramento River. As a result, significant risks to health and safety, temperature control, minimum in-stream flow requirements, and an inability to control salinity encroachment in the Sacramento-San Joaquin Delta could result later this season. Under the current circumstances the Projects believe the most prudent course of action is to conserve storage in upstream reservoirs until significant improvement of that storage is realized.

If the requested February and March modifications to D-1641 Table 3 are granted, Reclamation and DWR forecast additional conservation of stored water in upstream reservoirs. Upstream supplies can provide the water necessary to protect fish and wildlife, Delta water quality and exports for critical needs. The 4,000 cfs Delta outflow is the estimated minimum nominal rate assumed to maintain salinity levels above 250 mg/l chloride at all export locations specified under Table 1 of D-1641.

Without a modification of the Delta outflow requirement and Vernalis requirement, Reclamation and DWR could be forced to increase releases from upstream reservoirs in February and March to meet Delta outflow levels up to 7,100 cfs or more, and Vernalis flows of up to 1,140 cfs. The estimated impact to reservoir storage decreases the likelihood that adequate cold-water reserves will be available to meet regulatory requirements protecting salmon and other cold-water fish species in the summer and fall of 2015 and could even result in a "loss of control" over salinity encroachment in the Delta by late spring 2015 and into 2016 in a worst case scenario. "Loss of control" describes a condition in which storages at or near dead pool in the major Project reservoirs will not allow sufficient release capability to control encroachment of ocean

water into the Delta, which will make the Delta water quality incompatible with in-Delta beneficial uses. This condition would persist until Northern California receives rainfall that produces sufficient runoff to flush the Delta of ocean water, which will once again allow for these in-Delta beneficial uses. Failure to sufficiently control Delta salinity will jeopardize the ability to provide for human health and safety for communities both within the Delta and those that rely upon the Delta for water supply.

D-1641 also requires closure of the DCC gates from February 1 through May 20. Through this petition and in furtherance of the January 2014 Proclamation, the Projects are seeking the use of the DCC gates as a means of controlling salinity conditions in the Delta. Natural runoff and the Delta inflow/outflow needed to meet the X2 requirement would normally assist in meeting salinity requirements in the Delta with the DCC gates closed, but under these extremely low flow conditions DCC gate operations may be needed to protect interior Delta salinity conditions.

a. Authorization to Take Extraordinary Measures

As a result of the extraordinary conditions experienced throughout 2014 and into 2015, the Governor signed the January 2014 Proclamation and December 2014 Proclamation. These proclamations include or renew the following two directives:

Directive 8 - "The Water Board to consider modifying requirements for reservoir releases or diversion limitations, where existing requirements were established to implement a water quality control plan. These changes would enable water to be conserved upstream later in the year to protect cold water pools for salmon and steelhead, maintain water supply, and improve water quality."

Directive 9 - "The Department of Water Resources and the Water Board will take actions necessary to make water immediately available, and, for the purposes of carrying out directives 5 and 8, Water Code section 13247 and Division 13 (commencing with section 21000) of the Public Resources Code and regulations adopted pursuant to that Division are suspended on the basis that strict compliance with them will prevent, hinder, or delay the mitigation of the effects of the emergency."

DWR has initiated a number of actions to minimize drought impacts and meet minimum health and safety needs including aggressive conservation efforts and taking a lead role in the Governor's Interagency Drought Task Force. Under the January 2014 Proclamation, the State Water Board is authorized to modify D-1641.

b. Real-Time Drought Operations Management Team

DWR and Reclamation propose the continuance of the RTDOT. The RTDOT consists of a team of managers from DWR, Reclamation, State Water Board, California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS)

and the Fish and Wildlife Service (USFWS) authorized to evaluate the physical and biological data on an ongoing basis to ensure efficient water operations management through potentially dynamic weather and flow events during the course of the declared drought emergency. The RTDOT provides state and federal water operators, fish agencies, and the State Water Board with a reliable communication schedule and established points of contact to timely respond to emergency issues.

DWR and Reclamation expect to work with DFW, NMFS, and USFWS to ensure that decisions made by this group or proposals submitted to the State Water Board follow the principles set forth in the 2015 Drought Strategy and meet the requirements of CESA and ESA, including complying with the drought contingency provision (RPA Action I.2.3.c.) in the 2009 NMFS Biological Opinion. This process allows the regulatory agencies to provide feedback and concur on potential project operations and related effects on an ongoing basis as the drought emergency is addressed. As a result of this coordination, DWR and Reclamation may submit to the State Water Board additional information on developing standards appropriate for operation of the Projects during the drought.

**2) There Will be no Impact to Other Legal Users of Water**

The Projects anticipate these changes will not change the natural and abandoned flows. The requested changes to D-1641 will reduce the Projects anticipated releases of stored water to augment natural and abandoned flow to satisfy Project regulatory requirements. These Project releases would not be flows available for downstream diverters without a contract with the Projects because those diverters have no right to Project stored water. If the State Water Board approves the requested changes that result in a reduction in stored water releases, such a reduction could not result in an injury to other legal users of water.

**3) The Change Will Not Result in Unreasonable Impacts to Fish and Wildlife or Other Instream Uses**

Extreme drought conditions are well known to stress the aquatic resources of the San Francisco estuary and its watershed. Dry conditions during winter are expected to adversely affect spawning and rearing conditions for Longfin Smelt and Delta Smelt, and migration conditions for winter-run Chinook salmon, spring-run Chinook salmon, steelhead trout, and southern distinct population segment of North American green sturgeon. While maintaining flows consistent with unmodified D-1641 outflow requirements would provide some short-term support for these species, the reduced storage concomitant with these outflows would lead to substantially worse impacts later in the year. Conversely, while a modified D-1641 which reduces outflows may decrease Delta survival of the salmonids during winter, it will conserve reservoir storage which will lead to increased cold water pool available later in the year to provide upstream fishery benefits. The proposed export limits are intended to provide additional water deliveries



while not exceeding proportional regulatory standards regarding exports (e.g. E/I). The proposed DCC gate operations balance risks to both water quality and outmigrating anadromous fish during February and March, in the event of the extreme low Delta inflows. Hence, this proposal seeks to balance the short-term and long-term habitat needs of some of the covered anadromous and pelagic species during the entirety of WY2015.

Unlike WY2014, winter-run Chinook salmon and Delta Smelt are currently at an elevated risk of entrainment impacts, due to their spatial distribution, abundance, and productivity. Spring-run Chinook and steelhead are predicted to have an increased risk of entrainment in the South Delta as their migration increases through February and March. Green sturgeon are typically exposed to a broad spectrum of flows and exports over the course of the year, and thus not likely to have increased risk of entrainment due to changes in flows. Increased monitoring and coordination, extending from the interagency drought response efforts in WY2014, is intended to support management of key entrainment risk indicators in the Interior and South Delta as part of the proposed operations. The evidence for the risk of entrainment for each species of concern will be considered as part of the biological review being conducted to support the Endangered Species Act consultation process.

#### Consultation with California Department of Fish and Wildlife

DWR and Reclamation have met numerous times during the past few months with representatives of the CDFW, as well as with NMFS and USFWS, to discuss the hydrologic situation and potential measures to address it. On December 18, 2013, this group met to discuss water system operations, including additional openings of Delta Cross Channel gates during the winter and spring of 2014. On January 15, 2014, DWR and Reclamation presented the water system operations proposal and the requested Delta outflow Delta Cross Channel gate operations modifications contained in this petition to CDFW, NMFS and USFWS (as well as to representatives of the State Water Boards), and discussed it with this group again on January 24, 2014. During each of these meetings, DWR and Reclamation provided answers to questions posed by CDFW. Furthermore, consultation between DWR, Reclamation, and CDFW has occurred by virtue of the Governor's creation of a Drought Task Force. Both direct talks concerning this petition and discussions on the drought more generally have presented opportunities to consult as required under the State Water Code.

#### **4) The Change is in the Public Interest**

The public interest is best served by maintaining sustainable minimum exports and water quality necessary for the protection of critical water supplies. The requested changes are in the public interest by preserving water supplies to meet critical water supply needs, by increasing the duration and likelihood of maintaining minimal salinity control, and by

increasing the duration and likelihood of success of maintaining a cold water pool sufficient for sensitive aquatic species through the remainder of the year.

In addition, by modifying the Delta outflow as proposed in this petition the probability that the Projects will be able to prevent the “loss of control” over Delta salinity this summer will increase. If meeting unmodified D-1641 outflow objectives early in the year results in insufficient storage to control seawater intrusion, a loss of control would persist until the Northern California receives a rainy season with sufficient runoff to flush the Delta of ocean water to once again allow for in-delta beneficial uses. In this event, the enormous amount of water necessary to flush the Delta would be an inefficient use of water.

### **III. Due Diligence has been Exercised**

DWR and Reclamation have exercised due diligence to avoid the circumstances necessitating this request by reducing allocations to its water supply contractors in 2013, when the current severe dry pattern began to emerge. Again in 2014, the Projects allocated a historic low for water deliveries to water supply contractors. Current conditions indicate that 2015 will be another extremely low allocation year for water supply contractors. In addition, prior to this petition DWR and Reclamation have reduced exports and maintained the minimum outflow necessary for salinity control. All avenues to conserve water in upstream storage were exercised while continuing to meet regulatory requirements.

Reclamation and DWR have contracts with senior water right holders to supply specific amounts of water (Exchange and Settlement contracts). The Projects will continue to exercise the discretion allowed in their contracts in order to minimize demands on upstream storage. In 2014, engaging these contractors also resulted in voluntary water conservation or demand shifting by changing the timing of deliveries. In 2015, if drought conditions persist, the Projects will again engage these contractors.

The drafting of this petition began upon the completion of the January 2015 forecast, which, along with the dry January hydrology, demonstrated the urgent need to seek the modifications proposed in this petition, and information supportive of this petition was developed through the marshalling of staff resources to examine and determine narrow and focused changes to address the immediate problem and a matrix of potential future requests that are dependent upon the evolving hydrology. As noted above, DWR and Reclamation have met with State Water Board staff and with representatives of CDFW, NMFS and USFWS, to discuss the elements of this petition, and to seek their input on how best to manage multiple needs for water supply.

DEPARTMENT OF WATER RESOURCES  
P.O. BOX 9428  
SACRAMENTO CA 94236-0001

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CIA 38		CIA 388	30,765.00	0.00	
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HOLD AT AN ANGLE TOWARD LIGHT TO VERIFY ARTIFICIAL WATERMARK ON FACE & BACK

BILL LOCKYER, TREASURER  
STATE OF CALIFORNIA  
SACRAMENTO

ACCOUNT - NUMBER - SERIAL

417- 612744

WARNING: THIS NUMBER  
BLEEDS THROUGH PINK  
TO THE BACK

90-1342  
1211

PAY TO THE ORDER OF

SWRC WATER RIGHTS DIVISION  
PO BOX 2000  
SACRAMENTO, CA 95812

ISSUE DATE

CHECK AMOUNT

01/22/2015    **\*\*\*30,765.00\*\***

By

*William Wong*  
*Joseph M.*

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