NOTICE OF TEMPORARY URGENCY CHANGE PETITION

AND

NOTICE OF PUBLIC WORKSHOP

The State Water Resources Control Board will hold a
Workshop to Receive Public Input on a
Drought Contingency Plan for the State Water Project
and the Central Valley Project and an Associated
Temporary Urgency Change Petition filed by
California Department of Water Resources and
United States Bureau of Reclamation
Regarding Permits and License[1] of
the State Water Project and the Central Valley Project
In Response to Current Dry Conditions

The **Public Workshop** will commence on
Wednesday, February 18, 2015, at 9:00 a.m.

in the Byron Sher Auditorium
Joe Serna, Jr.-Cal/EPA Building
1001 I Street, Second Floor
Sacramento, CA

NOTICE IS HEREBY GIVEN that the Department of Water Resources (DWR) and the United States Bureau of Reclamation (Reclamation) (collectively referred to as Petitioners) filed a Temporary Urgency Change Petition (TUCP) with the State Water Resources Control Board (State Water Board or Board), Division of Water Rights on January 23, 2015, pursuant to California Water Code section 1435 et seq.

The TUCP requests that the State Water Board temporarily modify the water right permits for DWR's State Water Project (SWP) and the water right license and permits for Reclamation's Central Valley Project (CVP) (collectively the CVP and SWP are also referred to as the

[1] The petition was filed for Permits 16478, 16479, 16481, 16482 and 16483 (Applications 5630, 14443, 14445A, 17512 and 17514A, respectively) of the Department of Water Resources for the State Water Project and License 1986 and Permits 11315, 11316, 11885, 11886, 11887, 11967, 11968, 11969, 11970, 11971, 11972, 11973, 12364,12721, 12722, 12723, 12725, 12726, 12727, 12860, 15735, 16597, 20245, and 16600 (Applications 23, 234, 1465, 5638, 13370, 13371, 5628, 15374, 15375, 15376, 16767, 16768, 17374, 17376, 5626, 9363, 9364, 9366, 9367, 9368, 15764, 22316, 14858A, 14858B, and 19304, respectively) of the United States Bureau of Reclamation for the Central Valley Project.

Projects). Specifically, in association with drought conditions, the TUCP requests temporary modification of conditions imposed pursuant to State Water Board Revised Decision 1641 (D-1641) that require the Petitioners to meet flow and water quality objectives established in the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta) Estuary. The TUCP requests the modifications for a period of 180 days. If drought conditions continue, the Petitioners may also request a renewal of the TUCP.

The State Water Board will hold a workshop at the time and location noted above. The Executive Director will act on the TUCP prior to the workshop. At the workshop, the Board will receive public input on the TUCP, the Executive Director's order, and a Drought Contingency Plan that DWR and Reclamation have prepared as required under State Water Board Order WR 2014-0029. This will be an informational workshop only. A quorum of the State Water Board may be present; however, no Board action will be taken.

BACKGROUND

Hydrology

California is currently in the fourth year of a drought. Of particular concern is the state's critically low snow pack which provides much of California's seasonal water storage. The South Section (San Joaquin, Kings, Kaweah, Kern, and Mono Rivers watersheds) snow pack on January 15, 2015 was 34 percent of average for that date (California Data Exchange Center (CDEC), January 15, 2015). Central Section snowpack (Carson, Yuba, American, Mokelumne, Stanislaus, Tuolumne, Merced and Walker River watersheds) was 33 percent of average, and Northern Section snowpack (Trinity, Eel, Sacramento, Feather, and Truckee Rivers watersheds) was 41 percent of average.

In the Sacramento River watershed, Water Year 2012 was classified as below normal, Water Year 2013 was dry, and Water Year 2014 was critically dry. (Attachment 1, Figure 1.) As of January 15, 2015, the Northern Sierra 8-Station Index was at 22.8 inches, about average for this time of year (CDEC, January 15, 2015), but likely to fall to below-average given there is not expected to be any significant precipitation during the entire month of January, which is historically one of the three wettest months. The lack of precipitation the last couple years has also contributed to low reservoir storage levels in the Sacramento watershed. Shasta Reservoir on the Sacramento River, Oroville Reservoir on the Feather River, and Folsom Reservoir on the American River were at 43, 40, and 46 percent of capacity on January 15, 2015, respectively (62, 59, and 86 percent of average for January, respectively).

The San Joaquin River Watershed in particular has experienced severely dry conditions for the past three years. Water Year 2012 was classified as dry and Water Years 2013 and 2014 as critically dry. (Attachment 1, Figure 2.) As of January 15, 2015, the San Joaquin 5-Station Index is at 9.25 inches (CDEC January 15, 2015). The lack of precipitation in the last few years has contributed to low reservoir storage levels throughout the watershed. New Exchequer Reservoir on the Merced River, New Don Pedro Reservoir on the Tuolumne River, New Melones Reservoir on the Stanislaus River, and Millerton Reservoir on the upper San Joaquin River were at 7, 40, 23, and 35 percent of capacity, respectively (14, 58, 40, and 53 percent of average for January, respectively). Further, there are no forecasted significant precipitation events projected in the area this month.

Governor's Executive Orders

On January 17, 2014, Governor Brown issued a Drought Emergency Proclamation that directed the State Water Board, among other things, to consider petitions, such as the TUCP, to modify requirements for reservoir releases or diversion limitations that were established to implement a water quality control plan. As indicated in the Proclamation, such modifications may be necessary to conserve cold water stored in upstream reservoirs that may be needed later in the year to protect salmon and steelhead, to maintain water supply, and to improve water quality. As authorized by Government Code section 8571, the Governor's Proclamation also suspended the California Environmental Quality Act (CEQA), and the regulations adopted pursuant to it, to the extent that CEQA otherwise would have applied to specified actions necessary to mitigate the effects of the drought, including the State Water Board's action on the TUCP. In addition, the Governor's Proclamation suspended Water Code section 13247 to the extent that it otherwise would have applied to specified activities, including action on the TUCP. Section 13247 requires state agencies, including the State Water Board, to comply with water quality control plans unless otherwise directed or authorized by statute. Absent suspension of section 13247, the State Water Board could not approve a petition to modify water right permits or licenses in a way that does not provide for full attainment of the water quality objectives as specified in the Bay-Delta Plan, even during a drought emergency.

On April 25, 2014, the Governor issued a Proclamation of a Continued State of Emergency to strengthen the state's ability to manage water and habitat effectively in drought conditions and called on all Californians to redouble their efforts to conserve water. In the April Proclamation, the Governor ordered that the provisions of the January 17, 2014 Proclamation remain in full force and also added several new provisions.

On December 22, 2014, Governor Brown issued Executive Order B-28-14, which extended the waiver of CEQA and Water Code section 13247 contained in the January 17, 2014 and April 25, 2014 Proclamations through May 31, 2016.

Previous TUCPs

On January 31, 2014, the Executive Director conditionally approved a TUCP to modify the conditions of the water right permits for the SWP and the water right license and permits for the CVP. The approval temporarily modified Delta flow and water quality requirements to address critically dry conditions associated with California's ongoing drought. As the result of changed circumstances and subsequent requests from Petitioners, and in response to objections to the TUCP Order, the Executive Director modified the TUCP Order on February 7, 2014, February 28, 2014, March 18, 2014, April 9, 2014, April 11, 2014, April 18, 2014, May 2, 2014, and October 7, 2014 to extend and change the conditions of the TUCP Order. In the May 2, 2014 TUCP Order, the Executive Director renewed the TUCP Order, which now expires on January 27, 2015.

On September 24, 2014, the State Water Board adopted Order WR 2014-0029, which addressed objections to and denied petitions for reconsideration of the Executive Director's January 31, 2014 TUCP Order and subsequent modifications thereto. While Order WR 2014 0029 denied the petitions for reconsideration, the Order did make some modifications to the TUCP Order in response to issues raised by some of the petitioners and other commenters in order to improve planning and coordination at that time and in the future if dry conditions continue. Specifically, the Order required the preparation of a Water Year 2015 Drought Contingency Plan in the event of continued drought conditions. The Order required the Drought Contingency Plan to identify planned minimum monthly flow and storage conditions that consider Delta salinity control, fishery protection, and supplies for municipal water users related

to projected flow and storage conditions, and any other information that may be requested by the Executive Director or his designee. The Order required the Petitioners to submit a plan for the beginning of the water year by October 15, 2014, and to submit a plan for the remainder of the water year by January 15, 2015, with updates as needed.

Both Drought Contingency Plans were timely submitted. The January 15, 2015 Drought Contingency Plan identifies likely 2015 TUCP requests by the Petitioners by month for the 50 percent, 90 percent, and 99 percent hydrologic scenarios. Each of these forecasts project monthly storage levels, reservoir releases, Delta pumping rates, and Delta outflow through the end of September 30, 2015. The January 15, 2015 Drought Contingency Plan indicates that much is still unknown about the hydrology for this year; therefore all specific changes to water right requirements are also still unknown.

CURRENT TUCP

The January 23, 2015 TUCP submitted by the Petitioners requests changes to water right requirements for the Projects consistent with the January 15, 2015 Drought Contingency Plan. Specifically the Petitioners request potential modifications to requirements included in Tables 1, 2 and 3 of D-1641 (Attachment 1) over the next 180 days in response to critically dry drought conditions. The TUCP identifies requested changes to Table 3 during February and March and also indicates that additional requests may be submitted prior to April 1, 2015, consistent with the Drought Contingency Plan. Following are the requested changes during February and March:

1. **Modification of the minimum monthly Net Delta Outflow Index (NDOI) during February and March to no less than 4,000 cubic feet per second (cfs).** Pursuant to footnote 10 of Table 3 of D-1641, the minimum daily NDOI during February through June is 7,100 cfs calculated as a 3-day running average. (Attachment 1, Table 3; Figure 3.) This requirement may also be met by achieving either a daily average or 14-day running average electrical conductivity (EC) at the confluence of the Sacramento and the San Joaquin rivers of less than or equal to 2.64 millimhos per centimeter (mmhos/cm) (Collinsville station C2). If the best available estimate of the Eight River Index (described in footnote 9) for January is more than 900 thousand acre-feet (TAF), the daily average or 14-day running average EC at station C2 is required to be less than or equal to 2.64 mmhos/cm for at least one day between February 1 and February 14; however, if the best available estimate of the Eight River Index for January is between 650 TAF and 900 TAF, the Executive Director of the State Water Board is delegated authority to decide whether this requirement applies. If the best available estimate of the Eight River Index for February is less than 500 TAF, the standard may be further relaxed in March upon the request of the DWR and Reclamation, subject to the approval of the Executive Director. Additional Delta outflow objectives are also contained in Table 4 (Attachment 1).

2. **Modification of the San Joaquin River at Airport Way Bridge, Vernalis minimum monthly average flow rate to 500 cfs during February and March.** Pursuant to Table 3 of D-1641 the minimum monthly San Joaquin River flow requirement is either 710 or 1,140 cfs during this time period, with the higher flow rate applying when the 2 parts per thousand isohaline requirement in Table 4 is at or west of Chipps Island.

3. **Modification of the Delta Cross Channel (DCC) Gate closure requirements to allow the DCC Gates to 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.** The Petitioners propose to use the DCC Gate triggers matrix (as described in Appendix G of the April 2014 Drought Operations Plan and Operational Forecast) to determine operation of the DCC Gates. Pursuant to Table 3 of D-1641, the DCC Gates are required to be closed during February and March.

4. **Modification of the export limits included in Table 3 during February and March.** The Petitioners propose to add the following additional export requirements, to be applicable when different levels of Delta outflow are maintained:

    a. When an NDOI of at least 5,500 cfs is not being met or the DCC Gates are open, 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 SWP and CVP export rate would be no greater than 1,500 cfs.
    b. When footnote 10 of Table 3 of D-1641 is not being met, but NDOI is greater than 5,500 cfs and the DCC Gates are closed, 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 would be no greater than 3,500 cfs on a 3-day running average.
    c. 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 mmhos/cm 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 would be permitted up to D- 1641 Export Limits contained in Table 3 and, in compliance with other applicable laws and regulations including the federal Endangered Species Act (ESA) and California ESA (CESA).

Additional potential changes during April through September 30 are described in the January 15, 2015 Drought Contingency Plan and referenced in the TUCP, which may be considered by the Executive Director or the State Water Board in the future. Specifically, these additional potential changes are planned for discussion at the February 18, 2015 workshop.

LOCATION OF INFORMATION

This notice, the Drought Contingency Plan, the Petitioners' TUCP, and related information may be viewed and downloaded at:
http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/tucp.shtml.

To receive immediate notification regarding modifications to the Petitioners' TUCP and related announcements regarding the drought, please subscribe to the Board's "Drought Updates" email subscription list, under "Water Rights" title bar at:
http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml.

MATTERS FOR DISCUSSION AT THE WORKSHOP

At the workshop, the State Water Board will receive public comment and input on the January 15, 2015 Drought Contingency Plan, the current TUCP request, the Executive Director's order in response to the TUCP, and any potential future TUCP requests. Regarding the TUCP, the public will have an opportunity to provide input on: 1) the urgent need for the changes; 2) whether the changes may be made without injury to any other lawful user of water; 3) whether the changes may be made without unreasonable effect upon fish, wildlife, or other instream beneficial uses; and 4) whether the changes are in the public interest. The Board will also seek suggestions for terms and conditions in any Order approving the temporary change to better protect public interest, health and safety, and beneficial uses of water.[2]

OBJECTIONS TO THE TUCP

Pursuant to California Water Code section 1438(d), any interested person may file an objection to the TUCP. Water Code section 1438 describes the procedure for addressing an objection. **Objections filed in response to this notice must be received by the State Water Board and should be provided to the petitioners no later than 12 noon, on Friday, February 13, 2015**. Please file objections using the petition protest form, which can be downloaded at: http://www.waterboards.ca.gov/waterrights/publications_forms/forms/docs/pet_protest.pdf. Send objections or correspondence to the following: 1) State Water Resources Control Board, c/o Rich Satkowski, P.O. Box 2000, Sacramento, CA 95812-2000 or via email at Rich.Satkowski@waterboards.ca.gov; 2) Department of Water Resources, c/o James Mizell, P.O. Box 942836, Sacramento, CA 94236-0001 or via email at James.Mizell@water.ca.gov; and 3) Regional Solicitor's Office, c/o Amy Aufdemberge, 2800 Cottage Way, Rm. E-1712, Sacramento, CA 95825 or via email at Amy.Aufdemberge@sol.doi.gov.

PROCEDURAL MATTERS

The workshop will be informal and will not be an evidentiary hearing. Any comments on the TUCP or Drought Contingency Plan will not be treated as testimony. If necessary, the State Water Board will hold an evidentiary hearing on any objections to the TUCP at a later date. While a quorum of the State Water Board may be present, the Board will not take formal action at the workshop. While there will be no sworn testimony or cross-examination of participants, the State Water Board and its staff may ask clarifying questions. The workshop is an opportunity for interested persons to provide input to the State Water Board. To ensure a productive and efficient workshop, oral comments may be limited at the discretion of the Board Chair.

QUESTIONS REGARDING THIS NOTICE

Questions concerning this notice may be directed to Jean McCue, Water Resource Control Engineer, at (916) 341-5351 or by email at Jean.McCue@waterboards.ca.gov or Rich Satkowski at (916) 341-5439 or by email at Rich.Satkowski@waterboards.ca.gov.

[2] Pursuant to Water Code section 1440, a temporary change order is subject at all times to modification or revocation at the discretion of the Board and shall automatically expire 180 days after the date of its issuance unless an earlier date is specified or it has been revoked.

WEBCAST OF WORKSHOP

A broadcast of the February 18, 2015 State Water Board Workshop will be available via the Internet and can be accessed at: http://www.calepa.ca.gov/broadcast/.

PARKING, ACCESSIBILITY AND SECURITY

A map to the Joe Serna Jr.-Cal/EPA Building and parking information are available at http://www.calepa.ca.gov/EPABldg/location.htm. The Cal/EPA Building is accessible to people with disabilities. Individuals who require special accommodations at the Cal/EPA Building are requested to contact Tanya Cole, Equal Employment Opportunity Office, at (916) 341-5880.

Due to enhanced security precautions at the Cal/EPA Building, all visitors are required to register with security staff prior to attending any meeting. To sign in and receive a visitor's badge, visitors must go to the Visitor and Environmental Services Center, located just inside and to the left of the building's public entrance. Depending on their destination and the building's security level, visitors may be asked to show valid picture identification. Valid picture identification can take the form of a current driver's license, military identification card, or state or federal identification card. Depending on the size and number of meetings scheduled on any given day, the security check-in could take up to fifteen minutes. Please allow adequate time to sign in before being directed to the workshop.

January 27, 2015
Date

Jeanine Townsend
Clerk to the Board

TABLE 1
WATER QUALITY OBJECTIVES FOR
MUNICIPAL AND INDUSTRIAL BENEFICIAL USES

COMPLIANCE LOCATION	INTERAGENCY STATION NUMBER (RKI [1])	PARAMETER	DESCRIPTION (UNIT)	WATER YEAR TYPE [2]	TIME PERIOD	VALUE
Contra Costa Canal at Pumping Plant #1	*C-5 (CHCCC06)*	*Chloride (Cl^-)*	*Maximum mean daily 150 mg/l Cl^- for at least the number of days shown during the Calendar Year. Must be provided in intervals of not less than two weeks duration. (Percentage of Calendar Year shown in parenthesis)*			*No. of days each Calendar Year £ 150 mg/l Cl^-*
-or-				*W*		*240 (66%)*
San Joaquin River at Antioch Water Works Intake	*D-12 (near) (RSAN007)*			*AN*		*190 (52%)*
				BN		*175 (48%)*
				D		*165 (45%*
				C		*155 (42%)*
Contra Costa Canal at Pumping Plant #1	*C-5 (CHCCC06)*	*Chloride (Cl^-)*	*Maximum mean daily (mg/l)*	*All*	*Oct-Sep*	*250*
-and-						
West Canal at mouth of Clifton Court Forebay	*C-9 (CHWST0)*					
-and-						
Delta-Mendota Canal at Tracy Pumping Plant	*DMC-1 (CHDMC004)*					
-and-						
Barker Slough at North Bay Aqueduct Intake	*---- (SLSAR3)*					
-and-						
Cache Slough at City of Vallejo Intake [3]	*C-19 (SLCCH16)*					

[1] River Kilometer Index station number.
[2] The Sacramento Valley 40-30-30 water year hydrologic classification index (see Figure 1) applies for determinations of water year type.
[3] The Cache Slough objective to be effective only when water is being diverted from this location.

TABLE 2
WATER QUALITY OBJECTIVES FOR AGRICULTURAL BENEFICIAL USES

COMPLIANCE LOCATION	INTERAGENCY STATION NUMBER (RKI [1])	PARAMETER	DESCRIPTION (UNIT) [2]	WATER YEAR TYPE [3]	TIME PERIOD	VALUE
WESTERN DELTA						
Sacramento River at Emmaton	*D-22 (RSAC092)*	*Electrical Conductivity (EC)*	*Maximum 14-day running average of mean daily EC (mmhos/cm)*		*0.45 EC April 1 to date shown*	*EC from date shown to Aug 15 [4]*
				W	*Aug 15*	*----*
				AN	*Jul 1*	*0.63*
				BN	*Jun 20*	*1.14*
				D	*Jun 15*	*1.67*
				C	*----*	*2.78*
San Joaquin River at Jersey Point	*D-15\ (RSAN018)*	*Electrical Conductivity (EC)*	*Maximum 14-day running average of mean daily EC (mmhos/cm)*		*0.45 EC April 1 to date shown*	*EC from date shown to Aug 15 [4]*
				W	*Aug 15*	*----*
				AN	*Aug 15*	*----*
				BN	*Jun 20*	*0.74*
				D	*Jun 15*	*1.35*
				C	*----*	*2.20*
INTERIOR DELTA						
South Fork Mokelumne River at Terminous	*C-13 (RSMKL08)*	*Electrical Conductivity (EC)*	*Maximum 14-day running average of mean daily EC (mmhos/cm)*		*0.45 EC April 1 to date shown*	*EC from date shown to Aug 15 [4]*
				W	*Aug 15*	*----*
				AN	*Aug 15*	*----*
				BN	*Aug 15*	*----*
				D	*Aug 15*	*----*
				C	*----*	*0.54*
San Joaquin River at San Andreas Landing	*C-4 (RSAN032)*	*Electrical Conductivity (EC)*	*Maximum 14-day running average of mean daily EC (mmhos/cm)*		*0.45 EC April 1 to date shown*	*EC from date shown to Aug 15 [4]*
				W	*Aug 15*	*----*
				AN	*Aug 15*	*----*
				BN	*Aug 15*	*----*
				D	*Jun 25*	*0.58*
				C	*----*	*0.87*
SOUTHERN DELTA						
San Joaquin River at Airport Way Bridge, Vernalis ***-and-*** *San Joaquin River at Brandt Bridge site[5]* ***-and-*** *Old River near Middle River [5]* ***-and-*** *Old River at Tracy Road Bridge [5]*	*C-10 (RSAN112)* *C-6 (RSAN073)* *C-8 (ROLD69)* *P-12 (ROLD59)*	*Electrical Conductivity (EC)*	*Maximum 30-day running average of mean daily EC (mmhos/cm)*	*All*	*Apr-Aug Sep-Mar*	*0.7 1.0*
EXPORT AREA						
West Canal at mouth of Clifton Court Forebay ***-and-*** *Delta-Mendota Canal at Tracy Pumping Plant*	*C-9 (CHWST0)* *DMC-1 (CHDMC004)*	*Electrical Conductivity (EC)*	*Maximum monthly average of mean daily EC (mmhos/cm)*	*All*	*Oct-Sep*	*1.0*

[1] River Kilometer Index station number.

[2] Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period for the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance.

[3] The Sacramento Valley 40-30-30 water year hydrologic classification index (see Figure 1) applies for determinations of water year type.

[4] When no date is shown, EC limit continues from April 1.

[5] The 0.7 EC objective becomes effective on April 1, 2005. The DWR and the USBR shall meet 1.0 EC at these stations year round until April 1, 2005. The 0.7 EC objective is replaced by the 1.0 EC objective from April through August after April 1, 2005 if permanent barriers are constructed, or equivalent measures are implemented, in the southern Delta and an operations plan that reasonably protects southern Delta agriculture is prepared by the DWR and the USBR and approved by the Executive Director of the SWRCB. The SWRCB will review the salinity objectives for the southern Delta in the next review of the Bay-Delta objectives following construction of the barriers.

TABLE 3
WATER QUALITY OBJECTIVES FOR FISH AND WILDLIFE BENEFICIAL USES

COMPLIANCE LOCATION	INTERAGENCY STATION NUMBER (RKI [1])	PARAMETER	DESCRIPTION (UNIT) [2]	WATER YEAR TYPE [3]	TIME PERIOD	VALUE
SAN JOAQUIN RIVER SALINITY						
San Joaquin River at and between Jersey Point and Prisoners Point [4]	*D-15 (RSAN018)* ***-and-*** *D-29 (RSAN038)*	*Electrical Conductivity (EC)*	*Maximum 14-day running average of mean daily EC(mmhos/cm)*	*W,AN,BN,D*	*Apr-May*	*0.44 [5]*
EASTERN SUISUN MARSH SALINITY						
Sacramento River at Collinsville ***-and-*** *Montezuma Slought at National Steel* ***-and-*** *Montezuma Slough near Beldon Landing*	*C-2 (RSAC081)* *S-64 (SLMZU25)* *S-49 (SLMZU11)*	*Electrical Conductivity (EC)*	*Maximum monthly average of both daily high tide EC values (mmhos/cm), or demonstrate that equivalent or better protection will be provided at the location*	*All*	*Oct* *Nov-Dec* *Jan* *Feb-Mar* *Apr-May*	*19.0* *15.5* *12.5* *8.0* *11.0*
WESTERN SUISUN MARSH SALINITY						
Chadbourne Slough at Sunrise Duck Club ***-and-*** *Suisun Slough, 300 feet south of Volanti Slough*	*S-21 (SLCBN1)* *S-42 (SLSUS12)*	*Electrical Conductivity (EC)*	*Maximum monthly average of both daily high tide EC values (mmhos/cm), or demonstrate that equivalent or better protection will be provided at the location*	*All but deficiency period [6]*	*Oct* *Nov* *Dec* *Jan* *Feb-Mar* *Apr-May*	*19.0* *16.5* *15.5* *12.5* *8.0* *11.0*
				Deficiency Period [6]	*Oct* *Nov* *Dec-Mar* *Apr* *May*	*19.0* *16.5* *15.6* *14.0* *12.5*

TABLE 3 (continued)
WATER QUALITY OBJECTIVES FOR FISH AND WILDLIFE BENEFICIAL USES

COMPLIANCE LOCATION	INTERAGENCY STATION NUMBER(RKI1[])	PARAMETER	DESCRIPTION (UNIT) [2]	WATER YEAR TYPE [3]	TIME PERIOD	VALUE
DELTA OUTFLOW						
		Net Delta Outflow Index (NDOI) [7]	*Minimum monthly average [8] NDOI (cfs)*	*All*	*Jan*	*4,500 [9]*
				All	*Feb-Jun*	*[10]*
				W,AN	*Jul*	*8,000*
				BN		*6,500*
				D		*5,000*
				C		*4,000*
				W,AN,BN	*Aug*	*4,000*
				D		*3,500*
				C		*3,000*
				All	*Sep*	*3,000*
				W,AN,BN,D	*Oct*	*4,000*
				C		*3,000*
				W,AN,BN,D	*Nov-Dec*	*4,500*
				C		*3,500*
RIVER FLOWS						
Sacramento River at Rio Vista	*D-24 (RSAC101)*	*Flow rate*	*Minimum monthly average [11] flow rate (cfs)*	*All*	*Sep*	*3,000*
				W,AN,BN,D	*Oct*	*4,000*
				C		*3,000*
				W,AN,BN,D	*Nove-Dec*	*4,500*
				C		*3,500*
San Joaquin River at Airport Way Bridge, Vernalis	*C-10 (RSAN112)*	*Flow rate*	*Minimum monthly average [12] flow rate (cfs) [13]*	*W,AN*	*Feb-Apr 14*	*2,130 or 3,420*
				BN,D	*and*	*1,420 or 2,280*
				C	*May 16-Jun*	*710 or 1,140*
				W	*Apr 15-*	*7,330 or 8,620*
				AN	*May 15 [14]*	*5,730 or 7,020*
				BN		*4,620 or 5,480*
				D		*4,020 or 4,880*
				C		*3,110 or 3,540*
				All	*Oct*	*1,000 [15]*
EXPORT LIMITS						
		Combined export rate [16]	*Maximum 3-day running average (cfs)*	*All*	*Apr 15- May 15 [17]*	*[18]*
				All	*Feb-Jun*	*35% Delta inflow [21]*
			Maximum percent of Delta inflow diverted [19] [20]	*All*	*Jul-Jan*	*65% Delta inflow*
DELTA CROSS CHANNEL GATES CLOSURE						
Delta Cross Channel at Walnut Grove	—	*Closure of gates*	*Closed gates*	*All*	*Nov-Jan*	*[22]*
					Feb-May 20	*----*
					May 21- Jun 15	*[23]*

Table 3 Footnotes

[1] River Kilometer Index station number.

[2] Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period of the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance.

[3] The Sacramento Valley 40-30-30 Water Year Hydrologic Classification Index (see Figure 1) applies unless otherwise specified.

[4] Compliance will be determined at Jersey Point (station D15) and Prisoners Point (station D29).

[5] This standard does not apply in May when the best available May estimate of the Sacramento River Index for the water year is less than 8.1 MAF at the 90% exceedence level. [Note: The Sacramento River Index refers to the sum of the unimpaired runoff in the water year as published in the DWR Bulletin 120 for the following locations: Sacramento River above Bend Bridge, near Red Bluff; Feather River, total unimpaired inflow to Oroville Reservoir; Yuba River at Smartville; and American River, total unimpaired inflow to Folsom Reservoir.]

[6] A deficiency period is: (1) the second consecutive dry water year following a critical year; (2) a dry water year following a year in which the Sacramento River Index (described in footnote 5) was less than 11.35 MAF; or (3) a critical water year following a dry or critical water year. The determination of a deficiency period is made using the prior year's final Water Year Type determination and a forecast of the current year's Water Year Type; and remains in effect until a subsequent water year is other than a Dry or Critical water year as announced on May 31 by DWR and USBR as the final water year determination.

[7] Net Delta Outflow Index (NDOI) is defined in Figure 3.

[8] For the May-January objectives, if the value is less than or equal to 5,000 cfs, the 7-day running average shall not be less than 1,000 cfs below the value; if the value is greater than 5,000 cfs, the 7-day running average shall not be less than 80% of the value.

[9] The objective is increased to 6,000 cfs if the best available estimate of the Eight River Index for December is greater than 800 TAF. [Note: The Eight River Index refers to the sum of the unimpaired runoff as published in the DWR Bulletin 120 for the following locations: Sacramento River flow at Bend Bridge, near Red Bluff; Feather River, total inflow to Oroville Reservoir; Yuba River flow at Smartville; American River, total inflow to Folsom Reservoir; Stanislaus River, total inflow to New Melones Reservoir; Tuolumne River, total inflow to Don Pedro Reservoir; Merced River, total inflow to Exchequer Reservoir; and San Joaquin River, total inflow to Millerton Lake.]

[10] The minimum daily net Delta outflow shall be 7,100 cfs for this period, calculated as a 3-day running average. This requirement is also met if either the daily average or 14-day running average EC at the confluence of the Sacramento and the San Joaquin rivers is less than or equal to 2.64 mmhos/cm (Collinsville station C2). If the best available estimate of the Eight River Index (described in footnote 9) for January is more than 900 TAF, the daily average or 14-day running average EC at station C2 shall be less than or equal to 2.64 mmhos/cm for at least one day between February 1 and February 14; however, if the best available estimate of the Eight River Index for January is between 650 TAF and 900 TAF, the Executive Director of the SWRCB is delegated authority to decide whether this requirement applies. If the best available estimate of the Eight River Index for February is less than 500 TAF, the standard may be further relaxed in March upon the request of the DWR and the USBR, subject to the approval of the Executive Director of the SWRCB. The standard does not apply in May and June if the best available May estimate of the Sacramento River Index (described in footnote 5) for the water year is less than 8.1 MAF at the 90% exceedence level.

Under this circumstance, a minimum 14-day running average flow of 4,000 cfs is required in May and June. Additional Delta outflow objectives are contained in Table 4.

[11] The 7-day running average shall not be less than 1,000 cfs below the monthly objective.

[12] Partial months are averaged for that period. For example, the flow rate for April 1-14 would be averaged over 14 days. The 7-day running average shall not be less than 20% below the flow rate objective, with the exception of the April 15-May 15 pulse flow period when this restriction does not apply.

[13] The water year classification for the San Joaquin River flow objectives will be established using the best available estimate of the 60-20-20 San Joaquin Valley Water Year Hydrologic Classification (see Figure 2) at the 75% exceedence level. The higher flow objective applies when the 2-ppt isohaline (measured as 2.64 mmhos/cm surface salinity) is required to be at or west of Chipps Island.

[14] This time period may be varied based on real-time monitoring. One pulse, or two separate pulses of combined duration equal to the single pulse, should be scheduled to coincide with fish migration in San Joaquin River tributaries and the Delta. The USBR will schedule the time period of the pulse or pulses in consultation with the USFWS, the NMFS, and the DFG. Consultation with the CALFED Operations Group established under the Framework Agreement will satisfy the consultation requirement. The schedule is subject to the approval of the Executive Director of the SWRCB.

[15] Plus up to an additional 28 TAF pulse/attraction flow during all water year types. The amount of additional water will be limited to that amount necessary to provide a monthly average flow of 2,000 cfs. The additional 28 TAF is not required in a critical year following a critical year. The pulse flow will be scheduled by the DWR and the USBR in consultation with the USFWS, the NMFS and the DFG. Consultation with the CALFED Operations Group established under the Framework Agreement will satisfy the consultation requirement.

[16] Combined export rate for this objective is defined as the Clifton Court Forebay inflow rate (minus actual Byron-Bethany Irrigation District diversions from Clifton Court Forebay) and the export rate of the Tracy pumping plant.

[17] This time period may be varied based on real-time monitoring and will coincide with the San Joaquin River pulse flow described in footnote 18. The DWR and the USBR, in consultation with the USFWS, the NMFS and the DFG, will determine the time period for this 31-day export limit. Consultation with the CALFED Operations Group established under the Framework Agreement will satisfy the consultation requirement.

[18] Maximum export rate is 1,500 cfs or 100% of 3-day running average of San Joaquin River flow at Vernalis, whichever is greater. Variations to this maximum export rate may be authorized if agreed to by the USFWS, the NMFS and the DFG. This flexibility is intended to result in no net water supply cost annually within the limits of the water quality and operational requirements of this plan. Variations may result from recommendations of agencies for protection of fish resources, including actions taken pursuant to the State and federal Endangered Species Act. Any variations will be effective immediately upon notice to the Executive Director of the SWRCB. If the Executive Director of the SWRCB does not object to the variations within 10 days, the variations will remain in effect. The Executive Director of the SWRCB is also authorized to grant short-term exemptions to export limits for the purpose of facilitating a study of the feasibility of recirculating export water into the San Joaquin River to meet flow objectives.

[19] Percent of Delta inflow diverted is defined in Figure 3. For the calculation of maximum percent Delta inflow diverted, the export rate is a 3-day running average and the Delta inflow is a 14-day running average, except when the CVP or the SWP is making storage withdrawals for export, in which case both the export rate and the Delta inflow are 3-day running averages.

[20] The percent Delta inflow diverted values can be varied either up or down. Variations are authorized subject to the process described in footnote 18.

[21] If the best available estimate of the Eight River Index (described in footnote 9) for January is less than or equal to 1.0 MAF, the export limit for February is 45% of Delta inflow. If the best available estimate of the Eight River Index for January is greater than 1.5 MAF, the February export limit is 35% of Delta inflow. If the best available estimate of the Eight River Index for January is between 1.0 MAF and 1.5 MAF, the DWR and the USBR will set the export limit for February within the range of 35% to 45%, after consultation with the USFWS, the NMFS and the DFG. Consultation with the CALFED Operations Group established under the Framework Agreement will satisfy the consultation requirement.

[22] For the November-January period, close Delta Cross Channel gates for a total of up to 45 days. The USBR will determine the timing and duration of the gate closure after consultation with the USFWS, the NMFS and the DFG. Consultation with the CALFED Operations Group established under the Framework Agreement will satisfy the consultation requirement.

[23] For the May 21-June 15 period, close Delta Cross Channel gates for a total of 14 days. The USBR will determine the timing and duration of the gate closure after consultation with the USFWS, the NMFS and the DFG. Consultation with the CALFED Operations Group established under the Framework Agreement will satisfy the consultation requirement.

Figure 1
Sacramento Valley
Water Year Hydrologic Classification

Year classification shall be determined by computation of the following equation:

INDEX = 0.4 * X + 0.3 * Y + 0.3 * Z

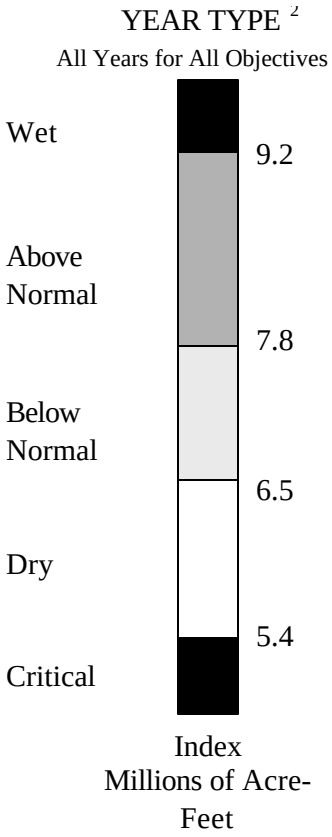
Where: X = Current year's April – July Sacramento Valley unimpaired runoff

Y = Current October – March Sacramento Valley unimpaired runoff

Z = Previous year's index[1]

The Sacramento Valley unimpaired runoff for the current water year (October 1 of the preceding calendar year through September 30 of the current calendar year), as published in California Department of Water Resources Bulletin 120, is a forecast of the sum of the following locations: Sacramento River above Bend Bridge, near Red Bluff; Feather River, total inflow to Oroville Reservoir; Yuba River at Smartville; American River, total inflow to Folsom Reservoir. Preliminary determinations of year classification shall be made in February, March, and April with final determination in May. These preliminary determinations shall be based on hydrologic conditions to date plus forecasts of future runoff assuming normal precipitation for the remainder of the water year.

Classification	Index Millions of Acre-Feet (MAF)
Wet……	Equal to or greater than 9.2
Above Normal…..	Greater than 7.8 and less than 9.2
Below Normal…..	Equal to or less than 7.8 and greater than 6.5
Dry…….....	Equal to or less than 6.5 and greater than 5.4
Critical……..…	Equal to or less than 5.4



[1] A cap of 10.0 MAF is put on the previous year's index (Z) to account for required flood control reservoir releases during wet years.

[2] The year type for the preceding water year will remain in effect until the initial forecast of unimpaired runoff for the current water year is available.

Figure 2
San Joaquin Valley
Water Year Hydrologic Classification

Year classification shall be determined by computation of the following equation:

INDEX = 0.6 * X + 0.2 * Y + 0.2 * Z

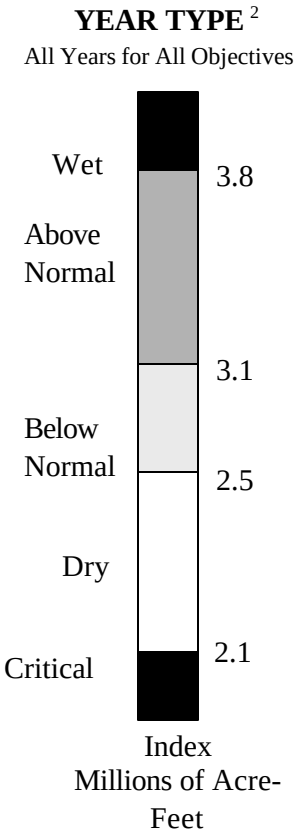
Where: X = Current year's April – July
San Joaquin Valley unimpaired runoff

Y = Current October – March
San Joaquin Valley unimpaired runoff

Z = Previous year's index[1]

The San Joaquin Valley unimpaired runoff for the current water year (October 1 of the preceding calendar year through September 30 of the current calendar year), as published in California Department of Water Resources Bulletin 120, is a forecast of the sum of the following locations: Stanislaus River, total flow to New Melones Reservoir; Tuolumne River, total inflow to Don Pedro Reservoir; Merced River, total flow to Exchequer Reservoir; San Joaquin River, total inflow to Millerton Lake. Preliminary determinations of year classification shall be made in February, March, and April with final determination in May. These preliminary determinations shall be based on hydrologic conditions to date plus forecasts of future runoff assuming normal precipitation for the remainder of the water year.

Classification	Index Millions of Acre-Feet (MAF)
Wet……	Equal to or greater than 3.8
Above Normal…..	Greater than 3.1 and less than 3.8
Below Normal…..	Equal to or less than 3.1 and greater than 2.5
Dry…….	Equal to or less than 2.5 and greater than 2.1
Critical……..	Equal to or less than 2.1



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[1] A cap of 4.5 MAF is put on the previous year's index (Z) to account for required flood control reservoir releases during wet years.

[2] The year type for the preceding water year will remain in effect until the initial forecast of unimpaired runoff for the current water year is available.

Figure 3
NDOI and PERCENT INFLOW DIVERTED [1]

The NDOI and the percent inflow diverted, as described in this footnote, shall be computed daily by the DWR and the USBR using the following formulas (all flows are in cfs):

NDOI = DELTA INFLOW - NET DELTA CONSUMPTIVE USE - DELTA EXPORTS

PERCENT INFLOW DIVERTED = (CCF + TPP) ¸ DELTA INFLOW

where *DELTA INFLOW = SAC + SRTP + YOLO + EAST + MISC + SJR*

SAC	=	Sacramento River at Freeport mean daily flow for the previous day; the 25-hour tidal cycle measurements from 12:00 midnight to 1:00 a.m. may be used instead.
SRTP	=	Sacramento Regional Treatment Plant average daily discharge for the previous week.
YOLO	=	Yolo Bypass mean daily flow for the previous day, which is equal to the flows from the Sacramento Weir, Fremont Weir, Cache Creek at Rumsey, and the South Fork of Putah Creek.
EAST	=	Eastside Streams mean daily flow for the previous day from the Mokelumne River at Woodbridge, Cosumnes River at Michigan Bar, and Calaveras River at Bellota.
MISC	=	Combined mean daily flow for the previous day of Bear Creek, Dry Creek, Stockton Diverting Canal, French Camp Slough, Marsh Creek, and Morrison Creek.
SJR	=	San Joaquin River flow at Vernalis, mean daily flow for the previous day.

where *NET DELTA CONSUMPTIVE USE = GDEPL - PREC*

GDEPL	=	Delta gross channel depletion for the previous day based on water year type using the DWR's latest Delta land use study.[2]
PREC	=	Real-time Delta precipitation runoff for the previous day estimated from stations within the Delta.

and where *DELTA EXPORTS*[3] *= CCF + TPP + CCC + NBA*

CCF	=	Clifton Court Forebay inflow for the current day.[4]
TPP	=	Tracy Pumping Plant pumping for the current day.
CCC	=	Contra Costa Canal pumping for the current day.
NBA	=	North Bay Aqueduct pumping for the current day.

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1 Not all of the Delta tributary streams are gaged and telemetered. When appropriate, other methods of estimating stream flows, such as correlations with precipitation or runoff from nearby streams, may be used instead.

2 The DWR is currently developing new channel depletion estimates. If these new estimates are not available, DAYFLOW channel depletion estimates shall be used.

3 The term "Delta Exports" is used only to calculate the NDOI. It is not intended to distinguish among the listed diversions with respect to eligibility for protection under the area of origin provisions of the California Water Code.

4 Actual Byron-Bethany Irrigation District withdrawals from Clifton Court Forebay shall be subtracted from Clifton Court Forebay inflow. (Byron-Bethany Irrigation District water use is incorporated into the GDEPL term.

Table 4. Number of Days When Maximum Daily Average Electrical Conductivity of 2.64 mmhos/cm Must Be Maintained at Specified Location

Number of Days When Maximum Daily Average Electrical Conductivity of 2.64 mmhos/cm Must Be Maintained at Specified Location [a]																	
PMI[b] (TAF)	Chipps Island (Chipps Island Station D10)					PMI[b] (TAF)	Port Chicago (Port Chicago Station C14) [d]					PMI[b] (TAF)	Port Chicago (Port Chicago Station C14)[d]				
	FEB	MAR	APR	MAY	JUN		FEB	MAR	APR	MAY	JUN		FEB	MAR	APR	MAY	JUN
≤ 500	0	0	0	0	0	**0**	0	0	0	0	0	**5250**	27	29	25	26	6
750	0	0	0	0	0	**250**	1	0	0	0	0	**5500**	27	29	26	28	9
1000	28[c]	12	2	0	0	**500**	4	1	0	0	0	**5750**	27	29	27	28	13
1250	28	31	6	0	0	**750**	8	2	0	0	0	**6000**	27	29	27	29	16
1500	28	31	13	0	0	**1000**	12	4	0	0	0	**6250**	27	30	27	29	19
1750	28	31	20	0	0	**1250**	15	6	1	0	0	**6500**	27	30	28	30	22
2000	28	31	25	1	0	**1500**	18	9	1	0	0	**6750**	27	30	28	30	24
2250	28	31	27	3	0	**1750**	20	12	2	0	0	**7000**	27	30	28	30	26
2500	28	31	29	11	1	**2000**	21	15	4	0	0	**7250**	27	30	28	30	27
2750	28	31	29	20	2	**2250**	22	17	5	1	0	**7500**	27	30	29	30	28
3000	28	31	30	27	4	**2500**	23	19	8	1	0	**7750**	27	30	29	31	28
3250	28	31	30	29	8	**2750**	24	21	10	2	0	**8000**	27	30	29	31	29
3500	28	31	30	30	13	**3000**	25	23	12	4	0	**8250**	28	30	29	31	29
3750	28	31	30	31	18	**3250**	25	24	14	6	0	**8500**	28	30	29	31	29
4000	28	31	30	31	23	**3500**	25	25	16	9	0	**8750**	28	30	29	31	30
4250	28	31	30	31	25	**3750**	26	26	18	12	0	**9000**	28	30	29	31	30
4500	28	31	30	31	27	**4000**	26	27	20	15	0	**9250**	28	30	29	31	30
4750	28	31	30	31	28	**4250**	26	27	21	18	1	**9500**	28	31	29	31	30
5000	28	31	30	31	29	**4500**	26	28	23	21	2	**9750**	28	31	29	31	30
5250	28	31	30	31	29	**4750**	27	28	24	23	3	**10000**	28	31	30	31	30
≤ 5500	28	31	30	31	30	**5000**	27	28	25	25	4	**>10000**	28	31	30	31	30

[a] The requirement for number of days the maximum daily average EC (EC) of 2.64 mmhos per centimeter (mmhos/cm) must be maintained at Chipps Island and Port Chicago can also be met with maximum 14-day running average EC of 2.64 mmhos/cm, or 3-day running average NDOIs of 11,400 cfs and 29,200 cfs, respectively. If salinity/flow objectives are met for a greater number of days than the requirements for any month, the excess days shall be applied to meeting the requirements for the following month. The number of days for values of the PMI between those specified in this table shall be determined by linear interpolation.

[b] PMI is the best available estimate of the previous month's Eight River Index. (Refer to Footnote 10 for Table 3 for a description of the Eight River Index.)

[c] When the PMI is between 800 TAF and 1000 TAF, the number of days the maximum daily average EC of 2.64 mmhos/cm (or maximum 14-day running average EC of 2.64 mmhos/cm, or 3-day running average NDOI of 11,400 cfs) must be maintained at Chipps Island in February is determined by linear interpolation between 0 and 28 days.

[d] This standard applies only in months when the average EC at Port Chicago during the 14 days immediately prior to the first day of the month is less than or equal to 2.64 mmhos/cm.