



## United States Department of the Interior

BUREAU OF RECLAMATION  
Central Valley Operations Office  
3310 El Camino Avenue, Suite 300  
Sacramento, California 95821

IN REPLY  
REFER TO:

CVO-400  
WTR.1-10

JUN 25 2003

Ms. Celeste Cantú  
Executive Director  
State Water Resources Control Board  
P. O. Box 2000  
Sacramento, California 95812-2000

Subject: Water Level Response Plan Pursuant to D-1641

Dear Ms. Cantú:

Attached for your approval is the Response Plan for Water Level Concerns in the South Delta Under Water Rights Decision 1641. We are seeking a new approval of this plan, which was first submitted on January 28, 2002, and is in effect until June 1, 2003. The plan has been modified to incorporate the State Water Resources Control Board's comments and conditions from last year and last year's experience in operating under this plan.

The Bureau of Reclamation (Reclamation) and the Department of Water Resources (Department) developed this plan in coordination with Mr. John Herrick and Mr. Alex Hildebrand, of the South Delta Water Agency (SDWA) as well as with representatives from the California Department of Fish and Game, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service.

This plan only addresses water level impacts due to the incremental effects of Joint Point of Diversion operations and water transfers. It includes provisions for forecasting water levels, mitigating incremental effects on water levels, developing preventative measures for problematic agricultural diversions, and maintaining regular communication between Reclamation, the Department, and SDWA.

In response to water level concerns from diverters downstream of the barriers, Reclamation and the Department provided portable pumps to augment irrigation when siphons failed. The use of these pumps was considered experimental last year. After successful use of the portable pumps, all parties agreed the portable pumps are a viable short-term mitigation as stated in the Response Plan.

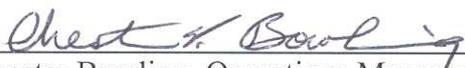
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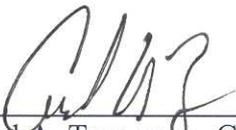
It is difficult to predict when water levels of concern may occur due to the numerous factors influencing the water levels in the South Delta. A key component retained in this plan concerns unanticipated water levels of concern. In the plan, Reclamation and the Department pledge to suspend the JPOD/transfer upon the request of SDWA if diverters within the South Delta experience water levels of concern when and where no such levels were forecasted.

Last year diverters from Tom Paine Slough experienced low water levels that were not forecast by the Department's Delta Simulation Model 2 and the cause of which is still not completely understood. Reclamation, the Department and SDWA will be closely monitoring that location this summer. The Department is considering the use of temporary pumps to supplement water levels in the slough should the problem occur again. In addition, this summer the Department is experimenting with alternate intake operations at Clifton Court Forebay, which may improve the effectiveness of the temporary barrier operations and the general filling of South Delta channels.

The Department applied for a localized dredging permit last year from the Army Corps of Engineers (COE), and the Department anticipates approval from the COE in time for the next dredging window this fall. The Bureau and the Department request your approval of this plan as required by Water Rights Decision 1641.

If you need any additional information regarding this plan, please contact Paul Fujitani, Bureau of Reclamation, at 916-979-2197 or Curtis Creel, Department of Water Resources, at 916-574-2722.

  
 Chester Bowling, Operations Manager  
 Central Valley Operations Office  
 Bureau of Reclamation

  
 Carl A. Torgersen, Chief  
 SWP Operations Control Office  
 Division of Operations and Maintenance

Attachment

cc: Mr. Alex Hildebrand  
 South Delta Water Agency  
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 Stockton, California 95267

Mr. John Herrick  
 South Delta Water Agency  
 P.O. Box 73092  
 Stockton, California 95267

## Response Plan for Water Level Concerns in the South Delta Under Water Rights Decision 1641

Staff from the Department of Water Resources (DWR) and the United States Bureau of Reclamation (Reclamation) have developed this Water Level Response Plan per the conditions set forth in the State Water Resources Control Board's (SWRCB) Water Rights Decision 1641 regarding joint points of diversion for the State Water Project (SWP) and the Central Valley Project (CVP). This Plan sets conditions for the operations of the SWP and the CVP as they pertain to the use of Joint Point of Diversion (JPOD) and additional pumping in the Delta to accommodate water transfers.

Reclamation and DWR will manage water transfers of their own and those of third parties consistent with this Plan. Third parties will be given the opportunity to participate financially in the actions called for in the Plan to mitigate for the incremental effects of their water transfer on water levels or have their water transfer rescheduled, if possible to a time period when these effects do not occur.

### Actions Covered by this Plan

This Plan establishes a process to address water levels of concern when such concern results from the incremental effects of JPOD or additional pumping to accommodate water transfers on water levels in the South Delta. An incremental effect on water levels is defined as a reduction in water surface elevation at low tide from what would occur absent the action. Water levels of concern shall be the levels at which ongoing or scheduled diversions in the southern Delta are impaired to the injury of water users in the southern Delta.

Reclamation, DWR, and the South Delta Water Agency (SDWA) shall strive to maintain diligent communication regarding the planning and execution of any action referencing this Plan and expected diversions throughout the southern Delta. This Plan assumes the continued existence of CVP/SWP facilities within the existing permitted export capabilities as of spring of 2003. If facilities, Clifton Court Forebay operations or export restrictions change, then the Reclamation and DWR will consult with the Executive Director of the SWRCB to determine whether the Plan requires changes and further approval.

Actions covered by this plan shall be contingent on forecasted water levels in the southern Delta. For Condition II below, these forecasts must indicate the action will not cause or aggravate water levels of concern.

Condition I. The following conditions provide a general description under which an action will not cause or aggravate water levels of concern.

- 1) A shift of pumping from CVP facilities at the Tracy Pumping Plant to SWP facilities at the Banks Pumping Plant and
  - a) total exports during the period that does not increase over that which would have occurred absent of the JPOD or transfer, and
  - b) operation of the SWP's Clifton Court facility does not change from the priorities of intake operation specified in the 1990 Draft Settlement Contract between

SDWA and DWR or from another operational regime agreed to by SDWA;

or

- 2) An increase of total exports by using available capacity at the SWP's Banks Pumping Plant and
  - a) the three tidal barriers in Middle River, Old River, and Grant Line Canal are installed and fully operated,
  - b) the Head of Old River Barrier is not installed or operated to materially affect the flow of the San Joaquin River from entering Old River, and
  - c) Clifton Court Forebay is operated consistent with the priorities specified in the 1990 Draft Settlement Contract between SDWA and DWR or with another operational regime agreed to by SDWA.

Condition II. If an action covered by this Plan is proposed that does not meet the conditions described above, the action may still occur if at least one of the following conditions is met:

- a) Forecasts show the action will not cause or aggravate water levels of concern;

or

- b) Adequate measures exist to offset the incremental effects of the action to water levels of concern. Reclamation and DWR propose to implement operational adjustments or install equipment (such as portable pumps) on a temporary basis to offset the incremental effects;

or

- c) Reclamation and DWR determine that no diversions will occur at a location and during a period when the action will have an incremental effect on water levels. Reclamation and DWR will contact the potentially affected parties prior to the action to ensure that the diverters have no plans for diversions during the period the action will occur.

Forecast Procedure.

To provide a methodology by which minimum (low tide) water levels within the SDWA service area can be forecasted under a proposed action covered by this Plan, DWR shall utilize the hydrodynamic component of its Delta Simulation Model 2 (DSM2). Model inputs will include projected tidal conditions at Benicia, projections of Delta inflows from the Sacramento River, Eastside streams and the San Joaquin River, high channel depletion needs for the month per the 1990 Draft Settlement Contract between SDWA and DWR, and projections of Delta exports by Contra Costa Water District (CCWD), the SWP and the CVP at Clifton Court and Tracy Pumping Plant which reflect the proposed action. Under such conditions, the low water levels at Middle River near the Howard Road Bridge, Old River near Tracy Road Bridge, Doughty Cut above Grant Line Canal Barrier, and east of Coney Island (DSM2 Channel 218) shall be determined by running DSM2.

Water levels are considered adequate if they are forecasted to be 0.0 msl or greater at Old River near Tracy Road Bridge, and Doughty Cut above Grant Line Canal Barrier, and 0.3 msl or greater at Middle River near the Howard Road Bridge.

The parties recognize that the Coney Island/Channel 218 location is downstream of the temporary barriers and will therefore often have water levels below that which is necessary for local diversions. DWR plans to install a permanent stage recorder in the area. Data from this station and an accurate record of the irrigation conditions (based on portable pump usage) will be used to develop the baseline water level of concern beyond which incremental effects of JPOD or transfers will warrant mitigation per this plan. A long-term solution for water levels of concern downstream of the barriers is to be developed within the CalFed South Delta Improvement Plan. Until such Plan is implemented, JPOD or transfer operations are contingent upon DWR and/or Reclamation providing adequate mitigation for incremental effects to water levels of concern for these diverters. Such mitigation may include diversion modifications, temporary pumps, or other measures. DWR, Reclamation, and SDWA will work together, and with the Management Agencies<sup>1</sup>, to resolve issues related to such mitigation.

#### Notice and Modeling Requirements

No later than seven (7) days prior to any JPOD or transfer operations, Reclamation and/or DWR shall give SDWA notice thereof. If an emergency arises, Reclamation and DWR shall give SDWA as much notice as possible prior to any such action. An emergency does not include operational changes due to ESA limitations or requirements. Such notice shall include modeling forecasts for the time frame during which the JPOD or transfer is scheduled to occur. During any such JPOD or transfer operation, Reclamation or DWR shall update the modeling no less than every week and more often if conditions vary from those modeled in a manner that could be adverse to water levels.

#### Actual Water Level Problems

Reclamation and DWR will suspend the action upon request by SDWA if diverters within the South Delta experience water levels of concern, when and where no such levels were forecasted. Reclamation and DWR will update the forecasts and propose appropriate mitigation, if applicable. At the time of the request, the SDWA will provide to Reclamation and DWR the time, location, and owner's name and contact information for the diversion experiencing the problem. The parties expect suspension of the action will normally occur within twelve hours after notification by SDWA and must occur no later than 24 hours after that notification. Reclamation and DWR will perform additional analyses of water level conditions within the SDWA. The analyses will include, but not be limited to, updated hydrodynamic modeling. If Reclamation and DWR can support a determination of no incremental impact with nearby observed data, the action may continue. If the analyses show that an incremental impact does occur, mitigation will be offered. SDWA will then have five (5) days to respond to the proposed mitigation. If SDWA does not respond within five (5) days, the pumping will resume. If SDWA declines the proposed mitigation, Reclamation and DWR may appeal to the SWRCB,

<sup>1</sup> The Management Agencies include the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and the California Department of Fish and Game.

Chief, Division of Water Rights to deem the mitigation offer acceptable or not. Reclamation and DWR will continue the action until the SWRCB has judged the action unacceptable.

The contacts for Reclamation and DWR are Curtis Creel and Paul Fujitani, respectively, or their designees. Reclamation and DWR will also provide SDWA with contacts for after-hours notification.

#### Updated Modeling

During the existence of this Plan, Reclamation, DWR and SDWA shall work together to improve the reliability of the modeling used to predict the effects of export pumping on South Delta water levels. The parties shall also work together to refine the definition of water levels in the South Delta below which local diversions become impaired. If additional or replacement definitions of said water levels are identified through this Plan, they shall be incorporated into this Plan.

#### Preventive Measures.

The parties shall work together to identify diversions which are most susceptible to impairment due to low water levels and attempt to develop actions which may mitigate any such low water levels at said diversions; perhaps lowering the water levels of concern. Any lowering of these concern levels shall only occur if all diversions within a particular area are identified and measures acceptable to the diverters are implemented.

Any modifications needed to protect agricultural diversions by water right holders in the southern Delta will be required only if the diverters can demonstrate that they have a valid right to the water during the period when water levels due to JPOD are too low.

The parties recognize that dredging would be a valuable portion of any program to address water level issues and will be essential to prevent an increasing conflict between exports and South Delta diverters. Reclamation and DWR will implement a site specific dredging program in the South Delta for the benefit of agricultural diversions provided necessary regulatory permits can be obtained. Reclamation and DWR recognized that a comprehensive, long-term dredging program is desired by SDWA. However, such a program is viewed by both Reclamation and DWR to be beyond the scope of this Water Level Response Plan.

The parties agree that any actions or measures taken hereunder to assist local diverters shall not be considered a final resolution of the water level, circulation, or quality problems in the South Delta associated with the operation of the CVP and SWP export pumps, although such actions might be a portion of a long-term solution.

The diverters and water suppliers within the South Delta, excepting those diverters and water suppliers who export water for use outside of the Delta, are the beneficiaries of this Response Plan.

Names, phone numbers, and FAX numbers of representatives:

Primary Contact

Alternate Contact

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6/23/2003