

**M e m o r a n d u m**

Date : January 31, 2001

To : Management Agencies

From : Project Agencies  
Department of Water ResourcesSubject: **Fish Action: January 27 through January 31, 2001**Description of Action

Per the CALFED Operations Juvenile Salmon Protection Plan, exports may be reduced to approximately 6,000 cfs combined for a five-day period when the Knights Landing or Sacramento Catch Index reaches a value of 10. Continued curtailment could be based upon continuous high index values or daily losses greater than 25 of chinook salmon at the CVP/SWP diversions in the south Delta. A multi-purpose five-day reduction in exports took place from January 17 to January 21 based upon the Sacramento Catch Index exceeding 10. Exports were increased on January 21 and again on January 22 and, since then, on at least three days, daily chinook salmon losses greater than 25 have occurred. The schematic for the Juvenile Salmon Protection Plan indicates use of salmon loss levels greater than 25 at the CVP/SWP to trigger the continuation of an export curtailment even if the Sacramento or Knights Landing Catch Index drops below 10 which has been the case during the past week. The Sacramento Catch Index was 6.7 on January 25 and 9.7 on January 26.

Based upon the loss level of juvenile chinook salmon in recent days, the Management Agencies requested a five-day reduction in combined exports to 6,000 cfs beginning January 27 and ending January 31. The majority of the export reductions would occur at the SWP since that is mainly where the losses occurred. The purpose of the action is to reduce the loss of juvenile chinook salmon and steelhead at the CVP/SWP Delta diversions and to otherwise improve the survival of juvenile salmon and steelhead in the Delta.

On January 26, a Data Assessment Team (DAT) conference call was made with representatives from the Management and Project Agencies in which the above actions were discussed. Mutual concurrence at the staff level to implement the proposed action was received. The notes from the DAT meeting are included.

Monitoring results and salmon and steelhead salvage/losses were re-evaluated on January 29 during a DAT conference call. After discussing the status of fish movement and losses over the weekend, the Management Agencies decided to continue the curtailment through January 31.

SURNAME

DWR 155 (Rev. 2/86)

Z. Petri 2/1/01

C. C. Carl 2/2/01

Per the CALFED Operations Juvenile Salmon Protection Plan, the Delta Cross Channel gates will be closed for four days beginning January 26 based upon the Sacramento Catch Index being greater than 5. It is unlikely the gates would be opened on January 30 for two reasons: the gates are closed for the high Sacramento River flows at Freeport which peaked at about 29,000 cfs on January 28 and the gates must be closed on February 1 per D-1641.

#### Estimated Cost Of Action

The Department of Water Resources has estimated that these actions could reduce combined Central Valley Project and State Water Project exports by approximately 56 TAF (about 12 TAF for CVP and 44 TAF for SWP). The estimate assumes exports would continue at a combined level approximately between 11,600 and 11,900 cfs in the base operation. The actual amount could be either more or less dependent upon the flow in the San Joaquin River at Vernalis. However, if the export curtailment were reduced by two days, the estimate would be lower. DWR and the Bureau of Reclamation have not performed a cost analysis of the change in operations.

#### Method Of Accounting For Costs

DWR and Reclamation will provide to the Management Agencies an accounting of the actual water, energy, storage and conveyance costs. The water cost analysis will be provided within thirty days of completing the action and will include a comparison between the actual operation (with the fish action) and a base operation (based on planned exports). All other costs will be submitted thirty days upon completion of the recovery actions. Disagreements regarding the analysis are to be discussed within the B2/EWA Interagency Team. Disputes will be reviewed by the Ops Group and elevated to the Water Operations Management Team for final resolution.

#### B(2)/EWA Assets

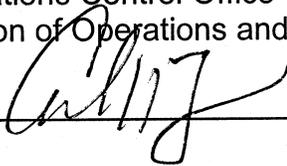
The Management Agencies have concluded that this may be a joint CVPIA/EWA action. Therefore, both b(2) and EWA assets may be applied to the export reductions of the CVP and SWP. The proposed fish action is not to impact the baseline delivery capability of the SWP. Whether the action would impact the CVP delivery capability depends upon the amount of b(2) water used. Therefore, DWR is

to make operations and water allocation decisions based upon the base operations plan, absent the fish action, whereas, Reclamation is to make operations and water allocation decisions based upon the b(2) operations plan.

There are adequate CVPIA and EWA assets available to cover both January Delta fish actions. The amount of water and the time it becomes available will be determined when DWR/Reclamation submit the final water cost analysis to the Management Agencies.

Carl Torgersen, Chief  
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Division of Operations and Maintenance

Date

  
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Chester Bowling, Operations Manager  
Central Valley Operations  
Bureau of Reclamation

Date

2/5/01  
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Management Agency Authorization provided by:

Department of Fish and Game – Perry Herrgesell  
U.S. Fish and Wildlife Services – Michael Thabault  
National Marine Fisheries Services – Michael Aceituno

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Subject: draft Summary of DAT/OFF Conference Call 1/26/2001

draft Summary of DAT/OFF Conference Call 1/26/2001

Participants: SGreene, SFoss, MKjelson, BOppenheim, RSitts,  
JSnow, TBoardman, MPierce, AHinojosa, ASandu,  
HVantran, RGuinee, JWhite, JLeahigh, PFujitani,  
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### Chinook Monitoring

Knights Landing - The catch reported last Wednesday, 1/24, was no yearling Chinook. More data will be available this afternoon covering Wednesday and Thursday.

Delta - On Thursday, 1/25, 5 yearling sized Chinook were caught in the Sacramento Area seines. They were 85 - 133 mm. The Sacramento Catch Index was 6.7. In addition, on Wednesday, 1/24, 10 yearling sized Chinook were caught at the Knights Landing FWS beach seine, although they are too far upstream to include in the Sacramento Catch Index. So far, today, 1/26, no yearling sized Chinook have been caught in the Sacramento trawl. Yesterday, FWS informed the USBR the catch index was > 5 and requested preparation to close the Delta Cross Channel gates today after the DAT call.

SWP&CVP Delta Export Facility Salvage - Chinook loss and Steelhead salvage increased at the SWP since last Monday, 1/22, and the preliminary data for today indicates relatively high loss and salvage again.

At the SWP on 1/22 winter run length Chinook unclipped loss was 82; on 1/23 was 13; and 1/24 was 27. Preliminary loss for 1/25 was 25. The clipped Chinook loss on 1/22 was 144, on 1/23 was 35, and on 1/24 was 186. The clipped Chinook likely originated from the Coleman late fall production release in early January or could be from the Delta release in the Sacramento River near the Delta Cross Channel gates.

At the SWP in 1/22 Steelhead clipped salvage was 69; on 1/23 was 18; and on 1/24 was 45. The relatively high salvage of clipped Steelhead likely originated from the Mokelumne Hatchery release, although Steelhead releases have been made from the American River hatchery too.

At the CVP, Chinook loss and Steelhead salvage was low and did not increase significantly.

Water Quality - Water quality is very good. Rock Slough is still at 233 mg/l, and has been for the last two weeks because pumping out of Rock Slough is still low. The salinity will improve as it is pumped through Rock Slough. Water quality in Old River at the Los Vaqueros diversion is better at 120 mg/l.

Operations - The projects declared excess conditions 1/24. The SWP is targeting exports at 6680 cfs plus 1/3 of Vernalis flow. The Sacramento River flow is expected to increase to > 30,000 cfs at Freeport by Sunday or Monday. Oroville is releasing the minimum of 1,750 cfs.

The CVP is targeting exports at 4,100 cfs. Keswick is releasing 3,700 cfs and Nimbus is releasing 1,500 cfs.

#### DAT Recommendations

The DAT biologists requested the DCC be closed at 10 am this morning based on the Sacramento Catch Index of 6.7. Another DCC gate closure indicator was observed; the Sacramento Flow at Knights Landing increased greater than 25%. The 4-day closure begins today and absent additional fish indicators goes through Tuesday morning. The operators expect the gates will remain closed through the end of the month because the flows are expected to increase and they will be closed starting 2/1/2001 under the Water Quality Control Plan.

Although Chinook loss and Steelhead salvage is relatively high, the Salmon Protection Plan Decision Tree indicates both a Sacramento Catch index > 10 and loss value > 25 indicate an export reduction. The DAT biologist are confident that the Chinook and Steelhead at the facilities are from the Sacramento basin, and recommended an export reduction to combined 6,000 cfs. Since the decision tree was described as a "living" document, and intended to be revised upon additional information, the DAT biologists will re-evaluate the decision tree.

The operators estimated an export reduction to combined 6,000 cfs for 5 days would cost the EWA and CVPIA 56,000 af. Operators and biologists discussed the reductions at each facility. The DAT biologists recommended a significant reduction at the SWP because most of the Chinook loss and Steelhead salvage occurred at the SWP. The EWA and CVPIA assets used will be discussed by the WOMT. The operators and biologists decided to split the combined exports - 3,000 cfs at the SWP and 3,000 cfs at the CVP.

The DAT biologists recommended re-assessing the salvage conditions daily in consideration of truncating the 5-day reduction.

The DAT will have a conference call Monday morning at 10am to re-assess the information.

The DAT and operators agreed to reduce exports to combined 6,000 cfs starting Saturday morning and continuing through Monday. The operators will schedule capacity exports starting Tuesday morning unless biological information on Monday morning supports a continued export reduction.

The DAT will inform the WOMT of this decision this morning.

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To: calfedda@water.ca.gov  
Subject: Summary of DAT/OFF Conference Call 1/29/2001

### Summary of DAT/OFF Conference Call 1/29/2001

Participants: SGreene, HVantran, SFoss, MKjelson, BOppenheim, JSnow, TBoardman, AHinojosa, RGuinee, JWhite, JLeahigh, PFujitani, TMorstein-Marx, SSmith, TPettit, BHerbold

### Chinook Monitoring

Mill Creek - The traps were lifted last Thursday, 1/25, because of high flows, and installed again Friday. The catch was relatively low, only 7 yearling sized Chinook were caught over the weekend.

Deer Creek - The traps were lifted last Thursday, 1/25, because of high flows, and installed again Friday. The catch was relatively low, only 3 yearling sized Chinook were caught over the weekend.

GCID - 2000 Chinook were caught Sunday, 1/28. 16 were yearling sized and the rest were fry.

Knights Landing - Last Friday, 1/26, 4 yearling and 1 fry were caught. The traps were checked again Sunday. 3000 salmon were caught, 45 yearling sized and the rest were fry. Sacramento River flow at Wilkins Slough increased from 7,000 cfs on 1/24 to 15,000 cfs Friday and 19,000 cfs Sunday. Turbidity was high, about 20 NTU. The Knights Landing Catch Index was 11.1 as of Sunday, 1/28.

Delta - The Sacramento Index based on the trawl last Friday and beach seines last Saturday was 17.4. 3 yearling sized Chinook were caught in the trawl last Friday, and the catch in the Sacramento Area beach seines last Saturday (corrected for effort) was 14.4 yearling sized Chinook.

SWP&CVP Delta Export Facility Salvage - The combined loss of yearling sized Chinook was 104 on 1/26, 10 on 1/27 and 28 on 1/28. The combined salvage of non-clipped Steelhead was 12 on 1/26, 0 on 1/27 and 0 on 1/28. Clipped Steelhead salvage was 82 on 1/26, 55 on 1/27, and 0 on 1/28.

### Coleman Late Fall Surrogates Losses at the Delta Exports

Date	Site	Released	Loss	%Loss
11/3/00	Battle Cr	60,000	66.90	0.11
11/9/00	Walnut Grove	120,300	65.66	0.05

12/4/00 Battle Cr	70,000	54.91	0.08
1/5/01 Battle Cr	420,000	0.00	0.00
1/7/01 Battle Cr	70,000	0.00	0.00
not identified yet		52.86	

Water Quality - Water quality is very good. The Delta Cross Channel gates were closed last Thursday 1/26.

Operations - The SWP and CVP reduced exports to 3,000 cfs each starting Saturday, 1/27, based on relatively high salvage at the SWP. Both projects were scheduled to increase to capacity on Tuesday subject to the biological information on this conference call.

Delta inflow peaked on Sunday. The Sacramento River at Freeport peaked at 29,000 cfs, but will decreased 5,000 cfs per day. The San Joaquin River peaked at 3,000 cfs, but will decreased 100 cfs per day.

Keswick is releasing 3,600 cfs and is decreasing to 3,250 cfs. Oroville is releasing 1,750 cfs. Folsom is releasing 1,500 cfs.

Two small storms are predicted this weekend and next week, but less than an inch is predicted in the Feather River basin.

#### DAT Recommendations

The DAT biologist recommended continuing the export reduction two more days, but will re-evaluate the biological data on the regular Tuesday DAT Conference Call.

So far, this export reduction has cost the SWP 9,000 af per day, and the CVP 2,500 af per day. On 2/1/2001, the E/I ratio is reduced from 65% to 45% and the Delta Cross Channel gates will be closed through 5/20/2001. The cost of the export reduction will decrease as of 2/1. The original estimated cost of this 5- day export reduction was about 60,000 af. 45,000 af of that was estimated at the SWP.

The next DAT Conference Call will be the regularly scheduled call Tuesday, 1/30/2001. The number is 657-4111.

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