CALFED Ops Group

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CALFED Water Operations Management Team

CALFED Ops Group Decision Concerning Reductions in Pumping for Fish

This summary is to memorialize the decision made at the CALFED Ops Group meeting on February 23, 2000. At the meeting, the Department of Water Resources and the U.S. Bureau of Reclamation agreed to voluntarily decrease exports at the State Water Project Banks Pumping Plant from its current rate of about 9,000 cfs to 6,000 cfs. The curtailment was to begin as soon as practicable (which it did on February 24) and continue through March 1, 2000. While the curtailment is at the SWP pumping plant, it may actually reduce the amount of water that can be exported for the Central Valley Project (particularly the Cross Valley Canal contractors).

Biological Basis for the Export Reduction:

The National Marine Fisheries Service presented data on current salvage at both the Tracy and Skinner fish salvage facilities. The data indicated that the yellow light level for winter-run chinook (2897 salmon in the winter-run size range) has been exceeded and NMFS expressed concern that based on current salvage trends, the red light level might be reached by early March. NMFS believes that a large number of the winter-run salmon outmigrants are presently within the Delta and at risk due to CVP and SWP exports. They also believe that an export reduction at this time will protect these fish. The goal expressed by biologists is to avoid exceeding the red light incidental take level at this time or delay its potential exceedence until late March. Based on historical salvage data and the current hydrology, they believe the majority of the winter-run juveniles will have moved out of the Delta by the end of March and there will be less risk posed by export pumping to the fish at that time. Gary Stern of NMFS acknowledged that reducing exports now would be taken into consideration if the red light level were exceeded later in the season.

The recommendation presented at the CALFED Ops Group meeting was for the projects to decrease combined exports by 3,000 to 4,000 cfs for a period of at least a week. The export reduction preferred was a decrease in exports at Banks Pumping Plant where the salvage rates have been higher.

The proposal had been discussed in depth earlier in the day by the Data Assessment Team without a recommendation for a specific decrease or duration in pumping.

The U.S. Fish and Wildlife Service also indicated that salvage of delta smelt at project facilities was about 300 fish per day for the 14-day mean and had increased in recent days (the yellow light for delta smelt is a 14-day mean of 400 fish per day). Biologists believe the delta smelt being salvaged at this time are mature adults with some nearly ready to lay eggs. They stated that an export reduction at this time would provide the most benefit to delta smelt by lessening the take of adults and, therefore, have the likely effect of increasing the number of progeny. Ken Sanchez of USFWS said the Service would recognize the potential benefit to young delta smelt production from an export curtailment at this time if incidental take of young-of-the-year delta smelt approached or somewhat exceeded concern levels later this year. He did, however, qualify his statement by saying that he could make no guarantees on USFWS actions to protect delta smelt later in the year, particularly if take greatly exceeds the incidental take levels contained in the delta smelt biological opinion. His statement was generally seen by the project operators as a positive sign that USFWS would be willing to try to minimize impacts on the projects later in the year after smelt have spawned, if the projects provide protection to adult delta smelt at this time.

Status of Current Project Operations:

DWR achieved its goal of securing about 1,062,000 acre-feet of SWP storage in San Luis Reservoir on February 23; CVP storage in San Luis Reservoir totaled 700,000 acre-feet on February 23. On February 22, the SWP began wheeling Cross Valley Canal 1999 contract water that had been postponed because unused pumping capability at Banks Pumping Plant had not been available before that date. There are about 66,000 acre-feet of CVC 1999 water to be wheeled before the end of the USBR's contract year (February 29). About 14,000 acre-feet were wheeled on February 22 and 23. The SWP direct water delivery demands have temporarily decreased due to the recent stormy weather. Current deliveries are about 3,500 cfs but will likely increase unless the San Joaquin Valley and Southern California receive another series of storms.

Banks pumping has been about 9,000 cfs recently to fill SWP share of San Luis and to wheel CVC water. The SWP wheeling capability available for USBR use for CVC deliveries or Joint Point of Diversion pumping to fill the CVP

share of San Luis Reservoir is equal to the difference between Banks exports and SWP's direct deliveries.

USBR is currently exporting the maximum it can at the Tracy Pumping Plant (4,100 cfs is the maximum this time of year due to capacity limitations in the Delta Mendota Canal).

Other facts/factors:

- The Department of the Interior has a b(2) placeholder of 35,000 acre-feet for March 2000 in the operations plan. Although not guaranteed, Federal representatives indicated they would consider whether the export reduction made now could be accounted as b(2) water. DOI could apply the March b(2) water to the reduced exports now. It could also look at reconfiguring other actions in June to cover the amount of reduced exports. While these options were discussed at the CALFED Ops Group meeting, it was clearly stated that USFWS management would make the final determination on how b(2) water would be used.

- A primary goal of the SWP and CVP is to fill San Luis Reservoir by April 14, 2000. A preliminary look at the operations plan indicates there is still sufficient export capability to achieve the goal of filling San Luis by April 14.

- Water user stakeholder concern was expressed about the potential impacts to water quality. Currently, the quality of water being pumped is very good; moving exports to a later time could result in poorer water quality in San Luis Reservoir and at delivery points to urban water users.

- There was a lengthy discussion about the significance of the genetic identification of salmon that are salvaged at the Tracy and Skinner facilities. It was reported that no tissue samples had been taken recently for genetic analysis. With no recent samples to analyze, it is now difficult to validate or refute the estimate of loss of winter-run juveniles. However, samples are now being taken and will be analyzed in the next couple of weeks. A more in-depth discussion is provided in the enclosed DAT memo to the CALFED Ops Group regarding the biological justification for the export reduction at the SWP.

- The CALFED Ops Group requested the DAT review the current monitoring efforts and determine if additional monitoring is warranted. This will be coordinated with a delta smelt workgroup being formed by the USFWS to specifically look at monitoring and actions necessary to protect delta smelt.

DWR and USBR staff will review the operations plan studies and modify them as necessary to incorporate the effects of the temporary export reduction decision on use of excess SWP capacity for meeting CVP needs.

If you have any questions regarding this matter, please contact Larry Gage at (916) 574-2656 or Lowell Ploss at (916) 979-2199.

Larry K. Gage, Co-Chair
CALFED Ops Group

Date: 2-29-2000

Lowell Ploss, Co-Chair
CALFED Ops Group

Date: 2-29-2000

Enclosure

cc: Greg Gartrell, Chair
No-Name Group

MEMORANDUM

From : Data Assessment Team, CALFED Ops

To : CALFED Operations Group

Date: February 29, 2000

Subject : DAT Biological Justification For Export Reduction at the SWP 2/24/00

On 2/23/00 DAT recommended an export reduction at the SWP for the protection of winter-run Chinook, as well as other listed species (steelhead, spring-run Chinook, delta smelt) and candidate species (fall-run Chinook) within the Delta.

WINTER RUN

Winter run losses at the export facilities began increasing on 1/18/00 when Sacramento flows increased with this season's rains. Losses increased at an even greater rate beginning 2/14/00 when flows increased significantly again, and combined exports increased to greater than 12,000 cfs. The density of loss (fish per acre foot) increased with increased exports as well. Over 90% of the winter-run Chinook losses have occurred at the State's Delta export facility. The "yellow light" level of concern for winter run, a loss of 2,897, was exceeded 2/20/00. Loss continued to increase to 3,700 through 2/23/00. At the current loss rate, the "red light" level of concern could be exceeded by the first week in March.

Based on salvage data and genetic characterization, winter run losses are highest between the months of February and April. The length frequency distribution of larger Chinook at the export facilities changed from 130 mm to 200 mm in January to 110 mm to 170 mm in February. Based on life history information, this latter range seen in February 2000 is the length frequency distribution that contains a higher proportion of winter run. The winter run emigration this year is relatively early.

So far this year, a limited number of salvage samples were analyzed for genetic characterization. Most of the samples were from larger Chinook salvaged during August and September, and from fry in January. About half of the larger Chinook salvaged during November and December were analyzed. Although these were larger than the winter run length range, about 20% were genetic winter run. About a third of the larger Chinook salvaged during January were analyzed. Most of these were in the winter run length range, and about 10% were genetic winter run. A very crude estimate based on genetic characterization is a loss of 64 winter run in November and December, and 85 winter run in January.

Unfortunately, none of the larger Chinook salvaged in February have been analyzed yet. Chinook salvaged in February are more likely to be "genetic winter run" than the previous samples; based on life history information and genetic characterization of salvage over the past three years, we expect most winter run to emigrate between February and April. Again, a very crude loss estimate based in genetic characterization information is 60% of the winter-run loss that is based on length criteria. At the current rate of loss, we could exceed the 2% take level of concern based on genetic characterization by the end of the season.

The DAT considered the following information (1) high loss rate of Chinook in the winter-run length range, (2) the timing of this high loss rate during a period when most winter run emigrate through the Delta, (3) the trend for winter run to have an outmigration of about a month, (4) and the hydrologic forecast for the upcoming week, and determined that most benefits for winter run Chinook would be achieved by a reduction in exports now rather than after exceeding the "red light" level of concern. By waiting for the "red light", we could miss the majority of the winter run emigration.

SPRING RUN AND FALL RUN FRY

Other runs of Chinook will benefit from an export reduction now. The larger Chinook salvaged this time of year are winter, yearling-spring and late-fall runs. Salvage of fall run fry increased dramatically beginning 2/16/00.

STEELHEAD

Steelhead salvage has increased significantly since 1/19/00. The cumulative salvage since 12/1/99 through 2/21/00 is 2,000. The proposed "yellow light" level of concern for steelhead is 400, and the "red light" level is 750. We exceeded the proposed "red light" level 2/8/00, and the salvage increased at an even greater rate beginning 2/17/00 when flows increased significantly again and combined exports increased to over 12,000 cfs. Both salvage and salvage per acre foot increased with increased exports.

DELTA SMELT

Delta Smelt take increased significantly throughout the month of February. The 14-day running average through 2/22/00 was 300/day. The "yellow light" level of concern for the month of February is a 14-day running average of 400/day. The "red light" level of concern is a total of 10,910 Delta Smelt salvaged. At the current rate of take, the "yellow light" will likely be exceeded in the next week and the "red light" may be exceeded.