

2006 Delta Plan
Deadline: 11/13/06



**Public Workshop Comments
Draft Water Quality Control Plan
for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary
State Water Resources Control Board
November 13-14, 2006**

**Comments of San Joaquin Audubon Society,
Marin Audubon Society and Golden Gate Audubon Society**

INTRODUCTION

San Joaquin Audubon Society, Marin Audubon Society and Golden Gate Audubon Society appreciate the opportunity to provide input to the State Water Resources Control Board's Board review of its Draft Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary dated September 2006. These three Audubon Society chapters have participated in the Board's water quality and water rights allocation reviews for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary for more than twenty years. Most recently, these Audubon Society chapters sought and secured judicial review of the Board's Water Right Decision 1641 (D-1641) in order to assure that water rights to the San Joaquin River were allocated in a manner consistent with the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary adopted in May 1995 (1995 Plan).

That litigation resulted in a ruling from the Third District Court of Appeal overturning D-1641 because it failed to implement the Vernalis Pulse Flow Objective in the 1995 Plan while the San Joaquin River Agreement (SJRA) is in effect, and failed to implement the 1995 Plan's southern Delta salinity objectives. *State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 674, 777, 844. The Court of Appeal remanded D-1641 to this Board to conduct further proceedings to "either assign responsibility for meeting the Vernalis Pulse Flow Objective and the southern Delta salinity objectives or to modify those objectives." 136 Cal.App.4th at 844. In response, the Board has circulated its Draft Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Draft Plan) for public review. Accordingly, the Audubon Society chapters submit these comments.

The Draft Plan falls far short of achieving the salmon doubling objective required by state and federal law. We respectfully object to the Draft Plan, and request significant strengthening of its water quality standards, in the following respects:

DISCUSSION

I. The Draft Plan Fails to Acknowledge the Impending Collapse of the Bay-Delta Ecosystem, and the Utter Failure of Existing Regulatory Controls.

As required by state and federal law, the 1995 Plan directed, in its Salmon Protection Table 3 Water Quality Objectives, that "[w]ater quality conditions shall be maintained together with other measures in the watershed, sufficient to achieve a doubling of natural production of chinook salmon from the average production of 1967-1991, consistent with the provisions [of] State and Federal law." Contrary to this primary water quality objective, after adoption of the 1995 Plan the average escapement of fall-run chinook salmon in the San Joaquin River has continued to plummet. The average escapement from 1967 to 1991 was 18,211, yielding a doubling goal of 36,000 salmon. But instead of moving salmon production upward toward this goal, the Board's weak and ineffective resource management policies have caused the average escapement to fall. Between 1992 and 2004, escapement averaged only 13,855 fall run chinook salmon, a 24 percent decline in escapement from 1967-1991 levels.

Instead of acknowledging the utter failure of its regulatory programs, and resolving to adopt the substantial reforms necessary to reverse the impending collapse of the Bay-Delta ecosystem, the Draft Plan proposes more of the same failed policies. Accordingly, we recommend the following improvements.

II. The Draft Plan's Substitution of VAMP Target Flows for the Substantial Flow Increases Necessary to Restore Salmon Populations Must Be Rejected.

The Draft Plan proposes to further relax the already deficient Plan Flow Standards by supplanting the Spring Pulse Flow Requirements of the 1995 Plan with the less stringent VAMP experimental target flows through December 31, 2011 (or the termination of the SJRA, whichever occurs first). Draft Plan at 21-25. By thus further weakening, rather than strengthening, spring pulse flow objectives for the San Joaquin River, the Draft Plan becomes the problem rather than its solution, driving a final nail in the fall run Chinook's coffin.

Instead the State Water Board should institute the flow reform measures recommended by the Department of Fish and Game in its March 2005 Public Workshop Comments on Issue 8 (Spring Pulse Flows in the San Joaquin River at Vernalis). The Board should also adopt the recommendation of hydrologist Arve R. Sjovald (attached, and discussed separately by the California Sportfishing Protection Alliance and others) documenting the need to substantially **reduce exports** from the Banks pumping facility during the months of December, January, February and March. These recommendations are summarized below.

III. The Magnitude and Duration of the VAMP Target Flows Are Too Low.

In its March 2005 Public Workshop Comments on Issue 8, the California Department of Fish and Game (CDFG) noted that "even with the flow objectives in the 1995 Plan, SJR [San Joaquin River] salmon populations are showing a declining trend." *Id.* at p. 2. CDFG concluded that the 1995 Plan's Spring Pulse Flow Objectives were inadequate because their duration was too short and their minimum flows were too low. *Id.* at p. 3. CDFG observed that "about 50% of salmon smolts out-migrate before Mid-April or after Mid-May and thus do not receive protection from conditions provided during the VAMP window." *Id.* at p. 6. CDFG concluded that "prolonging the VAMP window of protection from April 1 to May 31, and changing the frequency of Standard Minimum Flow Levels" would result in "substantial gains in adult salmon escapement."

In particular, CDFG's review of applicable data demonstrated that "if the Delta Inflow Standard target flow levels to protect SJR salmon . . . were changed in terms of **increased magnitude, prolonged duration, and reduction in re-occurrence interval of the lowest Standard Year Type, then substantial gains in SJR adult salmon are possible.**" *Id.* at p. 20. For example, CDFG estimated that these improvements could increase SJR chinook salmon

escapement to nearly 32,000 salmon, just 4,000 salmon short of the 1995 Plan's Narrative Salmon Doubling Goal of 36,000 SJR adult fall-run Chinook salmon. *Id.* CDFG pointed out that its recommended increase in the duration and minimum flow during the spring pulse period would also result in a substantial increase in steelhead trout smolt populations. *Id.* at p. 25.

IV. Increasing Spring Pulse Flows Will Reduce Excessively Warm Water Temperatures for Salmon and Steelhead Smolts.

CDFG's comments also noted that "excessively warm water temperatures for salmon and steelhead smolts after the VAMP window time period (e.g., after May 15)" were due to substantial drops in post-VAMP flows at Vernalis. This reduction in flows in late May resulted in a significant increase in water temperature at Vernalis, approaching the 68 degrees Fahrenheit daily average lethal limit for salmon smolts. *Id.* at p. 26. CDFG pointed out that "[d]ata collected in the last 10 years suggest that **if flows at Vernalis remain elevated (e.g., to approximately 4,000 cfs) during the May 16 through May 31 time frame**, . . . then water temperatures from Vernalis to Jersey Point (e.g., interior Delta) should remain **under the lethal limit** (68 degrees Fahrenheit daily average) for salmon smolts outmigrating past Mossdale during the warmer air temperature time periods." *Id.* at p. 26. Noting that "the existing body of scientific evidence . . . suggests that there is a strong correlation between the number of outmigrating smolts passing Mossdale and subsequent returns of adult salmon," CDFG recommended "an expanded window with higher Vernalis flow objectives for increased protection of fry." *Id.* at p. 27.

V. The Draft Plan Should Substantially Reduce Pumping from the Banks Facility During December, January, February and March.

Substantially increased State Water Project pumping during the winter appears to be a primary cause of the Bay-Delta's ecological collapse. Winter pumping at the Banks pumping facility during the last four years of the 1990's averaged only 573,000 acre feet. During the next five years, average State Water Project diversions during these four winter months more than **doubled**, to 1,331,000 acre feet. Non-Table-A diversions likewise **increased** dramatically from the late 1990's to the early 2000's. From 1996 through 1999, non-Table-A diversions averaged 257,000 acre feet. During the next five years, the non-Table-A diversions nearly doubled, to 473,000 acre feet.

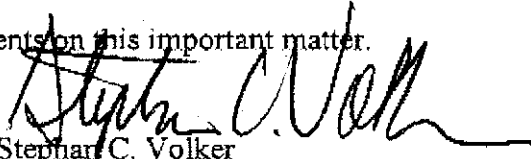
Yet State Water Project releases from the Oroville dam **decreased** dramatically from the late 1990's to the early 2000's. Between 1996 and 1999, Oroville releases during these four winter months averaged 2,132,000 acre feet. During the following five years, from 2000 to 2004, however, Oroville releases averaged only 855,000 acre feet, less than half the pre-2000 level of releases.

This severe disparity between State Water Project **inflow** at the Oroville dam, and **outflow** at the Banks pumping facility, looms as the single most significant and fundamental change in management of the Bay-Delta system during the past decade. This dramatic increase in winter diversions relative to inflow appears to be a significant factor in the ongoing collapse of the Bay-Delta ecosystem. Accordingly, we strongly urge the Board to curtail Delta diversions during the winter months in order to restore much-needed balance to this obviously over-taxed ecosystem.

CONCLUSION

For the foregoing reasons, we urge the Board to reject the Draft Plan and to make the significant modifications we outline above.

Thank you for considering our comments on this important matter.


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Enclosure: Supplemental Information on SWP Pumping Regimens in the Delta, 1996-2004
(by Arve R. Sjøvold, dated September 18, 2006)

**SUPPLEMENTAL INFORMATION ON SWP PUMPING
REGIMENS IN THE DELTA, 1996-2004**

**By: Arve R. Sjovold
September 18, 2006**

Recent investigations of the monthly Banks pumping data for the SWP shows a significant increase in pumping during the months of December, January, February and March for water years 2000 and beyond. Corresponding data on releases from Oroville Dam on the Feather River show that beginning in water year 2000 significantly less water was being released and dam levels were generally lower during this period. The combined view of these data indicate a complete reversal of pumping and releases prior to water year 2000. In fact, releases from Oroville are significantly less than SWP pumping at Banks from 2000 on whereas releases were significantly more than banks pumping prior to 2000. It is quite reasonable to assume that this change in pumping regimen may be the major factor in causing the pelagic organism decline in the Delta that was observed after 2000.

The months of December, January, February, and March were selected for study especially because during those months pumping from Banks is constrained primarily only by Delta outflow standards. These may be insufficient to protect environmental quality in the face of the changed pumping regimen. This period should be of particular concern because runoff records show that December and January are often very low runoff months. During dry years, even February can be a low runoff month. It is quite reasonable that operations in the Delta during these months may have to be constrained more. The present constraints were developed under SWRCB purview based on data and arguments made under conditions when pumping from Banks was generally less than releases from Oroville.

Before final conclusions can be reached on this assessment, it will be necessary to include the corresponding set of Delta pumping by the CVP and releases from Shasta. It is possible but unlikely that CVP operations were curtailed to allow more vigorous pumping by the SWP. Also of interest in this matter is to investigate the payouts under the Environmental Water Account (EWA) during this period. Since the EWA was promulgated to provide water for fish, it appears that this has not been working. In fact, it is possible that EWA payouts were made at the same time vigorous pumping was taking place.

Another matter to investigate is the delivery of water pumped during these four months before and after year 2000. Preliminary data indicates that most of the increased pumping was being used to deliver "surplus" water, "carryover" water, or "turnback pool" water. It would be a mistake of the first order to allow delivery in any of these categories if a realistic assessment shows that there is no surplus water of any kind. These three categories of delivery, as far as can be determined, are usually scheduled for the months in question except for December. They are not part of contractually required Table A delivery commitments so there is no necessity to do them.

It is my opinion after studying this data that there should be strict environmental constraints placed on operations in December and January and that the month of February should be conditional on findings of above average runoff and or snowpack. Without a revisit of the constraints on Delta operations, Delta health will be tenuous.

Attached is a Table and chart of the SWP operations data for the winter months during the years 1996 and 2004.

Table of SWP Operations

Water-yr	Delta Diversions Sum(D,J,F,M)		Non-Table A Diversions		Oroville Releases (D,J,F,M)		8-River Indx (D,J,F,M)	
	TAF		TAF		TAF		TAF	
1996	696		434		2130		12970	
1997	508		84		2308		17340	
1998	638		134		1754		17740	
1999	448		375		2335		10860	
2000	1395		809		1495		12120	
2001	1155		393		706		4760	
2002	1286		249		385		9250	
2003	1348		310		657		10810	
2004	1473		604		1032		?	

