STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In the Matter of Permits 11966, 11967, 19968, 11969, 11970, 11971, 11973, 12364, 12365, 12720, 12721, 12722, 12723, and 12724, and Licenses 9956 and 9957, on Permitted Applications 5625, 5626, 5627, 5628, 9363, 9364, 9365, 15374, 15375, 15376, 16767, 17374, 17375, and 17376, and on Licensed Applications 10588 and 15424 of the UNITED STATES BUREAU OF RECLAMATION and Permits 16477, 16478, 16479, 16480, 16481, 16482, and 16483, on Permitted Applications 5629, 5630, 14443, 14444, 14445A, 17512, and 17514A of the DEPARTMENT OF WATER RESOURCES.	ORDER: WR 92-02

ORDER ESTABLISHING DROUGHT-RELATED REQUIREMENTS FOR THE BAY-DELTA ESTUARY DURING 1992

BY THE BOARD:

1.0 INTRODUCTION

Notice of public hearing having been given to consider specified drought-related issues involving fishery protection within and upstream of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Estuary); a public hearing having been held on March 3 and 19, 1992; the State Water Resources Control Board

(State Water Board) having considered all the evidence in the record; the State Water Board finds and concludes as follows:

2.0 BACKGROUND

2.1 Current Hydrological Situation

Currently the State of California is in the sixth year of a drought. The major reservoirs contributing water to the Sacramento River during the dry season are low. Particularly, storage at Lake Shasta at the end of February 1992 was at 1.966 million acre-feet (maf), or 57 percent of average. Other reservoirs that release water to the Sacramento River and the Sacramento-San Joaquin Delta are correspondingly low. Unimpaired runoff this year in the Sacramento River Basin was estimated as of March 1, 1992, at approximately 10.1 maf with a 50 percent probability of exceedance, which would make 1992 a critical dry year. Because the reservoirs have been depleted during the drought, and assuming 1992 remains dry, the United States Bureau of Reclamation (USBR) currently plans to deliver only 15 percent of its agricultural contracts in 1992, and the Department of Water Resources (DWR) currently plans to deliver only 35 percent of its 1992 contractual requests.

2.2 NMFS Biological Opinion

On February 14, 1992, the National Marine Fisheries Service (NMFS) issued a Biological Opinion to the United States Bureau of Reclamation (USBR). The Biological Opinion was a result of formal consultation under Section 7 of the federal Endangered Species Act (16 United States Code Section 1536) to determine whether the USBR's operation of the Central Valley Project (CVP) jeopardizes the continued existence of the threatened Sacramento River winter-run Chinook salmon. The Biological Opinion applies only to 1992 operations, and a new opinion will be issued for future CVP operations.

According to the Biological Opinion, winter-run Chinook salmon can be adversely affected by several factors, including high water temperature, reduced streamflow after spawning occurs, acid mine drainage from the Spring Creek Debris Dam above Keswick Dam, low streamflows, operation of Red Bluff Diversion Dam with the gates closed, diversion through the Delta Cross Channel Gate, entrainment at the pumping plants of the CVP and the State Water Project (SWP) in the southern Delta, and diversion into the Suisun Marsh. The State Water Board has adopted water right terms and conditions for (1) water temperature between Keswick Dam and Red Bluff Diversion Dam and (2) salinity levels

and flow requirements in the Sacramento-San Joaquin Delta (Delta). The ability of the USBR and the DWR to meet the State Water Board's water right requirements may be affected by the NMFS action.

According to the Biological Opinion, winter-run Chinook salmon spawn in the Sacramento River between Keswick Dam and Red Bluff Diversion Dam. During spawning and egg incubation (between late April and the end of September) the optimum temperature is between 43°F and 56°F. Mortality begins at 57.5°F. NMFS estimated that average survival of the winter-run spawn would be about 61 percent under the extremely dry 1992 water supply conditions predicted before February 14, 1992.

Peak migration of winter-run Chinook salmon juveniles downstream through the Sacramento-San Joaquin Delta occurs during February through April. Adult winter-run migrate upstream through the Delta from December through May.

To protect the winter-run Chinook salmon, the NMFS provided a "Reasonable and Prudent Alternative" for the USBR to implement to avoid jeopardy to the winter-run salmon as a result of 1992 operations. The Reasonable and Prudent Alternative requires the USBR to:

1. Maintain a minimum flow of 3000 cfs below Keswick Dam;

2. Maintain daily average water temperature in the Sacramento River at no more than 56°F between Keswick Dam and Balls Ferry from April 15 through September 30, and at no more than 60°F from October 1 through October 31;

3. Maintain the gates of the Red Bluff Diversion Dam in the raised position through May 1 or later;

4. Raise the gates of the Red Bluff Diversion Dam on November 1 or earlier;

5. Maintain the Delta Cross Channel Gate in the closed position from February 1 through May 1;

6. Close the Suisun Marsh Salinity Control Gate from March 1 through April 15 or provide written documentation that during the operation of the Suisun Marsh Salinity Control Gate no water will be diverted from Montezuma Slough through unscreened diversions from March 1 through April 15;

7. Curtail operation of unscreened diversions within Montezuma Slough and in other locations from March 1 through April 15;

8. Establish a working operations and management group to coordinate and ensure full implementation of the reasonable and prudent alternative.

In addition to the Reasonable and Prudent Alternative, the NMFS made several conservation recommendations, including installing a temporary barrier across Georgiana Slough, reducing the scheduled release of 340,000 af to the Trinity River, and modifying pump intakes in the Sacramento River to allow diversions at lower streamflow rates. With the Biological Opinion, NMFS also included an Incidental Take Statement, authorizing the incidental taking of winter-run Chinook salmon in the 1992 operation of the CVP if the DWR and the USBR comply with the Reasonable and Prudent Alternative.

The USBR and the DWR plan to comply with the Reasonable and Prudent Alternative. In accordance with the Incidental Take Statement, NMFS also ordered USBR and DWR to develop, by March 2, 1992, programs that could be implemented by March 6, 1992, for the optimum

survival of winter-run Chinook salmon during salvage operations at their water diversions at Tracy and at Clifton Court in the southern Delta.

2.2 Legal Basis for State Water Board Action

The State Water Board has authority under Water Code Sections 100 and 275, under its reserved jurisdiction in the permits and licenses of the USBR and the DWR, and under its continuing authority pursuant to the public trust doctrine[1] and the reasonableness doctrine,[2] to take action in response to the prevailing drought conditions and the NMFS Reasonable and Prudent Alternative. This order considers how the State Water Board should approach the potential violation of terms and conditions in water right permits held by the DWR and the USBR.

3.0 ISSUES CONSIDERED IN THIS ORDER

3.1 Matters Considered in This Order

Several Key Issues were listed in the Notice of Public Hearing. These were:

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1 See United States v. State Water Resources Control Board (1986) 182 Cal.App.3d 83, 227 Cal.Rptr. 161; National Audubon Society v. Superior Court (1983) 189 Cal.Rptr. 346, 33 Cal.3d 419.

2 See Cal. Const. Article X, Section 2 and United States v. State Water Resources Control Board, supra.

"1. What are the expected reservoir levels and water supply conditions for CVP and SWP facilities if water year 1992 is critically dry, dry, or below normal?

"2. What are the expected river temperatures below Keswick Dam and how does the United States Bureau of Reclamation intend to comply during 1992 with the requirements of Water Right Order 90-5, as amended?

"3. What are the most reasonable uses of available water supplies in 1992?

"4. What actions by the United States Bureau of Reclamation, the Department of Water Resources, and the State Water Board should be taken in response to the Biological Opinion issued by the National Marine Fisheries Service?

"5. Should Water Right Decision 1485 Delta and Suisun Marsh standards be temporarily modified in 1992 to facilitate conserving cold water in Shasta reservoir for winter-run Chinook salmon and to preserve carryover storage for 1993? What temporary terms and conditions on the CVP and the SWP operations should be adopted?"

The primary focus of this order is how the salinity standards for certain stations in the Suisun Marsh and for the intake of the Contra Costa Canal should be applied during 1992, taking into account operational changes DWR and USBR are making in the Delta to comply with the Reasonable and Prudent Alternative that the National Marine Fisheries Service is requiring in order to protect winter-run Chinook salmon.

3.2 Compliance With Order WR 90-5

Order WR 90-5 requires the USBR to meet a daily average water temperature of 56°F in the Sacramento River at Red Bluff Diversion Dam whenever higher temperatures would be detrimental to the fishery; i.e., when any of the four runs of Chinook salmon are spawning or incubating eggs in the upper Sacramento River. Order WR 90-5 allows the USBR to meet 56°F in a shorter reach if it reports to the State Water Board that factors beyond the USBR's reasonable control[3] prevent the USBR from meeting this temperature at Red Bluff Diversion Dam and the Chief of the Division of Water Rights does not object to the change. The USBR should know by this time the minimum length of reach where it will meet the temperature requirement for all runs of Chinook salmon; i.e., the winter-run, fall-run, late fall-run, and spring-run. While the latter three runs are not endangered or threatened at this time, the natural production of these runs has declined sharply in recent years.

3 Order WR 90-5 lists two examples of factors that would be beyond the USBR's reasonable control; these are (1) conditions where fishery protection can best be achieved by allowing a higher temperature in order to conserve cool water for later release, and (2) conditions where allowing a higher temperature is necessary to implement measures to conserve the endangered winter-run Chinook salmon. The State Water Board also has advised the USBR that decisions on water deliveries are subject to the availability of water, and that water should not be considered available for delivery if it is needed as carryover to maintain an adequate cold water pool for the fishery.

To date, the USBR has not reported to the State Water Board in compliance with Order WR 90-5. No reason exists for further delays in reporting changes in the location where the USBR will meet 56°F in the river. Therefore, this Order requires that the USBR report to the Chief of the Division of Water Rights by June 1, 1992, its changes and its operation plan for meeting the temperature requirement at any location other than the Red Bluff Diversion Dam.

The National Marine Fisheries Service has required that in 1992 the USBR maintain a temperature of no more than 56°F in the Sacramento River between Keswick Dam and Balls Ferry from April 15 through September 30, and no more than 60°F from October 1 through October 31, for winter-run Chinook salmon. This protection will provide spawning habitat in a reach of only 25.75 miles, compared with protection to the Red Bluff Diversion Dam, as required in Order WR 90-5, which would provide 48.85 miles of spawning habitat.

We note that in accordance with its stipulation in United States v. State Water Resources Control Board, E.D. Cal. No. CIV-S-90-0731 RAR/JFM and in accordance with Order WR 91-01 (amending Order WR 90-5), the USBR will submit by March 31, 1992, a plan of study for

minimizing the warming of water to be discharged through the Spring Creek Power Plant. The Spring Creek Power Plant discharges water from the Trinity River into the Sacramento River upstream of Keswick Dam, and may influence the temperature of the Sacramento River. The USBR should take into account its plan of study in designating the reaches of the Sacramento River to be protected at 56°F for the various Chinook salmon runs this year.

3.3. Effect of the Reasonable and Prudent Alternative on Meeting Delta Standards

USBR and DWR compliance with two requirements of the Reasonable and Prudent Alternative required by the National Marine Fisheries Service may impair their ability to meet certain salinity standards in the Sacramento-San Joaquin Delta and Suisun Marsh, as required by their water right permits. These requirements are that (1) the Delta Cross Channel Gate be maintained in the closed position from February 1 through May 1 to reduce the diversion of winter-run Chinook salmon outmigrants into the Delta, and (2) the Suisun Marsh Salinity Control Gate be closed from March 1 through April 15 to eliminate the diversion of juvenile outmigrants into Montezuma Slough. The National Marine Fisheries Service will not require the

USBR and the DWR to close the Suisun Marsh Salinity Control Gate if the DWR and the USBR can provide written documentation that no water will be diverted from Montezuma Slough through unscreened diversions from March 1 through April 15.

3.3.1 Closure of Delta Cross Channel Gate

Closure of the Delta Cross Channel Gate is expected to help minimize the diversion of juvenile outmigrating winter-run Chinook salmon into the central Delta. Fish survival is poor in the central Delta; this may be due to entrainment in water diversion facilities and a longer migration route to salt water.

Closing the Delta Cross Channel Gate will re-route water bound for diversion in the southern Delta. Instead of being diverted to flow through the central Delta channels in a generally north to south direction, the water will flow westward in its natural course, the Sacramento River. Some of it may then turn at the western end of the Delta and flow upstream in the San Joaquin River toward the diversion pumps. On this more circuitous route, the water will pick up some ocean salts.

The water right permits held by the USBR and the DWR require that the two projects meet salinity standards

at Rock Slough. The permits require the two projects to achieve a maximum mean daily chloride level of 250 milligrams per liter (mg/l), and during a critical dry year achieve 150 mg/l chlorides for at least 155 days.[4] Usually, the USBR and the DWR find that their best chance of meeting the 150 mg/l standard is during the early part of the year, while there are uncontrolled flows in the Delta.

The USBR and the DWR argue that with the Delta Cross Channel Gate closed until May 1, they may be unable to meet the 150 mg/l chloride standard for 155 days during 1992. They argue that with the Cross Channel Gate closed, salt water will be pulled upstream in the San Joaquin River by the export pumps in the southern Delta and may invade the central Delta. Salty water is not easily removed from the central Delta. If pumping rates at the USBR Tracy Pumping Plant and the DWR Banks Pumping Plant are relatively low, the chances of meeting the standard with the Cross Channel Gate closed apparently are improved. We have heard speculation that salts may invade the central Delta even with low pumping rates while the Delta Cross Channel Gate is closed and make it very costly to meet the 150 mg/l

4 During other year types, the permits require the USBR and the DWR to achieve the 150 mg/l chloride standard for more days per year.

standard after the Cross Channel Gate is reopened. Because rainfall events in March and April could keep the Delta in excess conditions. We do not know that salts will invade the central Delta this year. Since late February the USBR and the DWR have met the 150 mg/l standard with the Cross Channel Gate closed.

Past operating experience indicates that the USBR and DWR meet the 150 mg/l chloride standard in the winter and early spring when excess flows help to improve Delta water quality.

The USBR recommended that the State Water Board adopt the 250 mg/l standard for all of 1992 at Rock Slough. The DWR argued that the Reasonable and Prudent Alternative is expressly predicated on an expectation that the State Water Board will relax the Rock Slough standards. Nevertheless, the DWR acknowledges that NMFS did not specify a precise relaxation level and that hydrological circumstances after February 14 may change the water costs of meeting the 150 mg/l standard during 1992. The State Water Board must exercise its discretion to decide the extent to which the 150 mg/l standard must be met, considering the current hydrological situation and the NMFS requirements.

On March 3, we received only guesses and no calculations as to the water cost of meeting the 150 mg/l standard with the Cross Channel Gate open or closed this year. Experience since the Cross Channel Gate was closed on February 3, 1992, indicates that the projects can nearly meet the 150 mg/l standard under dry conditions, and can meet it when there is uncontrolled runoff in the Delta. Since mid-February, there has been uncontrolled runoff in the Delta, but there may still be periods while the Cross Channel Gate is closed when no uncontrolled runoff is present in the Delta.

On March 19, we received conflicting evidence from several parties regarding the costs of flushing out any salts that may intrude into the central Delta, and of meeting the 150 mg/l chloride standard after the salts are flushed out. The March 19 evidence was based on calculations using different data sources. The estimated costs have two components. The first is the water and increased exports required to flush salts from the central Delta. The second is the water cost of meeting the 150 mg/l chloride standard for a longer period into the summer because of the time needed to flush salts discussed above. DWP and the USBR estimate

these costs to be about 400,000 af beyond that needed to meet the 150 mg/l standard if the Delta Cross Channel Gate had not been closed. Contra Costa Water District (CCWD) disagrees with these estimates. CCWD argues that the water cost to flush salts from the Delta is less. They point out that data from the field suggests that meeting the 150 mg/l chloride standard costs no additional water over meeting the 250 mg/l chloride standard.

A separate issue is the export reductions needed to meet 150 mg/l chloride while the Cross Channel Gate is closed. We have received little information on this issue. Since March rains have kept the Delta in uncontrolled conditions, the 150 mg/l chloride standard will likely be met through this month. Flows in April cannot be predicted, but if we receive a few storms as we have in past years, the 150 mg/l chloride standard could be met with little effect on water project operations. However, if April turns dry and hot, meeting this requirement could become difficult or impossible to reasonably meet. If the standard could be maintained through April while the Cross Channel Gate is closed, relatively small amounts of water would be needed to continue to meet the standard through the first part of July. Maintaining the standard is

preferable to allowing salt water to intrude the Delta and then trying to flush it out.

Our choices for regulating compliance with the 150 mg/l standard in 1992 in connection with the Cross Channel Gate closure are (1) require full compliance, (2) give the USBR and the DWR credit for having complied with the 150 mg/l standard during the February 3 through May 1 period that the Cross Channel Gate is closed to comply with the Reasonable and Prudent Alternative, or (3) do not require any compliance with the 150 mg/l standard during 1992.

We believe that we cannot require precise compliance with the permit terms and conditions in 1992 because (1) this is a critical dry year and reservoir storage in the watershed of the Delta is low, (2) Cross Channel Gate closure delayed the USBR's and DWR's achieving the 150 mg/l chloride standard at Rock Slough in February, and (3) we have evidence that meeting the 150 mg/l standard for the full 155 days required for a critical year could under some circumstances become unreasonable because of the Cross Channel Gate closure. We have conflicting evidence whether and under what circumstances additional reservoir releases would be required to meet the 150 mg/l standard with the Cross

Channel Gate closed. But requiring no compliance with the 150 mg/l standard could, as discussed in Environmental Considerations, below, have an adverse effect on fish and wildlife. If the USBR and the DWR reduce exports when there are no uncontrolled flows in the Delta, they may avoid salinity intrusion into the central Delta. If salinity intrusion becomes unavoidable, they could pump it out after the Cross Channel Gate is reopened by increasing reservoir releases and exports. As discussed in Environmental Considerations, below, if we (1) credit the USBR and the DWR with meeting the 150 mg/l standard only for the period up until now when the Cross Channel Gate is closed to comply with the Reasonable and Prudent Alternative, and (2) require the USBR and the DWR to meet the standard if possible during the remaining period when the Cross Channel Gate is closed, any potentially adverse effects of our exercise of discretion may be insignificant.[5]

3.3.2 Closure of Suisun Marsh Salinity Control Gate

The Suisun Marsh Salinity Control Gate is operated to meet salinity standards in the channels of Suisun Marsh without releasing large amounts of water for Delta

5 We believe that the State Water Board's discretion to require full compliance with the 150 mg/l chloride standard while the Cross Channel is closed is limited; this issue is discussed more fully in Environmental Considerations, below.

outflow. During periods of moderate to low Delta outflow from September through May, the DWR operates the gates to tidally pump water from the Sacramento River into Montezuma Slough. This provides less saline water in the interior of Suisun Marsh. The less saline water is needed to leach salts from lands that grow certain types of plants used by migrating waterfowl as food. It also may help support some rare, threatened or endangered species that require less saline water.

If the Suisun Marsh Salinity Control Gate is closed from March 1 through April 15, the salinity levels in the interior of the Suisun Marsh will probably exceed the levels required by DWR's and USBR's water right permits. The National Marine Fisheries Service will allow the DWR and the USBR to operate the gate if an agreement is reached in which no diversions will be made through unscreened diversions from Montezuma Slough. Because of the gate closure, the USBR is asking the State Water Board for relief from the requirement to meet the salinity requirements, both at the interior Suisun Marsh stations and at Collinsville on the Sacramento River. The USBR argument for waiving the Collinsville standard was that because its purpose is to regulate the quality of water entering the Suisun Marsh, and no water will enter, it is not needed.

The NMFS requirement to either close the Suisun Marsh Salinity Control Gate or prevent diversions within Suisun Marsh from unscreened diversions is intended to prevent the diversion of winter-run Chinook salmon onto the lands in Suisun Marsh along with irrigation water.

Both the Department of Fish and Game and the United States Fish and Wildlife Service testified that closure of the Suisun Marsh Salinity Control Gate will not jeopardize the threatened and endangered species in the Suisun Marsh. Nevertheless, the Department of Fish and Game would prefer to keep the gate in operation pursuant to an agreement not to divert water through unscreened diversions in the interior of the Marsh. The Department of Fish and Game has reached an agreement from the landowners in the Suisun Marsh, but the gate is not yet operating. If the gate is put into operation, we do not know whether the Suisun Marsh Salinity Control Gate will be closed again for violations of the agreement before the nondiversion period prescribed by the NMFS ends.

Whenever the NMFS requires closure of the Suisun Marsh Salinity Control Gate, no water can enter the Suisun Marsh from the Sacramento River. Consequently, without

rainfall fresh water would not be available to maintain the salinity standards in the interior of the Marsh, even if large reservoir releases were made. Neither the USBR nor the DWR is capable of acting to meet the standards unless the gate is opened. Therefore, the federal requirements under the Endangered Species Act override the water right permit terms and conditions that require the USBR and the DWR to meet the interior Suisun Marsh standards, so long as the Gate remains closed. When the Gate is open, the USBR and the DWR can and should meet the salinity standards.

Consequently, we will not require the USBR and the DWR to meet the salinity requirements for the interior of Suisun Marsh in their water right permits when the Suisun Marsh Salinity Control Gate must be closed to comply with the Reasonable and Prudent Alternative. We will allow a reasonable period for them to ramp up to the standards after the gate is reopened. At all other times, the USBR and the DWR will be required to meet the permit requirements for the interior of the Suisun Marsh.

Except in February and March, the Collinsville standard in the water right permits probably will be met with the flows the USBR and the DWR will provide for meeting

the Chipps Island standard. Compliance with the March standard is assured because of the recent rains, and the February standard was met. We are not relaxing the Chipps Island standard. The Collinsville standard provides some incidental protection for beneficial uses outside the Suisun Marsh. Based on these considerations, we will require the DWR and the USBR to meet the Collinsville standard.

4.0 PARTIES PRESENTING EVIDENCE AND POSITIONS

In addition to the USBR and the DWR, whose water rights are affected by this order, we received evidence and comments from representatives of the following organizations:

- National Marine Fisheries Service
- United States Fish and Wildlife Service
- Department of Fish and Game
- Trinity County
- Assemblyman Jim Costa
- Contra Costa Water District
- Westlands Water District
- State Water Contractors
- Central Valley Project Water Association
- Suisun Resource Conservation District
- Delta Tributaries Advisory Committee

- Tom Zuckerman (Central Delta)
- Jim Grammis, farmer
- Hoopa Valley Tribe
- Committee for Water Policy Consensus
- Jim Curry (regarding the Solano Project)
- Colusa County Board of Supervisors

We received policy statements from:

- Two children representing farmworkers
- California Sportfishing Protection Alliance[6]
- Environmental Defense Fund
- Sacramento River Preservation Trust

We have considered in this order all of the evidence and policy statements received from the above parties.

5.0 ENVIRONMENTAL CONSIDERATIONS

Two actions discussed in this order arguably could have potentially significant adverse effects on the environment. These are (1) an action to relieve the USBR and the DWR from meeting the salinity requirements in their water right permits for Suisun Marsh, and (2) an action to allow less than full compliance with

6 This statement was titled as written testimony but was mailed to the State Water Board. Although a member of the Alliance was in the audience, he did not present the statement as sworn testimony or make himself available for cross-examination. Therefore, the California Sportfishing Protection Alliance submittal is treated as a policy statement.

the requirement that the USBR and the DWR achieve a chloride level at the intake of the Contra Costa Canal no higher than 150 mg/l for at least 155 days during a critical dry year.

For both actions, the State Water Board's discretion is limited where its action would conflict with the Reasonable and Prudent Alternative issued by the National Marine Fisheries Service under the federal Endangered Species Act. The USBR and the DWR must comply with the Reasonable and Prudent Alternative, and their compliance may make it impossible to fully comply with their water right permit terms and conditions. To the extent that they cannot comply with both the state and federal requirements, the federal requirements under the Endangered Species Act will prevail, and the State Water Board's discretion to require compliance is correspondingly limited.

5.1 Effects on Suisun Marsh

For the interior Suisun Marsh standards, the extent of the State Water Board's discretion is relatively clear: If the Suisun Marsh Salinity Control Gate is closed because the USBR and the DWR can only comply with the Reasonable and Prudent Alternative by closing the gate, the salinity standards for the interior Suisun Marsh

cannot be enforced. Thus, the State Water Board has no discretion to require the USBR and the DWR to meet the interior Suisun Marsh standards when the gate is closed between March 1 and April 15, 1992 to comply with the Reasonable and Prudent Alternative. The State Water Board's action relieving them from the requirement during that period is not subject to the requirements of the California Environmental Quality Act (CEQA), set forth at Public Resources Code Sections 21000 et seq. See Public Resources Code Section 21080.

5.2 The 150 mg/l Chloride Standard at Contra Costa Canal

It is unclear whether the USBR and the DWR can meet the 150 mg/l chloride standard at the Contra Costa Canal intake. Apparently they can meet 150 mg/l at least for part of the 155 days required during a critical dry year. Consequently, the extent of the State Water Board's discretion is unclear. We do not know whether it will be possible for the USBR and the DWR consistently to meet the 150 mg/l chloride standard at the Contra Costa Canal while the Delta Cross Channel Gate is closed. Likewise, we do not know whether, despite the USBR's and the DWR's best efforts, salinity will intrude into the central Delta by May 1. If salinity intrudes, we do not know whether it will be because of the Cross Channel Gate closure or because of

other factors not caused by compliance with the Reasonable and Prudent Alternative.

We have evidence that different flows and export rates to meet various levels of salinity at the Contra Costa Canal intake will have differing effects on the striped bass fishery. As the Department of Fish and Game witness pointed out, the 150 mg/l standard provides some incidental protection for fish and wildlife in the Delta. Removal of this standard would have a significant effect on striped bass.

If the USBR and the DWR meet the 150 mg/l chloride standard while the Cross Channel Gate is closed, the USBR and the DWR are more likely to meet it during the following two months after the Cross Channel Gate is reopened. If this results in higher Delta outflows or lower export rates, it will benefit the striped bass.

To avoid causing potentially significant adverse environmental effects because of this action, we will limit our action. We will give the USBR and the DWR credit for meeting the 150 mg/l chloride standard at the intake of the Contra Costa Canal while the Delta Cross Channel Gate is closed to comply with the Reasonable and Prudent Alternative to this date. The

chances are good that runoff will meet the 150 mg/l chloride standard through March. However, while the Cross Channel Gate is closed, compliance could, if there is no uncontrolled runoff in the Delta, make necessary additional inflows to the Delta of unknown magnitude. A requirement that would force an unknown amount of additional inflows to meet this standard at the expense of reservoir storage this year could be unreasonable. Therefore, we will reserve jurisdiction and delegate authority to the Executive Director to credit the USBR and the DWR for additional days of compliance with the 150 mg/l chloride standard while the Cross Channel Gate is closed, if certain findings can be made.

As stated earlier, the USBR and the DWR typically try to meet the 150 mg/l chloride standard in the winter and early spring during excess conditions. If under this order the USBR and DWR are able to attain the 150 mg/l chloride standard through reductions in exports and excess flow conditions in the winter and spring, then they would likely continue complying with this standard for the remaining two or so months. This order requires this normal operation. However, if even after the best efforts by the USBR and the DWR to achieve the 150 mg/l chloride standard, water quality

exceeds this standard, the DWR and the USBR could defer compliance until the fall without violating Water Right Decision 1485.

We will retain jurisidiction to consider at a later date in 1992 whether it is reasonable, under all the circumstances existing in 1992, for the State Water Board to require the USBR and the DWR to continue to meet the 150 mg/l chloride standard. Any request for relief must be filed by the DWR and the USBR jointly, and must be supported by substantial evidence.

5.3 CEQA Compliance

We believe that in this order the State Water Board avoids any significant adverse effects on the environment that are within the State Water Board's discretion. This order enforces the requirements of the water right permits held by the DWR and the USBR within the State Water Board's discretion, to the extent reasonable under Cal. Const. Art. X, Section 2. Therefore, under 14 Cal. Code Regs. Section 15321(a)(2), this action is categorically exempt from the provisions of CEQA.

This action arguably would not be exempt if there were a reasonable probability that the action within the

State Water Board's discretion would have a significant effect on the environment. See Public Resources Code Section 15300.2(c). We find that the State Water Board's exercise of discretion does not have a reasonable probability of having a significant adverse effect beyond that already caused by closure of the Cross Channel Gate.

6.0 CONCLUSIONS

Based on the foregoing findings, we conclude as follows:

1. We will not require the USBR and the DWR to meet the Suisun Marsh salinity standards for the interior of the Marsh while the Suisun Marsh Salinity Control Gate is closed to comply with the Reasonable and Prudent Alternative.

2. We will give the USBR and the DWR credit for meeting the 150 mg/l chloride standard through the date of this order at the intake of the Contra Costa Canal while the Delta Cross Channel Gate is closed for the purpose of complying with the Reasonable and Prudent Alternative.

3. We will require the USBR to report by June 1, 1992, to the Chief of the Division of Water Rights its plans to meet 56°F in the Sacramento River during 1992 for all runs of Chinook salmon.

4. We will reserve jurisdiction and delegate authority for the Executive Director to extend the period when the USBR and the DWR receive credit for meeting the 150 mg/l chloride standard at the Contra Costa Canal intake while the Cross Channel Gate is closed. Any extension must be supported by substantial evidence provided by the USBR and DWR.

5. We will reserve jurisdiction to consider, at a later date in 1992, whether it is reasonable, under all of the circumstances, to require compliance with the 150 mg/l chloride standard at the Contra Costa Canal intake during 1992. Any request from the USBR and the DWR must be filed jointly, and must be supported by substantial evidence.

ORDER

In conjunction with their compliance with the Reasonable and Prudent Alternative issued by the National Marine Fisheries Service on February 14, 1992, the Department of Water Resources

(DWR) and the United States Bureau of Reclamation (USBR) shall comply with the following requirements during 1992.

1. Meet all water quality standards for the Sacramento-San Joaquin Delta and Suisun Marsh set forth in water right permit and license terms and conditions on Applications 5625, 5626, 5627, 2628, 9363, 9364, 9365, 15374, 15375, 15376, 16767, 17374, 17375, 17376, 10588, 15424, 5629, 5630, 14443, 14444, 14445A, 17512, and 17514A with the following exceptions:

   a. Whenever the Montezuma Slough Salinity Control Gate is (1) closed between March 1 and April 15, 1992 in order to comply with the reasonable and prudent alternative issued by the National Marine Fisheries Service, or (2) has been reopened for less than ten days after a closure in compliance with the reasonable and prudent alternatives, the DWR and the USBR will not be required to meet the applicable Electrical Conductivity requirements for Suisun Marsh at the following stations: Montezuma Slough at National Steel, Montezuma Slough near Beldon Landing, Chadbourne Slough at Chadbourne Road, Cordelia Slough 500 ft. west of S.P.R.R. crossing at Cygnus, Cordelia Slough at Cordelia Goodyear Ditch, Goodyear Slough at Morrow Island Clubhouse, Goodyear Slough 1.3 miles south of Morrow Island Ditch at Pierce, and Suisun Slough 300 feet

south of Volanti Slough. All other Suisun Marsh Electrical Conductivity requirements of the permits and licenses shall be met.

b. For each day through the date of this order when the Delta Cross Channel Gate is closed in order to comply with the reasonable and prudent alternative issued by the National Marine Fisheries Service, the DWR and the USBR shall be credited with having attained a maximum mean daily chloride level of 150 milligrams per liter at the Contra Costa Canal intake in Rock Slough.

2. The USBR shall, by June 1, 1992, report to the Chief, Division of Water Rights, any change from the Red Bluff Diversion Dam where the USBR will meet 56°F in the Sacramento River whenever this temperature is required by the fishery, for all runs of Chinook salmon and steelhead trout, in accordance with Order WR 90-5.

3. This order shall expire on December 31, 1992, and shall have no force and effect thereafter.

4. a. Jurisdiction is reserved to consider whether to extend the period under Order paragraph 1.b. in which the USBR and the DWR will be credited with having attained a maximum mean daily chloride level

of 150 mg/l at the Contra Costa Canal intake while the Delta Cross Channel Gate is closed to comply with National Marine Fisheries Service requirements. The USBR and the DWR jointly shall file any request for an extension of the period. Any request shall be supported when filed by substantial evidence demonstrating that meeting the 150 mg/l chloride standard would require an amount of water so large as to be a waste or unreasonable use of water. Such evidence also shall demonstrate (1) that the inability to meet the 150 mg/l chloride standard is because of the Cross Channel Gate closure, and (2) relief from the standard would have no reasonable possibility of having a significant adverse effect on the environment.

Authority is delegated to the Executive Director to approve a request that meets the requirements of this term after giving notice to all parties who participated in the March 3 and March 19, 1992 hearings and making findings that (1) meeting the 150 mg/l chloride standard would require a waste or unreasonable use of water; (2) the inability to meet the 150 mg/l chloride standard is at least in part because of the Cross Channel Gate closure; and (3) the Executive Director's exercise of discretion

would have no reasonable possibility of having a significant adverse effect on the environment.

b. Jurisdiction is reserved to consider, at a later date in 1992 after notice and opportunity for hearing, whether it is reasonable, under all of the circumstances, to require compliance with the 150 mg/l chloride standard at the Contra Costa Canal intake during 1992. Any request for relief from meeting the standard shall be filed by the USBR and the DWR jointly, and the request shall be supported by substantial evidence when it is filed. The evidence shall address the reasonableness of meeting the standard, the effect of the NMFS requirements on

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the ability to meet the standard, and whether a State Water Board decision granting relief would be subject to the California Environmental Quality Act.

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on March 19, 1992.

AYE: W. Don Maughan
Eliseo M. Samaniego
John Caffrey
Marc Del Piero
James M. Stubchaer

NO: None

ABSENT: None

ABSTAIN: None

Maureen Marché
Administrative Assistant
to the Board