

PROGRAM OF IMPLEMENTATION

INTRODUCTION

This exhibit describes the California Department of Fish and Game's recommendations concerning implementation measures which should be incorporated in the Water Quality Control Plan for salinity for the Bay-Delta Estuary and in pollution control actions taken by Regional Water Quality Control Boards 2 and 5. The Department is describing implementation measures concerning wildlife in upstream areas and export service areas in separate testimony.

The primary emphasis of this document is on short and long-term measures relative to the salinity control plan for the Estuary. The document also considers how such measures interrelate with measures needed for fishery resources upstream from the Estuary and procedures related to endangered species both in the Estuary and elsewhere.

SALINITY CONTROL PLAN

Overview

During earlier portions of the hearing the Department of Fish and Game and others have described the needs of fish and wildlife throughout the Bay-Delta Estuary. Broadly, the needs pertain to two principal effects of water development.

First, water development has modified freshwater flows through the Delta and into San Francisco Bay. Flows in the late summer have been increased, but the predominant effect has been decreased flows at other times in relation to what they would have been in the absence of water development. Those decreases have increased gradually over the years, so that average annual flows, as indicated by DWR Exhibit 31-D, will now be only about 60% of recent historical levels. As State Water Contractor's Exhibit 260 points out, a general trend of increasing rainfall since the 1920's has caused average annual Delta outflows to remain almost unchanged, thus masking some effects of water development.

Testimony on fish and wildlife demonstrated effects of flow changes on a variety of species. Flows are important year around, but the predominant need is for adequate flows from approximately February through July. Flows within a portion of that time partially control the abundance of chinook salmon, striped bass, American shad, longfin smelt, yellowfin goby and the predominant species of bay shrimp, Cranon franciscorum. We believe that other species are affected similarly, but we have not yet documented effects on other species well. Flows during that time are also a major controlling influence over the production of waterfowl foods in Suisun Marsh and the lower levels of the food chain, particularly in the entrapment zone.

The general consequence of relationships described in the preceding paragraph is that provision of flows targeted for one species actually benefits many species.

The second general class of impacts is that water diversions in the estuary by local municipalities, industries and farmers and by the State Water Project (SWP) and the Federal Central Valley Project (CVP) kill many fish. The fact SWP and CVP diversions are in the South Delta, while most of their water supply comes from the Sacramento River, is especially significant. The resulting water transport process sweeps fish and their food supply from throughout the Delta to the export pumps causing large losses.

Adverse effects from the diversions have built up over a long period of time. Implementation of various measures is needed to alleviate effects immediately. For practical reasons, some effects can only be eliminated by construction of facilities and thus require longer term implementation measures. Also, additional technical information is needed in many areas, requiring a longer term perspective on implementation. Hence additional studies should be part of the implementation package.

A species by species discussion of near term implementation measures follows.

Chinook Salmon

Sacramento River Portion of the Delta

In broad terms, testimony presented to the Board indicates that the survival of naturally produced salmon has diminished in the Sacramento-San Joaquin System, including in the Delta. Water development has caused much of that decline. While commercial catches of adult salmon have remained stable, due to successful operation of hatcheries, the decreased survival threatens the long

term viability of salmon populations and diminishes current potential use of the resource.

To help alleviate adverse effects, the Board should adopt an objective of maintaining the survival rate of each race of salmon smolts passing through the Estuary at the Historical Level, as defined in DFG Exhibit 30. If sufficient actions are not found within the Estuary, actions which would provide equivalent benefits upstream from the Estuary must be implemented, with habitat restoration having priority. While we always support implementing a wide diversity of measures to increase salmon production upstream from the Estuary, only measures not already authorized or required to be addressed by law would be acceptable offsite mitigation measures for water development impacts in the Delta.

For fall run salmon, the objective should be an average survival of 73% for salmon smolts migrating down the Sacramento River from Sacramento to Port Chicago. This objective is based on the relationship illustrated by Figure 4-1 of USFWS Exhibit 31.

While such a survival rate could be provided by maintenance of minimum flows, the evidence presented by the Fish and Wildlife Service indicates survival is controlled through the interaction of flows, diversions and water temperature. Hence, a variety of measures in addition to flow need to be considered in implementing our recommendation.

Sufficient technical information is not currently available to evaluate the benefits and costs of various potential implementation measures. In order to develop the best possible

assessment of benefits and costs, the Department has embarked on a cooperative planning effort with the Fish and Wildlife Service (FWS), the National Marine Fisheries Service (NMFS), the Department of Water Resources (DWR), and the Bureau of Reclamation (USBR). That planning effort is described in DFG Exhibit 65 which is being introduced on behalf of all five agencies. The goal of the planning effort is to complete the best possible assessment of alternatives to present to the Board during Phase III of these hearings. We say "best possible assessment" because definitive information will not be available for all potential actions, but we are confident that major improvements can be identified.

The Department recommends that your salinity control plan include the goal as we have defined it here and in our testimony on salmon, and that it provide for selecting implementation measures to accomplish that goal during Phase III.

San Joaquin River Portion of the Delta

For planning purposes, the Board should adopt an objective of maintaining the survival of salmon smolts passing through the Estuary at the Historical Level. Sufficient information is not going to be available during this hearing to establish Historical Levels for the San Joaquin River. Hence, we recommend that the Board adopt a goal of substantially improving the survival of salmon smolts migrating through the Delta from Vernalis to Chipps Island.

We will be evaluating actions to increase survival in the San Joaquin portion of the Delta as described in DFG Exhibit 65. The

Board should adopt the same approach towards developing implementation measures as we recommended for salmon in the Sacramento River.

Striped Bass

The Board should adopt a goal of providing an average annual production of young striped bass equal to a striped bass index of 106, as defined in our testimony on striped bass. As discussed in our testimony, it is not a realistic objective to achieve that goal in the immediate future. The striped bass population, however, is only about half of what it was 20 years ago. Hence, the standards in D-1485 need to be strengthened.

We recommend the following:

1. Minimum outflows should be as follows:

	May 1 through June 10 ^{1/} / _____	June 11 through June 17 ^{2/} / _____	June 18 through July 31 ^{1/} / _____
Wet	30,000	20,000	10,000
Above Normal	25,000	17,500	10,000
Below Normal	22,000	16,000	10,000
Dry ^{3/}	12,000	10,000	8,000
Dry ^{4/} or Critical	3,300	3,100	2,900

^{1/} 14-day mean in cfs.

^{2/} 7-day mean in cfs.

^{3/} a dry year following a year other than a dry or critical one.

^{4/} a dry year following a dry or critical year.

(It would be acceptable to modify this table to a continuous function of flow to provide equivalent benefits, as

recommended by the Department of Water Resources in Exhibits 601, 611, 612 and 614.)

2. Expand the provision for closing the Delta Cross Channel Gates to minimize the diversion of young striped bass into the Central Delta to include closures for up to 10 days but not more than one out of four when the Delta outflow index is less than 12,000 cfs. Closure of the gates should be determined by real time monitoring of bass egg and larval abundance.

3. During May and June, no storage withdrawals for export from the Delta should be made that cause exports to exceed a mean rate of 5,000 cfs during the storage withdrawal period.

All of the remaining criteria for the protection of striped bass in D-1485, including optimizing the operation of existing fish screen systems, should remain in effect.

The purpose of the above changes in criteria are to get more striped bass at least into Suisun Bay in all but critical years and dry years following dry or critical years. That will improve survival both by getting bass to a more productive area than the Delta and by minimizing losses of young bass in diversions in the Delta.

The first criterion was developed by estimating the magnitude of flow needed to move young striped bass west of Collinsville (Table 1). The period May 1 to June 10 was selected to include the principal spawning period for striped bass in both the Sacramento and San Joaquin Rivers (Figure 1). The flows recommended during that time in Below Normal and wetter years

Table 1. Estimated Delta outflow (cfs) required to move 25, 50, 75 and 100 percent of striped bass larvae into the estuary west of Collinsville (egg and larvae stations 1-15, 63-66, 414, 416, 515). R square is for each regression used to calculate flow distribution relationship. Degrees of freedom are in parentheses.

Month	(mm)	R ² (df)	25	50	75	100
5	6	.91(9)	12,000	19,300	26,600	33,900
	7	.86(9)	10,100	17,300	24,500	31,600
	8	.82(9)	8,700	16,000	23,200	30,500
	9	.74(9)	7,900	15,200	22,600	30,000
	10	.00(8)	-	-	-	-
	11-14	.16(7)	-	-	-	-
6	6	.88(9)	9,200	16,900	24,600	32,400
	7	.80(9)	7,400	14,600	21,900	29,100
	8	.72(9)	6,200	13,600	20,900	28,200
	9	.71(9)	4,000	11,100	18,200	25,200
	10	.69(9)	3,000	9,900	16,900	23,800
	11-14	.61(9)	2,300	9,700	17,100	24,500
7	6	.39(6)	-	-	-	-
	7	.65(6)	8,400	14,600	21,900	29,100
	8	.67(6)	7,600	11,300	14,900	18,600
	9	.74(6)	7,500	10,700	14,000	17,200
	10	.85(6)	6,300	10,100	12,600	15,800
	11-14	.59(6)	5,200	9,200	13,300	17,400

CALIFORNIA FISH AND GAME

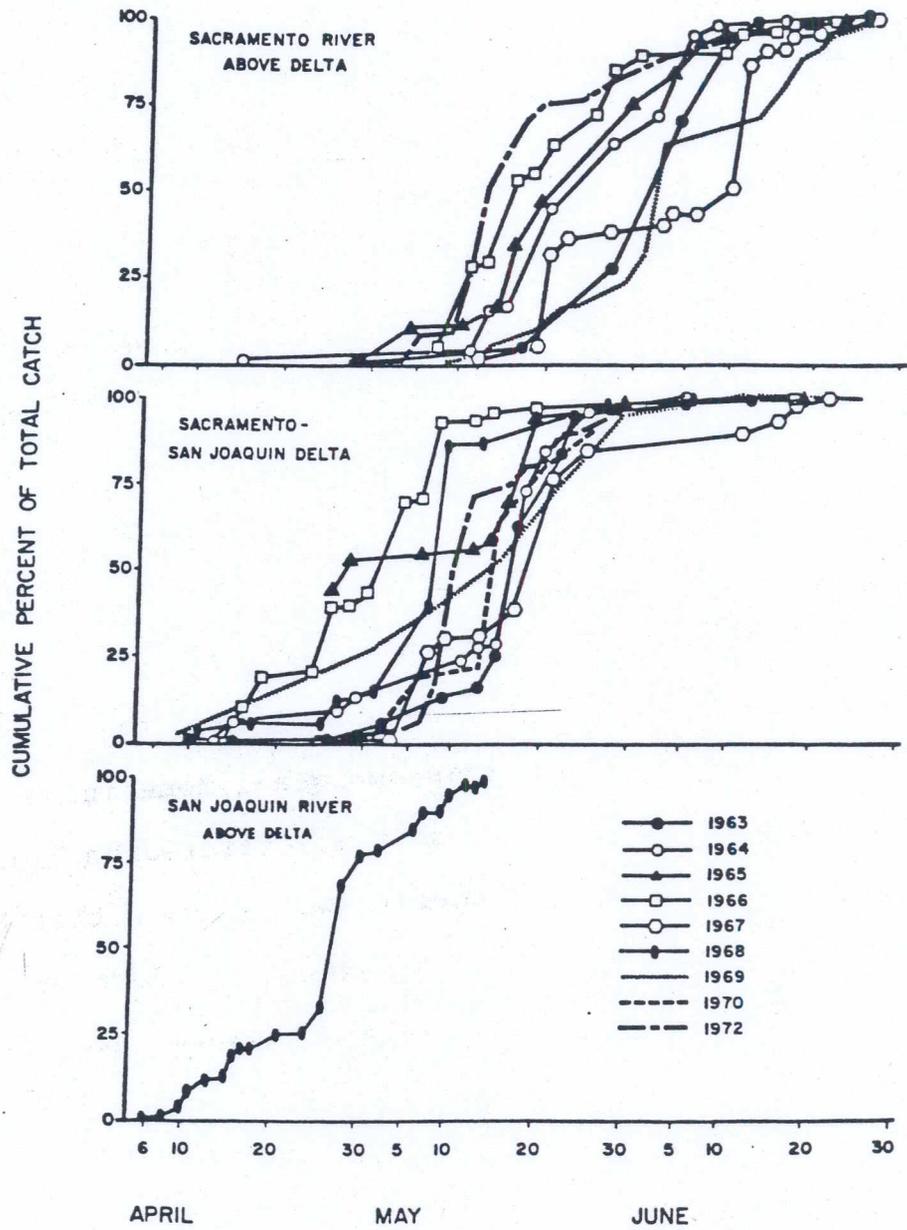


FIGURE 1 Cumulative percentage of striped bass spawning over time in various areas. Daily percentages for the Delta from 1966-1972 and for the Sacramento River in 1972 were estimated by dividing total weighted catches each day by the seasonal total weighted catch. Percentages for the other surveys were estimated by dividing the daily catch per unit effort by the sum of those statistics for the season. The cumulative percentage is a running sum of the daily percentages.

(Reproduced from Turner, Jerry L., 1976, Calif. Fish. and Game, 62(2):106-118).

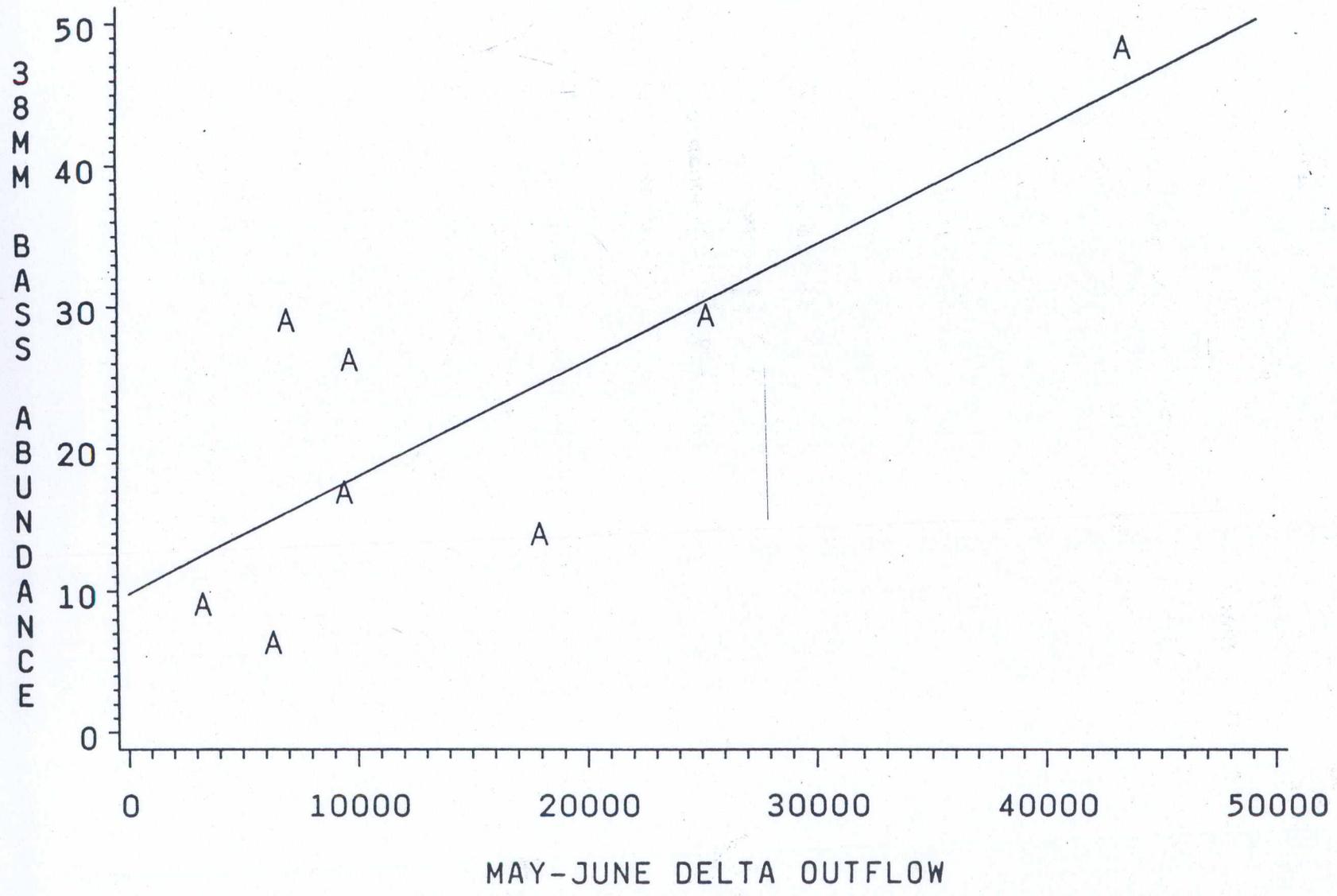
should move 75% to 100%, of the larval bass downstream of Collinsville by the time they are about two weeks old. After June 10 we propose reducing flows in two steps to the amount we believe necessary to keep a majority of bass below Collinsville based on Table 1.

Recommended flows for dry years would provide substantially better conditions for bass than under present standards, but would move only about half the bass below Collinsville. In critical years and dry years following dry or critical years we have not proposed any changes in the D-1485 flow standards, in recognition of the difficult water supply problems in such years. In proposing standards which are substantially less than optimum during dry and critical years, we expect the Board to review the equity of sharing shortages among all beneficial uses.

Based on the relationship illustrated on Figure 2 and assuming no cumulative benefit, we estimate that the improved standards would result in an average increase of approximately 25% and 6 index units as compared to continued operations under D-1485, assuming the same frequency of year types as occurred between 1922 and 1967 as described in DWR Exhibit 31-D. The additional average annual amount of water required to meet our recommended standards in relation to present standards is on the order of 650,000 af at the 1990 level of development.

The improved criterion for closing the Delta Cross Channel Gates should result in production of striped bass being somewhat greater than the above estimates based only on changes in flow,

Figure 2. Relationship between abundance of young striped bass and mean May-June outflow from 1977 through 1985. Data for 1983 were excluded because extremely high flows swept fish out of the sampling area. This figure illustrates essentially the same basic relationship shown in Figure 13 of DFG Exhibit 25.



particularly if closures are based on real time monitoring of bass abundance. The criterion for greater curtailment of exports from the Delta would decrease losses of bass primarily in some dry and critical years.

We offer these recommendations as interim measures while studies continue to define the cause of the bass decline and alternative corrective actions are explored. It would be appropriate to modify them to accommodate a good experiment to evaluate the cause of the bass decline, and we will actively seek experimental opportunities in consultation with other interested parties and the Board.

In addition, we urge you to determine that it is an unreasonable method of diversion to divert water from the Bay-Delta Estuary without taking all reasonable measures to reduce the loss of young striped bass in a diversion and replacing all bass unavoidably lost. This recommendation would essentially make universal the conditions for striped bass which now apply to Pacific Gas and Electric Company's diversions at their Pittsburg and Contra Costa power plants and to the Department of Water Resources' diversion into Clifton Court Forebay.

Other Migratory and Resident Fish in the Delta

We are not recommending any specific implementation measures for this group of fishes at this time. The recommendations for striped bass, however, would provide additional benefits to American shad.

San Francisco Bay Fishes and Invertebrates

For planning purposes, the Board should adopt a goal of maintaining fish and invertebrates in the Bay at Historical Levels. Sufficient information is not available now to define historical levels, although our testimony in the Bay portion of the hearing has demonstrated the importance of March through May flows for the production of bay shrimp and longfin smelt. Our recommendations for striped bass will improve the production of those species some in relation to what would occur with the present standards in D-1485. Those recommendations will probably also improve production of other species such as starry flounder, which tend to be more numerous in wet years than in dry years but for which we have not quantified a relationship.

As stated in the Bay portion of our testimony, we have chosen not to recommend specific measures to protect resources in the Bay until we define benefits for a broader cross section of the species occurring in the Bay.

Wildlife

The only wildlife resources for which we have identified a specific need in relation to water development in the Estuary is waterfowl and other wildlife in Suisun Marsh. Our testimony has documented the need to maintain Suisun Marsh as a brackish water marsh by maintaining appropriate salinity water in channels throughout the Marsh.

We have entered into contracts with the Department of Water Resources, the Bureau of Reclamation and the Suisun Resources Conservation District (DWR Exhibits 506b, 507b, and 508b). Your salinity control plan should include the interim and permanent standards and the implementation schedule in those contracts. The plan should also provide for monitoring and mitigation of wetland impacts as provided for in the contracts.

The other wildlife issue the Board needs to consider in its planning is potential effects on endangered wildlife and plants. A later section of this report provides guidance on that issue.

LONG-TERM MEASURES

In addition to the near term measures described above, the Board needs to provide for some longer term measures in its salinity control plan. These measures need to address changes in water development facilities in the Delta, water development facilities outside the Delta, and needs for additional factual information on fish and wildlife resources.

Delta Water Facilities

The Board has publicly stated a desire to avoid issues related to future water facilities within the Delta. Considering the politically charged nature of the controversy surrounding those facilities, that is understandable. On the other hand, the

information we and others have presented on fishery resources, particularly striped bass and salmon, indicates considerable harm from the present method of transferring water across the Delta.

Alleviating that harm appears to require either drastically curtailing present diversions or restructuring Delta water transfer facilities. In past decisions, the Board has been unwilling to do the former but acknowledged the desirability of providing better protection for fishery resources.

We submit that measures to provide that better protection are overdue, and unless the Board is now willing to curtail diversions substantially, it has a responsibility to address the Delta water transfer issue. We do not suggest that the Board become involved in the details of facility planning, but the Board should prescribe environmental conditions the facilities should produce to alleviate adverse effects on fishery resources and specify a reasonable and timely implementation schedule.

The concept is not new. The Board included provisions for salmon in D-1379 which could only be met through changes in Delta water transfer facilities but failed to compel their implementation.

As a minimum, we recommend that the salinity control plan provide for the elimination of reverse flows in the entire San Joaquin River for the reasons stated in our testimony on striped bass and salmon. Measures selected to accomplish that need to be compatible with the goal we have recommended for salmon in the Sacramento River. We point that out explicitly because the

easiest way to eliminate reverse flows in the lower San Joaquin River involves diverting larger amounts of water from the Sacramento River through existing facilities. As the Fish and Wildlife Service Exhibit 31 indicates, such diversions would significantly decrease the survival of salmon. Hence, other measures, such as fish screens at the Sacramento River diversion point, need to accompany increased diversions from the Sacramento River. Fish screens at the Sacramento River present some difficult technical problems.

The Board should establish a deadline for eliminating reverse flows in the San Joaquin River. We have recommended 1995 in earlier testimony.

From the standpoint of salmon migrating to and from the San Joaquin River and striped bass, it would be desirable to go further and provide for the elimination of reverse flows in Old and Middle Rivers. The full value of that for salmon cannot be defined without a better assessment of the benefits of a barrier, fish screen or other measures at the head of Old River. That is one action which will be evaluated in the 5 agency planning effort for salmon. Fish and Game Exhibit 25 demonstrates substantial harm to young striped bass in the Delta caused by ongoing water project operations. We believe that the elimination of reverse flows in Old and Middle rivers is essential to the full restoration of the Delta's capacity as a nursery area for young striped bass.

For practical purposes, elimination of reverse flows in Old and Middle rivers would likely require construction of an isolated

water transfer facility, starting at the Sacramento River. Such a facility would pose risks for fishery resources, particularly salmon and shad, in the Sacramento River. Fish screens would obviously then be essential and, as noted earlier, they involve difficult technical problems which need to be solved.

Other Water Development Facilities

Water development agencies are obviously going to continue planning additional facilities in an attempt to meet the water demands various parties have described to the Board. The Board should issue planning guidance for such facilities.

Further development obviously pose risks to fish and wildlife in the Bay-Delta Estuary and elsewhere. The fish and wildlife needs described to you indicate the risks are greatest for diversions and storage from March through the summer, particularly in the drier years. Evidence indicates that any further depletions then will cause some harm to a variety of fish and invertebrates in the Delta and San Francisco Bay. Further depletions in the spring of dry and critical years, and likely a portion of below normal years, would be particularly harmful. The Board's planning guidance should indicate that planners should not propose depleting such flows further.

In effect we are saying that projects which depend primarily on storage in December through February are most likely to be compatible with fish and wildlife needs. Onstream projects upstream from the Delta would seem to have some advantages in this

regard, but all environmental impacts obviously need to be weighed to determine which projects should be implemented.

At least as long as diversions continue with present facilities, the Board should also insist that any further water storage projects allocate part of the yield to reducing existing impacts in the estuary by decreasing exports or increasing Delta outflow during periods critical to fish and wildlife.

Additional Evaluation of Fish and Wildlife Needs

Throughout Phase I many parties have described needs for additional information about fish and wildlife. The Interagency Ecological Study for the Sacramento-San Joaquin Estuary is a cooperative program involving our Department, Water Resources, the Board, the Fish and Wildlife Service, the Bureau of Reclamation and the Geological Survey. Many of the objectives of that program involve fulfilling needs specified in D1485.

Over the next few months the agencies will be reviewing the whole program, based in part on the information which has been presented to the Board during Phase I.

Additional important information comes from the monitoring plan specified in D1485. That monitoring program has not been fully integrated with the study program. We believe some of its elements are probably less detailed than necessary while others are too detailed.

We do not have recommendations on specific elements of the study and monitoring program now, and believe it is more important

to discuss the process., Both the study and monitoring programs would benefit from more input from the diverse interests represented in this hearing. It is also important to review and update both programs regularly. We believe that both objectives could be aided by the Board's holding a workshop annually to provide the basis for modifying monitoring requirements and study guidance. We recommend that the Board hold such workshops and update study and monitoring requirements based on them.

UPSTREAM ISSUES

The testimony of ourselves and the Fish and Wildlife Service has pointed out the interrelationships between satisfying fish, wildlife and other needs in the Estuary and effects on fish and wildlife resources upstream from the Estuary, including those in the Trinity, Sacramento, and American rivers, and in the San Joaquin River system. We have also described various needs of fish and wildlife in upstream areas that are not being met. We are calling this issue to your attention again to emphasize the importance of considering the needs in upstream areas described in earlier testimony when developing the salinity control plan and preparing the EIR on it.

We also want to reemphasize one particular issue, namely the inadequacy of measures to protect salmon in the San Joaquin system and the interrelationship between those measures and measures needed in the Delta.

In earlier testimony we recommended that the Board direct major upstream water right holders in the San Joaquin System (i.e., Bureau of Reclamation, City of San Francisco, Oakdale Irrigation District, South San Joaquin Irrigation District, Modesto Irrigation District, Turlock Irrigation District and Merced Irrigation District) to work with DFG, FWS, and NMFS to prepare a plan for the restoration of salmon in the San Joaquin system upstream from the Delta and submit it to the Board by 1992 for consideration relative to their water rights. We consider action in this area to be critical and the Board's forceful involvement essential.

As indicated in DFG Exhibit 65, DFG, FWS, NMFS, DWR and USBR are now committed to such a planning effort, with the goal of providing some results to the Board during Phase III in 1989. We would welcome the participation of the other entities and would hope that they view it as an opportunity to get some constructive assistance in actions to restore salmon.

The Board should state an intention to review upstream water rights permits concerning the adequacy of measures to protect salmon upstream from the Estuary, encourage water rights permit holders to participate in the planning process and urge that flows for salmon be improved in the meantime on an experimental basis to aid in restoration. Until the planning is completed, the Board should not approve any water appropriations that could affect the availability of water in the San Joaquin Basin.

POLLUTION

We wish to reiterate a few points you heard in testimony on pollutants.

You heard from us and the others the importance of control at the source. Once toxicants are discharged into the estuary, many are either taken up selectively by the biota or are deposited in sediments. Due to bioaccumulation in the food chain, low concentrations in discharges often reach toxic levels in the biota, while many toxicants in sediments are mobilized over a period of time. The persistence of DDT and PCBs years after their use has terminated provides ample warning of long term effects. Clearly the cornerstone of your pollutant policy for toxicants needs to be source control and treatment prior to discharge - not dilution. Rapid dispersion and safe assimilation may be needed for the residues of oxygen demanding wastes that are not eliminated in the treatment process. Adequate monitoring is necessary, including the use of flow through bioassays of representative species at their most sensitive life stage.

Clearly, Basin Plan standards should be reviewed, updated and diligently enforced to assure that the discharge of treated waste does not affect beneficial uses adversely.

Policy concerning the disposal of dredge material needs careful review. You heard testimony from us and others concerning the undesirability of disposing of dredge material within the estuary, both from the standpoint of remobilizing toxicants and causing turbidity.

While the evidence presented to you indicates major improvement in the problems caused by conventional pollutants - those causing oxygen depletion and biological contamination - and in the amounts of toxicants discharged from point sources, many questions were raised about direct and indirect effects of toxicants. The Board needs to support an aggressive program to evaluate such effects and resolve any problems identified.

ENDANGERED SPECIES

The Department of Fish and Game (DFG) has testified previously about the potential impacts of the State Water Resources Control Board's decision on State and Federal listed (threatened, endangered and rare) plants and animals as well as federal candidate species. Impacts could take the form of direct impacts of the Board's decision on species in the Bay-Delta estuary or secondary effects caused by operational changes or service area impacts.

The Board has an obligation under the California Environmental Quality Act (CEQA) to address impacts on the species listed in Department of Fish and Game's Exhibits 4, 5, 6, and 7. In addition, the California Native Plant Act requires that the Department be notified prior to any action which would impact listed plants. The Board has a further obligation as required in the California Endangered Species Act (CESA). Pursuant to Section 2090 of CESA, as a state lead agency, the Board is required to consult with DFG. This consultation will result in DFG making a

determination as to whether the Board's action would jeopardize state listed species.

The Board should request technical assistance from the U. S. Fish and Wildlife Service's Endangered Species Office for those federally listed species that may be adversely impacted.

CESA Procedures

The first step recommended by CESA is the initiation of an informal consultation. This serves as an early warning device to assist the lead agency in identifying any potential conflicts with listed species. This step was initiated by the Board staff and DFG responded to the request with memoranda dated August 6, 1987 and October 20, 1987 (Appendix 1 and 2). In these memoranda DFG listed all those species that could be affected by the Board's actions. In addition, the Board was advised that detailed information would be needed in order to more clearly identify those species that may be affected by the Board's decision and define to what extent, if any, these species may be impacted. At a minimum the following data must be clearly presented to DFG:

1. A full description of the project area and project impact area, including maps.
2. Known and potential distribution of endangered and threatened species in the project area and project impact area, based on recent field surveys.

3. Additional information on species distribution and habitat, based upon literature, and scientific data review, and discussions with experts.
4. Analysis of possible effects of the proposed project on those listed species which may be affected by the proposed project based on the above data. This analysis will include cumulative effects.
5. Analysis of alternatives designed to reduce or eliminate impacts to endangered and threatened species.

As a continuation of this process DFG staff will work with the Board's staff identifying prudent alternatives and reasonable mitigation and enhancement measures that, when implemented, would avoid a jeopardy finding. Alternatives to consider include adopting water quality and flow standards that would avoid direct impacts to State listed species or conditioning water rights permits to preclude operational changes that could jeopardize listed species. Water rights permits for service area water users could be conditioned to avoid or minimize adverse impacts and the Board's decision could include provisions for prohibiting or minimizing water availability for the development of new agricultural areas that would destroy endangered and threatened species habitats.

Mitigation and enhancement measures include any provisions adopted by the Board that would minimize any unavoidable adverse impacts. Habitat development or enhancement of listed species habitats in areas adjacent to the impacted area could be considered.

This entire process will require close coordination between the Board and DFG and substantial information on subjects such as potential operation changes that may result from the Board's decision and land use changes as a result of water availability in the service area to the Board's actions. At this time, adequate information is unavailable to complete the consultation process. When it is available DFG will informally advise the Board whether or not its actions could jeopardize endangered or threatened species and the conditions or mitigation measures required to avoid jeopardy.

After the alternatives or mitigation measures are agreed to by DFG and the Board they should be incorporated in the Draft EIR. DFG will then respond within 45 days of the Notice of Completion of the DEIR with a formal written determination on whether or not the project would jeopardize endangered or threatened species. The final EIR should include all recommendations made by DFG. Should adequate measures not be included and DFG determines that the project, as approved, would jeopardize endangered or threatened species, DFG may file an appeal within 30 days after the Notice of Determination has been filed with the Secretary for Resources.

A parallel effort will be required with the U.S. Fish and Wildlife Service if there is any involvement by a federal agency, and the two efforts should be closely coordinated.