State Water Resources Control Board - Revised February 23, 2010

Informational Proceeding to Develop Flow Criteria for the Delta Ecosystem - Questions

Party submitting questions: California Sportfishing Protection Alliance

Priority[1]	Question	Witness
1	Hasn't the most inappropriate management decision that has led to "past failures in solving Delta fishery issues" been that insufficient water has been devoted to the problem, like under-doses of penicillin that only make the problem worse by giving the false appearance of addressing it?	Bay Institute/Any
2	If new habitat for pelagic fish species (such as tidal marshes) is created in the Delta, and X2 compliance points are moved upstream into the Delta, what will be the likely ecological effects in San Francisco Bay? In San Pablo Bay? In Suisun Bay? In the marshes adjacent to Suisun Bay?	Bay Institute/Any
3	Isn't it true that in order to maintain the entire estuary, it will be necessary to provide far greater Delta outflows than in recent history, even if new marsh habitat is created in the Delta itself?	Bay Institute/Any
4	Does the Bay Institute believe that reducing Delta outflow, as suggested by the State and Federal Water Contractors, is an important part of habitat restoration in the Delta at places such as Cache Slough, in order for this restoration to help recover pelagic fish species? Why or why not?	Bay Institute/Any
5	Would habitat restoration in Cache Slough, Sherman Island, the Lower Mokelumne floodplain, and the Yolo Bypass, as contemplated in BDCP, benefit pelagic fish species other than Delta smelt? Which species? Would those species be dependent on low Delta outflow for this habitat restoration to successfully benefit them?	Bay Institute/Any

1	DFG made no specific flow recommendations for this proceeding. Does DFG still support the flow recommendations that it made in the 1987-8 Water Quality Control Plan hearings and that it made in the 1992 Water Rights (D-1630) hearings as the flows necessary to fully protect Delta fisheries?	DFG/Any
2	Isn't the natural population-level defense of salmon against predation massive numbers of outmigrating smolts?	DFG/Salmonid panelist
3	If one predator of salmonids is eliminated in the Delta food chain, isn't it likely, or even certain, that another predator will take its place?	DFG/Salmonid panelist
4	Isn't one of the largest determinants of future escapement the numbers of salmon that enter the Delta as smolts as compared to fry?	DFG/Salmonid panelist
5	Why is in incorrect for the State and Federal Water Contractors to say that there is an "excess of habitat needed to support the current population" of Delta smelt?	DFG/Matt Nobriga (as co-author of Feyrer et al 2007, as cited in State and Federal Water Contractors' testimony).
6	Is there a statistically significant relationship between fall X2 and delta smelt abundance?	DFG/Matt Nobriga (as co-author of Feyrer et al 2007, as cited in State and Federal Water Contractors' testimony).
7	Can flow be used to reduce the negative effects of invasive species on native fishes? What changes in Delta outflow would significantly reduce the effects of invasive species or increase the populations of native fishes?	DFG/Other stressors panelist
1	What is the range of percentages when direct entrainment losses at the Delta pumps are compared with indirect losses? How does this vary for different species of fish?	SRCSD/Mr. Grovhoug
2	Considering indirect losses due to pumping operations, do you agree with the testimony of the State Water Contractors that Delta pumping operations do not have a population level effect on Delta smelt? How about on other species? Please specify which species.	SRCSD/Mr. Grovhoug
3	Would you please explain why the effort by the consultants for the State and Federal Water Contractors to disprove a significant correlation between reverse flows and "normalized salvage" fails to address the relationship between reverse flows and population-level effects of Delta pumping on any native fish species?	SRCSD/Mr. Grovhoug

4	Can you tell us if there is there a statistically significant correlation between reverse flows or any other consequence of Delta pumping and population-level effects on any native fish species? If yes, would you please tell us which species and roughly quantify those effects?	SRCSD/Mr. Grovhoug
5	Would you please describe some of the most important effects of reverse flows on predation on native fish?	SRCSD/Mr. Grovhoug
6	Would you please describe some of the most important effects of low Delta outflow on predation on native fish?	SRCSD/Mr. Grovhoug
1	Do the State and Federal Water Contractors believe that any quantitative conclusions on Delta outflow needs can ever be reached at all, final or otherwise?	SFWC/Any
2	Given that the Delta is the most studied estuary on the west coast of North America, how much more understanding do the State and Federal Water Contractors believe is necessary to gain before remedial action is taken?	SFWC/Any
3	Would it be fair to say that the State and Federal Water Contractors believe that they consider any Delta outflow whose ecosystem benefits are in any way uncertain is wasted water? If not, what measure of uncertainty regarding Delta outflow is allowable before it can be said that water is being wasted?	SFWC/Any
4	Do the Contractors maintain that insufficient Delta outflows are not a stressor or in any way a cause of the decline of Delta fisheries and other aspects of the ecosystem? Will increasing Delta outflow directly address the origins of any "stressors impacting the Delta's species and ecosystems?"	SFWC/Other stressors panelist
5	Do the State and Federal Water Contractors believe that "creating more empty space in upstream reservoirs leading to more capture of the needed flood flows" is deleterious to fish in the Delta? Do the Contractors agree that it is essential for the health of estuarine species to have frequent flood flows of varying magnitudes pass through the Delta?	SFWC/Hydrology panelist
6	What evidence do the State and Federal Water Contractors have that efforts to reduce predation can be successful to a degree that will improve survival of salmonids on a population level?	SFWC/Salmonid panelist

7	How do the State and Federal Water Contractors explain the strong correlations that were found in previous studies such as Kjelson's (Exhibit FWS-31 from the 1987 Water Quality Control Plan hearings) between successful outmigration and increasing flow, the closing of the Cross Channel Gates, and keeping Sacramento River fish out of the Central Delta?	SFWC/Salmonid panelist
8	Given that Kjelson and others, in previous studies, showed that juvenile salmon that entered the Delta as smolts had a much greater chance of successful outmigration to the ocean than juveniles that entered the Delta as fry, why does the Water Contractors' testimony fail to discuss this distinction? Do the tracking studies performed by the Water Contractors deal only with juvenile salmon that enter the Delta as fry?	SFWC/Salmonid panelist
9	Given that the rate of predation of salmon smolts in natural and unimpaired river systems is about 98%, aren't the most important statistics regarding successful outmigration comparative statistics that evaluate success under different scenarios of operating the Delta?	SFWC/Salmonid panelist
10	Is it the opinion of the State and Federal Water Contractors that sewage should be treated to a degree that no dilution by clean water should be needed at the point of discharge into a waterway? Are the State and Federal Water Contractors prepared to finance treatment to such a level throughout the Central Valley? If not, what improvements are the Contractors willing to finance?	SFWC/Other stressors panelist
	Are the State and Federal Water Contractors prepared to finance elimination of ammonium discharge at the Sacramento Wastewater Treatment Plant in order to test their theory that present ammonium discharge at that site is the "underlying cause" in the decline of pelagic species that is concealed by high Delta outflow?	SFWC/Other stressors panelist
	Do the State and Federal Water Contractors, or other agricultural water purveyors, have any responsibility to address pesticide pollution from the agriculture to which they supply water? If yes, have the measures they have taken to reduce pesticide pollution by their contractors been sufficient to reduce their contractors' pollution to a negligible level?	SFWC/Other stressors panelist

	Do the State and Federal Water Contractors support changes to the Ag Waiver program that would clearly and immediately assign individual responsibility to agricultural polluters in order to better reduce pollution from pesticide and other agricultural chemicals?	SFWC/Other stressors panelist
	Do the State and Federal Water Contractors support a general ban on the use of pyrethroid pesticides? Do they support a ban on domestic use of pyrethroid pesticides?	SFWC/Other stressors panelist
	Is it the testimony of the State and Federal Contractors that "declines in density of desirable prey for pelagic fish" have not been caused in any way by export operations, by reverse flows, or by low inflows from the San Joaquin side of the Delta?	SFWC/Pelagic fisheries panelist
	Is it the testimony of the State and Federal Contractors that in the absence of ammonium concentrations in the estuary, Delta smelt would be at about the same abundances they were at in 1990?	SFWC/Pelagic fisheries panelist
	Do the State and Federal Contractors maintain that, if ammonium were eliminated, there would there be no benefit to increased Delta outflows in addressing other contaminants?	SFWC/Other stressors panelist
	Is it the testimony of the State and Federal Contractors that periodic high flow events in the magnitude of 75,000-100,000 cfs of Delta outflow are needed to cleanse the estuary? If not, what flows are necessary to cleanse the estuary? Is it necessary to cleanse the estuary of all the pollutants that the Contractors maintain are the underlying causes of Delta fisheries declines?	SFWC/Hydrology panelist
	Do the State and Federal Contractors agree or disagree that prolonged flow events in the magnitude of 45,000 cfs of Delta outflow would likely accomplish the same objectives in increasing the food supply for Delta smelt as shorter term flow events of 75,000-100,000 cfs? Why?	SFWC/Hydrology panelist
1	USFWS made no specific flow recommendations for this proceeding. Does the Service still support the flow recommendations that it made in the 1987-8 Water Quality Control Plan hearings and that it made in the 1992 Water Rights (D-1630) hearings as the flows necessary to fully protect Delta fisheries?	USFWS/Any

2	Does USFWS still support the flows developed by the Anadromous Fish Restoration Program to achieve the doubling goals for anadromous fish in the Central Valley?	USFWS/Any
1	Isn't the most basic conclusion of your testimony and exhibits that there is not enough water in the Central Valley to meet existing levels of diversions and exports while also providing water needed for fisheries and other aquatic beneficial uses (as described by Bay Institute and the U.C. Davis scientists team)?	SVWU/Mr. Bourez
2	Why was it necessary to run the Cal-Sim model to show that existing levels of diversions and exports come at the expense of fisheries resources?	SVWU/Mr. Bourez
3	Are you aware that CSPA and others have been saying for over 25 years that water in the Central Valley is over-appropriated?	SVWU/Mr. Bourez
4	Can you imagine any modeling scenarios in which reduced diversions or exports would be examined?	SVWU/Mr. Bourez