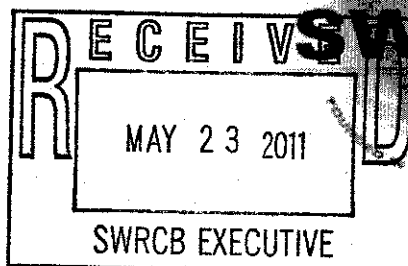


May 23, 2011

Ms. Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento CA 95814



Dear Ms Townsend:

The State Water Contractors organization ("SWC") has received the State Water Resources Control Board's ("State Board's") April 1, 2011, "Revised Notice of Preparation" ("RNOP") for its CEQA environmental documentation regarding proposed revisions to the water quality and flow objectives to protect South Delta agriculture and San Joaquin River fisheries. Specifically, the RNOP states that:

[t]he purpose of this notice and the additional scoping meeting is to: 1) clarify the scope of the State Water Board's current review of the southern Delta salinity and San Joaquin River flow objectives and the program of implementation for those objectives included in the Bay-Delta Plan and the scope of the environmental documentation in support of that review; and 2) provide opportunity to comment on the clarified scope.

The SWC has been engaged in these proceedings since their inception, for the simple reason that Delta water quality objectives have the potential to significantly impact the availability of the State Water Project exports upon which millions of people and hundreds of thousands of acres of fertile farmland rely. The SWC appreciate the opportunity to comment on the RNOP and the draft water quality objectives set forth therein.

The Draft San Joaquin River Fish and Wildlife Flow Objectives (Attachment 2)

Because the State of California operates no storage or diversion facilities on the San Joaquin River system, SWP operations do not impact either the timing or the quantity of flows in the San Joaquin River at Vernalis. This being the case, the SWC's initial request is that the CEQA documents and the resulting water quality plan explicitly recognize that the SWP does not impact San Joaquin River flows above Vernalis and that, therefore, the program of implementation will contain no SWP obligations related to such flows.

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Ms. Jeanine Townsend

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In addition, the SWC has two concerns with the information provided by the State Board through Attachment 2 to the RNOP. The first concern involves the use of so-called "unimpaired flow percentages" as the basis for establishing flow objectives to protect fish. On February 8, 2011, the SWC, jointly with the San Luis and Delta Mendota Water Authority ("SLDMWA"), filed comments on the State Board's Draft Technical Report. In those comments, we stated the following:

The Authority, Westlands, and SWC recommend that a collaborative technical team be assembled, composed of experts in the fields of hydrology, temperature, and life cycle modeling, which would be guided by the following principles: (1) focus on ecological processes and mechanisms for fish abundance; and (2) keep the modeling as simple as possible. The processes and factors the technical team should take into consideration would include: (1) identifying physical conditions (such as water depth, velocity, turbidity and physical conditions) that support fishery life stages by species, spatially and temporally, through the articulation of life cycle models; (2) evaluating habitat availability in the San Joaquin and channel processes at restoration sites within the San Joaquin basin; (3) evaluating water and sediment interactions with river channel shape (i.e. fluvial geomorphology); (4) evaluating water temperature needs of salmon and steelhead, and the capability of dam releases to meet those needs at various downstream locations; and (5) developing a flow schedule, which emerges from the above information, and is informed by hydrologic, temperature, and life cycle modeling.

In additional text and a footnote we commented that it is necessary to scientifically justify proposed flow prescriptions, and that water quality objectives that do not address the underlying stressors may violate the Clean Water Act and Porter-Cologne Water Quality Control Act. (See, February 8, 2011, letter at pp. 3-4) The SWC could not identify anything in the RNOP that indicates that the Water Board's environmental analysis recognizes this need to undertake a lifecycle analysis and will do so to satisfy the obligation to utilize the best available science.

CEQA requires no less of the Water Board than do the federal and State water quality laws just referenced. Given the potential impacts of modified San Joaquin River flows on, for example, irrigation supplies, hydro-power generation, and increased water temperatures caused by lowered reservoir levels, a full scientific analysis of the expected benefits over the life cycle of the fish of concern from any proposed flow increase needs to be included in the CEQA documentation. Simply adopting as the objective a gross percentage of unimpaired flows without such a lifecycle analysis is an unacceptable blunt instrument when a fine scalpel is required.

The SWC is also concerned with the statement on page 4 of Attachment 2, which suggests that some unidentified rate of flow is needed downstream of Vernalis to move migratory fish through the system. The statement suggests that the State Board has evidence that some additional fraction of migrating San Joaquin River juvenile salmonids will survive through the Delta if flows are not impacted by diversions. The SWC is aware of no scientific data that support such a belief. Tellingly, Attachment 2 provides no scientific support or analysis for such an assumption; nor does it suggest what proportion of migrating salmonids would be so benefitted. While the SWC do not dispute that some level of flows are required, the statement is so vague as

to prevent a commenter on the RNOP from formulating responsive comments to the program being considered.

What the SWC does know is that, as the San Joaquin River passes Vernalis, it moves into an area where tidal action overwhelms river flows. In this tidally dominated area, migratory fish do not seem to respond to changes in flow in terms of the length of time spent in the Delta as they move to the ocean. Salmon smolts are volitional swimmers and move through the system independent of flow rates.

Delta hydrology is heavily influenced by tidal flux far exceeding the subtle influence of net channel flows. (Decl. of DWR Expert Bradley Cavallo in *Consolidated Salmonid Cases* ¶ 8 (Feb. 3, 2011) ("Cavallo Decl.")). In fact, large changes in flow patterns are confined to channels very near the export facilities. In contrast, junctions along the San Joaquin River are relatively insensitive to increasing exports. (Cavallo Decl. ¶ 12, 14, 15.) The minor fractional changes in flow patterns likely have an undetectable effect on migrating juvenile salmonids and provide little reason to expect adverse impacts caused by the export diversions. (Cavallo Decl. ¶ 16, 17.)

Recent telemetry studies show Salmonid smolts spend merely minutes or hours at channel junctions, and only days navigating long stretches of Delta passageways. (Bureau et al. 2007; Vogel 2004.) As a result, it has also been shown that using the DSM2 HYDRO model to predict fish movement is superior to using Particle Tracking Modeling (PTM), particularly insofar as the former model analyzes 15-minute interval, channel-specific flow data, which provide much more precise estimates of fluctuating Delta conditions compared to the weekly to monthly timeframes used in the PTM. (Decl. of DWR Expert Bradley Cavallo in *Consolidated Salmonid Cases* ¶¶ 7, 8, 16, 17 (Feb. 3, 2011) ("Cavallo Decl.")).

In addition, the Delta Passage Model, which incorporates the best available science – including race-specific arrival timing, route selection, behavior, and mortality of juvenile salmon – illustrates the effects of exports on salmon survival are very small relative to non-project stressors. (Cavallo Decl. ¶¶ 22, 23, 24.)

Therefore, the SWC request that the State Board, as part of its planning and CEQA process, identify the scientific evidence it has to support its apparent belief regarding the effects of in-Delta diversions on juvenile Salmonid migration, which lifecycle factors for the various migratory fish species that it believes could be affected by in-Delta and export diversions during particular time periods, what mechanisms it believes are at play, and how it believes those effects could be tested and measured. Without this kind of scientific analysis, adoption of a flow objective for the San Joaquin River below Vernalis would be unreasonable.

The Draft Southern Delta Agricultural Water Quality Objectives (Attachment 3)

The SWC, while agreeing substantively that Table 2 of Attachment 3 reaches the correct conclusion as to the water quality (salinity) objectives needed to reasonably protect crops grown in the South Delta, has several comments concerning this portion of the RNOP.

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First, we believe that Table 2 should be modified to remove both the "from" and "to" references to the column labeled "Compliance Locations and footnote 5." In spite of the footnote, the table leaves the impression that an entity with compliance responsibility could be in violation, and subject to a cease and desist order, if the objective was being met at the applicable "station" but poorer water quality was found at any location with the range established by the Table. The State Board's desire to signal its plan to re-evaluate whether these stations properly reflect water quality throughout the South Delta would be better carried out by expanding the paragraph discussing this subject in the middle of page 4 of Attachment 3.

Second, the SWC strenuously objects to perpetuation of the error first contained in Water Rights Decision 1485 to the effect that "elevated salinity in the southern Delta" is caused in part by "diversions of water by the SWP..." There is no scientific support for this conclusion and no basis for the inclusion of this language in numbered paragraph 1 on page 3 of Attachment 3. To the contrary, DSM2 studies—the only scientific evidence on this point—show that SWP diversions *improve* water quality in some areas of the southern Delta and are neutral, at worst, in the rest of the southern Delta. These same studies provide support for the conclusion that the cessation of or reduction in pumping by the SWP would likely have far greater *negative* consequences for southern Delta water quality than current operations.

We believe the language about SWP impacts upon southern Delta salinity may have been retained as a result of the apparent belief that SWP and CVP operations have negatively impacted water circulation in the southern Delta, as indicated by the proposed requirement that DWR and USBR be made responsible for implementing "a special study to characterize the spatial and temporal distribution and associated dynamics of water level, circulation, and salinity conditions in the southern Delta water ways." (Attachment 3, p. 5, numbered paragraph 2.i.) This brings the SWC to its third set of concerns.

While water level issues may be appropriate to consider in a water rights proceeding (for example, to the extent that a diversion by a junior rights holder may unreasonably interfere with diversions by other legal users of water), the SWC does not believe such issues fall within the purview of the Porter-Cologne Act. Among other things, water level issues require a careful examination of whom in the Delta are legal users of water (an issue very much in dispute) and whether affected diversions and methods of diversion are *reasonable* given the competing uses of the water involved. These are pure water rights issues. They are not issues that can be settled in a quasi-legislative water quality proceeding conducted under the Porter-Cologne Act. Accordingly, the SWC believes the reference to water levels should be stricken from the RNOP and, instead, be reserved for consideration during future water rights proceedings.

With respect to water circulation (which we view as a null zone question) and distribution of salinity conditions, the SWC believes the State Board should consider, as part of its CEQA process, an alternative that would provide for this study to be carried out by the State Board itself, with cooperation from DWR in the form of modeling expertise and supported by data and financial contributions provided by southern Delta water users. There is no basis, at this point in the information development stage, to impose the entire burden of these studies on SWP and CVP water users.

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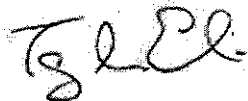
Candidly, the SWC considers the State Board's proposed approach to southern Delta circulation/salinity issues to be seriously flawed. Therefore, in cooperation with DWR, the SWC is developing additional DSM2 model runs that will examine circulation and null zones under varied conditions (barriers/no barriers) and pumping rates (no pumping/CVP only pumping/SWP and CVP pumping). We believe these studies will show that the major problems facing in-Delta diverters are primarily caused by their own in-Delta diversions being in excess of the available flow at Vernalis and that circulation problems and null zones are primarily a function of these excess diversion rates and the bathymetry of the southern Delta channels --- not export project operations. The SWC will share these model results with State Board staff as soon as they are completed.

Pending the completion of those studies, there is simply no evidence that export project operations need to be regulated in the manner suggested in the RNOP and the CEQA documents or that doing so will resolve southern Delta salinity issues. Rather than perpetuating the faulty assumption first conceived in D 1485, future State Board submittals should focus, instead, on finding the actual cause of southern Delta circulation problems rather than starting with a presumption that the export projects are primarily at fault.

In addition, while the subject of in-Delta diversions exceeding available flow at Vernalis was recognized by the SWRCB in its 1995 WQCP, it is fundamentally a water rights issue. Southern Delta diverters have no water right, riparian or appropriative, to more water or to better quality water than they would have had in the absence of upstream storage facilities. Instead, their "rights," such as they are, are limited in terms of quantity and quality to the water that would have been available in the absence of upstream storage projects. But, again, these are issues of water rights and are inappropriate to resolve in a quasi-legislative Porter-Cologne Act proceeding.

The SWC appreciates this opportunity to comment on the RNOP and looks forward to continued participation in a process designed to ensure that balanced, reasonable water quality objectives are developed using the best available science.

Sincerely,



Terry L. Erlewine
General Manager