Public Comment Sthrn Delta Ag & SJR Flow Deadline: 5/23/11 by 12 noon

SOUTH DELTA WATER AGENCY

4255 PACIFIC AVENUE, SUITE 2 STOCKTON, CALIFORNIA 95207 TELEPHONE (209) 956-0150 FAX (209) 956-0154 E-MAIL Jherrlaw@aol.com

LATE COMMENT

Directors:

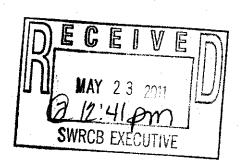
Jerry Robinson, Chairman Robert K. Ferguson, Vice-Chairman Natalino Bacchetti Jack Alvarez Mary Hildebrand

Counsel & Manager: John Herrick

May 23, 2011

<u>Via E-Mail and Regular Mail</u> <u>commentletters@waterboards.ca.gov</u>

Ms. Jeanine Townsend, Clerk to the Board State Water Resources Control Board Cal/EPA Headquarters 1001 "I" Street, 1st Floor Sacramento, CA 95814



Re: Comments to Notice of Preparation and Notice of Additional Scoping Review of San Joaquin River Flows and Southern Delta Salinity Objectives

Dear Ms. Townsend:

The South Delta Water Agency ("SDWA") submits the following comments to the above referenced Notices relating to the San Joaquin River Flow and Southern Delta Salinity Objectives.

1. As per previously submitted comments, the SDWA requests the SWRCB further investigate and analyze the water quality necessary to protect southern Delta agriculture. The previously submitted Hoffman Report is being used as a basis to justify a relaxation of the interior southern Delta standards. However, that Report contains a number of flaws previously noted. The first is that in developing leaching fractions for the subject soils, Dr. Hoffman used drainage information from areas in the southern Delta which are not subject to shallow, salty ground water. He also used an assumed applied water quality. Each of these assumptions was incorrect. The drainage water quality used is not an indication (and is certainly not representative) of how much salt has been flushed or leached from the soils in the areas from which the data did not come. Most of the lands on Pescadero Tract, Stewart Tract, Fabian Tract, Union Island and Roberts Island are subject to twice daily tidal action which raises the shallow ground water back into or near the root zone. Thus, any water percolating through the root zone is not conveying the applied salts away; it is merely temporarily transporting the salts into that shallow ground water where is soon is reintroduced back into the root zone. Dr. Hoffman

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incorrectly assumed that the quality of the drain water he examined was an indication of how much salt was leaching through the root zone and being transported out of the area. This incorrect assumption makes his entire analysis meaningless. Dr. Hoffman's only reply to these facts was to cite his knowledge of practices on a Central Delta Tract/Island (not part of the record and an incorrect description of the practices on that Tract/Island).

In addition, Dr. Hoffman assumed the applied water (again using data from an area not representative of the lower (elevation) areas of the southern Delta) was of a quality equal to the 0.7 EC standard. However, most of the lands from which he took his data receive water from the Delta Mendota Canal which is of a better quality than the 0.7 EC standard. Thus, Dr. Hoffman calculated the leaching fractions for an area by using both incorrect and non-representative data.

- 2. Dr. Hoffman did not adequately consider the limitations on percolation when calculating leaching fractions. Notwithstanding numerous sources of data provided to him regarding the various low percolating soils, his Report concluded that an adequate amount of water would/was flowing through the soil profile for the removal of salts. Previously submitted data by the SDWA (some produced by Dr. Hoffman himself a number of years ago) evidences the fact that up to 40% of the soils have a permeability of 0.2 inches per hour, with another 34% of the soils allowing only 0.2-0.6 inches per hour. Under such circumstances, the ability to transport salts through the soil profile (i.e. to leach) is virtually impossible. Dr. Hoffman ignored specific data indicating this in his analysis, instead relying on laboratory data and data from other non-similar areas to make his conclusions. When this inability to move salts through the soil profile is combined with the shallow ground water subject to tidal action, is it clear that Dr. Hoffman's Report provides no reliable information on which to base a change in the salinity standards.
- 3. Dr. Hoffman also failed to take into consideration farming practices which affect the ability to apply irrigation water and allow additional time for percolation. His comments to such data were that such practices were "bad management practices." Clearly an indication of the shortcomings of his work. Prior SDWA comments enumerate other problems and flaws with Dr. Hoffman's Report.
- 4. The environmental review of the proposed changes to the salinity objectives must include a peer review of Dr. Hoffman's Report so that independent experts can confirm and comment on the serious problems in the Report.
- Using the faulty data and conclusions from the Hoffman Report, the Notice lists possible changes to the salinity standards. Obviously, if the Report is flawed and incorrect, there is no basis to proposed any relaxation to the standards. The proposed changes and the Hoffman Report make no mention and do not attempt to explain examples on crop damage in the area due to high salt concentrations. Such data therefore precludes any change to the standards when the current standards are not protecting the beneficial use they are tied to.
- 6. The proposed changes do not take into account the water quality in areas not currently SWRCB

measured or estimated by the projects. It is well known that the compliance locations for the objectives are not located in the stagnant or null zones in the area. Because of this, it not even known what is the quality of water being used by diverters from these null zones, and thus it is not known what leaching is being accomplished or can be achieved. Unless and until experiments/testing is done to see what is being applied and what is being leached there is no basis for changing the objectives. SDWA recommends such experiments and testing be done in cooperation with it.

- 7. Similarly, the proposed changes to the objectives would allow a worse quality of water at the compliance locations with no analysis of what that worse water quality would do to the quality of the water in the null zones or how it might affect agriculture. Such worse quality would certainly exist well be fore the proposed narrative standard would result in any improvement in net flows.
- 8. The proposed narrative standard for net flows and water levels is a good step in addressing the underlying causes of the salinity problems in the area. SDWA recommends that this proposal be further fleshed out so that it provides a more specific set of actions and a rigid timetable. Prior salinity objectives have regularly been ignored and not enforced. To avoid the practice, export limitations should eventually be linked to meeting the standards, with an automatic decrease or shut down when exceedences occur.
- 9. The environmental review should include the effects of proposed changes in export facilities. Given the ongoing efforts to have an isolated facility for exports, CEQA requires it's effects on current and future water quality objectives be examined. As SDWA has shown the SWRCB, any change in southern Delta exports would necessarily result in less CVP salt being removed from the area, and a worsening of the water for local diverters.
- 10. Since the Notice sets forth proposals to worsen water quality in an area currently being injured by poor water quality, an anti-degradation analysis is required. The effects of allowing worse water quality will also affect other beneficial uses.
- 11. The proposed changes to the interior standards are not also proposed for Vernalis. It is perfectly appropriate and legal to require a better water quality at an upstream location in order to maintain the minimum quality downstream necessary to protect a beneficial use. I believe the cold water requirements for locations down stream from dams take into account the warming of the water between the release point and the compliance location.
- 12. SDWA has not provided any expert witness or other materials relating to fishery needs/flows on the San Joaquin River. It appears that the current consensus is that more fluctuations in flow are necessary to protect fish, and that additional amounts of water are also required. The environmental analysis should take into consideration the actual and purported "conservation" efforts by the upstream agencies and other parties. Such conservation efforts result in less flow in the river at many times, which in combination with their complete lack of responsibility for main stem requirements, indicates that requiring additional flows is both

appropriate and feasible.

13. The analysis should not go forward until the USBR complies with the directives of HR 2828. That federal law requires both a Plan to Meet Standards, and a decrease in reliance on New Melones for those standards. Hence, the amounts of water needed for fish and for salinity control will be different once the Bureau complies with the law and makes the discretionary decisions about how much less New Melones water it will use for these purposes. The Bureau's continued delays should not be allowed.

The SDWA looks forward to participating in this process as it continues. The Central Delta Water Agency joins in these comments. Please call me if you have any questions or comments.

Very truly yours,

JOHN HERRICK