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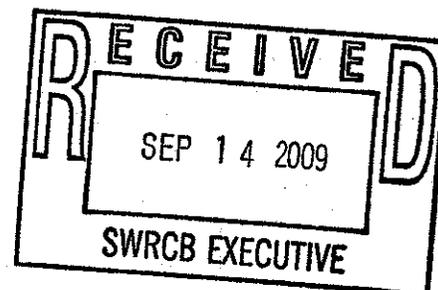
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VIA MAIL AND EMAIL - COMMENTLETTERS@WATERBOARDS.CA.GOV

Ms. Jeanine Townsend
Clerk to the Board and
Board Members of the
State Water Resources Control Board
1001 I Street, 24th Floor [95814]
P.O. Box 100
Sacramento, CA 95812-0100



Re: **Crop Salt Tolerance Study Report Comments by the City of Tracy**
Client-Matter No. 07547.00004

Dear Ms. Townsend and Members of the State Water Board:

On behalf of the City of Tracy ("City"), we would like to sincerely thank the State Water Resources Control Board ("State Water Board") for commissioning this salinity study to update the state of science on appropriate and reasonable water quality objectives for the Sacramento/San Joaquin Delta ("Delta"). In order to address these issues more fully, we respectfully submit the following comments on the July 14, 2009 Draft Report on "Salt Tolerance of Crops in the Southern Sacramento-San Joaquin Delta" by Dr. Glenn Hoffman.

1. The City takes issue with the statement on page 1 of the report that the southern Delta salinity objectives "were not substantively changes in the 2006 Bay-Delta Plan." The Bay-Delta Plan modifications made in 2006 changed the application of the electrical conductivity ("EC") objectives to all regions of the southern Delta, rather than just to the previous four compliance points specified in the earlier versions of the Plan. In addition, the modifications in 2006 for the first time imposed compliance with the EC objectives on municipal dischargers, without ever having undertaken the mandatory analysis required by Water Code section 13241, or having adopted a comprehensive program for implementation required by Water Code section 13242 setting forth considerations for how municipalities would comply with the expanded applicability of the water quality objective for EC. To make the report more accurate, the City suggests including the following at the end of the first sentence in the third paragraph at section 1.2 on page 1: "... was not available on which to base changes. However, the application of these objectives was modified to apply throughout the southern Delta and to additional discharge sources."

2. The City appreciates the recommendation to the State Water Board on page 5 of the draft report to modify outdated unit of measurement for EC currently used. When the State Water Board acts to modify the EC objectives, those objectives should be in microSiemens per centimeter ($\mu\text{S}/\text{cm}$) or deciSiemens per meter (dS/m), which are more updated units of measurement.

3. To get a more accurate picture of the salinity in the Delta over time, Dr. Hoffman should incorporate historic data showing salinity levels before water supply improvements were made to the Delta on page 5. The data going back only to 2000 gives too limited a view of the historic salinity levels.

4. The State Water Board members should take note of the findings in the report that the southern Delta waters are *not impaired* for EC over the long term (*see* pages 5, 74). As such, the State Water Board should consider revising the EC objectives to be long term averages that would still be protective.

5. It is unclear why Dr. Hoffman uses 100% crop protection as the goal to be attained (*see e.g.*, page 6). The City would like to point out that federal law allows once in three year exceedances of all objectives, and that criteria set to protect aquatic life are set at the 95th percentile and are not generally based on the most sensitive species. Thus, Dr. Hoffman should incorporate the 95th percentile values in his analysis (both for 95th percentile salt sensitivity and 95th percentile crop protection) to provide the State Water Board with a range of protective values as they embark on a new Water Code section 13241 analysis and adopt new objectives that will ensure "the reasonable protection of beneficial uses." Total 100% protection is not required by law, particularly for off-stream uses.

6. The State Water Board should consider whether the use of the Sodium Adsorption Ration ("SAR") would be a better objective particularly since Dr. Hoffman found no evidence of sodicity (*see* pg. 7).

7. Dr. Hoffman should opine on whether total dissolved solids ("TDS"), sodium, or other ions should be used as the proper objective since EC is not a pollutant, just a measurement of salinity (*see* pg. 13).

8. As the State Water Board contemplates the proper salinity objectives for the southern Delta, the City would like to point out that hundreds of millions of dollars will be needed around the Delta for municipal dischargers to consistently meet an end-of-pipe effluent limit based on Dr. Hoffman's proposed 1.0 dS/m EC objective, which is only needed to protect the most salt sensitive bean crop that is grown on less than 4000 acres in the Delta (*see* pg. 15). The State Water Board should consider that it would be cheaper to buy the land or to buy out the farmers' right to grow salt sensitive crops than it would be to install expensive and energy intensive treatment facilities, particularly when the data shows that the 1.0 dS/m level is rarely exceeded.

9. Dr. Hoffman should identify the source of the water used on the acreage where the most salt sensitive crops are being grown as the irrigation water used could be groundwater and not river water. (See pgs. 15/39) Further, Dr. Hoffman should include the projected cost of the updated bean study suggested on pg. 20.

10. Dr. Hoffman should identify any other available water management techniques that could be utilized to improve leaching to allow higher EC water to be equally protective of crop yield. (see pg. 35)

11. The data cited by Dr. Hoffman shows that, if EC objectives are not adjusted, perhaps waste discharge requirements ("WDRs") need to be placed on agricultural drains as the average EC from these discharges was cited as being 1.5 dS/m (see pg. 50). If municipal discharges are going to be held to a low EC level, a level playing field must be established. These issues must be considered in any 13241 analysis done to update the EC values in the Delta Plan

12. As previously stated, 100% yield is not "reasonable protection" anticipated by the Water Code at sections 13000 and 13241 given the astronomical construction, operation and maintenance costs of treatment needed to attain the objective when applied as an end of pipe effluent limitation (see pg. 63) Thus, Dr. Hoffman should rerun tolerance thresholds at less than 100% protection (see pg. 71).

In closing, the City contends that maintenance of EC objectives that were based on 30 year old studies and are over-protective of the majority of the crops grown in the Delta is unreasonable, particularly given the costs to dischargers that are required to meet those objectives as effluent limits notwithstanding the fact that their discharges have not caused the average values in the water to exceed those levels (see pg. 77).

Thank you for allowing the City to submit comments on this important draft report.

Respectfully submitted,

DOWNEY BRAND LLP



Melissa A. Thorne
Special Counsel for the City of Tracy

cc: Steve Bayley, City of Tracy

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