June 5, 2014

Anne Olson
Senior Water Resources Control Engineer
Non-15 Permitting
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Ste. 200
Rancho Cordova, CA 95670

SUBJECT: CENTRAL VALLEY SALINITY ALTERNATIVES FOR LONG-TERM SUSTAINABILITY (CV-SALTS) TECHNICAL ADVISORY COMMITTEE RESPONSE TO A REQUEST FOR CLARIFICATION BY THE CITY OF DIXON REGARDING THE CITY OF DIXON'S SITE SPECIFIC BORON STUDY AND ADDENDUM (ORDER NO. R5-2008-0136)

Dear Ms. Olson,

On September 12, 2013, the CV-SALTS Technical Advisory Committee (TAC) reviewed and discussed the *Site-Specific Boron Objective Study Work Plan* (Stantec 2013), as it related to ongoing CV-SALTS evaluations to determine appropriate salinity water quality objectives to protect agricultural supply water. A letter from the TAC, dated October 17, 2013, was submitted to you with a finding that the "TAC agreed that the Work Plan as proposed will achieve the stated objectives of the project" with the provision that "the project proponent provide the technical justification for the proposed annual average in the Study Report." Subsequent to that letter, the City of Dixon submitted a *Site Specific Boron Objective Study* (Stantec 2014a) and a *Site Specific Salinity Objective Study as an Addendum to the Boron Study* (Stantec 2014b).

The TAC reviewed the studies to determine if the objectives of the work plan were met through the completion of the studies. The TAC submitted a letter to you on April 11, 2014 providing general comments and a work plan consistency review of the study and addendum. On May 27, 2014, the City of Dixon asked for clarification of one of the recommendations of the April 11th TAC letter, specifically: *"The City agrees that sunflower is the appropriate crop to use, and based on the information available, and using procedures specified in the August 2, 2013 Workplan (Ref; Table 4 of the February 7, 2014 Report), that would result in a range of 1.7 – 1.8 mg/L for irrigation water, depending on the leaching requirement chosen by the farmers. Can you provide clarification and/or concurrence that this was the intent of your General Comment No. 4?"*

The TAC concurs that sunflower was the appropriate crop to use based on the methodology developed by CV-SALTS to determine sensitive crop species. Further, we concur that a range of boron concentrations in irrigation water from 1.65 to 1.83 mg/L – depending on the leaching requirement chosen by the growers (15% and 25%, respectively) – would be protective of the 95 percent yield for sunflowers. As a practical matter, it would be reasonably conservative to set the agricultural water quality objective at 1.65 mg/L in the City's WDRs to ensure that all agricultural beneficial uses are

adequately protected. From CV-SALTS perspective, no further information is needed from the project proponents to finalize the City of Dixon's *Site Specific Boron Objective Study.* The City's study was adequate for its intended purpose. However, it is possible that future efforts to develop a Salt and Nutrient Management Plan specific to this sub-basin may result in adoption of different water quality objectives in the future, but it is not possible to predict whether they would be more or less stringent.

Please call us if you have any questions concerning this clarification.

Sincerely,

Parry Klassen
Chair, CV-SALTS Executive Committee

Nigel T. Quinn
Co-Chair, CV-SALTS TAC

cc: Joe Leach PE/City of Dixon
Joseph DiGiorgio PE/Stantec