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VIA electronic mail to CWFhearing@waterboards.ca.gov and service list of hearing participants.

Tam Doduc, Member and Co-Hearing Officer
Felicia Marcus, Chair and Co-Hearing Officer
State Water Resources Control Board
1001 I Street
Sacramento, California 95814

Dear Hearing Officer Doduc and Hearing Officer Marcus,

In the Hearing on Friday, October 28, 2016, the State Water Contractors' attorney objected to Deirdre Des Jardins, principal at California Water Research ("California Water Research") reading an excerpt from the annual report by the Department of Water Resources to the State Water Resources Control Board on Bay-Delta modeling during cross-examination. The following excerpt on DSM2 modeling was introduced in cross-examination of Dr. Shankar Parvathinathan:

O&M's DSM2 Delta forecasts have shown that the DSM2 forecasting tool is effective at providing qualitative information concerning the trends in various hydrodynamic and water quality parameters. However, a more formal analysis of the ability of O&M's current DSM2based forecasts to provide accurate quantitative results has not been conducted. *It should be noted that DSM2 real-time simulations can at times fail to reproduce or predict observed data due to a combination of errors in forecast model input and DSM2 accuracy.* (Exhibit DDJ-14, p. 8-4, emphasis added.)¹

The State Water Contractors' attorney referred to California Water Research's reading of this excerpt in cross-examination as "testifying." Since California Water Research did not have a chance to respond to the objection in the Hearing, California Water Research respectfully submits this written response.

¹ Exhibit DDJ-14 is an excerpt from Exhibit DDJ-13, which is a true and correct copy of Michael Mierzwa and Bob Suits, "Real-Time Data and Forecasting Proof of Concept and Development," Chapter 8 of the Department of Water Resources' 2004 Annual Progress Report to the State Water Board on Methodology for Flow and Salinity Estimates in the Sacramento-San Joaquin Delta and Suisun Marsh, p. 8-4. Downloaded from <http://baydeltaoffice.water.ca.gov/modeling/deltamodeling/delta/reports/annrpt/2004/2004Ch8.pdf>.

As argued below, California Water Research's use of relevant excerpts from reference texts is not testimony, but an appropriate use of a treatise in cross-examination that would be accepted in civil trials in California. Dr. Shankar's testimony was on the Petitioners' DSM2 modeling of water quality impacts. The excerpt was from one of the Department of Water Resources' annual reports on Bay-Delta modeling mandated by the State Water Board in Decision 1485. The annual reports were also previously referred to in the written testimony of DWR's witness, Armin Munevar:

DWR submits annual reports to the State Water Board updating the State Water Board on DWR's progress in further refining CalSim II, as well as its other modeling tools. (See <http://baydeltaoffice.water.ca.gov/modeling/deltamodeling/AR2014/AR-2014-All.pdf>.) (Exhibit DWR-71, p. 7 at 26)

The annual reports were also referred to in DWR's July 20, 2016, "Master Response to Objections."²

The references by DWR's witnesses and DWR's attorneys to these annual reports could be misleading, unless the parties are allowed to introduce relevant excerpts from the reports in the Hearing. As far as their use in cross-examination, California law has long recognized that an expert may be examined on the subject to which his or her expert testimony relates. Judges in California civil trials allow questions on the content of a publication that has been established as a reliable authority by other expert testimony, or by the witness' admission. Evidence Code 721 provides as follows:

721. (a) Subject to subdivision (b), a witness testifying as an expert may be cross-examined to the same extent as any other witness and, in addition, may be fully cross-examined as to (1) his or her qualifications, (2) the subject to which his or her expert testimony relates, and (3) the matter upon which his or her opinion is based and the reasons for his or her opinion.

(b) If a witness testifying as an expert testifies in the form of an opinion, he or she may not be cross-examined in regard to the content or tenor of any scientific, technical, or professional text, treatise, journal, or similar publication unless any of the following occurs:

- (1) The witness referred to, considered, or relied upon such publication in arriving at or forming his or her opinion.
- (2) The publication has been admitted in evidence.
- (3) The publication has been established as a reliable authority by the testimony or admission of the witness or by other expert testimony or by judicial notice.

If admitted, relevant portions of the publication may be read into evidence but may not be received as exhibits.

While the Administrative Procedure Act does not have specific provisions for use of texts in examination or cross-examination of expert witnesses, similar considerations of relevance and "reliable authority" presumably apply.³

² "Master Response To Similar Objections Made By Protestants Collectively," p. 14, footnote 11,

³ California Water Research also points out that the ad-hoc graphs and charts created by the Department of Water Resources ("DWR"), which DWR has used in cross-examination of experts testifying in Part 1B, are not information from technical references or publications that are accepted as authoritative.

Finally, California Water Research wishes to address prior statements made by the Department of Water Resources' attorney and the State Water Contractor's attorney during the Hearing that the reliability of the CALSIM II and DSM2 computer models is not an issue for cross-examination. The Department of Water Resources' July 20, 2016 "Master Response to Objections" referred to the March 9, 2016 ruling in the Bethany Irrigation District ("BBID") Administrative Civil Liability ("ACL") Hearing, stating that Kelly-Frye rule did not apply to Board proceedings. However, the March 18, 2016 BBID ACL Hearing ruling⁴ did not state that the reliability of expert testimony and the Prosecution Team's water availability analysis was not a consideration in the hearing. Instead the March 18, 2016 ruling stated that the Hearing Officer was unlikely to be misled:

Because the hearing officer is "presumably competent to disregard that evidence which should be excluded or to discount that evidence which has lesser probative value, it makes little sense, as a practical matter, for a judge in that position to apply strict exclusionary evidentiary rules." (Underwood v. Elkay Min., Inc. (4th Cir. 1997) 105 F.3d 946, 949.)

[I]n an agency proceeding the gate keeping function to evaluate evidence occurs when the evidence is considered in decisionmaking rather than when the evidence is admitted. Even though it arises later in the administrative process than it does in jury trials, the [hearing officer's] duty to screen evidence for reliability, probativeness, and substantiality similarly ensures that final agency decisions will be based on evidence of requisite quality and quantity.

[citations omitted]

We are, therefore, inclined to err on the side of admissibility, and consider whether the expert testimony is reliable, relevant, and comports with sections 801 through 805 of the Evidence Code upon our review of all of the evidence. (p. 2)

The March 18, 2016 ruling also states,

Extensive evidence has been submitted challenging various aspects of the analysis, obviating any appearance that the procedure, itself, is infallible. We fully intend to consider, in detail, the accuracy and reliability of the Prosecution Team's water availability analysis. (p. 3)

California Water Research respectfully requests that the Hearing Officers ensure that all relevant evidence on the accuracy, reliability and probativeness of the CALSIM II and DSM2 models be fully considered in the WaterFix Change Petition Hearing. This includes allowing parties to introduce relevant evidence into the hearing both by direct testimony and through cross-examination.

Sincerely,



Deirdre Des Jardins
Principal, California Water Research

⁴ State Water Resources Control Board, March 18, 2016 ruling, Byron-Bethany Irrigation District Administrative Civil Liability Hearing. Available at http://www.waterboards.ca.gov/waterrights/water_issues/programs/hearings/byron_bethany/docs/wisdbbid/wsdbbid_proceduralruling031816.pdf.

**STATEMENT OF SERVICE
CALIFORNIA WATERFIX PETITION HEARING**

Department of Water Resources and U.S. Bureau of Reclamation (Petitioners)

I hereby certify that I have this day submitted to the State Water Resources Control Board and caused a true and correct copy of the following document(s):

**Request for Official Notice – March 18, 2016 BBID Ruling
March 18, 2016 BBID ACL Hearing Ruling
Response to Objections to Use of Documents in Cross**

to be served by Electronic Mail (email) upon the parties listed in the Current Service List for the California Water Fix Petition Hearing, dated October 6, 2016, posted by the State Water Resources Control Board at

http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/docs/100616revsrvlist.pdf

Note: In the event that any emails to any parties on the Current Service List are undeliverable, you must attempt to effectuate service using another method of service, if necessary, and submit another statement of service that describes any changes to the date and method of service for those parties.

I certify that the foregoing is true and correct and that this document was executed on November 2, 2016.



Deirdre Des Jardins

California Water Research

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