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6 **BEFORE THE**
7 **CALIFORNIA STATE WATER RESOURCES CONTROL BOARD**
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9 HEARING REGARDING PETITION FILED
10 BY THE DEPARTMENT OF WATER
RESOURCES AND U.S. BUREAU OF
11 RECLAMATION REQUESTING CHANGES
12 IN WATER RIGHTS FOR THE
CALIFORNIA WATERFIX PROJECT

OFFER OF PROOF
13 OBJECTIONS BASED ON STANDARDS
14 FOR EXPERT TESTIMONY ON
SCIENTIFIC EVIDENCE

15 California Water Research is participating in the WaterFix Water Right Change Petition
16 Hearing on public interest grounds, and advocating for scientific integrity and transparency in the
17 WaterFix Hearing use of computer modeling. Cross-examination has shown that Petitioners'
18 CWF H3+ and BA H3+ CALSIM II hydrologic and operations modeling evidence, and DSM2,
19 Temperature, and Biological modeling based on it, is fundamentally speculative. The expert
20 testimony based on this modeling thus does not meet the standards for admissibility under
21 Evidence Code section 801(b) and 802. California Water Research hereby submits the
22 following objections to testimony of Petitioners' witnesses.
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1 I. ARGUMENT

2 First, the leading case on standards for the admissibility of scientific evidence is *Sargon*
3 *Enterprises v. University of Southern California* (2012) 55 Cal.4th 747. In *Sargon*, the
4 California Supreme court held that

5 under Evidence Code sections 801, subdivision (b) and 802, the trial court acts as a
6 gatekeeper to exclude expert opinion testimony that is (1) based on matter of a type on
7 which an expert may not reasonably rely, (2) based on reasons unsupported by the
8 material on which the expert relies, or (3) speculative. (*Id* at 771.)

9 Second, in *In re Lockheed Litig. Cases* (2004) 115 Cal.4th 558, the California Supreme
10 court, stated, with respect to Evidence Code 801(b), "[w]e construe this to mean the matter that
11 the expert relies on must provide a reasonable basis for the particular opinion offered, and that an
12 expert opinion based on speculation or conjecture is inadmissible." (*Id.* at 564.)

13 Third, courts have long required that the party offering scientific evidence must use a
14 qualified expert to demonstrate that correct scientific procedures were used in the particular
15 case.¹

16 II. DEFICIENCIES IN THE MODELING SUBMITTED FOR PART II

17 Petitioners' witnesses have testified that CWF H3+ is the adopted project. However,
18 Chapter 3 of the Final EIR/EIS (Exhibit SWRCB-102) states:

19 While the analysis for Alternative 4A in the resource chapters utilizes H3+ modeling
20 results, actual operations will ultimately depend on the results of the adaptive
21 management program. (p. 3-262.)

22 The CWF H3+ scenario is thus fundamentally speculative. The cross-examination of Gwen
23 Bucholz, Kristin White, Erik Reyes, and other Panel 1 and Panel 2 witnesses also showed that

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25 ¹ The basis for this requirement is (*People v. Kelly* (1976) 17 Cal.3d 24.) While the Hearing Officers have ruled that
26 Kelly-Frye standards do not apply to the WaterFix Hearing, presumably the Hearing Officers and Hearing Team will
27 use the standards for correct use of scientific procedures in weighing the evidence.

1 the CWF H3+ and BA H3+ operational scenarios are speculative. For example, the Coordinated
2 Operating Agreement assumptions about withdrawals from upstream reservoirs are speculative
3 (R.T. March 1, 2018, 181:3-182:2.) The cross-examination testimony of Mr. Reyes also shows
4 that the CWF H3+ CALSIM modeling does not accurately represent current or proposed future
5 operations. For example, the Oroville carryover storage targets do not represent current
6 operations carried into the future (R.T. March 1, 2017 88:1-94:7, 124:17-125:14.) The CWF
7 H3+ CALSIM modeling thus fails the basic steps of verification and validation (Exhibit DDJ-
8 105, p. 15.) The CALSIM II model outputs are inputs to the DSM2, Temperature, and
9 Biological models. (DSM2, Exhibit DWR-1015, 3:9-11, Biological models, Exhibit DWR-1012,
10 54:12-14.) The Petitioners' tiered modeling of CWF H3+ and BA H3+ operational impacts is
11 thus fundamentally deficient to be used as foundational evidence for a major water right change.

12 Based on the above points and authorities, I am moving to exclude the following exhibits
13 and testimony:

14 Testimony of Gwen Buchholz, Exhibit DWR-1010, 10:13-26, 12:2-12:11

15 Testimony of Marin Greenwood, Exhibit DWR-1012 3:21-4:2, 4:28-5:6, 6:24-8:11,8:22-
16 9:5, 21:20-22,22:25-26:1, 23:6-29:9, 23:13-19, 24:13-15, 25:2-26:2, 26:7-26:9, 26:19-21,
17 27:14-28:5, 28:15-29:4, 34:14-36:10, 38:14-19, 39:9-39:17, 43:2-7, 47:7-11,48:28-49:5,
49:13-50:9,50:19-22, 51:9-15, 53:10-54:7, 54:17-73:5, 73:6-74:17

18 Testimony of Richard Wilder, Exhibit DWR-1013, 2:21-25, 6:9-7:11, 7:16-28, 8:8-8:21,
19 10:3-14:28, 16:13-16:16, 17:3-5, 19:1-7, 30:12-31:7, 32:9-17, 33:10-13, 34:14-35:11,
37:7-40:3, 42:11-44:13,44:17-26, 45:18-46:2, 49:18-56:8, 57:5-57:22

20 Testimony of Tara Smith, Exhibit DWR-1015, 3:13-42:14

21 Testimony of Erik Reyes, Exhibit DWR-1016, p. 3:7-4:12, 6:26-7:18, 8:5-8:18, 9:2-
22 12:24, 14:20-15:21, 17:8-17:12

23 Testimony of Douglas Rischbieter, Exhibit DWR-1024, p. 3 at 5-12, p. 4 at 22-24, p.5 at
24 9-13 and 22-25, p.7 at 8-9

25 Exhibit DWR-1069, p. 24-75.

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Dated March 9, 2018

Respectfully submitted,



Deirdre Des Jardins
Principal, California Water Research

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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):

**Offer of Proof: Objections Based on Standards
for Expert Testimony on Scientific Evidence**

to be served by Electronic Mail (email) upon the parties listed in the Current Service List for the California Water Fix Petition Hearing, dated March 6, 2018, posted by the State Water Resources Control Board at http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/service_list.shtml

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 March 9, 2018.

Signature:



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