

BEFORE THE STATE WATER RESOURCES CONTROL BOARD OF THE STATE OF CALIFORNIA

ATTORNEY OR PARTY WITHOUT ATTORNEY REQUESTING SUBPOENA (name, address, and telephone no.): Stephan C. Volker M. Benjamin Eichenberg Law Offices of Stephan C. Volker 436 14th Street, Suite 1300 Oakland, CA 94612	FOR STATE WATER BOARD USE ONLY
REPRESENTING: TITLE OF THE PROCEEDING: <p align="center"><i>California WaterFix Project Change Petition</i></p>	
<input type="checkbox"/> SUBPOENA <input type="checkbox"/> RE HEARING <input checked="" type="checkbox"/> SUBPOENA DUCES TECUM <input checked="" type="checkbox"/> RE DEPOSITION	

THE PEOPLE OF THE STATE OF CALIFORNIA, TO (name): **U.S. Bureau of Reclamation's Person Most Knowledgeable**

1. YOU ARE ORDERED TO APPEAR AS A WITNESS in this proceeding as follows unless you make special agreement with the person named in item 3:

a. Date: July 18, 2016	Time: 9:00 a.m.
b. Address: Barkley Court Reporters, 770 L Street, Suite 950, Sacramento, CA	

2. AND YOU ARE:

- a. Ordered to appear in person. (Wat. Code, § 1080; Gov. Code, § 11450.10; Cal. Code Regs., tit. 23, § 649.6(a).)
- b. Not required to appear in person if you produce the records described in the accompanying affidavit in compliance with Evidence Code sections 1560 and 1561. (Wat. Code, § 1080; Gov. Code, § 11450.10(b); Cal. Code Regs., tit. 23, § 649.6(a).)
- c. Ordered to appear in person and to produce the records described in the accompanying affidavit. The personal attendance of the custodian or other qualified witness and the production of the original records is required by this subpoena. The procedure authorized by subdivision (b) of section 1560, and sections 1561 and 1562, of the Evidence Code will not be deemed sufficient compliance with this subpoena. (Wat. Code, § 1080; Gov. Code, § 11450.10; Cal. Code Regs., tit. 23, § 649.6(a).)

3. IF YOU HAVE ANY QUESTIONS ABOUT WITNESS FEES OR THE TIME OR DATE FOR YOU TO APPEAR, OR IF YOU WANT TO BE CERTAIN THAT YOUR PRESENCE IS REQUIRED, CONTACT THE FOLLOWING PERSON BEFORE THE DATE ON WHICH YOU ARE TO APPEAR:

a. Name: Stephan C. Volker	b. Telephone number: (510) 496-0600
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(Gov. Code, § 11450.20(a); Code Civ. Proc., § 1985.2.)

4. WITNESS FEES: You are entitled to witness fees and mileage actually traveled, both ways, as provided by law. Request them from the person who serves this subpoena or from the person named in item 3. (Wat. Code, §§ 1081, 1083, 1084; Gov. Code, §§ 11450.40, 68070 et seq.; Code Civ. Proc., §§ 1986.5, 2065.)

5. If you object to the terms of this subpoena, you may file a motion for a protective order including a motion to quash with the hearing officer assigned to your case. Motions must be made within a reasonable period after receipt of the subpoena, and shall be made with written notice to all parties, with proof of service upon all parties attached. In response to your motion, the hearing officer may make an order quashing the subpoena entirely, modifying it, or directing compliance with it, or may make any order needed to protect the parties or witnesses from unreasonable or oppressive demands, including unreasonable violations of the right to privacy. (Gov. Code, § 11450.30.) (Send motions to: The State Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, CA 95812-0100.)

DISOBEDIENCE OF THIS SUBPOENA MAY CAUSE YOU TO BE LIABLE FOR CONTEMPT AND OTHER PENALTIES PROVIDED BY LAW

(Wat. Code, §§ 1090-1097; Gov. Code, §§ 11450.20(b), 11455.10-11455.20.)

Dated: July 8, 2016



 (signature)

Name: Stephan C. Volker

Title: Attorney for Protestants

Pacific Coast Federation of Fishermen's Associations and Institute for Fisheries

(See reverse for Endorsement on Subpoena, if used, and Proof of Service) Resources

Unless issued by an attorney pursuant to Code of Civil Procedure, Section 1985, subdivision (c), the original subpoena is embossed with this seal.

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7 PACIFIC COAST FEDERATION OF
FISHERMEN'S ASSOCIATIONS and
8 INSTITUTE FOR FISHERIES RESOURCES

9
10 **BEFORE THE**
CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

11 HEARING REGARDING PETITION FILED BY THE)
12 DEPARTMENT OF WATER RESOURCES AND U.S.)
BUREAU OF RECLAMATION REQUESTING)
13 CHANGES IN WATER RIGHTS FOR THE)
CALIFORNIA WATERFIX PROJECT)
14)
15)
16)
ADDENDUM TO SUBPOENAS
DUCES TECUM
California Water Code § 1080;
California Government Code §
11450.10;
California Code of Regulations, Title
23 § 6496(a)

17 TO PETITIONERS DEPARTMENT OF WATER RESOURCES AND U.S. BUREAU OF
18 RECLAMATION AND TO YOUR ATTORNEYS OF RECORD:

19 Pursuant to California Water Code section 1080, California Government Code section 11450.10,
20 and California Code of Regulations, title 23, section 649.6 subdivision (a), protestants Pacific Coast
21 Federation of Fishermen's Associations ("PCFFA") and Institute for Fisheries Resources ("IFR") request
22 your production of the fourteen (14) categories of documents described below for the reasons summarized
23 below. Under Government Code section 11450.10(a), protestants may issue subpoenas or subpoenas
24 duces tecum "for production of documents at any reasonable time and place or at a hearing." Under
25 Government Code section 11450.20(a), such subpoenas may be issued "by the attorney of record for a
26 party, in accordance with sections 1985 to 1985.4, inclusive, of the Code of Civil Procedure."

27 **SUMMARY OF REQUEST**

28 The custodians of records or other qualified witnesses most knowledgeable for the California

1 Department of Water Resources (“DWR”) and the United States Bureau of Reclamation (“Reclamation,”
2 collectively, “petitioners”) are hereby commanded to produce the records identified below pursuant to
3 title 23 of the California Code of Regulations (“CCR”) and chapter 4.5 of the California Administrative
4 Procedure Act, California Government Code (“Gov. Code”) sections 11400 *et seq.* (“APA”). Production
5 of these documents is necessary because PCFFA and IFR (collectively, “protestants”), as well as other
6 parties to the WaterFix proceedings, have requested modeling information essential to the just and
7 efficient adjudication of these proceedings from DWR and Reclamation that has not been produced.

8 As protestants explained in their June 29, 2016 request for this Board’s issuance of a subpoena to
9 petitioners, petitioners have never provided the following information that California Water Research
10 requested by letters to the Board dated February 4, March 10 and April 2, 2016 regarding the CalSim II
11 model on which petitioners base their Change Petition: (1) a version history, including changes made
12 between versions; (2) information about the availability of model runs using different scenarios; (3)
13 information about the availability of quality assurance and quality control information; (4) a list of
14 sensitivity analyses that were run during the development of the models; and (5) information about the
15 availability of model runs for the CS5 scenario, levee failure scenario, and isolated conveyance
16 operations. California Water Research’s June 20, 2016 letter to the Board further explained that the
17 Board’s own scientific panel has articulated why adequate model documentation, testing, and calibration
18 information is necessary to any assessment of the modeling results that petitioners used to support their
19 petition.

20 Petitioners have not produced these essential documents despite these reasonable requests from
21 California Water Research, PCFFA, and IFR. Therefore, PCFFA and IFR, as authorized by Government
22 Code section 11450.05(b), hereby subpoena the production of these documents. Protestants request that
23 these documents be produced within ten (10) days of receipt of this subpoena. Except for information in
24 databases or version control systems, which are specified below, all documents are requested in their
25 original electronic form, as long as that form is readable by commonly available computer software.
26 Documents in directories may be provided in a commonly used directory archive format such as a .tar or
27 gzip file. Once the electronic records subject to this subpoena are assembled, protestants will arrange
28 with DWR and Reclamation to copy them at a designated time period of not less than six continuous

1 hours on a designated date. *Id.*

2 REQUESTED DOCUMENTS

3 CalSim II Code Development Information

4 1. All reports, analyses, presentations, correspondence, spreadsheets, notes, technical memoranda,
5 and other information relating to specification and review of the development of petitioners' CalSim II
6 modeling for the Bay Delta Conservation Plan ("BDCP") and WaterFix, including but not limited to the
7 following modeling phases:

- 8 a. Alternatives Screening, including the first and second screenings described in Appendices
9 3A and 3I of the Draft Environmental Impact Report ("DEIR") / Environmental Impact
10 Statement ("DEIS"), particularly model runs relating to the Board's 2010 Flow Criteria
11 and the Enhanced Spring Delta Outflow Approach initially recommended by the Board;
- 12 b. Preliminary Administrative DEIR/DEIS;
- 13 c. CS5 scenarios;
- 14 d. DEIR/DEIS;
- 15 e. Revised DEIR ("RDEIR") / Supplemental DEIS ("SDEIS");
- 16 f. Biological Assessment; and
- 17 g. WaterFix hearing;

18 *Necessity:* CH2M Hill and other contractors developed much of the BDCP and WaterFix
19 modeling under the supervision of petitioners and the BDCP / Delta Habitat Conservation and
20 Conveyance Program ("DHCCP") planning parties. Simulation development and review information was
21 not generally distributed and has not been made available to protestants. As reported in Appendix 3I of
22 the BDCP DEIR/DEIS, this information was used by the Board to review proposed operating criteria for
23 the project. Full disclosure is thus required in order to independently review the conclusions of the
24 alternatives screening and assess the suitability of the operations simulations for their designated purpose.

25 2. CalSim II model version history, in the format of a complete copy of the root directories of all
26 version control repositories involved, including the current repositories and any other repositories that
27 were used in the past but have been discontinued. For each repository, please provide an unabridged
28 exact binary of the entire recursive directory structure existing on the server, including all files, links, and

1 directories in and below the repository root, such that an installation of the version control utility (e.g.
2 Perforce, Git) would be able to access it as an intact repository in an equivalent manner as it has been
3 used by petitioners and their contractor, CH2M Hill. Names and versions of the version control utilities
4 should be provided, as well as any administrative passwords required to access the repository files. These
5 copies may be provided using any standard archiving tools such as .tar or gzip. The suggested format is
6 one repository per .tar (or .taz) file. To the extent the repositories do not have the following information,
7 it is also requested:

- 8 a. modeling code, data, and metadata for the following versions that had external review: the
9 2003 Historical Validation study version, the 2006 San Joaquin River review version, and
10 the 2008 Long-Term Operational Criteria and Plan (“OCAP”) Biological Assessment
11 version;
- 12 b. modeling code, data, and metadata for all BDCP and WaterFix versions; and
- 13 c. full version history and revision information for the BDCP and WaterFix model versions,
14 both released and unreleased, Delivery Reliability Report (“DRR”) versions, and Review
15 versions, including all version notes, all revision notes, and all change logs with associated
16 comments, all whether linked or separate.

17 *Necessity:* Version history and version control information relating the CalSim II code, inputs,
18 and changes to embedded parameters between model versions is mostly unavailable to protestants.
19 Without this information, and without any certainty about when each component of the current model
20 was last documented, tested, or calibrated, and what changes have been made since that time, it is
21 impossible to independently assess modeling accuracy and reliability for its designated purpose.

- 22 3. BDCP and WaterFix CalSim II model run information relating to the specification of BDCP and
23 WaterFix model runs, including all documentation, reports, analyses, presentations, notes, technical
24 memoranda, and correspondence concerning model runs that were performed for each version, including:
 - 25 a. current and future levels of development;
 - 26 b. different assumptions of shifts in hydrology due to climate change;
 - 27 c. different assumptions of sea level rise;
 - 28 d. different regulatory assumptions;

- 1 e. different outflow assumptions, including West Delta, Spring, and Fall X2; and
- 2 f. different project operations assumptions, including different assumptions of bypass flows
- 3 at Hood, and flows at Vernalis.

4 To the extent copies of the model runs are not already provided in the copy of the root of the version
5 control repositories, please also provide such copies.

6 *Necessity:* The model results presented for the WaterFix hearing include a number of future
7 conditions and operational assumptions. It is prohibitively difficult to assess the effects of these changes
8 without more model runs comparing those conditions and assumptions. Some of these runs may only be
9 available for earlier versions. Runs evaluating alternative outflow conditions and operating criteria are
10 also essential information with respect to meeting California Water Code section 85086.

11 4. BDCP and WaterFix model version and model run comparison information, including, for each
12 version and any model version it is derived from:

- 13 a. all documentation, reports, notes, correspondence, and technical memoranda relating to the
- 14 specification of sensitivity analyses or output comparisons between model versions and
- 15 model runs, including quality assurance/quality control comparisons; and
- 16 b. all spreadsheets, analyses, or other documents with results of sensitivity analyses and
- 17 output comparisons performed between different model versions or model runs.

18 *Necessity:* No information comparing outputs for the multiple BDCP and WaterFix models and
19 model runs has been provided. To the extent that spreadsheets comparing these outputs exist, they need
20 to be provided for informed technical analysis.

21 5. Relevant information on all hydrologic data inputs, water demand data inputs and parameters, and
22 operational parameters, including the most recent documentation on hydrologic inputs and parameters for
23 the CalSim II base model versions used for production of CEQA/NEPA and Biological Assessment
24 documents, including but not limited to the following:

- 25 a. all documentation, analyses, spreadsheets, notes, technical memoranda, and other
- 26 information relating to the development and testing of hydrologic input for CalSim II
- 27 without climate change, including reservoir inflows and tributary stream flows through
- 28 2003 without climate change (with any analyses or comparisons with historical data) and

1 any input data developed for years since 2003 (with any analyses or comparisons with
2 historical data);¹

- 3 b. all documentation, analyses, notes, technical memoranda, and other information relating to
4 delivery logic, allocation modules, and export demand modeling, as well as version
5 history, testing and sensitivity analysis, and documentation of assumptions for Central
6 Valley Project (“CVP”) Water Supply Index (“WSI”) Demand Index (“DI”) curves, CVP
7 delivery logic and Delivery-Carryover curve, State Water Project (“SWP”) WSI-DI curve,
8 and SWP delivery logic and Delivery-Carryover curve;
- 9 c. version history, testing and sensitivity analyses, notes, technical memoranda, and other
10 information relating to model version values for all operational parameters setting
11 operations of the major reservoirs, including the Shasta, Trinity, Folsom, Oroville, and San
12 Luis rule curves, and assumed Trinity minimum flows;
- 13 d. spreadsheets and related information used by the CVP and SWP system operators when
14 setting actual deliveries and operations; and
- 15 e. optimization function version history, testing and sensitivity analyses, and documentation
16 of assumptions for the weight table on demand nodes and weights for storage target zones
17 on reservoirs.

18 To the extent that operating parameters were changed in the CalSim II operations simulation presented
19 for the WaterFix hearing, please provide all of the above for that changed hearing version. Version
20 history information included in version control systems need only be provided once.

21 *Necessity:* According to the CalSim II Strategic Review conducted in 2003, “[t]here has not been
22 a sufficiently systematic, transparent, and accessible approach to the development and use of hydrologic,
23 water demand, capacity, and operational data for CALSIM II. . . . The administration of data
24 development is fragmented, disintegrated, and lacks a coherent technical or administrative framework.”
25 A Strategic Review of CALSIM II and its Use for Water Planning, Management, and Operations in
26 Central California, Attachment 1, p. 20 (Dec. 4, 2003). Petitioners agreed in their response to the Review
27

28 ¹ The same information for the climate change scenarios petitioners apparently considered is requested in
item 6 below.

1 that:

2 [t]he validity of data inputs impacts both model results and model credibility. The
3 greatest concern is the validity of the hydrologic inputs and parameters. Concern is
4 compounded by the current lack of complete documentation. Over the last two
5 years DWR and Reclamation have attempted to document model inputs.
6 Reclamation is currently documenting the current CalSim-II hydrology procedures.
7 This effort needs to be extended and updated.

8 Peer Review Response: A Report by DWR/Reclamation in Reply to the Peer Review of the CalSim-II
9 Model Sponsored by the CALFED Science Program in December 2003, Attachment 2, p. 12 (§ 4.3.2
10 Data). Thus, petitioners have themselves acknowledged the absolute necessity for access to the data
11 herein requested and represented twelve years ago that they believed that the effort to collect such data
12 should be extended and updated. While such extension and update may well have occurred,
13 documentation of such is either currently unavailable or very out of date.

14 6. All reports, analyses, spreadsheets, presentations, technical memoranda, notes, and other
15 information relating to the detailed development of the hydrologic input to CalSim II from the Q1-Q5
16 climate change scenarios, including documentation of the assumptions of, and testing and sensitivity
17 analyses for, the downscaling algorithm and Variable Infiltration Capacity (“VIC”) model used to develop
18 reservoir inflows.

19 *Necessity:* Only very general information is currently available about the assumptions used in the
20 downscaling method and VIC model used to develop hydrologic inputs to CalSim II from the Q1-Q5
21 climate change scenarios. Any independent evaluation of the climate modeling used by petitioners must
22 have this information.

23 7. Other CalSim model documentation. A complete copy of all documentation databases involved
24 in the CalSim model must be provided, such that an installation of the database utility would be able to
25 access the database in an equivalent manner as it is being used to conduct the modeling upon which
26 petitioners rely. Names and versions of the database utilities should be provided, as well as any
27 administrative passwords required to access the database files. The suggested format is as provided in
28 item 2, above. If the database utility is proprietary, a copy of that utility is also requested. To the extent
these databases do not contain all documents and information relating to the CalSim II version used as a
basis for the model results developed for the WaterFix hearing, such documents and information are also

1 requested. If complete information is not available for that version, all relevant information is requested,
2 including that for prior versions. This includes, but is not limited to, the following components:

- 3 a. basic documentation such as variable tables, current node maps, and any mass balance
4 evaluation and error corrections, including those proposed for model revisions;
- 5 b. documentation and notes for the simulation protocol and any scripts associated with the
6 simulation protocol, as well as copies of the scripts;
- 7 c. calibration, testing, field data, notes, analyses, error assessments and proposed corrections,
8 and documentation of the assumptions used for Sacramento Valley Depletion Analysis
9 Regions for diversions (including assumed demands for each region by settlement
10 contractors, agricultural users (“AG”), and municipal/industrial users (“M&I”) and the
11 project/non-project split for each demand), return flow calculations (including basin
12 inefficiencies, non-recoverable losses, and surface runoff), and groundwater (including
13 assumed demand, Central Valley Groundwater-Surface Water Model calibration
14 information, and testing information);
- 15 d. refuge diversions (level 2 and level 4) and assumed return flows;
- 16 e. version history, documentation of assumptions, notes, field data, technical memoranda,
17 and calibration information for Freeport, including the demands of the East Bay Municipal
18 Utility District, the Contra Costa Water District, and Sacramento County; and
- 19 f. version history, calibration and testing information, field data, and documentation of
20 assumptions for interior Delta flow splits, including the Sacramento River to Sutter and
21 Steamboat Sloughs, and the Delta Cross Channel and Georgiana Slough, the San Joaquin
22 River to Old and Middle River, and flow through Three Mile Slough, as well as Delta
23 Island consumptive use;
- 24 g. version history, calibration and testing, field data, technical review, and documentation of
25 assumptions for the most recent DSM2 model version used in calibration of the Delta
26 salinity artificial neural network (including calibration at Jersey Point, Rock Slough,
27 Emmaton, and Collinville); and
- 28 h. version history, calibration and testing information, field data, and documentation of

1 assumptions for the Delta salinity artificial neural network and the X2 artificial neural
2 network (including field data).

3 Version history information included in a version control system need only be provided once.

4 8. Information on Reclamation Temperature Models that includes:

- 5 a. all reports, technical memoranda, and CEQA document appendices listed in the
6 “References” section of Appendix H of the August 2008 OCAP Biological Assessment;
- 7 b. all documentation for the Reclamation Temperature models and the Sacramento River
8 Water Quality Model (“SRWQM”);
- 9 c. the validation data set for the SRWQM and all associated documentation, reports,
10 analyses, spreadsheets, presentations and technical memoranda, to the extent they have not
11 already been provided under parts a and/or b of this section; and
- 12 d. the testing and calibration data sets for the Reclamation Temperature models for Shasta,
13 Keswick, and the upper Sacramento River, and all associated documentation, reports,
14 analyses, spreadsheets, presentations and technical memoranda, to the extent they have not
15 already been provided under parts a and/or b of this section.

16 Also fish life cycle model development information that includes:

- 17 a. all information relating to development of petitioners’ fish life cycle models for the BDCP
18 and WaterFix processes, including all data, spreadsheets, analyses, notes, technical
19 comments and other information relating to specification and review of the models,
20 including the modeling phases specified in item 1;
- 21 b. fish life cycle model version histories, in the same format as that specified in item 2;
- 22 c. fish life cycle model run information, in particular all documents relating to the
23 specification of BDCP and WaterFix fish life cycle model runs, including documents and
24 correspondence relating to model runs that were performed for each version, as well as
25 copies of all model runs that are not included in item 9;
- 26 d. fish life cycle model version and model run comparison information, including all
27 sensitivity analyses and output comparisons between versions as specified in item 4; and
- 28 e. all available documentation, reports, and analyses of fish life cycle models, including

1 documentation of all model assumptions, scientific research, expert opinion, testing, and
2 field data used in the development of the models.

3 *Necessity:* Temperature modeling information is required in order to independently assess the
4 reliability of the model for predicting temperature-related impacts on salmonids. Likewise, fish modeling
5 information is required in order to independently assess the reliability of the fish life cycle models
6 developed by petitioners to show the petition's impact on fish. While some general information is
7 available on the modeling methods petitioners used, no details are available as to model testing or
8 validation.

9 **Managerial, Policy, and Information Technology Information**

10 9. Documents and other information regarding petitioners' management of CalSim code
11 development and maintenance, including current information on DWR and Reclamation processes for the
12 development and maintenance of CalSim model versions and associated documentation, version control,
13 quality assurance / quality control, and testing and calibration information (both within the agencies and
14 with contractors). Please produce all documents which address the following:

- 15 a. how source code is maintained, including the version control system;
- 16 b. what software and/or spreadsheets for viewing the model data are maintained, and how
17 they are maintained;
- 18 c. what notes are maintained, both linked to the code and separately, and how it is
19 maintained;
- 20 d. what information on model testing and calibration is maintained, both linked to the code
21 and separately, and how it is maintained;
- 22 e. what quality assurance and quality control information is maintained, and how it is
23 maintained; and
- 24 f. what information on known model errors and "bugs" is maintained, and how it is
25 maintained.

26 *Necessity:* By letters dated February 4, March 10, and April 12, 2016, California Water Research
27 requested information about the following petitioner management practices: version history, model runs,
28

1 quality assurance / quality control spreadsheets, and sensitivity analyses.² Petitioners did not respond
2 fully to these requests, in spite of direction by the Board in its March 4, 2016 ruling to do so. Petitioners
3 claimed in their June 3, 2016 letter that DWR had provided “all data reasonably in its possession
4 responsive to the requests.” However, petitioners stated in their 2004 Peer Review Response
5 (Attachment 2) that the agencies were maintaining a version control system for CalSim II, and that they
6 were implementing a documentation database and standard quality assurance / quality control
7 spreadsheets.³ Petitioners must give some explanation for these contradictory statements. Further, if
8 petitioners cannot provide the information herein requested, petitioners should document why this
9 information was not previously provided, why this information cannot now be provided, and what person
10 or entity is in possession of this information and could provide it to protestants.

11 10. All documents that address procurement of the modeling for the BDCP and WaterFix planning
12 and regulatory processes, including:

- 13 a. all Memorandums of Understanding and other agreements with BDCP parties that govern
14 the procurement of BDCP and WaterFix CEQA and NEPA documents, Biological
15 Assessment documents, and WaterFix Hearing documents, and the development and
16 review of any computer modeling for these processes;
- 17 b. all contracts with consulting firms – including, but not limited to CH2M Hill, ICF
18 International, and RBI Consulting – for preparation of hydrologic and hydrodynamic
19 modeling and fish life cycle models for these CEQA, NEPA, Biological Assessment, and
20 WaterFix processes;
- 21 c. a list of all documents, data, and computer models provided to consulting firms for use in
22 developing or refining the hydrologic and fish life cycle models for these CEQA, NEPA,
23 and Biological Assessment documents, including field data, analyses of field data,
24 computer models, and any testing or calibration reports, and copies of such documents,
25

26
27 ² This was also explained in PCFFA’s and IFR’s June 7, 2016 response to DWR and Reclamation’s
28 Opposition to Protestants’ Request for Additional Time to File Evidentiary Objections.

28 ³ See California Water Research, Request for Extension and Missing Modeling Information (June 9,
2016).

1 data, and models, to the extent they are not included in items 1-9;

2 d. all related Task Orders and Notices to Proceed.

3 *Necessity:* Petitioners have provided incomplete responses to all previous requests for
4 information on the development of computer modeling associated with the petition. This information
5 may be in the possession of consultants under contract to BDCP parties. Any participation by other
6 hearing parties in the development of the modeling used by petitioners, and any exercise of contractual
7 rights regarding such modeling, must be made transparent to the Board and to protestants in order to
8 obtain an objective evaluation of the modeling.

9 11. Documents or other information regarding external peer reviews, including all documents and
10 correspondence relating to external peer reviews of the CalSim and DSM2 model versions. Please
11 include all documents which address the following:

- 12 a. all lists or spreadsheets of external peer reviews for validation;
- 13 b. all discussions of the need for external peer review or validation;
- 14 c. all discussions and specification of information released for external peer reviews;
- 15 d. all reports from external peer reviews; and
- 16 e. all information relating to responses to external peer review, including complete
17 specification of model changes and corrections.

18 *Necessity:* External peer reviews are recommended for complex models such as the CalSim II.
19 According to the 2003 Strategic Review, “[n]ew models proposed for use in California should be peer
20 reviewed.” Attachment 1, p. 12. Such review should address

21 the theory underlying the model, the model’s software, the documentation of the
22 model as well as of its software, the model’s functions and capabilities including
23 those pertaining to model data input and output, the input data themselves, model
24 calibration and verification, capabilities for sensitivity and uncertainty analyses,
25 user control of all model operations including pre and post analyses (GUIs), spatial
26 and temporal resolutions, and its limiting assumptions.

27 *Id.* Protestants should at least have the information available to a peer review if they are to assess the
28 adequacy of the evidence submitted by petitioners. This information is necessary to independently assess
the reliability of the modeling petitioners have submitted to support their documentation of harms to other
users of water.

12. Documents or other information regarding other internal and external technical reviews, including

1 all documents and correspondence relating to internal or external technical review of the CalSim II model
2 and its components. This includes the following:

- 3 a. any lists or spreadsheets of technical reviews that were performed;
- 4 b. the Common Model Assumptions Package Review;
- 5 c. DWR and Reclamation's technical review of the modeling for the BDCP and WaterFix;
- 6 d. information produced for each technical review;
- 7 e. any reports, analyses, spreadsheets, presentations, correspondence, and technical
8 memoranda from each technical review; and
- 9 f. any response to each technical review, including detailed specifications of model changes
10 and corrections.

11 *Necessity:* According to the 2003 CALSIM II Strategic Review, a thorough technical analysis of
12 CalSim II "should be carried out. Only then will users of CALSIM II have some assurance as to the
13 appropriateness of its assumptions and to the quality (accuracy) of its results." Attachment 1, p. 3.
14 Petitioners have not yet made a comprehensive list of technical reviews performed for CalSim II
15 available, and some of these reviews may have been internal reviews. This information is necessary to
16 independently assess the reliability of the modeling petitioners have submitted to support their
17 documentation of harms to other users of water.

18 13. Distribution policy documents for the above modeling, including documents and correspondence
19 relating to the distribution of CalSim II model versions, except information currently published on open
20 access websites with working hyperlinks, including all documents relating to the following:

- 21 a. the Transparency Policy, as referenced in DWR's initial response to California Water
22 Research's request for modeling information;
- 23 b. external access (i.e., access by any person who is not employed by DWR, Reclamation, or
24 the California Natural Resources Agency) to or release of model source code;
- 25 c. external access to or release of software or spreadsheets for viewing model data;
- 26 d. external access to or release of model documentation;
- 27 e. external access to or release of model version control information;
- 28 f. external access to or release of model quality assurance and quality control information;

1 and

2 g. external access to or release of model testing and calibration information.

3 *Necessity:* According to the 2003 CalSim II Strategic Review, the CalSim II model should have
4 been “[s]ubject to a systematic model and data testing regime and continuous quality improvement
5 program.” Attachment 1, p. 21 (emphasis in original). DWR and Reclamation policies on stakeholder
6 access to technical information about modeling appear to be poorly implemented and to contain
7 conflicting policies, raising the potential for unequal access to such information, in contravention of the
8 peer review’s recommendation that such information be shared among stakeholders.

9 14. All documents which address the CVP/SWP Biological Opinion mandated revision of
10 Reclamation’s temperature model, including all documents which address the following:

- 11 a. model errors and/or the need for revision of the model;
- 12 b. all proposed revisions;
- 13 c. the timeline for implementation of such revisions; and
- 14 d. the timeline for release of the model.

15 *Necessity:* The CVP/SWP Biological Opinion, Reasonable and Prudent Alternative Action
16 1.2.4.3, mandates that Reclamation revise “major flaws” in its temperature model, as characterized by the
17 National Marine Fisheries Service in their letter of June 28, 2016. The presence of such major flaws is
18 relevant to Reclamation’s continued use of temperature modeling related to that evaluated in the
19 CVP/SWP Biological Opinion.

20 Protestants hereby subpoena these documents as specified in items 1-14 – whether they are
21 located on computers belonging to DWR or Reclamation, or on database servers as part of a database
22 maintenance contract with DWR or Reclamation⁴ – such that they can be easily copied to a hard drive or
23 zip drive, or in such form that protestants can easily download such documents as in the case of linked
24 open access websites. However these documents are produced, protestants request that they be produced
25 no later than five (5) days from receipt of this subpoena. Protestants also request that an index be

26
27
28 ⁴ Information located on database servers or computers used directly by DWR or Reclamation or on
database servers or computers operated by contractors to DWR and Reclamation all constitute
information reasonably under the control of DWR and Reclamation.

1 provided in the form of an Excel spreadsheet that indicates which of the above numbered document
2 requests each produced document is responsive to. Protestants further request that any expense for the
3 production of such documents be capped at \$100 without further express authorization from the
4 undersigned.

5 DWR and Reclamation need not produce documents publicly available and accessible to
6 protestants, provided such availability and accessibility is adequately demonstrated by working
7 hyperlinks. This includes documents already available to protestants at the following websites as of July
8 7, 2016:

- 9 1. <http://baydeltaoffice.water.ca.gov/modeling/hydrology>
- 10 2. <http://baydeltaoffice.water.ca.gov/modeling/deltamodeling/>
- 11 3. <http://baydeltaconservationplan.com/>
- 12 4. <https://www.californiawaterfix.com/>
- 13 5. http://www.usbr.gov/mp/cvo/ocapBA_051608.html

14 This also includes documents already released to protestants as exhibits by petitioners, or otherwise
15 submitted to the WaterFix hearing either by Board staff or one of the parties.

16 Protestants believe that the disclosure of these documents is not privileged or subject to any
17 existing limitations or exemptions under the Evidence Code. *Cf. Sehlmeier v. Department of General*
18 *Services* (1993) 17 Cal.App.4th 1072, 1079-80 (balancing test for confidential third party records which
19 are “in fact privileged under express provisions of the Evidence Code”). If petitioners believe a portion
20 of the information in the requested documents is exempt from disclosure, PCFFA and IFR hereby request
21 that any such information be clearly redacted and an explanation for such redaction be provided. PCFFA
22 and IFR also request that petitioners provide prompt notification of the reasons that any documents or

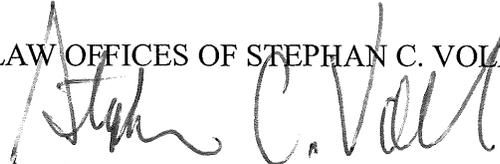
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1 portions thereof are withheld. If documents responsive to this request were erased or deleted in 2015 or
2 2016, please provide a complete description of any such files and the reasons why such files were erased
3 or deleted and the procedures followed, and the availability of backups for such files.

4
5 Dated: July 8, 2016

LAW OFFICES OF STEPHAN C. VOLKER



STEPHAN C. VOLKER

Attorney for Protestants

PACIFIC COAST FEDERATION OF FISHERMEN'S
ASSOCIATIONS and INSTITUTE FOR FISHERIES
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FISHERMEN’S ASSOCIATIONS and
8 INSTITUTE FOR FISHERIES RESOURCES

9
10 BEFORE THE
11 CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

12 HEARING REGARDING PETITION FILED BY THE)
DEPARTMENT OF WATER RESOURCES AND U.S.)
13 BUREAU OF RECLAMATION REQUESTING)
CHANGES IN WATER RIGHTS FOR THE)
14 CALIFORNIA WATERFIX PROJECT)
California Code of Civil Procedure §
15)
1987.5
16)

17 I, Stephan C. Volker, declare as follows:

18 1. I am an attorney admitted to practice law in the State of California and attorney of record
19 for protestants Pacific Coast Federation of Fishermen’s Associations and Institute for Fisheries Resources
20 (“protestants”) in this proceeding. The following matters are within my personal knowledge, and if called
21 as a witness, I could competently testify thereto.

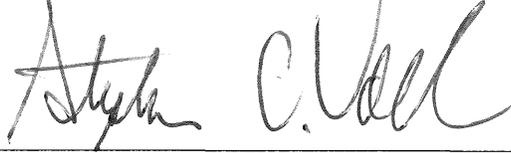
22 2. Protestants, as well as other parties to the WaterFix proceedings, have requested modeling
23 information relevant to these proceedings from petitioners California Department of Water Resources
24 (“DWR”) and the U.S. Bureau of Reclamation (“Reclamation”) that has not been produced.

25 3. Good cause exists for the production of the documents requested in the Subpoenas Duces
26 Tecum and their Addenda, for the reasons set forth in the section titled “necessity” following each
27 document request in the Addenda. As explained therein, production of these documents is essential to
28 afford protestants an understanding of the modeling basis for the evidence presented by petitioners in

1 support of their petition requesting changes in water rights for the California WaterFix project.

2 I declare under penalty of perjury under the laws of the State of California that the foregoing is
3 true and correct. Executed this 8th day of July 2016 in Oakland, California.

4
5
6 By:



STEPHAN C. VOLKER
Attorney for Protestants
PACIFIC COAST FEDERATION OF FISHERMEN'S
ASSOCIATIONS and INSTITUTE FOR FISHERIES
RESOURCES

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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 documents:

SUBPOENA DUCES TECUM TO DEPARTMENT OF WATER RESOURCES' PERSON MOST KNOWLEDGEABLE
ADDENDUM TO SUBPOENAS DUCES TECUM
DECLARATION OF COUNSEL ATTESTING TO GOOD CAUSE FOR SUBPOENAS DUCES TECUM

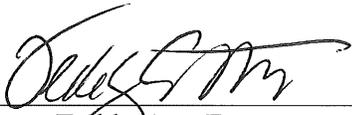
SUBPOENA DUCES TECUM TO U.S. BUREAU OF RECLAMATION'S PERSON MOST KNOWLEDGEABLE
ADDENDUM TO SUBPOENAS DUCES TECUM
DECLARATION OF COUNSEL ATTESTING TO GOOD CAUSE FOR SUBPOENAS DUCES TECUM

STATEMENT OF SERVICE

to be served by Electronic Mail (email) upon the parties listed in Table 1 of the Current Service List for the California WaterFix Petition Hearing, dated July 8, 2016, 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

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



Name: Teddy Ann Fuss
Title: Assistant to Stephan C. Volker, Attorney
Party/Affiliation: Pacific Coast Federation of Fishermen's Associations and Institute for Fisheries Resources
Address: 436 14th Street, Suite 1300
Oakland, CA 94612