

August 1, 2018

<u>Via Email - CWFhearing@waterboards.ca.gov</u>

The Honorable Felicia Marcus, Chair Co-Hearing Officer State Water Resources Control Board P.O. Box 100 Sacramento, CA 95812-0100 The Honorable Tam Doduc Co-Hearing Officer State Water Resources Control Board P.O. Box 100 Sacramento, CA 95812-0100

Re: California WaterFix
Ruling on Part 2 Rebuttal Testimony and Subpoenas

Dear Co-Hearing Officers Doduc and Marcus, and WaterFix Hearing Team:

The following letter addresses the Hearing Officers' *Ruling on Part 2 Rebuttal Testimony and Subpoenas*, dated July 27, 2018 ("July 27 Ruling").

The Hearing Officers' decision to strike the Rebuttal Testimony of two expert witnesses presented by the San Joaquin Tributaries Authority ("SJTA") and to preclude any questioning of the authors and developers of the 2010 Delta Flow Criteria Report (SWRCB-25) is inconsistent with the Delta Reform Act (Wat. Code, 85000 *et seq.*), predicated on factual inaccuracies, and unduly prejudicial to the SJTA and other parties in this proceeding.

There is only one document that the State Water Resources Control Board ("Board") is legally obligated to consider in this proceeding. That document - which has been offered into evidence during Part 1 and Part 2 of this proceeding - is the Board's own 2010 Delta Flow Criteria Report ("2010 DFCR"). Pursuant to the Delta Reform Act, any order approving the WaterFix change petition "shall include appropriate Delta flow criteria and shall be informed by the analysis" in the 2010 DFCR. (Wat. Code, § 85086[c][2][emphasis supplied].) Theoretically, the Board could – in its discretion – disregard (or otherwise ascribe no weight to) any piece of evidence in this proceeding except the 2010 DFCR.

Despite the Board's legal requirement to include "appropriate Delta flow criteria" in any order approving the WaterFix change petition (Wat. Code, § 85086[c][2]), the issue of what constitutes appropriate Delta flow criteria has remained largely unaddressed in this proceeding. Similarly, the 2010 DFCR, and the analysis therein which the Board must consider when setting appropriate Delta flow criteria, has been unchallenged in this proceeding. In addition to striking the SJTA's written testimony of Daniel B. Steiner and Doug Demko, both of which highlight deficiencies in the 2010 DFCR, the Hearing Officers have also precluded the SJTA, and all other parties, from questioning the Board employees who drafted the 2010 DFCR, as well as the individuals from the Department of Fish and Wildlife ("DFW") who provided some of the scientific analysis upon which the conclusions in the 2010 DFCR are based. The Hearing Officers' determination in the July 27 Ruling improperly ensures that the Board's 2010 DFCR remains largely unchallenged, notwithstanding that DFW has advised the Board, in a separate proceeding, that some of the scientific information presented by DFW during the development of the 2010 DFCR is based on an outdated version of the salmon-production simulation model (known as SalSim) which contains known errors.² In short, the Board's July 27 Ruling insulates its own report from criticism by striking written testimony that is critical thereof, and by shielding the drafters of the report from cross-examination.

The July 27 Ruling provides three reasons for striking the SJTA's Part 2 Rebuttal testimony and for precluding the questioning of subpoenaed witnesses concerning the 2010 DFCR. The Board's justifications are flawed, and it is apparent that the true reason for striking the testimony and precluding the questioning of critical witnesses is to expedite the proceeding by eliminating analysis and science that contradicts the conclusions in the 2010 DFCR.

1. The July 27 Ruling Erroneously Implies that the 2010 DFCR Was Not Offered Into Evidence During Part 2

The written testimony of modeling expert Daniel B. Steiner (SJTA-401) and fish biologist Doug Demko (SJTA-402) rebuts the flow analysis and scientific underpinnings of the conclusions in the 2010 DFCR. In the July 27 Ruling, the Hearing Officers stated that the 2010 DFCR "was not admitted into evidence during Part 2 of the hearing . . . and therefore it is not the proper subject of Part 2 rebuttal." (July 27 Ruling, p. 3-4 [emphasis supplied.) The Hearing Officers are incorrect.

¹ Prior to commencement of this proceeding the Board acknowledged, "the Delta Reform Act of 2009 requires the 'appropriate Delta flow criteria' to be informed by the State Water Board's 2010 Delta flow criteria report, which found that current flow requirements are insufficient to protect public trust resources in the Delta." (Revised Hearing Schedule, etc., April 25, 2016, p. 7.)

² During the hearings for the update of the Water Quality Control Plan for the Bay-Delta, DFW employee Dean Marston (a witnesses subpoenaed by the SJTA for rebuttal testimony) admitted to the Board that there are errors in earlier versions of the SalSim model.

Although the July 27 Ruling properly notes that the 2010 DFCR was offered into evidence during Part 1, and admitted into evidence on February 21, 2017, the Hearing Officers overlook the fact that the report was **also** offered into evidence in **Part 2** by the California Sportfishing Protection Alliance (CSPA). A copy of CSPA's Exhibit List for Part 2 identifying the 2010 DFCR (SWRCB-25) as an exhibit is attached to this letter (Exhibit A). Because the report had already been admitted into evidence during Part 1, it was unnecessary for the Board to formally admit the document into evidence a second time during Part 2. However, it is clear the 2010 DFCR was offered into evidence during Part 2. Therefore, the factual predicate for the Board's conclusion that the report is "not the proper subject of Part 2 rebuttal" is simply incorrect insofar as CSPA did, in fact, offer the report into evidence during Part 2. The SJTA should not be precluded from responding to CSPA's proffer of evidence during Part 2 simply because a different party proffered the same evidence during Part 1, particularly in light of the fact that the 2010 DFCR squarely addresses the issue of appropriate Delta flow criteria, which the Hearing Officers have repeatedly identified as a Part 2 issue. (Revised Hearing Schedule, etc., March 4, 2016, p. 5 ["As set forth in the hearing notice, what constitutes 'appropriate Delta flow criteria' is key hearing issue number 3.d, which will be considered during Part 2 of the hearing.)

Furthermore, the Hearing Officers previously directed the parties that "evidence accepted during Part 1 of the hearing **should not be resubmitted in Part 2**." (Ruling Regarding Scheduling of Part 2, etc., August 31, 2017, p. 12 [emphasis supplied].) The fact that other parties besides CSPA did not attempt to offer the 2010 DFCR into evidence during Part 2 is a consequence of the Board's order explicitly directing parties not to do so. It is entirely improper – if not deceptive - for the Board to direct the parties not to resubmit Part 1 documents that are relevant to Part 2 issues, and then rely on the fact that most parties abided by that order as a basis for precluding Part 2 rebuttal of those same documents.

More importantly, the Board has **not** stricken the testimony of other Part 2 rebuttal witnesses who stated that their rebuttal testimony was responsive to the 2010 DFCR. (*see e.g.* SVWU-400 ["MBK previously reviewed the SWRCB's 2010 Delta Flow Criteria Report and concluded there would be significant impacts to water supply deliveries, reservoir storage conditions, and ability to comply with existing SWRCB requirements with implementation of a minimum Delta outflow requirement of 40 to 50 percent of unimpaired flow. These conclusions remain relevant for the SWRCB's consideration during evaluation of potential terms and conditions for CWF."]; DWR-1211 ["I am also responding to several parties whose experts suggested that the SWRCB's 2010 Flow Criteria Report . . . should be accepted without modification, suggesting that there was no relevant information that should also be considered . . . This is inaccurate. Since 2010, there has been a large body of highly relevant scientific investigation, and this testimony is intended to identify some of that new information."].) The Hearing Officers' inconsistent treatment in this regard undercuts their reasoning that the SJTA's testimony was stricken because it is not proper Part 2 rebuttal. The 2010 DFCR is either proper subject matter for rebuttal, or it is not; it cannot be proper for some parties but not others.

Moreover, during Part 2 of the proceeding, Hearing Officer Tam Doduc explicitly and emphatically stated that the Board has not "disavowed anything associated with" the 2010 DFCR, that the Board has not "walked away from the hearing record" that resulted in the development of the 2010 DFCR, that she (as a Board member in 2010) is "very proud" of the work that we did and very proud of the report that was adopted," and that the 2010 DFCR "is going to be a very important part of our consideration" in the WaterFix proceeding. (Transcript of WaterFix Hearing, March 27, 2018, p. 264:15 to 266:8.) As if those statements were not clear enough, Hearing Officer Doduc further explained, "if there is any confusion, let me be very clear. We have not and will not disavow the 2010 flow criteria report, the proceedings, and all the expertise . . . that was associated with it. It will be part of our consideration." (Transcript of WaterFix Hearing, March 27, 2018, p. 266:16-20.) As noted above, however, DFW has, in fact, walked away from the version of the SalSim model that was used in 2010 and which formed the basis for some of the conclusions in the 2010 DFCR. The Board's order precluding the questioning of DFW personnel on this issue only ensures the Board's reliance on an outdated model with known errors.

In sum, it is not only disingenuous, but wholly contradictory, for the Board to assert that the 2010 DFCR "is not the proper subject of Part 2 rebuttal" simply because the same document was admitted into evidence during Part 1. Indeed, the Board's decision to admit the document during Part 1 must have been for reasons unrelated to the issue of appropriate Delta flow criteria, since the Board has repeatedly insisted that appropriate Delta flow criteria is a Part 2, not Part 1, issue. The SJTA's rebuttal testimony that is responsive to the 2010 DFCR must be treated the same as other rebuttal testimony that is responsive to the same document.

2. The SJTA's Written Testimony Critiquing the 2010 DFCR is Proper Evidence for Rebuttal, Not a Case-In-Chief

The second basis for the Hearing Officers' decision to strike the SJTA's written rebuttal testimony and preclude any questioning of the authors of the 2010 DFCR is that such evidence should have presented "as part of a Part 2 case-in-chief." (July 27 Ruling.) This basis is contrary to the Board's previous direction as to what type of evidence is appropriate for Part 2 cases in chief, as well as what type of evidence is proper for rebuttal. In addition, it is contrary to the Board's decision not to strike the rebuttal testimony of other witnesses who have indicated they are responding to the 2010 DFCR.

³ The transcript of the hearing inaccurately uses the word "produced" in place of the word "proud." A review of the archived video of March 27, 2018 reflects that the word used was "proud." (March 27, archived video, beginning, approximately, at time stamp 7:50:10.

Prior to the commencement of Part 2, the Hearing Officers directed the parties to submit exhibits and testimony for their Part 2 cases in chief regarding, among other things, "[w]hat Delta flow criteria are appropriate and should be included in any approval of the petition, taking into consideration the 2010 Delta flow criteria report" (Ruling Regarding Scheduling of Part 2, etc., August 31, 2017, p. 12-13.) In a subsequent order, the Hearing Officers directed the protestants to "present evidence in support of proposed terms and conditions that protestants believe are necessary and appropriate to avoid unreasonable impacts to fish and wildlife [etc.], including appropriate Delta flow criteria." (Ruling Regarding Request to Change the Part 2 Hearing Schedule, etc., September 29, 2017, p. 2.)

The SJTA is not proposing any appropriate Delta flow criteria in this proceeding (whether in rebuttal or otherwise), nor is it obligated do so. As such, the SJTA did not submit any evidence during its Part 2 case in chief proposing appropriate Delta flow criteria. However, as acknowledged by the Hearing Officers in the July 27 Ruling, witnesses for CSPA "endorsed the [2010 DFCR] in general, and recommended that the Board give great weight to the recommendations of the fisheries agencies that were submitted in the 2010 informational proceeding that culminated in the report " (July 27 Ruling, p. 3.) Prior to CSPA and other parties endorsing the 2010 DFCR and the analysis therein during their Part 2 cases in chief, there was no testimony from any party in this proceeding as to how the Board should consider the report, nor was there any testimony as to the weight that should be given to the analysis and conclusions therein. If the SJTA had presented the testimony of Steiner and Demko examining and critiquing the hydrologic and biologic analysis in the 2010 DFCR as part of its case in chief, such a challenge to the report would have been premature and inappropriate. Instead, in response to endorsements of the report by several parties – as well as in response to Hearing Officer Doduc's own praise of the report during Part 2 – the SJTA submitted rebuttal testimony demonstrating the deficiencies of the report from both a hydrologic and biologic perspective. In addition, given that the report and the scientific analysis therein is now 8 years old, the SJTA subpoenaed the authors of the report in order to explore the assumptions, limitations, analysis, findings and conclusions therein. By its nature, this testimony is responsive to the various assertions during Part 2 as to the reliability and usefulness of 2010 DFCR in 2018, thus making it proper rebuttal testimony.

3. The Probative Value of the Testimony is Not Outweighed by the Probability that its Admission Will Necessitate Undue Consumption of Time

The final basis for the Hearing Officers' decision is that the probative value of the SJTA's testimony critiquing the analysis in the 2010 DFCR is outweighed by the probability that its admission will necessitate undue consumption of time. This is the most astonishing of the three reasons provided by the Board for striking the testimony of Steiner and Demko, and for precluding any questioning of the authors of the 2010 DFCR. While the Board has discretion to exclude evidence on this basis, the July 27 Ruling is an abuse of that discretion. More importantly, the SJTA has a statutory right "to call and examine witnesses, to introduce exhibits . . . and to rebut evidence" (Gov. Code, § 11513[b].) In addition, the Board is required to admit "[a]ny relevant evidence if it is the sort of evidence on

which responsible persons are accustomed to rely in the conduct of serious affairs . . . ' (Gov. Code, § 11513[c]). The testimony of Steiner and Demko (both experts in their respective fields) quite easily satisfies this criterion. Furthermore, with respect to the subpoenaed witnesses from the Board and DFW, Evidence Code Section 804⁴ provides that "[i]f a witness testifying as an expert testifies that his opinion is based in whole or in part upon the opinion or statement of another person, such other person may be called and examined by any adverse party as if under cross-examination concerning the opinion or statement." (Evid. Code, § 804[a].) To the extent the witnesses from CSPA and Natural Resources Defense Council based their opinions regarding appropriate Delta flow criteria on the 2010 DFCR and the exhibits submitted by DFW during the development of that report, the SJTA is permitted under Evidence Code Section 804 to call and examine the authors of those documents.

As for the supposed issue that the testimony regarding the 2010 DFCR will require an undue consumption of time, this document – as noted above – is arguably the most important document that the Board will consider when setting conditions on the Petitioners' permits if the WaterFix project is approved. It is also the only specific document that the Board is legally required to consider, making any testimony on the issue relevant and admissible. (Gov. Code, § 11513[c].) Moreover, this proceeding has been burdened by countless hours of cross examination on topics with very little relevancy to the pertinent issues. Parties have submitted (and the Board has accepted into evidence) everything from neighborhood newspaper articles, to scholarly works on glacial studies in Western Antarctica. Despite the wide latitude that has been given to parties throughout this proceeding to present tangentially relevant evidence, the Board has now concluded that evidence critiquing its 2010 DFCR (the only document that **must**, as a matter of law, be considered in this proceeding) is of insufficient probative value to justify its presentation given the amount of time that will be required to address it.

The Board seems to base its decision on the fact a significant portion of the Steiner and Demko testimony focuses on flows at Vernalis on the San Joaquin River, and how – and to what extent – those flows can or should factor into appropriate Delta flow criteria based on the analysis in the 2010 DFCR. The Board asserts that the value of testimony concerning Vernalis flow is "marginal, at best" because "none of the parties have presented testimony in support of requiring increased flows at Vernalis," and "the U.S. Bureau of Reclamation does not propose to make any changes to Vernalis flow requirements or New Melones Project operations in connection with the WaterFix Project." (July 27 Ruling, p. 4.) The Board has missed the point.

⁴ Evidence Code Section 804 is applicable to this proceeding pursuant to California Code of Regulations, tit. 23, § 648(b).

First, the testimony of Steiner and Demko is properly focused on the San Joaquin River and Vernalis because all SJTA member agencies are within the San Joaquin River watershed. As such, the testimony is appropriately limited to the SJTA's primary geographic area of concern.

Second, it is irrelevant that no parties have specifically proposed new flow requirements for Vernalis. In setting appropriate Delta flow criteria, the Board is not bound by what other parties have proposed. The 2010 DFCR recommended specific flows at Vernalis. The Board has not made any determination in this proceeding that appropriate Delta flow criteria will not include an inflow requirement at Vernalis. Likewise, the Board has not decided that appropriate Delta flow criteria will not include an inflow to export ratio that encompasses flows from the San Joaquin River, nor has the Board determined that appropriate Delta flow criteria will not include a Delta outflow requirement that is based, in part, on inflow from the San Joaquin River. Unless – and until – those issues are settled (as well as many others), San Joaquin River flow remains relevant to this proceeding, and specifically relevant to the issue of appropriate Delta flow criteria.

Third, the fact that Reclamation has not proposed to change its operations at New Melones is irrelevant. Since appropriate Delta flow criteria has not yet been developed or determined, DWR and Reclamation cannot provide this Board with any assurance as to how they will jointly operate the CVP and SWP if the WaterFix Project is approved with appropriate Delta flow criteria that has not yet been considered. Although the Board is correct that Reclamation's permits for the operation of New Melones are not subject to this proceeding, it would be myopic to conclude that the conditions imposed upon the permits of DWR and Reclamation as part of an approval of the WaterFix Project would not have redirected impacts on the San Joaquin River. This is especially true given the prior-admitted testimony of Dr. Susan Paulsen (SJTA-304 Errata) that most San Joaquin River water that enters the Delta is either consumed within the Delta or exported by DWR and USBR, making San Joaquin River inflow a critical component of the Projects' exports.

Finally, the Hearing Officers stated that the appropriate forum for debating the merits of the San Joaquin River flow criteria in the 2010 DFCR is not the WaterFix proceeding, but rather the Board's ongoing process for updating the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary. This statement is not supported by the law. The Delta Reform Act required the development of the 2010 DFCR "[f]or the purpose of informing planning decisions for the Delta Plan and the Bay Delta Conservation Plan [now known as WaterFix]" (Wat. Code, § 85086[c][1].) By contrast, there is no requirement in the Delta Reform Act that the 2010 DFCR be used to inform the Board's update to the Water Quality Control Plan. In other words, the Board's statement is entirely contrary to the law: the appropriate forum is the WaterFix proceeding (previously the Bay-Delta Conservation Plan), not the Water Quality Control Plan process.

CONCLUSION

In the absence of any decision by the Board to reconsider the July 27 Ruling on its own motion, the SJTA will withdraw the remaining portions of SJTA-402 that were not stricken. The SJTA takes this action solely in response to the Hearing Officers' prejudicial and unsubstantiated ruling striking written testimony that is relevant to the reliability and usefulness of the 2010 DFCR and precluding any questioning of the individuals who drafted that report or provided the scientific analysis for the conclusions therein. In doing so, the SJTA reserves its right to judicially challenge the propriety of the Hearing Officers' July 27 Ruling upon a final action in this proceeding.

Sincerely,

Timothy Wasiewski

TW/llw

cc: Current Service List (July 30, 2018)

EXHIBIT 1

Exhibit Identification Index

California WaterFix Hearing California Department of Water Resources and U.S. Bureau of Reclamation

Date: 30 November 2017

Staff Note 11/30/17: Did not receive CSPA-221 or CSPA-255

PARTICIPANT: California Sportfishing Protection Alliance (CSPA), Part 2

Exhibit Identification Number	Exhibit Description Bill Jennings Testimony		Status of Evidence (for Hearing Team use Only)		
(e.g. DWR-1) CSPA-200					
		cspa_200.pdf	Introduced	Accepted	By Official Notice
CSPA-202	Chris Shutes Testimony	cspa_202.pdf			Notice
CSPA-204	Tom Cannon Testimony	cspa_204.pdf			
CSPA-206	G. Fred Lee Testimony	cspa_206.pdf			
CSPA-207	G. Fred Lee Statement of Qualifications	cspa_207.pdf			
CSPA-208	Marc Del Piero Testimony	cspa_208.pdf			
CSPA-209	Marc Del Piero Statement of Qualifications	cspa_209.pdf			
CSPA-210	Felix Smith Testimony	cspa_210.pdf			
CSPA-211	Felix Smith Statement of Qualifications	cspa_211.pdf			
CSPA-212	Gerald Neuberger Testimony	cspa_212.pdf			
CSPA-213	Gerald Neuberger Statement of Qualifications	cspa_213.pdf			
CSPA-214	Dan Bacher Testimony	cspa_214.pdf			
CSPA-215	Dan Bacher Statement of Qualifications	cspa_215.pdf			
CSPA-216	Dave Hurley Testimony	cspa_216.pdf			
CSPA-217	Dave Hurley Statement of Qualifications	cspa_217.pdf			
CSPA-218	Dave Fries Testimony	cspa_218.pdf			
CSPA-219	Dave Fries Statement of Qualifications	cspa_219.pdf			
CSPA-220	Tom Stokely Testimony	cspa_220.pdf			
CSPA-221	Tom Stokely Statement of Qualifications	Staff Note: Did not			
222 += 220	Decembed	receive			
222 to 229	Reserved	220 mdf			
CSPA-230	G. Fred Lee Powerpoint CDFW FMWT Abundances Indices	cspa_230.pdf			
CSPA-231 CSPA-232	CDFW FinW FAbundances indices CDFW Summer Townet Index Delta Smelt	cspa_231.pdf			
CSPA-232	CDFW Summer Townet Index Beita Shielt CDFW Summer Townet Index Striped Bass	cspa_232.pdf cspa_233.pdf			
CSPA-234	Yoshiyama et al 2000, Assissment of Chinook Salmon	cspa_234.pdf			
CSPA-235	Yoshiyama et al 2000, Assissment of Chindok Salmon	cspa_234.pdf			
CSPA-236	Federal Register Steelhead listing 2006	cspa_235.pdf			
CSPA-237	Central Valley Project Improvement Act	cspa_237.pdf			
238	Reserved	00pa_207.pai			
CSPA-239	AFRP Doubling Goal Graphs	cspa_239.pdf			
CSPA-240	Attorney General Letter: Re Racanelli Decision	cspa_240.pdf			
CSPA-241	Racanelli Decision, LexisNexis	cspa_241.pdf			
CSPA 242	1988 Draft Water Quality Plan for Salinity	cspa_242.pdf			
CSPA 243	1991 Water Quality Plan for Salinity	cspa_243.pdf			
CSPA-244	USEPA 1991 Disapproval Letter of 1991 Salinity Plan	cspa_244.pdf			
CSPA-245	Draft Decision D-1630	cspa_245.pdf			
CSPA-246	USEPA Federal Notice Final Rule Bay-Delta Standards	cspa_246.pdf			
CSPA-247	Federal Delta Standards at 40CFR131.37	cspa_247.pdf			
CSPA-248	State and Federal Project Exports & Outflow as Percentage of Inflow	cspa_248.pdf			
CSPA-249	CSPA 2015 Temperature Complaint	cspa_249.pdf			
CSPA-250	WR Order 92-02	csoa_250.pdf			
CSPA-251	DWR Drought in California	cspa_251.pdf			
CSPA-252	Letter From USBR & DWR to SWRCB Regarding Exceedances	cspa_252.pdf			
CSPA-253	CSPA 2015 Delta Complaint	cspa_253.pdf			
CSPA-254	CSPA, CWIN, AquAlliance Protest of Proposed May 2015 TUCP	cspa_254.pdf			
CSPA-255	CDFG Grand Tab Central Valley Chinook Salmon Population	Staff Note: Did not receive			
CSPA-256	DWR/USBR Response to Board Seeking Clairfication on Operations	cspa_256.pdf			
CSPA-257	National Academies Review of Science and Adaptive Management in BDCP	cspa_257.pdf			
CSPA-258	Independent Science Board Review of FEIR/EIS	cspa_258.pdf			
CSPA-259	CSPA Presentation SWRCB 20 may2015 Workshop	cspa_259.pdf			
CSPA-260	USEPA Comments on FEIS 2017	cspa_260.pdf			
CSPA-261	EWC Responsible Exports Plan	cspa_261.pdf			
CSPA-262	EWC A Sustainable Water Plan For California	cspa_262.pdf			
259 to 293	Reserved				
CSPA-294	Purpose and Intent of Fish & Game Code Section 5937	cspa_294.pdf			

CSPA-295 CSPA-296 CSPA-297 CSPA-298 CSPA-299 CSPA-300 CSPA-301 CSPA-302 CSPA-303 CSPA-304	Headwater to the Pacifc Ocean and Fair Ecological Share Water Resources, the Public Trust Doctrine and Racanelli Area of Origin Protection: Our Fisheries & Other Public Trust Interests Water Rights and No Compensation My Interest and Love of the Public Trust	cspa_295.pdf cspa_296.pdf cspa_297.pdf	
CSPA-297 CSPA-298 CSPA-299 CSPA-300 CSPA-301 CSPA-302 CSPA-303	Area of Origin Protection: Our Fisheries & Other Public Trust Interests Water Rights and No Compensation	cspa_297.pdf	
CSPA-298 CSPA-299 CSPA-300 CSPA-301 CSPA-302 CSPA-303	Water Rights and No Compensation		
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CSPA-302 CSPA-303	DOI submittal to 2010 Delta flow proceeding	cspa_300.pdf	
CSPA-302 CSPA-303	February 3, 2015 TUC Order for SWP and CVP	cspa_301.pdf	
CSPA-303	Excerpts from DOI submittal to 2010 Delta flow proceeding	cspa_302.pdf	
	NMFS summary submittal to 2010 Delta flow proceeding	cspa_303.pdf	
	NMFS Exhibit 7 from 2010 Delta flow proceeding del Rosario winter-run	cspa_304.pdf	
CSPA-305	First 2 pages of NMFS Exhibit 9 from 2010 Delta flow proceeding sturgeon flow requirements	cspa_305.pdf	
CSPA-306	Excerpts from NMFS summary submittal to 2010 Delta flow proceeding	cspa_306.pdf	
CSPA-307	and NMFS 2010 exhibits 7 and 9 Selected Tables from Exhibit SWRCB-66 Nov 2010 Quanfiable	cspa_307.pdf	
	Biological Objectivesand Flow Criteria del Rosario et al. Migration Patterns of Juvenile Winter-run-sized		
CSPA-308	Chinook Salmon	cspa_308.pdf	
309	Reserved		
CSPA-310	Sacramento River stage change 0ct-Nov 2017	cspa_310.pdf	
CSPA-311	Sacramento River fall-run Chinook spawning depth	cspa_311.pdf	
CSPA-312	Sept 22 - Nov 22 2017 water temps Redding Bend Bridge	cspa_312.pdf	
CSPA-313	CSPA Oroville carryover worksheet	cspa_313.pdf	
CSPA-314	Sept - Dec Feather River flow at Gridley 2007 2013	cspa_314.pdf	
CSPA-315	Oct - Dec SWP exports 2007 2013	cspa_314.pdf	
316	Reserved	00pa_010.pui	
CSPA-317	Water Rights Order 2015-0043 Corrected	cspa_317.pdf	
	Reserved	uspa_s17.pui	
318-339 CSPA-340		240 mdf	
	CA Striped Bass Association webpage on striped bass history in CA	cspa_340.pdf	
CSPA-341	CDFW webpage early history of CA striped bass	cspa_341.pdf	
CSPA-342	CDFW webpage on fishing for striped bass and striped bass reproduction	cspa_342.pdf	
CSPA-343	History of CA Striped Bass Assocation - webpage	cspa_343.pdf	
CSPA-344	Rio Vista Bass Festival and Derby webpage showing prizes for 2017	cspa_344.pdf	
345 to 349	Reserved		
CSPA-350	Text of Trinity River Act of 1955	cspa_350.pdf	
CSPA-351	House and Senate committee reports for Trinity River Act	cspa_351.pdf	
CSPA-352	CV Regional Board staff report CV salinity	cspa_352.pdf	
	USGS 2000 report on selenium discharges to Bay-Delta, Cover and p.		
CSPA-353	23	cspa_353.pdf	
CSPA-354	Selenium map in Place of Use CVP Trinity Division	cspa_354.pdf	
00171001	Colonian map in hace of Coc CVI Thinky Division	copa_co i.pai	
0004 055	USGS Water Investigations Report 88-01 (Tidball et al.) Cover and p. 18 (map of selenium concentration west side San Joaquin Valley)		
CSPA-355	1 27	cspa_355.pdf	
CSPA-356	Reclamation Map No. 416-208-341	cspa_356.pdf	
CSPA-357	Kimmerer, Entrainment losses in Delta 2008	cspa_357.pdf	
	CDEC temp. plots Spring Creek Powerhouse and Shasta Res.		
CSPA-358	discharges	cspa_358.pdf	
359-399	Reserved		
CSPA-400	The Twin-Tunnels Project: A Disaster for Salmon Part 1 of a Series 7.30.17 - Fish screen locations/Sweeping Velocities	cspa_400.pdf	
CSPA-401	The Twin-Tunnels Project: A Disaster for Salmon Part 2 of a Series 8.2.17, Fish Screen & Juvenile Impidgement	cspa_401.pdf	
	The Twin-Tunnels Project: A Disaster for Salmon Part 3 of a Series	400 "	
CSPA-402	8.9.17 - Unproven fish refugia The Twin-Tunnels Project: A Disaster for Salmon Part 4 of a Series	cspa_402.pdf	
CSPA-403	8.19.17 - Artifically-induced Predation	cspa_403.pdf	
CSPA-404	MWD's Dreams: a Nightmare for Fish 8.8.17 - Delta Outflows & Exports	cspa_404.pdf	
	Review of Delta Fish Population Losses from Pumping Operatins in the		
CSPA-405	Sacramento-San Joaquin River Delta - Larry Walker - January 2010	cspa_405.pdf	
CSPA-406	WaterFix NMFS Biological Opinion Conclusions on Salmon in the Delta 9.17.17	cspa_406.pdf	
CSPA-407	Are Hot Rivers in Summer the New Norm? 7.17.17 Fundamental Needs of Central Valley Fishes – Part 1c: Spring River	cspa_407.pdf	
CSPA-408	Flows 1.17.17	cspa_408.pdf	
CSPA-409		cena 400 ndf	
410	Low Flows – Deadly Water Temperatures 8.22.16	cspa_409.pdf	
	Reserved	1	
411	Reserved	<u> </u>	
0004 446	CSPA - BDCP & Fish Populations at the Pumps: Peripheral tunnels will	cspa_412.pdf	
CSPA-412	not eliminate massive fish kills at export facilities - 3.23.2013	- 5Pa 12.pu	

CSPA-413	NMFS RPA Update 1.19.2017	cspa_413.pdf		
	Testimony for CA State Water Board Workshop: Comprehensive (Phase			
CSPA-414	2) Review Update - Tom Cannon - 9.5.12	cspa_414.pdf		
CSPA-415 CSPA-416	Summer 2016 Delta Salinity and Outflow Standards - 10.26.16	cspa_415.pdf		
CSPA-416 CSPA-417	Experiment – Part 2 Yolo Bypass Flow - 7.30.16 Suisun Bay Marsh Habitat - 12.7.16	cspa_416.pdf		
418	Reserved	cspa_417.pdf		
CSPA-419	Drought Effect on the Bay 6.9.15	cspa_419.pdf		
CSPA-420	Predation - 9.24.16	cspa_420.pdf		
0004 404	FISHBIO Strikes Again – Predation Is the Problem, Not Water	cspa_421.pdf		
CSPA-421 CSPA-422	Diversions – Right or Wrong? - 3.23.16	· - ·		
CSPA-422 CSPA-423	Predator Fish Control Again Rears Its Ugly Head - 7.6.15	cspa_422.pdf		
424	Recent Delta Action Further Degrades Low Salinity Zone 8.10.15 Reserved	cspa_423.pdf	+	
CSPA-425		405	+	
CSPA-425 CSPA-426	May 2 Spring Tide Affects Delta - 5.10.15	cspa_425.pdf		
CSPA-427	Bay-Delta Spring Bloom Dissipates - 5.31.16 Delta April Bloom Related to Low Exports and San Joaquin Pulse Flow 4.23.15	cspa_426.pdf cspa_427.pdf		
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	WaterFix effects upper Sacramento River habitat 9.12.2017	cspa_428.pdf		
CSPA-429	What is wrong with NDOI? - 4.5.15	cspa_429.pdf		
CSPA-430	More on Fall X2 Adaptive Management - 11.21.17	cspa_430.pdf		
CSPA-431	What is wrong with summer water transfers? - 4.5.15	cspa_431.pdf		
CSPA-432	Can Winter Run Chinook Salmon be Saved in 2015? - 4.13.15	cspa_432.pdf		
CSPA-433	Winter-Run Chinook Salmon Status – End of 2016 1.15.17	cspa_433.pdf		
CSPA-434	Protecting Summer Salmon 6.5.2017	cspa_434.pdf		
CSPA-435	Salmon and Smelt Shorted in 2017 - 10.5.17	cspa_435.pdf		
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CSPA-437	Demise of the Delta Smelt Population - October 2014	cspa_437.pdf		
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CSPA-439	MAST Report Review - Summer 2013	cspa_439.pdf		
CSPA-440	CSPA: Delta Smelt on the Scaffold: Juvenile Delta Smelt are at an All- time Low Abundance Level	cspa_440.pdf		
CSPA-441	Delta Smelt Population Dynamics - 10.19.17	cspa_441.pdf		
CSPA-442	Another Hit for Salmon in 2017 - 11.16.2017	cspa_442.pdf		
CSPA-443	Record Low Spring Chinook Salmon Run - 10.31.2017	cspa_443.pdf		
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CSPA-445	More on Delta Smelt Tidal Surfing - 1.26.17	cspa_445.pdf		
CSPA-446	Sac River Fall Run Status and Future - 4-14-2017	cspa_446.pdf	+	
CSPA-447	Protecting Salmon and Sturgeon May-June 2017 - 6.2.2017	cspa_447.pdf	+	
448	Reserved			
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CSPA-451	June Protection Lost for Delta Smelt - 7.4.16	cspa_451.pdf	+	
452	Reserved			
CSPA-453	What Caused the Impending Extinction of Delta Smelt? 4.4.16	cspa_453.pdf		
CSPA-454	Smelt Extinction and Recovery: The Path Forward - 8.11.16	cspa_454.pdf		
	Summer 2015 Temporary Urgency Change Petition: Deadly for Delta	cspa_455.pdf		
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CSPA-457	The Cause of Probable Extinction of Longfin Smelt in San Francisco Bay- Delta - 4.18.16	cspa_457.pdf		
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CSPA-463	Fundamental Needs of Central Valley Fishes – Part 1d: Summer River, Delta, and Bay Freshwater Flows - 2.21.17	cspa_462.pdf cspa_463.pdf		
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CSPA-464	Winter Flows - 11.19.16	cspa_464.pdf		
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CSPA-465	First Pulse of Fall Rains - 11.16.2016	, - ,		
CSPA-466	WaterFix will devastate more than just Salmon - 9.5.17	cspa_466.pdf		

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SWRCB-21	D-1641				
SWRCB-23	D-1485				
SWRCB-24	WR Order 90-05				
SWRCB-25	SWRCB. Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem				
SWRCB-27	2006 Water Quality Standards (Reauthorized 1995 Standards)				
SWRCB-30	1995 Water Quality Standards				
SWRCB-34	Central Valley Regional Board Basin Plan				
SWRCB-66	CDFW 2010 Quantifiable Biological Objectives and Flow Criteria				
SWRCB-84	NMFS OCAP Biological Opinion 2009				
SWRCB-87	USFWS Biological Opinion 2008				
SWRCB-99	Anadromous Fish Restoration Program				
SWRCB-104	Biological Assessment for WaterFix 2016				
SWRCB-105	USFWS Biological Opinion for WaterFix 2017				
SWRCB-106	NMFS Biological Opinion for WaterFix 2017				
SWRCB-107	CDFW Incidental Take Permit for WaterFix 2017				