

DELTA SMELT CONSOLIDATED CASES; SAN LUIS & DELTA-MENDOTA WATER AUTHORITY, et al. v. SALAZAR, et al. STATE WATER CONTRACTORS v. SALAZAR, et al. COALITION FOR A SUSTAINABLE DELTA, et al. v. UNITED STATES FISH AND WILDLIFE SERVICE, et al. METROPOLITAN WATER DISTRICT v. UNITED STATES FISH AND WILDLIFE SERVICE, et al. STEWART & JASPER ORCHARDS et al. v. UNITED STATES FISH AND WILDLIFE SERVICE.

1:09-CV-407 OWW DLB

UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF CALIFORNIA

2009 U.S. Dist. LEXIS 116985

December 16, 2009, Decided
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PRIOR HISTORY: [Delta Smelt Consol. Cases v. Salazar, 2009 U.S. Dist. LEXIS 114956 \(E.D. Cal., Dec. 9, 2009\)](#)

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JUDGES: [Oliver W. Wanger](#) ▼, United States District Judge.

OPINION BY: [Oliver W. Wanger](#) ▼

OPINION

MEMORANDUM DECISION AND ORDER RE MOTION TO SUPPLEMENT THE ADMINISTRATIVE RECORD (DOC. 170).

I. INTRODUCTION

Plaintiffs San Luis & Delta-Mendota Water Authority, Westlands Water District, State Water Contractors, Coalition for a Sustainable Delta, [Kern County Water Agency](#), ▼ and [Metropolitan](#)

[Water District of Southern California](#) (collectively, "Plaintiffs") move to supplement the administrative record. Doc. 170; *see also* Doc. 331-2 (listing documents in dispute and the parties respective positions concerning supplementation).

A November 18, 2009 order reduced to writing the district court's oral rulings as to the vast majority of the documents in dispute. [*7] Doc. 406. As to certain "influential scientific reports and articles published prior to December 15, 2008, regarding the delta smelt and/or its habitat" (Documents 215-221, 223, 226-227, 233-235, 241-242, 245, 254-255, 258-264), the district court tentatively denied Plaintiffs' motion, but allowed Plaintiffs to supplement their briefing to present further "foundation," reasoning that Plaintiffs' "should have shown ... that ... the data and information" in these documents is not already "considered by existing record information." Doc. 406 at P8; Transcript of 11/19/09 hearing, Doc. 392, at 37-43. Plaintiffs filed a supplemental brief on November 6, 2009. Doc. 385. Federal Defendants opposed on November 20, 2009. Doc. 412.

II. ANALYSIS

A. Legal Framework.

The APA limits the scope of judicial review to the administrative record. [5 U.S.C. § 706](#) (directing the court to "review the whole record or those parts of it cited by a party."). The administrative record is "not necessarily those documents that the agency has compiled and submitted as 'the' administrative record." [Thompson v. U.S. Dept. of Labor, 885 F.2d 551, 555 \(9th Cir. 1989\)](#). Rather, "[t]he whole record" includes everything that was [*8] before the agency pertaining to the merits of the decision." [Portland Audubon Soc'y v. Endangered Species Comm., 984 F.2d 1534, 1548 \(9th Cir. 1993\)](#). "The 'whole' administrative record, therefore, consists of all documents and materials directly or indirectly considered by agency decision-makers and includes evidence contrary to the agency's position." [Thompson, 885 F.2d at 555](#) (emphasis added).

An incomplete record must be viewed as a fictional account of the actual decisionmaking process. When it appears the agency has relied on documents or materials not included in the record, supplementation is appropriate.

[Portland Audubon, 984 F.2d 1534](#) (internal quotations and citations omitted); *see also* [Asarco, Inc. v. U.S. Environmental Protection Agency, 616 F.2d 1153, 1160 \(9th Cir. 1980\)](#) ("A satisfactory explanation of agency action is essential for adequate judicial review, because the focus of judicial review is not on the wisdom of the agency's decision, but on whether the process employed by the agency to reach its decision took into consideration all the relevant facts.").

However, the record does not include "every scrap of paper that could or might have been created" on a subject. [*9] [TOMAC v. Norton, 193 F. Supp. 2d 182, 195 \(D.D.C. 2002\)](#). A broad application of the phrase "before the agency" would undermine the value of judicial review: Interpreting the word "before" so broadly as to encompass any potentially relevant document existing within the agency or in the hands of a third party would render judicial review meaningless. Thus, to ensure fair review of an agency decision, a reviewing court should have before it neither more nor less information than did the agency when it made its decision.

Pac. Shores Subdivision v. U.S. Army Corps of Eng'rs, 448 F. Supp. 2d 1, 5 (D.D.C. 2006) (internal citations and quotations omitted). The record certainly need not include documents that became available after the agency's decision had already been made ("post-decisional" documents). See *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 555, 98 S. Ct. 1197, 55 L. Ed. 2d 460 (1978)(judicial review is "limited [] by the time at which the decision was made...."); *Karuk tribe v. U.S. Forest Serv.*, 379 F. Supp. 2d 1071, 1090 (N.D. Cal. 2005)(court "may not consider information created during the litigation that was not available at the time the [agency] made its decision")(citations omitted).

Here, Plaintiffs [*10] point out that the ESA consultation regulations require FWS to "(1) Review all relevant information provided by the Federal agency or otherwise available....; (2) [e]valuate the current status of the listed species or critical habitat....; and (3) [e]valuate the effects of the action and cumulative effects on the listed species or critical habitat." 50 C.F.R. § 402.14(g)(1)-(3). The Consultation Handbook explains that a biological opinion should include a description of the proposed action, the status of the species and its critical habitat, the environmental baseline, the effects of the action, any cumulative effects, a conclusion, and any reasonable and prudent alternatives. U.S. Fish and Wildlife Service and National Marine Fisheries Service, *Endangered Species Consultation Handbook* at 4-13 (March 1998).¹

FOOTNOTES

¹ The district court previously took judicial notice of this Handbook, available at: <http://www.fws.gov/endangered/consultations/s7hndbk/s7hndbk.htm> .

In addition to permitting supplementation with documents that were part of the "whole record" but were excluded from the AR, the district court may also consider extra-record materials in an APA case under four narrow exceptions:

(1) when [*11] it needs to determine whether the agency has considered all relevant factors and has explained its decision;

(2) when the agency has relied upon documents or materials not included in the record;

(3) when it is necessary to explain technical terms or complex matters; and

(4) when a plaintiff makes a showing of agency bad faith.

Southwest Center for Biological Diversity v. United States Forest Service, 100 F.3d 1443, 1450 (9th Cir. 1996). However, before extra-record material may be considered under any of these exceptions, a plaintiff must first make a showing that the record is inadequate. *Animal Defense Council v. Hodel*, 840 F.2d 1432, 1437 (9th Cir. 1988) ("The [plaintiff] makes no showing that the district court needed to go outside the administrative record to determine whether the [agency] ignored information").

B. Influential Scientific Reports and Articles Published Prior to December 15, 2008, Regarding

the Delta Smelt and/or its Habitat.

Plaintiffs seek to supplement the record with certain "influential scientific reports and articles" (Documents 215-221, 223, 226-227, 233-235, 241-242, 245, 254-255, 258-264). The documents can be generally grouped into the following categories:

- (1) [*12] Documents pertaining to climate change and the future of the Delta;
- (2) Documents synthesizing issues affecting the Delta;
- (3) Documents concerning the effect(s) of ammonia on the delta smelt;
- (4) Documents concerning the effect(s) of pesticides on the delta smelt;
- (5) Documents related to the food web of the Delta.
- (6) Documents pertaining to invasive species and habitat restoration.

Plaintiffs argue that these documents should be admitted as supplements to the record because they are "necessary to determine whether FWS considered all relevant factors and explained its decision," Doc. 385 at 2, an invocation of the second exception to the prohibition against consideration of extra-record evidence. [*Southwest Center*, 100 F.3d at 1450](#). Plaintiffs maintain that the data and analyses presented in each of these documents are not otherwise available in the AR.

1. Documents pertaining to Climate Change and the Future of the Delta.

Plaintiffs argue that the record should be supplemented to include each of the following reports on climate change:

. Document 218, Louise Bedworth & Ellen Hanak, Pub. Policy Inst. of Cal., *Preparing California for a Changing Climate* (2008).

. Document 220, Ellen Hanak & [*13] Jay Lund, Pub. Policy Inst. of Cal., *Adapting California's Water Management to Climate Change* (2008).

. Document 258, Michael D. Dettinger et al., *Simulated Hydrological Responses to Climate Variations and Changes in the Merced, Carson, and American River Basins, Sierra Nevada, California, 1900-2099*, 62 *Climatic Change* 283 (2004).

. Document 259, Peter H. Gleick & Elizabeth L. Chalecki, *The Impacts of Climate Changes for Water Resources of the Colorado and Sacramento San-Joaquin River Basins*, 35 *J. Am. Water Resources Ass'n* 1429 (1999).

. Document 260, Katharine Hayhoe et al., *Emissions Pathways, Climate Change, and Impacts on California*, 101 *Proceedings Nat'l Academy Sci. U.S. America* 12422 (2004).

. Document 261, Noah Knowles & Daniel R. Cayan, Potential Effects of Global Warming on the Sacramento/San Joaquin Watershed and the San Francisco Estuary, 29 Geophys. Res. Letters 1891 (2002).

. Document 262, Nathan T. VanRheenen et al., Potential Implications of PCM Climate Change Scenarios for Sacramento-San Joaquin River Basin Hydrology and Water Resources, 62 Climatic Change 257 (2004).

. Document 263, Sebastian Vicuna et al., The Sensitivity of California Water Resources to Climate Change [*14] Scenarios, 43 J. Am. Water Resources Ass'n 482 (2007).

. Document 264, Tingju Zhu et al., Estimated Impacts of Climate Warming on California Water Availability Under Twelve Future Climate Scenarios, 41 J. Am. Water Res. Ass'n 1027 (2005).

The BiOp discusses several "climate change scenarios" generated using CALSIM II, BiOp 208, and concludes that OMR flow patterns will likely not be modified by climate change, while X2 may move further downstream in April and May in dry and critical years, *id.* at 222. Plaintiffs concede that the AR contains some additional material concerning climate change. *See* Doc. 385 at 6 (citing AR 16323 (DWR report entitled "Progress on Incorporating Climate Change into planning and Management of California's Water Resources"), AR 17655-65 (Estuary Watershed Article on Climate Change in California), 10071-74 (OCAP BA Discussion of Climate Change), 11089-11092 (same)).

Document 218 is a report published by the Public Policy Institute of California ("PPIC") assessing California's current level of preparedness for climate change impacts by examining six susceptible areas, including water resources and ecosystems. According to Plaintiffs, Document 218 "draws upon numerous [*15] peer-review published articles on the subject of climate change, none of which are included in the Index to Literature that accompanied the AR." Doc. 385 at 4. Plaintiffs do not explain why this document is necessary to demonstrate that FWS failed to consider "relevant factors" and/or "explain[] its decision." Although Plaintiffs assert Climate Change was not evaluated thoroughly enough and maintain that certain, critical data and/or reports were not considered, climate change was given some analysis. Document 218 may not be considered under the relevant factors/explanation of decision exception. However, if material in the PPIC report represents "best available science" that was ignored or given insufficient weight, Plaintiffs' experts may reference the document for that purpose.

This analysis applies with equal force to most of the remaining climate change documents. Plaintiffs maintain that Documents 220, 258, 260, 262, 263, and 264 provide data and/or information not otherwise considered in the AR, but fail to demonstrate that they are necessary to determine whether FWS considered all relevant factors and/or explained its decision. These documents either synthesize existing data [*16] in different ways or utilize different models to evaluate existing data. They do not raise entirely new "factors" for consideration and therefore cannot be considered under the "relevant factors" exception, nor to Plaintiffs explain why these documents are necessary to demonstrate that FWS did not explain its decision.

Document 259 provides a summary of the major studies on climate change that have been conducted for the Sacramento River Basin over the past 20 years and discusses the impacts of these studies for water management, planning, and policy. In particular, Plaintiffs argue that Document 259 "indicate[s] that climate change will effect salinity, sea-level, water quality, and streamflow -- all factors that will effect the delta smelt." Doc. 385 at 5. Document 259 concludes that climate change will likely result in "an [*17] increase in the ratio of rain to snow, even if total precipitation amounts remain stay the same; an increase in winter runoff as a fraction of total annual runoff; an earlier start [to] and faster spring snowmelt; a shorter snowmelt season; a decrease in late spring and summer runoff as a total amount of annual runoff; and an earlier drying of summer soil moisture." Document 259 at 1435. In addition, the paper concludes that these watershed responses may "threaten levee stability in the region, and that more salinity intrusion could affect water quality." *Id.* at 1436.

Plaintiffs' suggest that Document 259 highlights new "factors" not considered by FWS because it addresses "streamflow" and "water quality." Doc 385 at 5. First, it is not entirely accurate to conclude that the AR does not address "streamflow," which is an aspect of the CALSIM II modeling process used to evaluate the various climate change scenarios in the BiOp. To the extent Document 259 discusses water quality in the Sacramento River Basin at all, it does so in the context of water quality impacts from salinity changes. Document 259 at 1436. The impacts of salinity are indirectly addressed by the CALSIM II modeling of [*18] the position of X2. Document 259 does not address any new factors.

Plaintiffs' motion to supplement the AR is DENIED as to Documents 218, 220, 258, 259, 269, 260, 262, 263, and 264. If Plaintiffs' experts are able to demonstrate that any of these documents constitute "best available science" that was ignored or given insufficient weight, the Documents may be referenced for that purpose only.

2. Documents Synthesizing Issues Affecting the Delta.

The next four documents (215, 216, 217 & 242) "synthesize the multitude of studies that have been conducted on the Delta and look at the decline of the delta from a broad perspective instead of merely focusing on the CVP and SWP as the primary causes." Doc. 385 at 8.

. Document 215, Jay Lund et al., Pub. Policy Inst. of Cal., Comparing Futures for the Sacramento-San Joaquin Delta (2008).

. Document 216, Ellen Hanak & Jay R. Lund, Policy and Regulatory Challenges for the Delta of the Future, Appendix A to Comparing Futures for the Sacramento-San Joaquin Delta (2008).

. Document 217, Peter B. Moyle & [*19] William A. Bennett, The Future of the Delta Ecosystem and Its Fish, Technical Appendix D to Comparing Futures for the Sacramento-San Joaquin Delta (2008).

. Document 242, Michael Healey, Context Memorandum: Delta Ecosystem (August 13, 2007). Plaintiffs argue, without any explanation, that these documents should be considered to determine whether FWS "considered all relevant factors in making its decision." But, Plaintiffs fail to identify any particular factor considered in any of these documents that was not treated in

the BiOp or AR. The fact that these reports may synthesize available information in a particularly compelling or convenient manner does not require their consideration under any of the exceptions to the prohibition against extra-record evidence. Plaintiffs' motion to supplement the AR is DENIED as to Documents 215-217 & 242.

3. Documents Concerning the Effect(s) of Ammonia on the Delta Smelt.

Documents 221 and 254 concern the effects of ammonia on fish:

. Document 221, F.B. Eddy, Ammonia in Estuaries and Effects on Fish, 67 J. Fish Biology 1495 (July 18, 2005).

. Document 254, B.J. Wicks et al., Swimming and Ammonia Toxicity in Salmonids; The Effect of Sublethal Ammonia Exposure [*20] on the Swimming Performance of Coho Salmon and the Acute Toxicity of Ammonia in Swimming and Resting Rainbow Trout, 59 Aquatic Toxicology 55 (2002).

The BiOp already discusses how releases of ammonia may affect embryo survival or inhibit prey production, BiOp 153, 186, 237, and the AR contains information recognizing the effect of ammonia on delta smelt food sources, AR 6405-6506, 10144-10179, 19821-76.

Documents 221 and 254 address sub-lethal "biological" effects of ammonia on estuarine fish, such as reduced swimming performance and increase sensitivity to ammonia while swimming. It does not appear that these biological effects are discussed in the BiOp or AR, but, as neither study pertains directly to delta smelt, it is not apparent how these studies establish "biological" effects to the smelt and/or how these biological effects may be relevant to the jeopardy analysis. Expert opinion is necessary to determine if the treatment of ammonia in these two studies constitute a relevant factor that is not treated in the BiOp or AR. Plaintiffs' motion to supplement the record is DEFERRED as to these two documents.

Plaintiffs also argue that these documents should be considered in order to [*21] determine whether FWS relied upon the best available science. Doc. 385 at 10. This requires expert testimony not yet provided. If Plaintiffs' experts are able to demonstrate that either of these documents constitute "best available science" that was ignored or given insufficient weight, the Documents may be referenced for that purpose only.

4. Documents Concerning the Effect(s) of Pesticides on the Delta Smelt.

Documents 233-35 and 255 concern the effects of pesticides on delta smelt:

. Document 233, Lei Guo et al., Evaluation of Sources and Loading of Pesticides to the Sacramento River, California, USA During a Storm Event of Winter 2005, 26 Environmental Toxicology & Chemistry 2274 (2007).

. Document 234, Kelly L. Smalling et al., Occurrence of Pesticides in Water, Sediment, and Soil from the Yolo Bypass, California, 5 San Francisco Estuary & Watershed Science (2007).

. Document 235, Ted Daum & Rainer Hoenicke, RMP Watershed Pilot Study: An Informative Review with Emphasis on Contaminant Loading, Sources, and Effects, San Francisco Estuary Regional Monitoring Program (San Francisco Estuary Inst., San Francisco, CA), January 1998, Contribution # 19.

. Document 255, Donald Weston & Michael [*22] Lydy, Pyrethroids Pesticides in the Sacramento-San Joaquin Delta: Sources and Impacts on Delta Waters (undated).

Document 233 analyzes data regarding 26 pesticides used in the Sacramento Valley and demonstrates that the Sacramento River above Colusa is a major source of pesticide loading in the main stem of the Sacramento. It also concludes that the only pesticide with concentrations over water quality standards is Diazinon, an organophosphate insecticide, and that "additional mitigation measures may be needed to reduce its movement to surface water." Document 233 at 2274.

Document 234 evaluated potential sources of pesticides in the Yolo Bypass, and concluded that exposure to a mixture of pesticides in the water, sediment, and prey could lead to sub-lethal or chronic effects for some fish.

Document 235 provides a summary of various studies focusing on pollutant loading and sources within the San Francisco Estuary. It concludes that sources of pollutant loading are diverse and that that trace organics found in the San Francisco Estuary that are individually innocuous at ambient concentrations can be cumulatively toxic when present together. According to Plaintiffs "[t]his document provides [*23] crucial background information on this important factor effecting the environmental baseline and establishes the need to explore additional studies on the subject of contaminant loading in the Delta." Doc. 385 at 13.

Document 255 summarizes a study of pyrethroid insecticides in the Delta and their effects on the waters of the Delta. It finds that virtually all urban runoff contained pyrethroids at four times the concentration that would paralyze sensitive aquatic species, and that that two-thirds of the samples from wastewater treatment plants had concentrations of pyrethroids at 0.5-1.5 times the concentration that would cause paralysis. It also showed that toxicity in receiving waters was very high following storm events and that toxicity in rivers can be compounded by low flows maintained by low releases from dams providing less water to dilute pesticide-filled runoff. Plaintiffs argue "[t]his document is relevant because it provides additional data on sources and concentrations of pyrethroid insecticides that enter the waters of the Delta and the impact high concentrations of pyrethroids can have on sensitive aquatic species. It helps establish a correlation of increased use of [*24] pyrethroids with the pelagic organism decline, and thus is an important factor in establishing the environmental baseline for the delta smelt." *Id.*

At the same time, Plaintiffs acknowledge that the BiOp addresses the effects of pesticides: The 2008 BiOp recognizes that contaminants can change ecosystem functions and productivity through numerous pathways, but states that contaminant loading and its ecosystem effects within the Delta are not well understood. (AR 201.) The 2008 BiOp also states that pyrethroids are of particular interest because use of these insecticides has increased within the Delta watershed and

toxicity of sediment-bound pyrethroids to macroinvertebrates has been observed in small watersheds tributary to the Delta. (AR 202.)

Doc. 385 at 11. Plaintiffs also recognize that the AR contains information about the impacts of pesticides:

One study included in the record tests water samples in the Delta for pesticides and their toxicity. (AR 21661-21795.) Another assesses the potential for exposure of delta smelt during early life stages to dissolved pesticides by identifying dissolved pesticide concentrations in water samples taken from the Delta. (AR 19054-19067.) The record [*25] also includes a study that examines water samples to determine the input and transport of dormant spray pesticides such as Diazinon to the San Francisco Estuary. (AR 19068-19077.)

Plaintiffs acknowledge "[t]hese studies address significant aspects of the pesticide problem in the Delta," but argue that they "do not provide a complete picture":

For example, they lack testing on sediment samples for pyrethroid insecticides, which are being increasingly used in the Delta. The documents Plaintiffs seek to admit add to the body of data related to pesticide testing in soil and sediment samples effecting the Delta. While one study in the Administrative Record focuses on sediment testing (AR 16858-16864), it states that because sediments serve as the primary ecological repository of pyrethroid compounds, more studies that add to an understanding of fate and toxicity of sediment associated pyrethroids are needed to properly assess the ecological risk of pyrethroids to aquatic species. Documents 233-235 and 255 serve this purpose and fill a data gap in the Administrative Record.

Moreover, plaintiffs seek to admit scientific literature regarding the sources of pyrethroid insecticides. The record [*26] includes a case study of aquatic toxicity due to residential use of pyrethroid insecticides, but its data is limited to samples taken from the city of Roseville. (AR 21797-21803.) Document 255 provides a breakdown of pyrethroid sources to the Delta (including eight agricultural pumping stations, six urban runoff pump stations or storm drains, three municipal wastewater treatment plans and the Sacramento and San Joaquin Rivers as they enter the Delta) and examines the effects on the water bodies in to which they are released. This study is more comprehensive and relevant to establishing the environmental baseline for the species in the Delta. Because the effect of pesticides are known to be harmful and possibly lethal to the delta smelt, understanding their sources, distribution, and impact on the delta smelt is necessary to determine the baseline of the species. Therefore, Plaintiffs should be permitted to refer to these documents to demonstrate that federal defendants did not consider all relevant factors.

Doc. 385 at 14 (emphasis added).

Plaintiffs do not demonstrate that any of these documents are necessary to show that FWS failed to consider any relevant factor(s). In fact, Plaintiffs [*27] acknowledge that the BiOp and the AR review the distribution and effects of pesticides, including the issues of sediment contamination and pyrethroid insecticides. The documents offered by Plaintiffs do not address new "relevant factors" to meet that exception. Plaintiffs' request is DENIED on this ground. If Plaintiffs' experts believe these studies represent best available science that was unlawfully ignored or discounted by FWS, the studies may be considered in that context.

5. Documents Related to the Food Web of the Delta.

Documents 223, 226, 227 and 245 concern issues related to the food web of the Delta.
. Document 223, J.K. Thompson et al., Shallow Water Processes Govern System-Wide Phytoplankton Bloom Dynamics: A Field Study, 74 J. Marine Systems 153 (2007).

. Document 226, Julie W. Ambler et al., Seasonal Cycles of Zooplankton from San Francisco Bay, 129 Hydrobiologia 177 (1985).

. Document 227, Wim J. Kimmerer et al., Chronic Food Limitation of Egg Production in Populations of Copepods of the Genus *Acartia* in the San Francisco Estuary, 28 Estuaries & Coasts 541 (2005).

. Document 245, Wim J. Kimmerer et al., Predation by an Introduced Clam as the Likely Cause of Substantial Declines [*28] in Zooplankton of San Francisco Bay, 113 Mar. Ecol. Prog. Serv. 81 (1994).

Plaintiffs acknowledge that the BiOp concludes that declines in phytoplankton and zooplankton can impact food availability for the delta smelt and that water diversions from the CVP and SWP directly entrain zooplankton and phytoplankton biomass, thereby adversely impacting food availability for the delta smelt, negatively effecting its survival and reproduction. Doc. 385 at 15 (citing AR 200, 257). However, Plaintiffs maintain that the above-listed documents are necessary to demonstrate that FWS failed to consider "factors influencing decline and production of phytoplankton and zooplankton that is not otherwise available in the Administrative Record." Doc. 385 at 15.

Document 223 analyzes the effects of benthic grazing and light attenuation on phytoplankton dynamics in South San Francisco Bay. Plaintiffs acknowledge that the AR "includes an article that provides limited discussion of phytoplankton production," by "summariz[ing] studies that have found that production can be limited by temperature, light, nutrients, inorganic carbon, or grazing, and high levels of contaminants such as copper." *Id.* (citing AR 18705-18845, [*29] 18749.) Plaintiffs simply argue that Document 223 "provides a more substantive and detailed discussion regarding the influences on phytoplankton production." This is not sufficient to justify supplementation of the record under the "relevant factors" exception. If this "more substantive and detailed discussion" represents the best available science, it may be considered for that purpose upon a proper foundational showing by an expert.

Document 226 documents seasonal population dynamics of zooplankton in the San Francisco Bay estuary. Plaintiffs suggest that the AR should be supplemented to include this study, because it "provides information regarding river inflow, salinity distribution, and the effect on zooplankton, which is not otherwise discussed in detail in the Administrative Record." The fact that the offered document provides greater detail about a particular topic does not demonstrate that it is necessary to show that FWS failed to consider a particular relevant factor or that FWS failed to sufficiently explain its decision.

Document 227 is a study funded by CALFED that was cited by other documents in the

Administrative Record. (AR 6383; AR 12702). Among other things, this study [*30] shows that a certain species of zooplankton (*Acartia*) can remain dominant at moderate to high salinity, even when chronically underfed. According to Plaintiffs, this study "is necessary to determine whether the Service considered all relevant factors because its conclusion contradicts the idea presented in the 2008 BiOp that low outflow equals entrainment of copepods." Doc. 385 at 16-17. But, this misses the distinction between the "relevant factors" exception and the best available science requirement. This study does nothing to suggest that FWS failed to consider the population dynamics of copepods. Rather, it suggests that FWS reached an incorrect conclusion with regard to copepod populations because it failed to consider the information contained in 227. This is a "best available science" argument that must be supported by expert declarations or testimony.

Finally, Document 245 is a study that concludes that invasion by Asian clams may have permanent effects on the zooplankton population in the San Francisco Bay due to predation. Plaintiffs acknowledge that the AR and BiOp discuss the effect of the Asian clam on zooplankton abundance, but complain that the AR "do[es] not provide [*31] any substantive analysis." Doc. 385 at 17. Specifically, Plaintiffs argue that "[w]hile articles and reports in the Administrative Record recognize the impact of invasive species such as the Asian clam on phytoplankton and zooplankton, [D]ocument 245 provides a more in-depth understanding of how invasive species such as the Asian clam operate to cut short the delta smelt food supply in the San Francisco Bay." *Id.* Again, the fact that the offered document provides greater detail about a particular topic does not demonstrate that it is necessary to show that FWS failed to consider a particular relevant factor or that FWS failed to sufficiently explain its decision.

Plaintiffs' request to supplement the record with Documents 223, 226, 227 and 245 is DENIED WITHOUT PREJUDICE to their consideration if Plaintiffs' experts are able to demonstrate that any of these documents constitute "best available science" that was ignored or given insufficient weight.

6. Documents Pertaining to Invasive Species and Habitat Restoration.

Component 4 of the RPA requires habitat restoration to benefit the delta smelt. Document 241 relates to invasive species and habitat restoration:

. Document 241, Lenny F. Grimaldo [*32] et al., Spatial and Temporal Distribution of Native and Alien Chthyooplankton in Three Habitat Types of the Sacramento-San Joaquin Delta, Am. Fisheries Soc'y Symposium (Am. Fisheries Soc'y, Bethesda, Md.) February 2004, Symposium 39, at 81-96.

Document 241 examines the limitations of the benefits of habitat restoration given the existence of invasive species. The article specifically addresses three habitat types in the Delta.

Plaintiffs acknowledge that the AR provides some discussion regarding habitat restoration and invasive species. Doc. 385 at 18 (citing AR 17371-17414; AR 17415-17429). Plaintiffs argue that supplementation of the record with Document 241 is nevertheless appropriate because the first article on the subject in the AR does not "provide in depth analysis regarding this issue; it merely raises it as a topic of concern," while the second article in the AR focuses more on a different subject and "does not provide the same level of detail regarding various habitat types." *Id.* This does not suggest that Document 241 is necessary to demonstrate that FWS failed to

consider a relevant factor or sufficiently explain its decision. Plaintiffs' motion to supplement the record with [*33] Document 241 is DENIED. As with the other documents for which supplementation has been DENIED, if Document 241 represents the best available science, Plaintiffs may refer to it for that purpose upon presentation of the proper foundation provided by an expert witness.

III. CONCLUSION

For the reasons set forth above:

(1) Plaintiffs' motion to supplement the AR with Documents 221 and 254 is DEFERRED, pending further expert input;

(2) Plaintiffs' motion to supplement the AR with Documents 215-220, 223, 226-227, 233-235, 241-242, 245, 255, and 258-264 is DENIED WITHOUT PREJUDICE.

(3) If any Document represents best available science that an expert opines was ignored or given insufficient weight, Plaintiffs may refer to it for that purpose, upon presentation of the proper foundation provided by an expert witness.

(4) As Plaintiffs' deadline for the submission of expert declarations has passed, they may supplement their existing expert declarations, to the extent necessary and only for the purposes outlined in this memorandum decision and order, on or before December 28, 2009 in separate declarations entitled "Supplemental Declaration Re: Ammonia Studies as Relevant Factors" and/or "Supplemental [*34] Declaration Re: Best Available Science Documents." Any rebuttal declarations are due by January 6, 2010.

SO ORDERED

Dated: December 16, 2009

/s/ [Oliver W. Wanger](#) ▼

[Oliver W. Wanger](#) ▼

United States District Judge

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