UNITED STATES DISTRICT COURT

FOR THE EASTERN DISTRICT OF CALIFORNIA

AQUALLIANCE, et al., **Plaintiffs,** **v.** **U.S. BUREAU OF RECLAMATION, et al.,** **Defendants.**	**1:15-CV-754-LJO-BAM** **MEMORANDUM DECISION AND ORDER RE CROSS-MOTIONS FOR SUMMARY JUDGMENT (ECF Nos. 45, 48, 49, 50)**

I. INTRODUCTION

Plaintiffs,[1] various water resource management and conservation organizations, challenge Defendants'[2] "10-year water transfer program to move water from sellers located upstream of the Sacramento/San Joaquin Delta ('Delta') to willing buyers south of the Delta" (the "Project"). ECF No. 16, First Amended Complaint ("FAC") at ¶ 2. Specifically, Plaintiffs assert Reclamation's and the Authority's creation and approval of the Project's Final Long-Term Water Transfers Environmental

[1] Plaintiffs are AquAlliance, California Sportfishing Protection Alliance, South Delta Water Agency, Central Delta Water Agency, and Local Agencies of the North Delta.

[2] Defendants are U.S. Bureau of Reclamation ("Reclamation"), San Luis & Delta-Mendota Water Authority (the "Authority") U.S. Department of the Interior ("Interior"), Sally Jewell, in her official capacity as Secretary of the Interior, and U.S. Fish & Wildlife Service ("FWS"). The Court collectively refers to Defendants, excluding the Authority, as "Federal Defendants."

Impact Statement/Environmental Impact Report[3] ("FEIS/R") violated the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321 *et seq*., the Central Valley Project Improvement Act ("CVPIA"), Public Law 102-575[4], and the California Environmental Quality Act ("CEQA"), Cal. Pub. Res. Code §§ 21000 *et seq*. Plaintiffs also assert FWS's approval of the Project's Final Biological Opinion ("BiOp") and Incidental Take Statement ("ITS") violated the Endangered Species Act ("ESA"), 16 U.S.C. §§ 1531 *et seq*. FAC at ¶ 1.

Before the Court are the parties' cross-motions for summary judgment. ECF Nos. 45, 48, 49, 50. The parties did not request a hearing on the motions and the Court did not set one. For the following reasons, the Court GRANTS IN PART AND DENIES IN PART each of the pending motions.

II. FACTUAL AND PROCEDURAL BACKGROUND

Reclamation manages the Central Valley Project ("CVP") (Administrative Record ("AR")[5] 25427), one of "the largest and most important water projects in the United States." *San Luis & Delta-Mendota Water Auth. v. Jewell*, 747 F.3d 581, 591 (9th Cir. 2014) ("*San Luis v. Jewell*"). "The CVP consists of a series of dams[;] . . . 21 reservoirs; 11 hydropower plants; and 500 miles of canals and aqueducts," *id.* at 594 (citation omitted), that deliver irrigation water to the Sacramento and San Joaquin Valleys, and water to cities and industries in Sacramento, the San Joaquin Valley, and the east and south San Francisco Bay Areas. AR 25427. The key purpose of the CVP is "to transfer water from the Sacramento River [in Northern California] to water-deficient areas in the San Joaquin Valley and from the San Joaquin River to the southern regions of the Central Valley." *San Luis v. Jewell*, 747 F.3d at 591 (citation omitted).

The Project "extends from Shasta County in the northern portion of the Sacramento Valley to Kings County in the southern portion of the San Joaquin Valley and extends as far west as Santa Clara

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[3] Under NEPA, the Project's environmental report is referred to as an "Environmental Impact Statement," whereas it is referred to as an "Environmental Impact Report" under CEQA.

[4] Plaintiffs subsequently abandoned their CVPIA claim. *See* ECF No. 49-1 at 48; ECF No. 51.

[5] The AR in this case was lodged in several parts. *See* ECF Nos. 38, 39, 42-43, 60, 61-62.

County." AR 16700. The Project's stated purpose "is to facilitate and approve voluntary water transfers from willing sellers upstream of the Delta to water users south of the Delta and in the San Francisco Bay Area" when those sales use CVP and/or State Water Project ("SWP") infrastructure. AR 25368, 14786.

These transfers, which have occurred for decades (AR 25367), are proposed as a means to address the "severe reduction in CVP water supplies" that occur "during dry hydrological years" in the San Francisco Bay Area and the San Joaquin Valley. AR 25365, 25367. The transferred water would be made available through groundwater substitution, cropland idling, crop shifting, reservoir release, and conservation. AR 14786, 25375-25377. The Project would make up to 511,094 acre-feet[6] ("AF") of water available for transfer each year through these measures, depending on hydrological conditions. AR 25461. Buyers and sellers are required to submit CVP transfer proposals to Reclamation, who must approve them. AR 25436; CVPIA § 3405(a)(1). Similarly, transfer proposals with State Water Contractors ("SWC") and transfers that use SWP facilities require approval by the California Department of Water Resources ("DWR"). AR 25444.

This case concerns the FEIS/R issued by Reclamation and the Authority, and the BiOp issued by FWS, which evaluate the Project's potential environmental and species-related impacts through 2024. AR 25365 (FEIS/R); AR 047711 (BiOp). The FEIS/R's stated purpose is to "provide a streamlining tool by providing a comprehensive, long-range, project-level view of the potential environment impacts associated with a range of potential transfer activities over a ten-year period, to both expedite approval of water transfers and to reduce participant uncertainty." AR 27451.

Plaintiffs contend, and Defendants dispute, that: "(1) the FEIS/R violates NEPA, (2) the FEIS/R violates CEQA, (3) the FWS's BiOp and [ITS] are arbitrary and capricious, and (4) Reclamation arbitrarily and capriciously failed to re-initiate ESA consultation for impacts to special-status aquatic species" in violation of Section 7 of the ESA. ECF No. 45 at 12.

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[6] An acre-foot of water is the volume of water required to cover one acre of surface area to the depth of one foot, or approximately 43,560 cubic feet. *United States v. Westlands Water Dist.*, 134 F. Supp. 2d 1111, 1139 n. 61 (E.D. Cal. 2001).

III. STANDARDS OF DECISION

A. NEPA

NEPA requires that federal agencies prepare "a detailed statement by the responsible official on . . . the environmental impact" of any federal actions "significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C); *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin*., 538 F.3d 1172, 1185 (9th Cir. 2008). NEPA's purpose is twofold: (1) to ensure that agencies carefully consider information about significant environmental impacts and (2) to guarantee relevant information is available to the public. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989); *Ctr. for Biological Diversity*, 538 F.3d at 1185. "NEPA is a procedural statute," designed to ensure "that federal agencies take a 'hard look' at the environmental consequences of their proposed actions before deciding to proceed." *Native Ecosystems Council v. Weldon*, 697 F.3d 1043, 1051 (9th Cir. 2012) (quoting *Methow Valley*, 490 U.S. at 350-51). "Although NEPA establishes procedures by which agencies must consider the environmental impacts of their actions, it does not dictate the substantive results of agency decision making." *Id*. (citing *Methow Valley*, 490 U.S. at 350). "A court generally must be at its most deferential when reviewing scientific judgments and technical analyses within the agency's expertise under NEPA." *Id*. (internal citations omitted). The Council of Environmental Quality ("CEQ") has promulgated regulations governing how NEPA is implemented along with specific instructions regarding the preparation of EISs. 40 C.F.R. §§ 1505.1-1508.28.

B. APA

The Administrative Procedure Act's ("APA"), 5 U.S.C. §§ 701-06, standard of review applies to Plaintiffs' NEPA and ESA claims. *San Luis v. Jewell*, 747 F.3d at 601. The APA provides that "[a] person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute, is entitled to judicial review thereof." 5 U.S.C. § 702. Under the APA, the Court shall "hold unlawful and set aside agency action, findings, and conclusions found to be":

> (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;
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> (C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; [and/or]
> (D) without observance of procedure required by law[.]
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Id. § 706(A). When assessing claims pursuant to the APA, a court, reviewing only the AR, must determine "whether or not as a matter of law the evidence in the administrative record permitted the agency to make the decision it did." *Sierra Club v. Mainella*, 459 F. Supp. 2d 76, 90 (D.D.C. 2006) (quoting *Occidental Eng'g Co. v. INS*, 753 F.2d 766, 769 (9th Cir. 1985)). In other words, a court's "review is guided by whether the agency's analysis is reasonable and offers sufficient detail to ensure that environmental consequences have been fairly evaluated." *Protect Our Communities Found. v. Jewell*, 825 F.3d 571, 582 (9th Cir. 2016) (citations and quotation marks omitted).

A reviewing court "must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971), *abrogated in part on other grounds as recognized in Califano v. Sanders*, 430 U.S. 99, 105 (1977). Although a court's inquiry must be thorough, the standard of review is highly deferential; the agency's decision is "entitled to a presumption of regularity," and a court may not substitute its judgment for that of the agency. *Id.* at 415-16.

Courts should defer to the agency on matters within the agency's expertise unless the agency completely failed to address a factor that was essential to making an informed decision. *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv.*, 422 F.3d 782, 798 (9th Cir. 2005). A court "may not substitute its judgment for that of the agency concerning the wisdom or prudence of [the agency's] action." *River Runners for Wilderness v. Martin*, 593 F.3d 1064, 1070 (9th Cir. 2010). As the Ninth Circuit explained in *River Runners*:

> In conducting an APA review, the court must determine whether the agency's decision is "founded on a rational connection between the facts found and the choices made . . . and whether [the agency] has committed a clear error of judgment." *Ariz. Cattle Growers' Ass'n v. U.S. Fish & Wildlife*, 273 F.3d 1229, 1243 (9th Cir. 2001). "The [agency's] action . . . need only be a reasonable, not the best or most reasonable, decision." *Nat'l Wildlife Fed'n v. Burford*, 871 F.2d 849, 855 (9th Cir. 1989).

River Runners, 593 F.3d at 1070. Reviewing courts must be at their "most deferential" when an agency makes predictions, "within its area of special expertise, at the frontiers of science." *Baltimore Gas & Elec. Co. v. Nat. Res. Def. Council*, 462 U.S. 87, 103 (1983). In particular, an agency's "scientific methodology is owed substantial deference." *Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv.*, 378 F.3d 1059, 1066 (9th Cir. 2004), *superseded on other grounds by regulation as stated in Defenders of Wildlife v. Zinke*, 856 F.3d 1248, 1260 (9th Cir. 2017).

But "the deference accorded an agency's scientific or technical expertise is not unlimited." *Brower v. Evans*, 257 F.3d 1058, 1067 (9th Cir. 2001). Deference is not owed if "the agency has completely failed to address some factor consideration of which was essential to making an informed decision," *id.* (internal citation and quotation omitted), and courts are not required to defer to an agency conclusion that runs counter to that of other agencies or other individuals with specialized expertise in a particular technical area. *See, e.g., Am. Tunaboat Ass'n v. Baldrige*, 738 F.2d 1013, 1016-17 (9th Cir. 1984) (agency decision under the Marine Mammal Protection Act was not supported by substantial evidence because agency ignored data that was product of "many years' effort by trained research personnel").

C. CEQA[7]

Much like NEPA, CEQA requires California public agencies to conduct an environmental review of discretionary projects they carry out or approve, and to prepare an Environmental Impact

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[7] This Court has supplemental jurisdiction over Plaintiffs' CEQA claims under 28 U.S.C. § 1367(a), which permits federal courts to hear "claims that are so related to claims in the action within such original jurisdiction that they form part of the same case or controversy under Article III of the United States Constitution." *Communities For A Better Env't v. Cenco Ref. Co.*, 180 F. Supp. 2d 1062, 1088 (C.D. Cal. 2001).

Report ("EIR") for any project that may have a significant effect on the environment. Cal. Pub. Res. Code §§ 21151, 21100, 21080. Generally, judicial review in an action to set aside an agency's decision under CEQA "shall extend only to whether there was a prejudicial abuse of discretion." *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 40 Cal. 4th 412, 426 (2007) (citation and quotation marks omitted). "Such an abuse is established if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence." *Id.* (citation and quotation marks omitted). A reviewing court "does not pass upon the correctness of the EIR's environmental conclusions, but only upon its sufficiency as an informative document." *Laurel Heights Improvement Ass'n v. Regents of Univ. of California*, 47 Cal. 3d 376, 392 (1988), *as modified on denial of reh'g* (Jan. 26, 1989) (citation and quotation marks omitted).

"[A] reviewing court must adjust its scrutiny to the nature of the alleged defect, depending on whether the claim is predominantly one of improper procedure or a dispute over the facts." *Vineyard*, 40 Cal. 4th at 435. The Court reviews "de novo whether the agency has employed the correct procedures, scrupulously enforc[ing] all legislatively mandated CEQA requirements." *Id.* (citation and quotation marks omitted). For instance, "[w]hen an agency fails to include information mandated by CEQA in the environmental analysis, the agency fails to proceed in a manner required by law." *San Diego Citizenry Group v. Cty. of San Diego*, 219 Cal. App. 4th 1, 12 (2013). But "where the agency includes the relevant information, but the [factual] *adequacy* of the information is disputed, the question is one of substantial evidence." *Id.* (emphasis in original). "Substantial evidence" is defined as "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made . . . is to be determined by examining the whole record before the lead agency. Argument, speculation, unsubstantiated opinion or narrative [or] evidence which is clearly erroneous or inaccurate . . . does not constitute substantial evidence." *Save Our Peninsula Comm. v. Monterey Cnty. Bd. of Supervisors*, 87 Cal. App. 4th 99, 116-17 (2001). "A court may not set aside an agency's approval of an EIR on the

ground that an opposite conclusion would have been equally or more reasonable." *Laurel Heights*, 47 Cal. 3d at 393.

"The determination of whether an agency has proceeded in the manner required by law is based on a review of the record as a whole: Where some facts show a failure to comply, but the record as a whole supports a finding of compliance, courts should find compliance based on the evidence in the whole record." *San Diego Citizenry*, 219 Cal. App. 4th at 12-13 (citation and quotation marks omitted). Further, an EIR is presumed adequate under CEQA, and the party challenging the EIR bears the burden of proving its inadequacy. *See Rialto Citizens for Responsible Growth v. City of Rialto*, 208 Cal. App. 4th 899, 924-25 (2012). Thus, "an appellant challenging an EIR for insufficient evidence must lay out the evidence favorable to the other side and show why it is lacking. Failure to do so is fatal. A reviewing court will not independently review the record to make up for appellant's failure to carry his burden." *Defend the Bay v. City of Irvine*, 119 Cal. App. 4th 1261, 1266 (2004).

D. Summary Judgment

The APA's standard of review applies to Plaintiffs' NEPA claim and ESA Section 7(a)(2) challenge to the substance of the BiOp. *San Luis v. Jewell*, 747 F.3d at 601. Because review under the APA of such a claim would be limited to the AR, a slightly modified approach to summary judgment is applied, whereby the Court determines "whether or not as a matter of law the evidence in the administrative record permitted the agency to make the decision it did." *Sierra Club v. Mainella*, 459 F. Supp. 2d 76, 90 (D.D.C. 2006) (quoting *Occidental Eng'g Co. v. INS*, 753 F.2d 766, 769 (9th Cir. 1985)).

As a matter of law, a more traditional summary judgment burden-shifting approach could apply to Plaintiffs' Section 7(a)(2) failure to consult claim(s).[8] However, in practice, the parties present this

[8] While some claims brought under Section 7(a)(2) would arise under the APA and therefore be limited to the AR, *see, e.g.*, *San Luis v. Jewell*, 747 F.3d at 602 (limiting review to the administrative record in challenge to substance of biological opinion issued pursuant to Section 7(a)(2)), no such constraint appears to apply to Plaintiffs' Section 7(a)(2) failure to consult claim. *See Coal. for a Sustainable Delta v. Fed. Emergency Mgmt. Agency*, 812 F. Supp. 2d 1089, 1105 (E.D. Cal. 2011)

entire case as one that can be resolved on cross motions for summary judgment based upon the Court's review of the AR. *See generally* ECF No. 35 (Joint Scheduling Report); *see also* ECF No. 45 at 6. Judicial review of claims brought under CEQA is also limited to the administrative record.

IV. ANALYSIS

The administrative record in this case is enormous—the FEIS/R alone is over 1,000 pages—and, understandably, the parties' briefs are lengthy, with dozens of issues raised under CEQA, NEPA, and the ESA. While the briefs are generally cogent, they are not flawlessly organized, making the task of teasing out the various threads of argument all the more difficult. The Court has spent many hundreds of hours attempting to address the matters raised as thoroughly as is reasonably possible. It has no intention of doing it twice.

A. CEQA/NEPA Claims

1. CEQA Lead Agency

For purposes of CEQA, the Authority served as the lead agency for preparation of the EIS/EIR. Plaintiffs argue that the Authority was not the proper CEQA lead agency and that, instead, DWR should have prepared and certified the FEIS/R. ECF No. 45 at 8-12.

"Under CEQA, a lead agency is responsible for determining whether an EIR is required for a project. . . . The lead agency, with responsibility for the process by which the EIR is written, approved and certified, plays a crucial role." *Planning & Conservation League v. Dep't of Water Res.*, 83 Cal. App. 4th 892, 903 (2000), *as modified on denial of reh'g* (Oct. 16, 2000) ("*PCL I*") (internal quotation and citation omitted).

("Where . . . the claim for relief is that a federal agency failed to consult under ESA § 7, there is no administrative record of a consultation to limit the court's scope of review."); *see also Ellis v. Housenger*, No. C-13-1266 MMC, 2015 WL 3660079, at *4 (N.D. Cal. June 12, 2015) (same). So, while a court reviewing such a claim would borrow the standard of review from the APA because the ESA does not establish a standard of review, it would not similarly borrow the scope of review such that a court could, in theory, look outside the AR to resolve a Section 7(a)(2) failure to consult claim. *Id*. Likewise, Section 9 claims are not limited to the AR, at least in theory. *See Oregon Nat. Desert Ass'n v. Kimbell*, 593 F. Supp. 2d 1213, 1216 (D. Or. 2008). In this case, this is a distinction without a difference because no party has suggested that the Court should look beyond the AR to decide the claims in this case.

> The lead agency must independently participate, review, analyze and discuss the alternatives in good faith. Moreover, the agency's opinion on matters within its expertise is of particular value. As the process continues, the lead agency may determine an environmentally superior alternative is more desirable or mitigation measures must be adopted. In sum, the lead agency plays a pivotal role in defining the scope of environmental review, lending its expertise in areas within its particular domain, and in ultimately recommending the most environmentally sound alternative.

Id. at 904 (internal citations and quotations omitted).

California Public Resources Code § 21067 defines a "'[l]ead agency'" as "the public agency[9] which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment." In contrast, a "'[r]esponsible agency' means a public agency, other than the lead agency, which has responsibility for carrying out or approving a project." *Id*., § 21069. "Where a project is to be carried out or approved by more than one public agency, one public agency shall be responsible for preparing an EIR or negative declaration for the project. This agency shall be called the lead agency." 14 Cal. Code Regs. § 15050(a).

By regulation, California's Natural Resources Agency promulgated "Guidelines for Implementation of the California Environmental Quality Act" ("CEQA Guidelines"), set forth in Title 14 of the California Code of Regulations. 14 Cal. Code Regs. § 15000 *et seq*. Among other things, the CEQA Guidelines provide criteria for identifying which agency shall act as the lead agency where two or more public agencies are involved in the process. Under such circumstances, the determination of which agency will be the lead agency is governed by the following criteria:

> (a) If the project will be carried out by a public agency, that agency shall be the lead agency even if the project would be located within the jurisdiction of another public agency.
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> (b) If the project is to be carried out by a nongovernmental person or entity, the lead agency shall be the public agency with the greatest responsibility for supervising or approving the project as a whole.

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[9] Both the Authority and DWR are public agencies within the meaning of CEQA. Cal. Pub. Res. Code § 21063 ("'Public agency' includes any state agency, board, or commission, any county, city and county, city, regional agency, public district, redevelopment agency, or other political subdivision.").

> (1) The lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose such as an air pollution control district or a district which will provide a public service or public utility to the project.
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> (c) Where more than one public agency equally meet the criteria in subdivision (b), the agency which will act first on the project in question shall be the lead agency.
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> (d) Where the provisions of subdivisions (a), (b), and (c) leave two or more public agencies with a substantial claim to be the lead agency, the public agencies may by agreement designate an agency as the lead agency. An agreement may also provide for cooperative efforts by two or more agencies by contract, joint exercise of powers, or similar devices.

CEQA Guidelines § 15051.

Plaintiffs rely on *PCL I*. In that case, the Central Coast Water Authority ("CCWA") served as the CEQA Lead Agency for a project in which "DWR and agricultural urban contractors agreed to a statement of 14 principles, which came to be known as the Monterey Agreement. One of the major goals of the Monterey Agreement was to increase water management flexibility, providing more tools to local water agencies to maximize existing facilities." *PCL I*, 83 Cal. App. 4th at 901 (internal citation and quotation omitted). Among other things, as part of the Monterey Agreement, DWR agreed to transfer control of a state-owned property in Kern County slated for use as a water bank ("Kern Water Bank") to agricultural contractors, provide for permanent sales of water among contractors, provide more flexibility in using certain reservoirs for local use, and provide new rules for transportation of non-SWP water to contractors and for storing water outside a contractor's service area. *See id*. Purported advantages of the Monterey Agreement to individual water contractors included increased water supply reliability through water transfers, water banking, storage outside service areas, easier transport of non-project water, permanent sales of water among contractors, and use of the Kern Water Bank by agricultural and urban water contractors. *See id*.

PCL I held that CCWA was not the proper CEQA Lead Agency because "CCWA, a regional

water contractor, does not have principal responsibility for implementing the Monterey Agreement, although it may have a substantial state in seeing it implemented." *Id*. at 906. "By contrast, DWR, the state agency charged with the statutory responsibility to build, manage, and operate the SWP, clearly retains the principal responsibility to execute amended long-term contracts, to convey [certain properties planned for use as water banks], and to facilitate the water transfers allowed under the Monterey Agreement." *Id*. *PCL I* concluded that DWR's "statewide perspective and expertise," in light of the fact that "allocation of water to one part of the state has potential implications for distribution throughout the system," made DWR the "logical choice for lead agency because it has principal responsibility for implementation of an agreement that substantially restructures distribution of water throughout the state." *Id*. at 907.

Plaintiffs cite *PCL I* in support of their assertion that the Authority "does not have principal responsibility for implementing" the Project—a statewide transfer program between 28 seller agencies, 12 buyer agencies, [] DWR, and [Reclamation]." ECF No. 45 at 9 (citing AR 25370-72 (listing buyer and seller agencies)). The Authority's boundaries are coextensive with its 29 member water service contractors within the western San Joaquin Valley and San Benito and Santa Clara counties. These boundaries do not encompass any of the participating seller agencies, nor two key buyer agencies: the East Bay Municipal Utility District and the Contra Costa Water District. Furthermore, the Authority's purposes and powers are restricted by law to providing benefits to its member organizations.[10] Moreover, the FEIS/R acknowledges that the transfers "require approval from Reclamation and/or

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[10] In support of this assertion, Plaintiffs cite their own comment letters in the AR. *See* AR 27889 ("Comment Letter NG03 Barbara Vlamis, Bill Jennings, Jason Flanders, AquAlliance, California Sportfishing Protection Alliance, Aqua Terra Aeris Law Group"). This is insufficient on its own. *See Protect Lake Pleasant, LLC v. Connor*, No. CIV 07-0454-PHX-RCB, 2010 WL 5638735, at *40 (D. Ariz. July 30, 2010) (refusing to consider for their truth statements in comment letter within an administrative record where "[t]here [wa]s nothing in that comment letter substantiating plaintiffs' view [and] [p]laintiffs d[id] not, for example, rely upon or cite to any maps or census figures or other pertinent figures from governmental agencies"). However, the boundaries of the Authority's member districts are judicially noticeable facts. *See* http://www.sldmwa.org/OHTDocs/Maps/SLDMWA_Map.jpg (last visited May 4, 2017). Moreover, Plaintiffs' comment letter cites (but does not attach), the Authority's Joint Powers Agreement as authority for the scope of the Authority's powers, AR 30151, and the Authority does not object to the characterization.

[DWR], which necessitate compliance with NEPA and CEQA." AR 25368. It is undisputed that Reclamation serves as the "action agency"—the rough equivalent of a lead agency under CEQA—for purposes of NEPA compliance. *See* AR 25365. Plaintiffs insist that DWR should play a parallel role for purposes of CEQA because "[f]or water conveyed through the SWP system, DWR must [] determine if the transfer can be made without injuring any legal user of water and without unreasonably affecting fish wildlife or other instream beneficial uses and without unreasonably affecting the overall economy or environment of the county from which the water is being transferred." AR 25444.

The Court does not believe *PCL I* is analogous to the present case. Among other things, the Project does not involve a statewide policy document that implicates in significant ways the way DWR operates and contracts with water users. The Court believes that *Center for Biological Diversity v. City of San Bernardino*, 247 Cal. App. 4th 326 (2016), *as modified* (May 18, 2016) ("*CBD v. San Bernardino*"), provides more relevant guidance. That case concerned an EIR for a project planned to be managed by a private, nonprofit entity, the Fenner Valley Mutual Water Company, formed by a private company, Cadiz, Inc., in cooperation with several public water agencies. The project had several components: construction of a number of wells on land owned by Cadiz within the County of San Bernardino; extraction of groundwater from those wells; export of that water via an underwater conveyance pipeline for eventual delivery to the public agencies; and the potential for the public agencies to send surplus surface water to the project site to be held in storage in the groundwater basin. *Id*. at 333. Santa Margarita Water District ("SMWD") served as the lead agency, with the County of San Bernardino serving as a responsible agency. *Id*. at 332. The project planned for water from the project to go to customers of public agencies located in Los Angeles, Orange (where SMWD is located), Riverside, San Bernardino, and Ventura Counties. *Id*. at 333.

Plaintiffs in *CBD v. San Bernardino* argued that the County of San Bernardino should have been the lead agency because it was "in the best position to objectively balance the benefits and risks of the project, rather than the purchaser of the water." *Id*. at 339. The court determined that because the Project

will be carried out, in part, by a public agency, SMWD "was properly designated as the lead agency under [CEQA Guidelines § 15051(a)]" and had the "greatest responsibility for supervising the project *as a whole*" under CEQA Guidelines § 15051. *Id*. at 340 (emphasis in original). This was despite the fact that a certain percentage of the water to be transferred would be transferred from one place outside SMWD's boundaries to another place outside SMWD's boundaries.

The Court finds the situation in *CBD v. San Bernardino* analogous to the present case. Although some of the transfers at issue in the present case may originate and terminate in water districts outside the Authority's boundaries, the Authority has a more significant role in the overall project than does DWR. The Court agrees with the Authority that it is important to remember that "[w]ater transfers are voluntary actions proposed by willing buyers and sellers and are not initiated by state agencies." ECF No. 48 at 34 (citing AR 27422). DWR will not be a party involved in negotiating the transfers identified in the EIS/EIR, nor will the agency be party to any of the transfer contracts. AR 27422. The Authority, not DWR, has the greatest responsibility for determining the water needs of its members and in helping to obtain necessary water for those needs. *See* CEQA Administrative Record ("CAR")[11] 14; AR 25370-71, 25430-32 "DWR will have a coordination role in the process because it will coordinate with Reclamation on review of potential transfer information packages (to help ensure consistency between CVP-related transfers and non-CVP-related transfers). DWR may also help facilitate transfers through [SWP] facilities in some years." AR 27422. The Court agrees with the Authority that "[t]his is not a role with 'principal responsibility' such that DWR should be the CEQA lead agency." ECF No. 48 at 34. DWR, notably, has no responsibility over transfers that do not pass through its facilities. *See* AR 25443-44, 27421-22.

Plaintiffs argue that while the Authority "has a duty to comply with CEQA for *its* water transfers, [it] has no 'principal responsibility' for other entities' water transfers in which [the Authority]

[11] A portion of the administrative record concerns only the CEQA decision-making process. This portion of the record is designated under a separate numbering scheme.

has no role at all." ECF No. 51 at 1. This is true, but does not mean that DWR provides "greater legal, policy, and technical responsibility" for the Project as a whole. As explained above, the Authority's role is somewhat more significant than DWR's overall. That is all the law requires, particularly in light of *CBD v. San Bernardino*, which demonstrates by way of example that a lead agency can still qualify as such even though it has little to no control over implementation of some aspects of the project.

Plaintiffs make several additional arguments on the lead agency issue that merit serious consideration. First, as mentioned, a lead agency is defined as having "authority to require feasible changes in any or all activities involved in the project in order to substantially lessen or avoid significant effects on the environment." CEQA Guidelines at § 15041. Plaintiffs argue that the Authority fails to satisfy this definition because it has no authority over transfers in which it is not involved. ECF No. 51 at 2. More specifically, Plaintiffs emphasize that the FEIS/R relies on the mitigation measures that depend upon DWR for implementation, including "WS-1" and "GW-1",[12] which are designed to reduce impacts to surface water and groundwater supplies.

Under WS-1, a streamflow depletion factor will be applied to transfers "to mitigate potential water supply impacts from the additional groundwater pumping due to groundwater substitution transfers." AR 25526. "The streamflow depletion factor equates to a percentage of the total groundwater substitution transfer that will not be credited to the transferor and is intended to offset the streamflow effects of the added groundwater pumping due to transfer. *Id*. "The exact percentage of the streamflow depletion factor will be assessed and determined on a regular basis by Reclamation and DWR in consultation with buyers and sellers based on the best technical information available at that time." *Id*. "Reclamation and DWR require the imposition of a streamflow depletion factor because they will not move transfer water if doing so will violate the no injury rule." AR 25526-27.

Mitigation measure GW-1 requires monitoring of groundwater and/or surface water levels during

[12] Presumably the "WS" in WS-1 and the "GW" in GW-1 refer to the impacts they are designed to mitigate: Water Supply and Groundwater. *See* AR 25379-80.

transfers to, among other things, avoid potential effects to other legal users of water and mitigate significant environmental effects. AR 25759. Pursuant to GW-1, potential sellers must submit well data "for Reclamation and, where appropriate, DWR review, as part of the transfer approval process." *Id*. The record does support Plaintiffs' position that the Authority has no legal mandate to ensure groundwater and surface water impacts felt in other jurisdictions are fully mitigated or avoided. In contrast, DWR does have some role to play in overseeing groundwater management under California's Sustainable Groundwater Management Act ("SGMA"). Under SGMA, local agencies are tasked with creating Groundwater Sustainability Plans ("GSP") that must comport with requirements set forth in SGMA. *See* Cal. Water Code. §§ 10723, 10727.2. DWR oversees this process in various ways. *See* Cal. Water Code § 10733.8 (DWR must review GSPs or permitted alternatives every five years, assess whether the GSP complies with SGMA, and may include "recommended corrective actions to address any deficiencies").

The Authority responds that "as lead agency, it adopted mitigation measures that are legally feasible and may be fully enforced by Reclamation through its regulatory authority, in compliance with CEQA," ECF No. 58 at 16. Building on the CEQA Guideline definition of a lead agency as one having "authority to require feasible changes in any or all activities involved in the project in order to substantially lessen or avoid significant effects on the environment," CEQA Guideline § 15126.4(a)(2) provides: "Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. In the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation, or project design." Although the Court can locate no cases interpreting these Guidelines provisions in relevant ways, additional guidance can be found in other, similar provisions of CEQA that require mitigation measures be "fully enforceable through permit conditions, agreements, or other measures." Cal. Pub. Res. Code § 21081.6. Interpreting this related provision, at least one California court has found that an agency may adopt mitigation measures made enforceable through another agency with regulatory authority over the impact being mitigated. *Citizens Opposing a Dangerous Env't v. Cnty. of Kern*, 228

Cal. App. 4th 360, 383 (2014) (permitting lead agency to rely on a condition requiring compliance with FAA rules and regulations). Accordingly, the Court concludes that a lead agency does not lack "authority" to require feasible changes simply because it lacks ultimate enforcement authority over the mitigation measure. More would be required to demonstrate a mitigation measure is unenforceable.

Plaintiffs also argue that reliance on the Authority as lead agency prejudiced the environmental document by undermining the efficacy of these critical mitigation measures, "since key elements of each mitigation measure are illegally deferred to future DWR review and approval." ECF No. 45 at 10. This is a complaint about the structure and nature of the mitigation measures. Plaintiffs would be able to raise the same or similar complaint (i.e., that key elements are illegally deferred to future review) about the mitigation measures even if DWR were the lead agency. The Court does not find this to be a basis for finding the Authority is not the proper lead agency for this Project.

Finally, Plaintiffs are correct that most if not all of the Project's potentially significant impacts to water resources fall outside the boundaries of the Authority's member districts.[13] The Authority counters by citing CEQA Guidelines section 15051(a), which provides: "If the project will be carried out by a public agency, that agency shall be the lead agency even if the project would be located within the

[13] Plaintiffs attempt to use the fact that the project's principal impacts will occur outside the Authority's boundaries to distinguish this case from *Planning & Conservation League v. Castaic Lake Water Agency*, 180 Cal. App. 4th 210 (2009) ("*PCL II*"), *as modified on denial of reh'g* (Jan. 14, 2010). There, environmental plaintiffs challenged an EIR concerning a water transfer from two local agencies, Kern County Water Agency and Wheeler Ridge-Maricopa Storage District, to a third local agency, Castaic Lake Water Agency ("Castaic"). *Id*. at 219. Castaic acted as the lead agency for an EIR covering the transfer, which was arguably "facilitated by" the Monterey Agreement that was the subject of the challenge in *PCL I*. *See id*. at 237-39. Plaintiffs argued that DWR, not Castaic, was the appropriate lead agency to review the transfer because: (1) Castaic lacked the relevant expertise given that the EIR relied on DWR computer models regarding SWP water supplies to assess the impacts of the transfer and its various alternatives; and (2) DWR had superior expertise because the various scenarios evaluated in Castaic's EIR hinged on implementation of the Monterey Agreement, for which DWR was already conducting an environmental review. *Id*. at 239. The court disagreed, finding that under CEQA and its Guidelines, "courts have concluded that the public agency that shoulders primary responsibility for creating and implementing a project is the lead agency, even though other public agencies have a role in approving or realizing it." *Id*. Critically, "[t]he core of the project is a local transfer of water between Castaic and Wheeler Ridge." *Id*. at 240.

The Court does not find *PCL II* to be directly on point because it lacks the complication, present here, of a lead agency drafting an EIR for multiple water transfers, not all of which involve the lead agency directly. However, it is worth noting that, while Plaintiffs are correct that *PCL II* is distinguishable from the present case in that in *PCL II* the potential impacts tended to fall within the *PCL II* lead agency's (Castaic's) service area, *see id*. at 240, the fact that the impacts in *PCL II* fell within the lead agency's boundaries does not prove the inverse: that a public agency may not serve as a lead agency if the potential impacts will occur elsewhere. In fact, the CEQA Guidelines suggest otherwise. CEQA Guidelines section 15051, which outlines criteria for identifying the lead agency, does not mention the location of project impacts as a relevant consideration.

jurisdiction of another public agency." Here, the Authority is anticipated to be negotiating transfer agreements with potential sellers on behalf of participating members. AR 27421; *see also* AR 25442-44 (Authority identified as a common participant in most past water transfers); AR 25370 (Authority members identified as majority of potential buyers for transfers analyzed in FEIS/R). The fact that potentially significant impacts of the Project lie outside the Authority's boundaries does not render them per se an improper lead agency.

In sum, the Authority is a proper lead agency for the Project. Plaintiffs' motion for summary judgment on this ground is DENIED and the Authority's cross-motion GRANTED.

2. CEQA Project Description

Plaintiffs allege that the Project description violates CEQA because: (1) the description of the timing, amount, location, and frequency of transfers are entirely uncertain; and (2) the FEIS/R's "carriage water" project component improperly conflates a mitigation measure with the project itself and is completely undefined. ECF No. 45 at 12-17.[14]

Generally, "[a]n accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR." *County of Inyo v. City of Los Angeles*, 71 Cal. App. 3d 185, 193 (1977). "Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal . . . and weigh other alternatives in the balance." *Id*. at 192-93. A project description that gives conflicting signals to decision makers and the public about the nature and scope of the project is fundamentally inadequate and misleading. *San Joaquin Raptor Rescue Center v. County of Merced*, 149 Cal. App. 4th 645, 655-656 (2007) (finding conflict in EIR for mining project, where project description indicated no increases in mine production were being sought, yet also

[14] To the extent that Plaintiffs also suggested the project description similarly violated NEPA, Plaintiffs abandoned any such argument in their Opposition/Reply, which clearly indicates all "project description" challenges arise under CEQA. *See* ECF No. 51 at 4-6; ECF No. 59 at 2.

provided for substantial increases in mine production).

However, CEQA explicitly cautions courts against interpreting CEQA in a manner that imposes requirements beyond those explicitly stated in the statute or in the Guidelines. Cal. Pub. Res. Code § 21083.1. The CEQA Guidelines explain that "[t]he description of the project shall contain the following information but should not supply extensive detail beyond that needed for evaluation and review of the environmental impact":

> (a) The precise location and boundaries of the proposed project shall be shown on a detailed map, preferably topographic. The location of the project shall also appear on a regional map.
>
> (b) A statement of the objectives sought by the proposed project. A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project.
>
> (c) A general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities.
>
> (d) A statement briefly describing the intended uses of the EIR.
>
> > (1) This statement shall include, to the extent that the information is known to the lead agency,
> >
> > > (A) A list of the agencies that are expected to use the EIR in their decision-making, and
> > >
> > > (B) A list of permits and other approvals required to implement the project.
> > >
> > > (C) A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies. To the fullest extent possible, the lead agency should integrate CEQA review with these related environmental review and consultation requirements.
> >
> > (2) If a public agency must make more than one decision on a project, all its decisions subject to CEQA should be listed, preferably in the order in which they will occur. On request, the Office of Planning and Research will provide assistance in

identifying state permits for a project.

CEQA Guidelines § 15124 (emphasis added).

a. Timing, Amount, Location, and Frequency of Transfers

While the FEIS/R lists each of the entities anticipated to buy and sell transfer water, and places an upper limit on the amount of water transferred, Plaintiffs argue that the FEIS/R omits critical details about the timing, amount, location, and frequency of transfers. ECF No. 45 at 12. Plaintiffs suggest that the FEIS/R is unlawful because it "lacks the necessary stable and discrete project description required for a project-level review." ECF No. 45 at 14. Under CEQA, "a program EIR is distinct from a project EIR, which is prepared for a specific project and must examine in detail site-specific considerations." *Ctr. for Sierra Nevada Conservation v. County of El Dorado*, 202 Cal. App. 4th 1156, 1184 (2012). Plaintiffs argue that the FEIS/R cannot provide "in detail site-specific considerations" because it does not identify any single site-specific project, ECF No. 45 at 14, and does not set forth with any certainty whether transfers would occur, nor to what use the ultimate transfer water may be put. AR 27977-27979.

Plaintiffs somewhat conflate two standards. As discussed above, "[a]n accurate, stable and finite project description is the *sine qua non*" of every "informative and legally sufficient EIR." *County of Inyo*, 71 Cal. App. 3d at 193. At the same time, but not to be confused with the requirement for an "accurate stable and finite project," CEQA draws a distinction between a "program EIR" and a "project EIR," the latter being appropriate: "for a specific project and must examine in detail site-specific considerations." *Sierra Nevada Conservation*, 202 Cal. App. 4th at 1184; *see also* Guidelines § 15160 (explaining how the content of an EIR may be "tailored to different situations and intended uses"). The level of specificity required in an EIR is determined by the nature of the project and the "rule of reason." *City of Irvine v. Cnty. of Orange*, 238 Cal. App. 4th 526, 540 (2015) (internal citation and quotation omitted). When evaluating an EIR, a court should "look to the substance of the EIR, not its nominal title." *Id*. Therefore, an EIR must provide an accurate, stable and finite project description and must do so at an appropriate level of detail under the circumstances.

Teasing apart these two lines of authority, the first question is whether the FEIS/R provides an "accurate, stable and finite project description." *County of Inyo*, 71 Cal. App. 3d at 193. Plaintiffs suggest that the FEIS/R runs afoul of this standard because it lacks "the ability to provide details as to the time, location, and quantity of any actual transfer over the next 10 years." ECF No. 45 at 14. But, this misses the point of *County of Inyo*. In that case, the EIR described a project to increase pumping from a groundwater basin within the Owens Valley, with the water being "destined solely for 'unanticipated uses'" within the Owens Valley itself. *County of Inyo*, 71 Cal. App. 3d at 190. Yet, the EIR went on to discuss proposals "far broader than the initially described project," including at times referring to the project as part of the larger operation of the regional Los Angeles Aqueduct System and describing plans to export additional water outside the Owens Valley. *Id*. This moving target rendered the project description unlawful because "[t]he defined project and not some different project must be the EIR's bona fide subject. . . . [T]he selection of a narrow project as the launching pad for a vastly wider proposal frustrated CEQA's public information aims." *Id*. at 199-200. Other cases applying *County of Inyo* likewise find project descriptions unlawful where the EIR's description of a project's scope, size, or magnitude demonstrates internal inconsistencies. *See San Joaquin Raptor*, 149 Cal. App. 4th at 655 (finding project description unlawful where draft EIR represented that project would not significantly increase pre-existing mine's annual production, while proposed permit that would be approved by final EIR would allow for more than doubling of mine production); *Communities for a Better Env't v. City of Richmond*, 184 Cal. App. 4th 70, 84 (2010) ("*CBE v Richmond*") (finding project description inadequate where project proponent provided conflicting descriptions of oil refinery project, leading to confusion over whether project would allow refinery to process a more pollution-intensive petroleum product).

In contrast, *Citizens for a Sustainable Treasure Island v. City & County of San Francisco*, 227 Cal. App. 4th 1036 (2014), concerned an EIR approving the re-development of Naval Station Treasure Island into a mixed-use community. Project opponents argued that the EIR's project description was

"unstable and erratic" and that the plan was nothing more than a "conceptual land use map." *Id*. at 1052. The *Treasure Island* court disagreed, finding that the "EIR made an extensive effort to provide meaningful information about the project, while providing for flexibility needed to respond to changing conditions and unforeseen events that could possibly impact the Project's final design." *Id*. at 1053. The EIR described permitted uses of the project area and provided detailed standards that would govern development, including (through incorporation by reference) plans showing street layouts and concepts for the shapes of new buildings and landscapes. *Id*. The court acknowledged, however, that, "as a matter of necessity at this stage in the planning process, there are many Project features that are subject to future revision, and quite likely will be the subjects of supplemental review before the final Project design is implemented." *Id*. at 1054. The court did not fault the EIR "for not providing detail that, due to the nature of the Project, simply does not now exist." *Id*. (citing CEQA § 15146 ("The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.").) As *Treasure Island* points out, courts need not "require[] resolution of all hypothetical details prior to approval of an EIR." *Id*.

Here, the FEIS/R identifies the purpose of the project: to facilitate voluntary water transfers to CVP contractors to help meet shortfalls in contract amounts. AR 25368. The FEIS/R identifies potential buyers and sellers, AR 25370-72, and provides the maximum potential transfer that is covered by the FEIS/R for each seller, for a total maximum of 511,094 Acre Feet ("AF"). AR 25372. The service area of each potential buyer is described, AR 25370-71, and the potential sellers are grouped into "area[s] of analysis," AR 25372, which the FEIS/R utilizes in its analyses. AR 25485, 25487, 25540. The FEIS/R also identifies the maximum volume of water that may be transferred through the Delta in any given year (up to 600,000 AF in critical years or dry years following dry or critical years). AR 25375. Finally, the FEIS/R explains that the "transfer window" covered by the FEIS/R is July to September. *Id*. In addition, transfer operations are described by seller geographic region. For example, potential sales from willing sellers on the Sacramento River are described in detail as follows:

> Potential sellers on the Sacramento River include Conaway Preservation Group, LLC, Cranmore Farms, LLC, Glenn-Colusa Irrigation District (ID), Pelger Mutual Water Company (MWC), Pleasant Grove-Verona MWC, Reclamation District 108, Reclamation District 1004, Sycamore MWC, and Te Velde Revocable Family Trust, which may provide water made available through groundwater substitution or crop idling shifting actions. Anderson Cottonwood ID, Eastside MWC, Natomas MWC, and River Garden Farms plan to transfer water made available through groundwater substitution only.
>
> Potential sellers receive CVP water that is stored upstream from their service areas in Shasta Reservoir, a CVP facility Releases from Shasta Reservoir may be routed through or around the Shasta Power Plant to the Sacramento River, where flows are reregulated by Keswick Dam.
>
> Delta conveyance capacity would be available when conditions for sensitive species are acceptable to NOAA Fisheries and USFWS, typically from July through September, but groundwater substitution and cropland idling crop shifting transfers would be available from April through September. Storing water in Shasta Reservoir from April through June would help facilitate these types of transfers; however, Shasta Reservoir has a very limited capacity to store transfer water from April through June because of downstream temperature requirements. Reclamation is required by [State Water Resources Control Board] Water Rights Orders 90-05/91-01 to meet average daily temperature requirements as far downstream as practical when temperatures could affect fish. To meet requirements, Reclamation must carefully manage the cold water pool in Shasta Reservoir by releasing larger quantities of water earlier in the season; larger flows maintain cooler temperatures for a longer distance downstream. Reducing releases to hold transfer water in storage could affect Reclamation's ability to meet these downstream temperature requirements. Reclamation would only consider storing water for transfers if it would not affect releases for temperature or if it could be "backed up" into another reservoir (by reducing releases from that reservoir). Backing up water may be possible if the Delta is in balanced conditions and instream standards are met. The decision to back up transfer water would be made on a case-by-case basis, but storage is analyzed in this EIS/EIR so that the analysis is complete in the event Reclamation determines that storage is possible in a specific year.
>
> Because of the limitations associated with storing transfer water, crop idling transfers would be more difficult to implement Cropland idling cannot be started partway through the irrigation season, so the water made available from April through June would bypass the pumps and become Delta outflow if it cannot be stored. Sacramento River sellers and buyers would generally prefer water transfer options that are more flexible, such as starting groundwater substitution pumping when Delta pumping capacity for transfers is available.

> Proposed sellers divert water from various locations along the Sacramento River or the Sutter Bypass. If a seller shifts from using surface water to groundwater when a transfer is implemented, river flows would not decrease from Shasta Reservoir to the point of diversion absent transfers. River flow would then increase from the seller's usual diversion point downstream to the buyer's point of diversion because water is not diverted for use until it reaches the Delta.
>
> If Reclamation determines that it can store water in Shasta Reservoir, the flows in the Sacramento River between Shasta Reservoir and the point of diversion absent transfers would decrease from April through June. Flows downstream of the point of diversion would not change during this period.

AR 25468-69. Finally, the FEIS/R indicates that "water would be used only to help meet existing demands and would not serve any new demands in the buyers' service areas." AR 14788; *see also* AR 26116 ("Transfers would be used to serve existing demands in the contractors' service areas."). Critically, unlike in *County of Inyo*, Plaintiffs have not pointed to and the Court cannot identify any way in which the project description shifts throughout FEIS/R, or any way in which the analysis evaluates a project that is different than the project described.

Similarly, Plaintiffs argue that "without the ability to provide details as to the time, location, and quantity of any actual transfer over the next 10 years, the [F]EIS/R lacks the necessary stable and discrete project description required for project-level review." ECF No. 45 at 14. But, as *Treasure Island* explains, it is perfectly permissible for a CEQA document to evaluate the upper end of a range of impacts, while leaving undescribed some "detail that, due to the nature of the Project, simply does not now exist." *Treasure Island*, 227 Cal. App. 4th at 1054. Plaintiffs' complaint would have more traction if it appeared as though the FEIS/R was intended to be a project-level review. A review of the record reveals, however, that it is not.

EPA raised concerns about the level of detail in the Draft EIS/R ("DEIS/R"), stating in its comments:

> The level of detail missing from the [DEIS/R], particularly with regard to the specific provisions of likely transfer actions . . . , results in an EIS document more appropriate to a programmatic analysis. Without further details regarding these aspects of the proposed project, EPA believes the

> [FEIS/R] will not be sufficient to support project-level decision-making.

AR 27456. The FEIS/R indicates that this concern was "addressed" by allowing "project-level decision-making" as described in "Common Response 14," *id.*, which in turn states, in pertinent part:

> Implementation of the range of potential water transfers analyzed in this EIS/EIR (annual and multiyear, if any) would be subject to Reclamation's annual review and approval.
>
> Reclamation's Potential Action is to review and approve potential transfer activities, if appropriate, based on detailed review of the specific proposed transfer. Reclamation is not soliciting potential buyers or sellers for transfers. The potential buyers and sellers listed in this document could seek to transfer up to the maximum quantities analyzed in this EIS/EIR using this document for NEPA and CEQA compliance, or could propose other transfers outside of this range subject to appropriate environmental review and compliance with any other applicable requirements. Buyers and sellers must implement measures incorporated into the Proposed Action to avoid or reduce potential environmental impacts to obtain Reclamation approval of the transfer. Reclamation technical experts review all proposed transfers prior to approval of the transfer to ensure that impacts of the proposed transfer are within the scope of analysis in this EIS/EIR (or require the preparation of further environmental documentation in the event that new or substantially more severe adverse impacts are presented by the proposed transfer). Reclamation ensures that the identified mitigation measures are implemented through review of monthly reports, field visits, and necessary coordination with transfer participants. Reclamation and [the Authority] have developed a Mitigation, Monitoring, and Reporting Plan, which is included in Appendix K of the Final EIS/EIR. The requirements of monitoring and mitigation as they apply to each individual transfer will be included in the transfer approval.
>
> Reclamation will review each water transfer proposal with a view to the proposal's adequacy in addressing the technical information needed. <u>To fully consider the proposal, site specific conditions may require additional information and considerations beyond that described in current guidance</u> (such as including the Technical Information Document for Preparing Water Transfer Proposals, which is jointly prepared by DWR and Reclamation). This EIS/EIR does not predetermine those needs or those facts and does not foreclose the requirement and consideration of additional information (or further environmental review if necessary based on the potential for new or more severe environmental effects). The final quantity of water, if any, to be transferred is dependent on numerous factors, including future changes in hydrologic conditions, export capacity available for transfer water, negotiations between buyers and sellers, and Reclamation approval. Additional information regarding the process by which individual transfer proposals would be presented, evaluated, and

> potentially approved, can be found on Reclamation's website at http://www.usbr.gov/mp/watertransfer/ and DWR's website at http://www.water.ca.gov/watertransfers/proposals.cfm.

AR 27451-52 (emphasis added). The Court interprets this language in the FEIS/R as an admission by its authors that it does not provide specific, project-level authorization for any particular transfer. Rather, each transfer will be evaluated to determine whether that transfer is consistent with the parameters of the FEIS/R or whether, alternatively, site-specific conditions require additional evaluation beyond that provided in the FEIS/R itself. The Court finds this to be a reasonable approach, providing an appropriate level of detail under the circumstances. The FEIS/R is what it is and provides CEQA approval only for what it describes and evaluates.

Program EIRs are designed to work this way under CEQA. "They may be used to address impacts and mitigation measures that apply to the program as a whole to simplify later environmental review for program activities." *Ctr. for Biological Diversity v. Dep't of Fish & Wildlife*, 234 Cal. App. 4th 214, 233-34 (2015) ("*CBD v. DFW*") (citing CEQA Guidelines § 15168(d)). "They may also be used to consider broad programmatic issues for related actions at an early planning stage when the agency has greater flexibility to deal with basic problems or cumulative impacts." *Id*. (citing CEQA Guidelines § 15168 (b)). "The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR." CEQA Guidelines § 15146. "Accordingly, the CEQA Guidelines require an EIR to provide sufficient information in light of what is reasonably feasible." *CBD v. DFW*, 234 Cal. App. 4th 214 at 233-34.

Plaintiffs concede that it is "the contents, not the label, of an EIR [that is] of key concern," but insist that even if the Court construes the FEIS/R as a programmatic document, it is inadequate as such because it lacks necessary programmatic safeguards. ECF No. 51 at 4. The CEQA Guidelines provide specific guidance for public agencies that rely on a program EIR to avoid preparing subsequent EIRs; the public agency must examine site-specific program activities "in the light of the program EIR to determine whether an additional environmental document must be prepared." CEQA Guidelines §

15168(c). More specifically, "[i]f a later activity would have effects that were not examined in the program EIR, a new initial study would need to be prepared leading to either an EIR or a negative declaration." *Id*. at § 15168(c)(1). In contrast, "[i]f the agency finds that . . . no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required. *Id*. at § 15168(c)(2). In addition "[a]n agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program." *Id*. at § 15168(c)(3). Finally, "[w]here the subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR." *Id*. at § 15168(c)(4). Plaintiffs point out that in *CBD v. DFW*, which involved the review of a program EIR concerning stocking of fish in high alpine lakes and that practice's impact on native frog species, the California Department of Fish and Wildlife ("DFW") used a protocol to "evaluate each stocking location within the range of a [frog] species in a stepwise fashion to determine whether interactions between stocked trout and [frog] species may occur. If the biologist determines a significant impact is likely, the Department will cease stocking at that location unless and until it develops and implements an aquatic biodiversity management plan for that location." 234 Cal. App. 4th at 229. Plaintiffs suggest that the *CBD v. DFW* court treated the presence of the evaluation protocol as a pre-requisite to upholding the program EIR. The Court does not read *CBD v. DFW* to impose such a pre-requisite. In fact, *CBD v. DFW* reasoned:

> In effect, after a sufficiently comprehensive and specific program EIR has been certified, CEQA allows much of the initial site-specific review to occur outside a formal CEQA process and beyond public view. CEQA does not require the Department to engage in a public process when it determines whether the impacts from a site-specific project were addressed and adequately mitigated in the program EIR.

Id. at 239. It just so happened that in *CBD v. DFW*, DFW had already developed an evaluation protocol

to determine, when faced with project-level decisions, whether further site-specific review was needed. The evaluation protocol, the *CBD v. DFW* court concluded, was "a type of 'written checklist or similar device'" that CEQA allows a public agency to use to document site-specific impacts. *Id*. However, nothing in *CBD v. DFW* or the Guidelines requires the program EIR to articulate/define such a checklist. It appears permissible for the public agency to develop and apply such a checklist or similar device upon approval of specific programs (in this case specific transfers).

The Court agrees with the Authority that the FEIS/R in this case uses the CEQA process as it was intended to be used: to describe and analyze a series of individual activities having generally similar impacts that can be mitigated in similar ways.

b. Carriage Water

The FEIS/R indicates that the preferred alternative contains several "Environmental Commitments" which are designed to "avoid potential environmental impacts from water transfers." AR 25478. One such environmental commitment is the use of "carriage water," which, according to the FEIS/R, "will be used to maintain water quality in the Delta." *Id*.

Some background is helpful. The CVP and SWP facilities only have potential capacity to convey transferred water when doing so will not interfere with CVP and SWP operations, which are, in turn, subject to complex regulatory requirements. *See, e.g.*, CAR 325 (cautioning potential parties to transfer agreements that transfers can only take place when export capacity is available and that project operations are subject to numerous regulatory requirements); CAR 2305-06 (same). The regulatory requirement most relevant here is State Water Resources Control Board ("SWRCB") Decision 1641 ("D-1641").

> SWRCB Decision 1641 and [the related] Water Right Order 2001-05 describe the current water right requirements to implement the flow-dependent objectives outlined in the Bay Delta Plan. In SWRCB Decision 1641, the SWRCB assigned responsibilities to Reclamation and [DWR] for meeting these requirements. These responsibilities require that the [CVP] and [SWP] be operated to protect water quality and that DWR and or Reclamation ensure that the flow dependent water quality objectives are

> met in the Delta.

AR 25539.

More specifically, D-1641 "includes specific outflow requirements throughout the year, specific export restraints in the spring, and export limits based on a percentage of estuary inflow throughout the year." *Nat. Res. Def. Council v. Kempthorne*, 506 F. Supp. 2d 322, 340 (E.D. Cal. 2007) (citing the administrative record of that case). The water quality objectives in D-1641 "are designed to protect in-Delta agricultural, municipal and industrial, and fishery uses and vary throughout the year and by water year type . . . . D-1641 will also protect delta smelt by providing transport, habitat and attraction flows." *Id*. Under the terms of the "Agreement Between the United States of America and the State of California for Coordinated Operation of the Central Valley Project and State Water Project" ("Coordinated Operations Agreement" or "COA"), transfers can only take place when Reclamation and DWR declare that the Delta is in "balanced conditions." AR 25467. "Balanced water conditions" exist when storage releases plus unregulated flow equal Sacramento in-basin uses, plus exports. AR 15741; *Friant Water Auth. v. Jewell*, 23 F. Supp. 3d 1130, 1151 (E.D. Cal. 2014) (citing COA, Art. 3(b)).

The FEIS/R does not explain with any precision how carriage water is calculated. Instead, the mechanism by which carriage water is calculated is outlined in a generic sense as follows:

> Carriage water (a portion of the transfer that is not diverted in the Delta and becomes Delta outflow) will be used to maintain water quality in the Delta. Carriage water calculations will also reflect conveyance losses as the water moves from its source to the Delta export pumps and is conveyed from the Delta to buyers. Carriage water is represented as a percent of the transfer that does not reach the buyer, and this percent is calculated during the transfer based on real-time monitoring information in the Delta. Typical carriage water amounts range from 20 to 30 percent for transfers from the Sacramento Valley, and about 10 percent for transfers from the San Joaquin Valley

AR 25478. Put another way, carriage water is defined as "the extra water needed to carry a unit of water across the Delta to CVP/SWP export facilities while maintaining a constant salinity." AR 26419 This means that a certain percentage of any transferred water will be left in the Delta (to serve as

outflow) instead of ending up at its transfer destination, with certain other adjustments being made for in-stream losses caused by the cross-Delta conveyance of transfer water. *See generally id*. However, the FEIS/R acknowledged that "initial estimates for carriage water . . . must later be verified and adjusted." AR 26406. In practice, Reclamation and DWR make actual carriage water calculations based upon real-time monitoring information. AR 25478, 27627, 27840. Plaintiffs are correct that no details about the carriage water calculation process are provided.

Several things trouble Plaintiffs about the level of detail provided about the concept of carriage water in the FEIS/R. First, they complain that because the FEIS/R "entirely fails to describe how carriage water will be calculated . . . . it is not possible to determine the water quality and supply effects of the program." ECF No. 45 at 15 (internal citations omitted). In response to similar comments on the DEIS/R, the Authority added the explanation (quoted above) that "[t]ypical carriage water amounts range from 20 to 30 percent for transfers from the Sacramento Valley and about 10 percent for transfers from the San Joaquin Valley," AR 25478, but without explaining how these estimates were calculated or providing any detail about the carriage water calculation methodology.

Yet, Plaintiffs fail to point to any legal authority that suggests further detail is required. According to the Guidelines, CEQA requires a "general description" of the project's technical characteristics. CEQA Guidelines § 15124. One California appellate court has described this requirement as follows:

> "General" means involving only the main features of something rather than details or particulars. (Webster's New Internat. Dict. (3d ed.1986) p. 944.) The "general description" requirement for the technical attributes of a project is consistent with other CEQA mandates to make the EIR a user-friendly document. For example, Guidelines section 15140 states that EIRs must be written in plain language so that decision makers and the public can rapidly understand them. The general description requirement also fosters the principle that EIRs should be prepared early enough in the planning stages of a project to enable environmental concerns to influence the project's design. A general description of a project element can be provided earlier in the process than a detailed engineering plan and is more amenable to modification to reflect environmental concerns.

> The degree of specificity required depends on the type of project. There must be sufficient information to understand the environmental impacts of the proposed project. (Guidelines, § 15146, discussion.) The EIR must achieve a balance between technical accuracy and public understanding. (Guidelines, § 15147, discussion.)

Dry Creek Citizens Coal. v. Cty. of Tulare, 70 Cal. App. 4th 20, 27-28 (1999) (internal case citations omitted). The FEIS/R provides such a general description.

Plaintiffs also argue that the project description is unlawful because the FEIS/R fails to explain how carriage water "will maintain water quality in the Delta." ECF No. 45 at 16. Plaintiffs contend that "the administrative record is clear that water quality in the Delta frequently falls below standards established to protect the beneficial uses of the delta." *Id*. In support of this assertion, Plaintiffs cite several sources. First, they cite a comment letter submitted by Doug Teeter, of the Butte County Board of Supervisors. *See* AR 27527. The referenced page provides the text of one aspect of that comment letter, in which Teeter, relying on DWR's own reports, points out that an Index based on Net Delta Outflow ("NDO"),[15] the sum of all inflows and outflows into the Delta used by the CVP and SWP to manage operations, underestimates flow during wet periods and overestimates flow during dry periods. AR 27644. According to Teeter, "the over estimation of [NDO] also results in insufficient carriage water being pulled out of the water transfers to maintain delta water quality and CVP/SWP operational compliance with [other legal requirements]." *Id*. The FEIS/R responds to Mr. Teeter's comment by indicating that this concern with the measurement tool used to calculate outflow "is something that would apply in both the baseline and the action alternatives" and that "[t]he action alternatives would not affect how the measurement tool works or cause different environmental effects because of the measurement tool." AR 27645. Plaintiffs fail to explain how this response is insufficient or otherwise unreasonable. Put another way, Plaintiffs have failed to explain how any problems they or others may have with the way the NDO works renders the Project's description of carriage water insufficient.

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[15] The parties do not dispute the assertion in the FEIS/R that increases in NDO "could help Delta water quality" while "decreases could have an adverse effect." AR 25567.

Plaintiffs also cite their own comment letter on the Final EIS/R. ECF No. 45 at 16 (citing AR 30462). In the letter, Plaintiffs argue that the EIS/R "cannot continue to rely on D-1641 standards when these standards are regularly relaxed," and demand that the EIS/R consider how water transfers will impact the environment in years when D-1641 outflow and salinity requirements are relaxed. *Id*. (citing AR 30462-63); *see also* AR 27513-14 (similar comment referenced in the EIS/R pointing out that in January 2014, Reclamation and DWR jointly filed a Temporary Urgency Change Petition ("TUCP") to modify D-1641 standards including the Delta Outflow Objective, and objecting that the EIS/R does not evaluate impacts of water transfers on water quality during these extreme conditions). What Plaintiffs appear to be arguing by citing this comment letter is that the project description's reliance on carriage water is unclear in the context of the regular relaxation of outflow and salinity requirements because it is unclear whether the EIS/R's assertion that carriage water "will maintain water quality" means water quality will be maintained at the then-existing level of quality (i.e., at the level set by the then-present water quality requirements, as modified by any TUCP), or whether that term is being used in some other way, such as to mean the water will be used to achieve additional gains in water quality. *See* ECF No. 45 at 16 (questioning whether during times when water quality is relaxed "carriage water [will] maintain that impaired condition . . . or will it achieve condition by making repairs").

The record belies any confusion Plaintiffs may be attempting to sow. What the EIS/R means by "maintaining water quality in the Delta" is relatively straightforward, at least on a conceptual level. It is a mechanism for maintaining balanced conditions when exports take place. AR 15749 ("Carriage water is defined as the extra water needed to carry a unit of water across the Delta to CVP/SWP export facilities while maintaining a constant salinity."). The DEIS/R explains how water quality relates to the concept of balanced conditions:

> The Delta can be in either a balanced or surplus condition. Balanced conditions, as defined in COA, are those periods when DWR and Reclamation agree that releases from upstream reservoirs plus unregulated flow approximately equals the water needed to meet Sacramento Valley in-basin uses plus exports. Conversely, excess or surplus conditions are

> periods when it is agreed that releases from upstream reservoirs plus unregulated flow exceed Sacramento Valley in-basin uses plus exports. Sacramento Valley in-basin uses include Delta water quality.

AR 15741 (emphasis added). Accordingly, if Delta water quality standards are relaxed, the part of the balanced water equation made up by Sacramento Valley in-basin uses would change, making it possible (at least in theory) to export more water while maintaining balanced conditions. But, even if Delta water quality standards are relaxed, carriage water still serves the purpose of maintaining balanced conditions (i.e., to maintain salinity at whatever point the water quality standards require) whenever transfer water is to be exported from the CVP/SWP export facilities. Carriage water "maintain[s] water quality in the Delta" by preventing shifts in salinity that would be caused by the process of exporting transfer water. While the explanation of this arrangement could have been more direct, the Court does agree that the FEIS/R is unlawful because it fails to explain how carriage water "will maintain water quality in the Delta." On this ground, Plaintiffs' motion for summary judgment is DENIED and the Authority's cross-motion is GRANTED.

c. Does Description of Carriage Water as an Environmental Commitment Improperly Compress Analyses of Impacts and Mitigation Measures?

Plaintiffs argue that the way in which carriage water is described in the project as an "environmental commitment" improperly compresses the analysis of impacts and mitigation measures into a single issue, in violation of a principle set forth in *Lotus v. Department of Transportation*, 223 Cal. App. 4th 645, 655-656 (2014). *Lotus* concerned an EIR issued under CEQA for a highway construction project through old growth redwood forest. *Id*. at 647-48. The project called for the removal of six trees; the placement of fill within the structural root zone of 41 others; and excavation within the structural root zone of still another 58 trees. *Id*. at 649. Certain "avoidance minimization and/or mitigation measures" were incorporated into the project to "avoid and minimize impacts as well as to mitigate expected impacts," including, among other things, increased invasive plant removal, ensuring an arborist is present to monitor any ground disturbing construction activities, the use of specified

tools/machinery to minimize disturbance, the implementation of certain procedures whenever roots need to be cut, the use of certain types of construction materials to minimize impacts to roots, and the provision of watering to impacted trees for the entire summer following construction. *Id*. at 650-51. Ultimately, in part because of the above-described avoidance minimization and/or mitigation measures, the EIR concluded there would be no significant environmental effects caused by the project. *Id*. at 651.

The court found the EIR unlawful on several grounds. Primarily, the EIR failed to establish a standard of significance and ignored a State Park Natural Resources Handbook that cautioned that "there should be no construction activities in the Structural Root Zone of a protected tree." *Id*. at 654-55. In addition, and of particular importance to this case, the EIR was also defective because it incorporated the proposed mitigation measures into its description of the project before concluding that any potential impacts from the project were less than significant. *Id*. at 655-56. The "avoidance, minimization and/or mitigation measures," as they were characterized in the *Lotus* EIR, were not "part of the project," but, rather, were "mitigation measures designed to reduce or eliminate the damage to the redwoods anticipated from disturbing the structural root zone of the trees by excavation and placement of impermeable materials over the root zone." *Id*. at 656. In this way, the EIR improperly "compress[ed] the analysis of impacts and mitigation measures into a single issue," thereby "disregard[ing] the requirements of CEQA." *Id*. *Lotus* explains that it this type of failure is dangerous because, among other things, the lack of analysis and findings about the extent of impacts makes it impossible to determine if the mitigation measures are sufficient:

> The EIR fails to indicate which or even how many protected redwoods will be impacted beyond the tolerances specified in the handbook and, by failing to indicate any significant impacts, fails to make the necessary evaluation and findings concerning the mitigation measures that are proposed. Absent a determination regarding the significance of the impacts to the root systems of the old growth redwood trees, it is impossible to determine whether mitigation measures are required or to evaluate whether other more effective measures than those proposed should be considered. Should Caltrans determine that a specific tree or group of trees will be significantly impacted by proposed roadwork, that finding would trigger the need to consider a range of specifically targeted

> mitigation measures, including analysis of whether the project itself could be modified to lessen the impact.

Id.

In the present case, Plaintiffs argue that the FEIS/R makes a similar error by utilizing carriage water as a "pseudo-project component" to avoid full analysis of potentially significant water quality impacts. ECF No. 45 at 16-17. Plaintiffs characterize carriage water as "mitigation for the Project's water quality impacts," but complain that incorporating carriage water into the project description prevents a meaningful analysis of the Project's potentially significant impacts and the effectiveness of any mitigation measures proposed to address those impacts. *Id*. at 17. As the *Lotus* court explained, "[t]he distinction between elements of a project and measures designed to mitigate impacts of the project may not always be clear." 223 Cal. App. 4th at 656 n.8. *Lotus* uses as an example the use of "cement treated permeable base" employed to "minimize the thickness of the structural section [of roadway], provide greater porosity, minimize compaction of roots, and minimize thermal exposure to roots from Hot Mix Asphalt paving," which "might well be considered to define the project itself," explaining that it "would be nonsensical to analyze the impact of using some other composition of paving and then to consider use of this particular composition as a mitigation measure." *Id*. In contrast, "the same cannot be said of most of the 'avoidance, minimization and/or mitigation measures' [employed by the *Lotus* EIR], such as the restorative planting and replanting, invasive plant removal, and use of an arborist and of specialized equipment. These are plainly mitigation measures and not part of the project itself." *Id*.

Plaintiffs argue that "[c]arriage water serves only to mitigate or avoid the project's otherwise adverse water quality and supply impacts, serving no integral function of a water transfer." POR at 5. Carriage water does have the purpose of mitigation. It is defined as "a portion of the transfer that is not diverted in the Delta and becomes Delta outflow" and is used to maintain balanced Delta conditions to avoid salinity intrusion. AR 25478. However, the existence of "balanced conditions" is a pre-requisite for any transfers to occur under the project. In other words, the existence of balanced conditions is part

of "the project itself," *Lotus*, 223 Cal. App. 4th at 656 n.8. It is logical therefore to consider the deduction of carriage water to be part of the project as well. It would be "nonsensical" to eliminate carriage water from the description of the Project, as this would prevent satisfaction of one of the project's pre-requisites.[16]

Accordingly, Plaintiffs' motion for summary judgment on this issue is DENIED; the Authority's cross-motion is GRANTED. Whether or not the FEIS/R adequately evaluates Project impacts and proposes sufficient mitigation measures is a separate question.

3. Description of Project's Environmental Setting

a. CEQA Challenges to Description of Project's Environmental Setting

Plaintiffs next make a series of arguments under the heading "the EIS/R failed to legally describe the project's environmental setting." ECF No. 45 17-22.[17] "[A]n EIR must delineate environmental conditions prevailing absent the project, defining a 'baseline' against which predicted effects can be described and quantified." *Neighbors for Smart Rail v. Exposition Metro Line Const. Auth*., 57 Cal. 4th 439, 447 (2013) (internal citation omitted). "[T]he baseline for an agency's primary environmental analysis under CEQA must ordinarily be the actually existing physical conditions rather than hypothetical conditions that could have existed under applicable permits or regulations." *Id*. at 448 (internal citation omitted).

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[16] In support of their argument that carriage water is not an essential element of the project itself, Plaintiffs point out, correctly, that certain water transfers described in the Project may be permitted to proceed without subtracting carriage water. Specifically no carriage water adjustment is required for transfers made to East Bay Municipal Utility District ("EBMUD") because "the transfer water is made available and diverted at the upstream edge of the Delta" so "it is assumed that there is no change in Delta salinity associated with the transfer." AR 26419. Therefore carriage water—"the extra water needed to carry a unit of water across the Delta to the CVP/SWP export facilities while maintaining a constant salinity"—is unnecessary under those circumstances. The Court is not convinced that this changes the nature of "carriage water" from a Project element to a pure mitigation measure that would need to be divorced from the project description under *Lotus*. Rather, in the case of transfers to EBMUD, the Project does not require carriage water to function.

[17] As with the previous section, Plaintiffs also suggested the FEIS/R's description of the environmental setting violated NEPA, arguing Federal Defendants were required to supplement the DEIS/R or FEIS/R under NEPA. *See* ECF No. 45 at 18 (citing 40 C.F.R. § 1502.9 and related caselaw). Federal Defendants addressed this argument in their opposition/cross-motion, pointing out various reasons why no supplemental EIS was required under NEPA. ECF No. 49-1 at 12 (under NEPA "not every change to an EIS requires an agency to recirculate the document," and re-circulation is only required where the draft is insufficient to bring about the necessary public comments due to "significant new information or changes to the plan") (internal citations omitted). Plaintiff did not address the issue in the context of NEPA in its reply, so the Court treats this NEPA issue as abandoned.

Plaintiffs assert that the DEIS/R omitted numerous "crucial existing environmental features." ECF No. 45 at 17. According to Plaintiffs, after circulating the Draft for public comment, the FEIS/R "recogniz[ed] some, but not all, of these errors, . . . included significant revisions to its descriptions of the existing environmental conditions, but failed to recirculate this significant new information for public review and comment." *Id*. The Court interprets Plaintiffs' argument as having two parts. First, Plaintiffs appear to be asserting that, despite the significant revisions, the FEIS/R nonetheless still failed to describe lawfully the Project's environmental setting. Second, Plaintiffs argue that the Authority should have re-circulated the FEIS/R for public comment. Plaintiffs make separate sets of arguments in connection with the FEIS/R's description of (a) existing groundwater levels[18] and (b) existing groundwater contamination.

(1) Description of the Existing Groundwater Levels

It is somewhat difficult to tell whether Plaintiffs intend to challenge the content of the FEIS/R's description of the Project's environmental setting in connection with groundwater levels. Plaintiffs critique at length the content of the DEIS/R's discussion of groundwater elevations and other conditions related to the volume of accessible groundwater, and then concede that the FEIS/R makes "substantial revisions" thereto. ECF No. 45 at 20. Plaintiffs also take care to point out that after additional information was added to the DEIS/R, the document concluded that "[c]omparisons of spring groundwater levels in the last decade (Spring 2004 to Spring 2014) indicate steep declines in groundwater levels up to 40 feet." AR 25627. Plaintiffs do indicate that "the picture would have been bleaker still had the EIS/R disclosed groundwater conditions in the fall, rather than disclosing only spring levels immediately following winter rains," ECF No. 45 at 20 (citing AR 30459), and assert that the FEIS/R omitted any evaluation of deep well data, *id*. (citing AR 27894). But, Plaintiffs do not explain how these omissions of fall and deep well data render the FEIS/R's description of existing

[18] The parties confusingly refer to groundwater levels, elevation, and/or flow generically as groundwater "conditions," even though, as a matter of logic, contamination can impact groundwater "conditions" as well.

environmental conditions legally inadequate. Rather, they return to the argument that the "new data added to the FEIS/R, showing 10 years of declining groundwater levels in the Sacramento Valley (and omitting any deep well data, AR 27894), resulting in a slew of wells running dry in 2014, show a very different existing environmental condition than the resilient and ever-recharging groundwater levels the [F]EIS/R describes." ECF No. 45 at 20. It is impossible to tell whether Plaintiffs, in pointing to the "resilient and ever-recharging groundwater levels the EIS/R describes," are referring to the DEIS/R or the FEIS/R. Moreover, they do not provide a citation to the FEIS/R that presents picture of "resilient and ever-recharging groundwater levels."[19] In sum, Plaintiffs fail to point out with any specificity how or why the description of the groundwater levels in the FEIS/R is inadequate.

Similarly, Plaintiffs argue, generically, that the "steep decline" in groundwater levels significantly calls into question the effectiveness of mitigation measure GW-1, but fail (at least in this section of their brief) to explain why this might be the case. ECF No. 45 at 20. Plaintiffs also argue that the FEIS/R fails to consider a concurrent decline in surface water connected to the groundwater basins in question. ECF No. 45 at 21 (citing 27813 (showing FEIS/R's failure to address comment letter pointing to data that tends to show "stream accretion generally decreases at approximately the same rate as groundwater pumping increases")). But, again, Plaintiffs fail to elaborate upon this point in any way. It is not the Court's obligation to flesh out a parties' argument. The Court is left with no choice but to conclude that Plaintiffs have not met their burden to establish that the FEIS/R fails to adequately describe existing environmental conditions related to groundwater levels.

Plaintiffs' argument morphs into a somewhat different one in their reply, arguing, for example, that "in continuing to rely on its modeled baseline for its impact analysis, the [F]EIS/R ignores the dramatic depletion of groundwater levels in parts of Glenn, Colusa and Tehama County within the Sacramento Valley; 135 wells in the Sacramento Valley groundwater basin were reported to have gone

[19] The Court's own review of the record indicates that the FEIS/R attempts to provide a fairly balanced view of the groundwater situation. *See* AR 25625-27 (description of groundwater production, levels, and storage in Sacramento Valley Groundwater Basin); *see also* AR 27428 (explaining how recent hydrology was drier than the long-term average hydrology).

dry in 2014 alone." Doc 51 at 7 (citing AR 27426). The cited page of the AR (27426) is part of one of the Common Responses to comments contained in Appendix J of the FEIS/R. In Common Response 4, the FEIS/R presents the data in question indicating that 135 wells went dry. Plaintiffs' separate argument that these new additions required recirculation is discussed below. To the extent Plaintiffs are challenging what the FEIS/R did with this information in its analysis, that issue is misplaced in the context of a challenge to the way the project describes the environmental setting.[20]

(2) Is Recirculation Required in Light of Changes Made to the DEIS/R Pertaining to Information about Groundwater Levels?

The FEIS/R describes the "affected environment/existing conditions" to include "Redding Area Groundwater Basin; Sacramento Valley Groundwater Basin; San Joaquin Valley Groundwater Basin; Santa Clara Valley Groundwater Basin; and Gilroy-Hollister Valley Groundwater Basin." AR 25600. The majority of groundwater substitution pumping proposed by the Project would occur in the Sacramento Valley Groundwater Basin. AR 25463-66,AR 25601. Commenters raised the concern that the DEIS/R had failed to characterize accurately and sufficiently the groundwater resources in these basins. For example, U.S. EPA's comments succinctly articulate the asserted failure of the DEIS/R:

> The DEIS is internally inconsistent in defining and treating baseline/existing groundwater elevations. The characterization of existing groundwater conditions uses data sets that conclude at dates ranging from 1995 to 2013, and none include data from the 2013-2014 critical drought year. Where older, outdated data are used, it is possible that recent trends in groundwater elevation or land subsidence are not represented in the analysis. The current drought is perhaps the most severe the state has ever experienced and would be the relevant baseline for additional impact from the proposed action, slated to commence in 2015. According to the [DWR's] November 2014 Drought Update, over 50 percent of monitored wells in the Central and Sacramento Valleys have experienced groundwater level decreases of 2.5 feet or more from spring of 2013 to spring of 2014, with over 20% experiencing decreases of more than 10

[20] This kind of mixing of issues is rampant in the briefs in this case, making the Court's job far more difficult than it needs to be. This problem is exemplified in the headings themselves related to the subject of this paragraph. In the relevant section of Plaintiff's opposition, the major heading asserts that "the [F]EIS/R failed to legally describe the project's environmental setting." ECF No. 51 at 7 (emphasis added). The subheading asserts, however, that "[t]he [F]EIS/R failed to consider existing drought and overdraft conditions" and proceeds to critique how the FEIS/R analyzed information it disclosed. *Id*. (emphasis added). These are two separate types of issues, subject to different standards.

> feet. For the period from spring 2010 to spring 2014, nearly 30% of monitored wells have experienced declines in excess of 10 feet. While the most severe declines occur in the San Joaquin basin, precipitous declines are none-the-less prevalent across a majority of the sellers' service area. Due to these recent declines, some of the monitored wells in the sellers' service area may have reached historic low levels. Consequently, we are concerned that the extent of, or potential for, land subsidence may be greater than is reflected in the DEIS.

AR 27462; *see also* AR 27890-27891 (similar comment submitted by Plaintiffs).

It is undisputed that the FEIS/R made revisions to the description of groundwater levels. *See* AR 25625-25666 (adding dozens of maps and charts to describe existing conditions); *see also* AR 27813 ("Section 3.3.1.3, Affected Environment has been revised to clarify the impacts of current drought conditions to the groundwater resources within the area of analysis."). For example, the FEIS/R states:

> Change in groundwater elevation figures for (a) Spring 2013 to Spring 2014, (b) Spring 2004 to Spring 2014, and (c) Spring 2010 to Spring 2014 indicate groundwater levels have decreased within the Sacramento Valley. As shown in Figure J-1 below, water year (WY) 2014 was one of the driest years on record since 1977 and it was preceded by a dry and a critical year. Spring 2014 groundwater levels have changed between +5 and -20 feet within the Sacramento Valley in comparison to Spring 2013. Comparisons of spring groundwater levels in the last decade (Spring 2004 to Spring 2014) indicate groundwater levels have declined as much as 40 feet in parts of Glenn, Colusa and Tehama County within the Sacramento Valley.

AR 27424. The FEIS/R characterizes this data as demonstrating a "steep decline." AR 25672. Likewise, the FEIS/R acknowledged that surface water flows declined alongside groundwater levels. AR 27813 ("[S]tream accretion generally decreases at approximately the same rate as groundwater pumping increases.").

Plaintiffs argue that all of the above changes warranted recirculation of the EIR. If the lead agency adds "significant new information" to an EIR subsequent to the close of the public comment period but prior to certification of the final EIR, CEQA requires that the lead agency provide a new public comment period. Cal. Pub. Res. Code § 21092.1. The CEQA Guidelines describe "significant new information" as including "a disclosure showing that":

> (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
>
> (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
>
> (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.
>
> (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

CEQA Guidelines § 15088.5(a)(emphasis added). In contrast, "[r]ecirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR." *Id*. at § 15088.5(b). "[R]ecirculation is not required simply because new information is added." *S. Cty. Citizens for Smart Growth v. Cty. of Nevada*, 221 Cal. App. 4th 316, 328 (2013). "'[T]he final EIR will almost always contain information not included in the draft EIR' given the CEQA statutory requirements of circulation of the draft EIR, public comment, and response to these comments prior to certification of the final EIR." *Id*. (*quoting Laurel Heights Improvement Ass'n. v. Regents of University of Cal.*, 6 Cal.4th 1112, 1124 (1993) ("*Laurel Heights II*")). "Recirculation was intended to be an exception, rather than the general rule." *Laurel Heights II*, 6 Cal. 4th at 1132. "Courts must defer to an agency's explicit or implicit decision not to recirculate a draft EIR so long as it is supported by substantial evidence." *San Francisco Baykeeper, Inc. v. California State Lands Comm'n*, 242 Cal. App. 4th 202, 224 (2015) (internal citation and quotation omitted). "[A]n agency's determination not to recirculate is given substantial deference and is presumed to be correct." *Id*. (internal citations and quotations omitted). Thus, the appellant bears the burden of proving substantial evidence does not support the agency's decision not to recirculate an EIR. *Id*.

In its resolution certifying the FEIS/R under CEQA, the Authority made an affirmative finding that the new information added to the FEIS/R "adds detail about existing groundwater conditions, but

does not change the conclusions drawn regarding impacts of water transfers." CAR 5-6; *see also* CAR 22-27 (CEQA findings regarding project that summarize potential impacts, including impacts from groundwater substitution, which "could decrease flows in surface water bodies following a transfer while groundwater basins recharge," and finding that proposed mitigation measure WS-1 would reduce this impact to a "less than significant" level).

The Authority emphasizes that the FEIS/R "is intended to assess environmental conditions resulting from implementation of the range of potential transfer activities under the Proposed Action for a 10-year period." AR 27429. The FEIS/R therefore focused on "whether there exists within the period of analysis any 10-year period that is representative of a reasonable worst-case condition for Sacramento Valley hydrology." *Id*. The average Sacramento Valley combined annual runoff is approximately 17.8 million acre-feet ("MAF") and the average for the ten-year period from 2004-2014 was only 15.7 MAF. AR 27428. Yet, the period from 1985-1994 was even drier (12.7 MAF), with the driest ten-year period on record being 1928-1937 (12.3 MAF). *Id*. The FEIS/R summarizes the situation as follows:

> Though the Sacramento Valley and other parts of California are currently noticing declining groundwater level trends, past groundwater trends are indicative of groundwater levels declining moderately during extended droughts and recovering to pre-drought levels after subsequent wet periods.

AR 27424.

Plaintiffs argue that the new data added to the FEIS/R, showed persistently declining groundwater levels in the Sacramento Valley, resulting in a "slew of wells running completely dry at the time the [F]EIS/R was published." ECF No. 45 at 23 (emphasis added). In support of this assertion, Plaintiffs cite a large section of the FEIS/R, *see id*. (citing AR 25625-25666), containing, among other things, graphs (or "hydrographs") depicting groundwater elevations of "select monitoring wells across the Sacramento Valley." AR 25626. Plaintiffs make no effort to explain their interpretation of this information in any detail. The Court's own review of the material, along with additional supporting graphs in Appendix L, *see* AR 28256-28344, reveals a more nuanced situation, consistent with the

FEIS/R's statements. For example, the FEIS/R describes the data from shallow wells as showing "show long term trends that are either increasing stable or decreasing depending on the well. Several wells also show the recovery of groundwater levels following drought periods." AR 25626. With respect to intermediate wells, the FEIS/R presents a mixed picture:

> The hydrographs . . . show similar long term trends as the shallow wells (i.e., increasing, stable, or decreasing). Similar to the shallow wells several intermediate wells show recovery of groundwater levels in wetter periods following drought conditions. A number of the wells . . . show recent groundwater levels at or below historic low levels. However, some of these wells also show levels above historic low levels.

Id. Finally, with respect to deep wells, "a number . . . show long term declining water level trends." AR 25626. But, the FEIS/R explains that "most of the [deep] wells shown in [the relevant] figure have a shorter measurement record." *Id*. Moreover, "the recovery of water levels during drought periods can be seen in the hydrograph" for at least one deep water well. AR 25727. To succeed on their claim that re-circulation is required, Plaintiffs must demonstrate that substantial evidence does not support the Authority's implied conclusion that these new hydrographs do not present evidence of "new significant environmental impact would result from the project," or a "substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance," either of which would trigger the requirement for re-circulation. CEQA Guidelines § 15088.5(a).[21] Taken at face value, the FEIS/R's evaluation of the new information suggests that the new data is equivocal on any long-term trends in groundwater levels. Plaintiffs make no effort to demonstrate with any specificity why the FEIS/R's characterization of the new hydrographs is inaccurate.

Plaintiffs do point to some generic references that suggest, overall, groundwater levels in the Sacramento Valley are decreasing because drawdown rates are exceeding recovery rates. *See* AR 27894

[21] The Court does not believe any of the other factors listed in Guidelines § 15088.5 are even arguably relevant here.

(letter in which Plaintiffs comment on the DEIS/R, pointing out, among other things: "Although regional measured groundwater levels are purported to 'recover' during the winter months (Technical Memorandum 3), data from Spangler (2002) indicate that recovery levels are somewhat less than levels of drawdown, suggesting that, in general, water levels are declining"); AR 29306 (groundwater model manual stating: "Some locales show the early signs of persistent declines in groundwater level, including northern Sacramento County, areas near Chico, and on the far west side of the Valley in Glenn County, where water demands are met primarily, and in some locales exclusively, by groundwater"). However, these general references do not overcome the presumption of correctness that applies to the Authority's determination, based on evaluation of specific data, not to re-circulate. *See Baykeeper*, 242 Cal. App. 4th at 224. Plaintiffs' motion for summary judgment that the new information added to the FEIS/R regarding groundwater levels required re-circulation is DENIED; the Authority's cross-motion is GRANTED.

(3) Description of Existing Groundwater Contamination

Plaintiffs next argue that the FEIS/R failed to describe accurately existing groundwater contamination. For example, the DEIS/R concluded that any additional pumping of groundwater resulting from the project "is not expected to be in locations or at rates that would cause substantial long-term changes in groundwater levels that would cause changes to groundwater quality." AR 15069; AR 25704 (same language repeated in FEIS/R); *see also* AR 25754 ("Inducing the movement or migration of reduced quality water into previously unaffected areas through groundwater pumping is not likely to be a concern unless groundwater levels and or flow patterns are substantially altered for a long period of time. Groundwater extraction pumping under the Proposed Action would be limited to short-term withdrawals during the irrigation season. Consequently effects from the migration of reduced groundwater quality would be less than significant."). Plaintiffs argue that the DEIS/R's conclusion could not be supported without disclosing information about the location of contaminated groundwater and their proximity and interactivity with proposed groundwater pumping. *See* ECF No. 45 at 21. But,

again, they admit that the FEIS/R added significant new information describing these contaminated sites to the FEIS/R, *see* AR 25673-25674, including the following paragraph:

> Figure 3.3-16 below shows the active and open "clean-up" sites from SWRCB's GeoTracker database. The Sacramento Valley has 481 active clean-up program sites, 234 leaking underground tanks (UST) sites, 54 Military sites (includes military privatized UST sites), and one land disposal site as of December 29, 2014 (SWRCB 2014). These sites are in various stages of open investigation which includes site assessment, remediation, and/or monitoring. Most of the clean-up sites shown in Figure 3.3-16 are clustered around urban areas.

AR 25673.

Plaintiffs again argue that this new information is "significant new information" requiring recirculation under CEQA because "the added mapping and information shows contaminated groundwater sites that were not previously identified." ECF No. 45 at 22. Plaintiffs argue that this constitutes significant new information because "it reveals for the first time what the [DEIS/R] ignored, i.e. that some sources of groundwater might actually be contaminated." *Id*. This is not accurate. The DEIS/R does address the issue within Section 3.2 (Water Quality) as follows:

> *Groundwater substitution transfers could introduce contaminants that could enter surface waters from irrigation return flows*. Groundwater substitution transfers would use groundwater for irrigation instead of surface water. The amount of groundwater substituted for surface water under the Proposed Action would be relatively small compared to the amount of surface water used to irrigate agricultural fields in the Seller Service Area. Groundwater would mix with surface water in agricultural drainages prior to irrigation return flow reaching the rivers Constituents of concern that may be present in the groundwater could enter the surface water as a result of mixing with irrigation return flows. Any constituents of concern, however, would be greatly diluted when mixed with the existing surface waters applied because a much higher volume of surface water is used for irrigation purposes in the Seller Service Area. Additionally, groundwater quality in the area is generally good and sufficient for municipal agricultural domestic and industrial uses. Section 3.3 provides additional discussion of groundwater quality. Groundwater substitution transfers would result in a less than significant impact on water quality.

AR 14970. Both the DEIS/R and the FEIS/R emphasize that "groundwater quality in the area is generally good and sufficient for municipal agricultural domestic and industrial uses." *Id*.; AR 25559.

As mentioned, CEQA requires that the lead agency provide a new public comment period if "significant new information" is added to an EIR subsequent to the close of the public comment period but prior to certification of the final EIR. Cal. Pub. Res. Code § 21092.1. CEQA Guidelines section 15088.5(a) explains that "significant new information" includes information tending to show: (1) "[a] new significant environmental impact would result from the project . . ."; or (2) [a] substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance." (Emphasis added.) Here, Plaintiffs have failed to demonstrate that the new information at issue, including the data showing the location of active contaminant clean-up sites, meets either re-circulation trigger criterion. Plaintiffs do not argue that the FEIS/R was wrong to conclude that "groundwater quality in the area is generally good," nor that the logic underlying the finding of no significance is flawed. They fail to demonstrate that the new information highlights a "new significant environmental impact" or "a substantial increase in the severity of an environmental impact."[22] Re-circulation is therefore not required. Accordingly, Plaintiffs' motion for summary judgment that the new information added to the FEIS/R regarding groundwater quality required re-circulation is DENIED; the Authority's cross-motion is GRANTED.

Plaintiffs also argue that the information pertaining to contamination in the FEIS/R is inadequate because "it does not show the elevation or proximity of any contaminated site to any project groundwater well." ECF No. 45 at 22. As Federal Defendants point out, the FEIS/R contains a map, which shows the locations of the clean-up sites and of groundwater substitution pumping wells. AR 25674. As to whether the groundwater elevation of the contaminated sites is material, the same logic that undercut Plaintiffs' argument about re-circulation after additions were made to the DEIS/R undercuts their argument about inadequacy of the groundwater quality description in the FEIS/R. Plaintiffs fail to

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[22] Again, here it does not appear reasonable to apply either of the other factors set forth in CEQA Guidelines § 15088.5(a): where new information shows the availability of a new, feasible project alternative or mitigation measure that would lessen environmental impacts, or where new information shows the EIR was "fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded."

rebut the assertion in the DEIS/R and FEIS/R that groundwater quality is generally good and the related reasoning that led the authors to conclude groundwater contamination issues would be less than significant. The level of detail required in a project description need not go "beyond that needed for evaluation and review of the environmental impact." CEQA Guidelines § 15124. Plaintiffs' motion for summary judgment on this issue is DENIED.[23]

b. NEPA Challenges to Description of Groundwater Baseline

Plaintiffs argue that the FEIS/R violates NEPA because it impermissibly relies upon monitoring set forth in Mitigation Measure GW-1 in lieu of describing the environmental baseline. ECF No. 45 at 24-25. This, they contend, violates NEPA, which prohibits an EIS to substitute a mitigation measure as a proxy for measuring the environmental baseline. *Id*. (discussing *N. Plains Res. Council v. Surface Transp. Bd*., 668 F.3d 1067, 1085 (9th Cir. 2001) (rejecting EIR where agency failed to gather information about baseline environmental conditions)). This requirement stems from the uncontroversial proposition that it would be "simply impossible" to evaluate the effects of a project if an agency fails to gather information on the project's environmental conditions. *LaFlamme v. FERC*, 852 F.2d, 389, 400 (9th Cir. 1988). Plaintiffs argue that the task of describing baseline groundwater conditions is "left completely to a future date." ECF No. 45 at 25. Here, the record does not warrant the finding Plaintiffs advocate. As discussed above, the FEIS/R, including supporting graphs in Appendix L, *see* AR 28256-28344, describes existing groundwater conditions. Accordingly, Plaintiffs' motion for summary judgment on these grounds is DENIED; Federal Defendants' cross-motion is GRANTED.

Relatedly, Plaintiffs argue elsewhere that the FEIS/R unlawfully defers site-specific review to future mitigation measures. ECF No. 51 at 9-10. Plaintiffs correctly point to authorities applying NEPA

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[23] The Court does not accept Plaintiffs unsupportable position, ECF No. 51 at 9, that their motion should be granted on this issue simply because the Authority did not address the issue in their opposition/cross-motion. Plaintiffs bear the burden on this claim, *see Rialto Citizens*, 208 Cal. App. 4th at 924-25, and it is the Court's obligation on summary judgment to determine whether Plaintiffs have met that burden (i.e., whether Plaintiffs are entitled to judgment as a matter of law), *see* Fed. R. Civ. P. 56(a) ("The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law. The court should state on the record the reasons for granting or denying the motion.").

that prohibit a federal agency from avoiding site-specific evaluation of impacts, but rely entirely on portions of the FEIS/R that respond to a comment letter from EPA to argue that the FEIS/R omits site-specific analysis of impacts to groundwater. *See id*. at 9 (citing AR 27454 and AR 27471). While these record citations indicate that EPA raised this issue, they do not provide record support for the proposition itself, nor address the FEIS/R's response. The Court simply cannot make heads or tails of this argument as presented. Therefore, as to this issue Plaintiffs' motion for summary judgment on these grounds is DENIED; Federal Defendants' cross-motion is GRANTED.

4. Assessment of Significant Environmental Impacts

Next, Plaintiffs bring five sets of challenges concerning the FEIS/R's assessment of environmental impacts. The introductory paragraph for this section only cites CEQA authorities, suggesting all sub-arguments are CEQA challenges only. ECF No. 45 at 22. But, the second and third sub-arguments within this larger section also mention NEPA. *See id*. at 24-28. Other than those sections in which NEPA is specifically mentioned, or unless otherwise noted, the Court assumes only CEQA challenges are raised.

Under CEQA, "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project." CEQA Guidelines § 15126.2(a). The EIR should examine "changes in the existing physical conditions in the affected area." *Id*. "Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects." *Id*.

When reviewing whether an agency's impact analysis complies with NEPA, a reviewing court must ask whether the agency "adequately considered a project's potential impacts and whether the consideration given amounted to a 'hard look' at the environmental effects." *N. Alaska Envtl. Ctr. v. Kempthorne*, 457 F.3d 969, 975 (9th Cir. 2006) (*quoting Idaho Sporting Congress, Inc. v. Rittenhouse*, 305 F.3d 957, 963 (9th Cir. 2002)). A "hard look" includes "considering all foreseeable direct and indirect impacts." *Idaho Sporting Congress*, 305 F.3d at 973. "Furthermore, a 'hard look' should involve

a discussion of adverse impacts that does not improperly minimize negative side effects." *N. Alaska Envtl. Ctr*., 457 F.3d at 975 (quoting *Native Ecosystems Council v. U.S. Forest Service*, 428 F.3d 1233, 1241 (9th Cir. 2005)). Under NEPA, an agency's actions are only arbitrary and capricious if it "has relied on factors that Congress has not intended it to consider, has entirely failed to consider an important aspect of the problem, or has offered an explanation for that decision that runs counter to the evidence before the agency or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Pub. Citizen v. Nuclear Regulatory Com'n*, 573 F.3d 916, 923 (9th Cir. 2009).

a. Groundwater Impact Modeling Baseline (CEQA)

Plaintiffs argue that the FEIS/R is not in compliance with CEQA because the model it uses to evaluate its groundwater impacts inaccurately depicts baseline conditions.

(1) Hydrologic Baseline

Plaintiffs first argue that the model defines baseline conditions using an outdated baseline period from 1970-2003. ECF No 45. at 23. Plaintiffs generally assert that "reliance on data from this period fails to accurately reflect existing and foreseeable growth in future water demand, fails to account for ongoing increases in global temperatures, and fails to account for the long-term trend of groundwater drawdown in the state." *Id*.

The determination of the baseline is the first step in the impact review process. *Save our Peninsula Comm. v. Monterey Cty. Bd. of Supervisors*, 87 Cal. App. 4th 99, 125 (2001). "Environmental conditions may vary from year to year and in some cases it is necessary to consider conditions over a range of time periods. In some cases, conditions closer to the date the project is approved are more relevant to a determination whether the project's impacts will be significant." *Id*. "[A]n agency enjoys the discretion to decide, in the first instance, exactly how the existing physical conditions without the project can most realistically be measured, subject to review, as with all CEQA factual determinations, for support by substantial evidence." *Baykeeper*, 242 Cal. App. 4th at 218 (internal citation and

quotation omitted). Under CEQA, a court must "apply the substantial evidence test to conclusions, findings, and determinations, and to challenges to the scope of an EIR's analysis of a topic, the methodology used for studying an impact, and the reliability or accuracy of the data upon which the EIR relied because these types of challenges involve factual questions." *City of Long Beach v. Los Angeles Unified Sch. Dist*., 176 Cal. App. 4th 889, 898 (2009). Such a challenge therefore must be rejected if substantial evidence supports the agency's approach and the EIR is not clearly inadequate or unsupported. *Id*.

Some background is helpful to understanding the selection of 1970-2003 as the modeling period for the FEIS/R. The FEIS/R used three models to evaluate the environmental impacts of the project on groundwater resources: the Sacramento Valley Finite Element Groundwater Flow Model ("SACFEM2013"), CalSim II, [24] and the Transfer Operations Model ("TOM"). AR 27428. The full simulation period for which SACFEM2013 was capable at the time the FEIS/R issued was water year ("WY") 1970 through 2010; the full simulation period for CalSim II was WY 1922 through 2003. *Id*. TOM was developed for, and analysis was conducted on, the 34-year period of WY 1970-2003 because that was the period common to both the SACFEM2013 and CalSim II models. *Id*.

Plaintiffs assert that the FEIS/R's reliance on data from 1970-2003 for its modeling fails to accurately reflect existing conditions during more recent drought years. ECF No. 45 at 23.[25] The FEIS/R explains that the model's reliance on this data period is nonetheless appropriate, despite the fact that the

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[24] CalSim II is a computer model developed jointly by DWR and Reclamation that simulates SWP and CVP operations and is a standard planning tool for evaluating project operations. *Consol. Delta Smelt Cases*, 717 F. Supp. 2d 1021, 1028 (E.D. Cal. 2010).

[25] Plaintiffs assert in their opening brief without any citation to the record that "the EIR admits that reliance on data from this period fails to accurately reflect existing and foreseeable future growth in water demand, fails to account for ongoing increases in global temperatures, and fails to account for the long-term trend of groundwater drawdown in the state." ECF No. 45 at 23 (emphasis added). Despite the fact that the heading for the sub-section of Plaintiffs' brief within which this statement is made addresses climate change, the text of the subsection contains absolutely no substantive information about climate change. Climate change is instead addressed several sub-sections later. With respect to the argument that data does not reflect existing and foreseeable future growth in water demand and/or any long-term trend in groundwater drawdown, Plaintiffs fail to cite and the Court cannot locate anywhere in the record where the EIR admits failure to account for such issues. Such off-hand and unsupported remarks are more than unhelpful; they have exacerbated the already complex nature of this case and further delayed is resolution.

years since 2003 have been drier than average, because the model inputs included several ten-year periods that were even drier than the most recent period excluded from the model's data set. *See* AR 27428.

> The long-term average annual runoff from [the Sacramento, Feather, Yuba, and American Rivers] is approximately 17.8 [million acre-feet ("MAF")]. The average annual runoff for the period 2004 through 2014 is 15.7 MAF, while the average annual runoff for the period of analysis is 18.6 MAF. While it is true that the period from 2004 through 2014 has been drier than both the long-term average and the average for the period of analysis, this does not invalidate the analysis supporting the discussions in the environmental document. Hydrology in the period of analysis adequately represents the historical range and the variability that has occurred in the Sacramento Valley, and includes two multi-year droughts: 1976-77 and 1987-92. The drought of 1976-77 was more severe than any single year or 2-year period from 2004 through 2014, and the 1987-92 drought was more prolonged than any recent 6-year period.
>
> Additionally, the EIS/EIR is intended to assess environmental conditions resulting from implementation of the range of potential transfer activities under the Proposed Action for a 10-year period. A key consideration, therefore, is whether there exists within the period of analysis any 10-year period that is representative of a reasonable worst-case condition for Sacramento Valley hydrology. Within the period of analysis, there are several 10-year periods that are considerably drier than the 2004 through 2014 period. For example, the average annual runoff for the 10-year period 1985 through 1994 is 12.7 MAF. This is comparable to the minimum average annual runoff, 12.3 MAF in 1928 through 1937, for any 10-year period in the available record. The analysis includes a period similar to the driest 10 years on record, and drier than the period from 2004 through 2014.

AR 27428-29. Plaintiffs fail to rebut this reasonable explanation that is supported by substantial evidence in the form of the cited historical runoff data. *See Baykeeper*, 242 Cal. App. 4th at 219 (approving agency's decision that running five year average better reflected baseline than most recent year because most recent year's data was skewed by unique economic conditions, and finding challenger's argument that the more recent years were a more appropriate baseline to be an insufficient "disagreement with the Final EIR's analysis"); *see also Bakersfield Citizens v. City of Bakersfield*, 124 Cal. App. 4th 1184, 1198 (2004) ("Substantial evidence is defined as enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion,

even though other conclusions might also be reached."). Plaintiffs' motion for summary judgment that the FEIS/R's modeling approach inaccurately defines the environmental baseline related to groundwater levels is DENIED; the Authority's cross-motion is GRANTED.

(2) Consistency of Baseline

Plaintiffs next appear to argue that the FEIS/R is unlawful because it provides an internally inconsistent[26] picture of the environmental baseline. ECF No. 45 at 23.[27] As a specific example of internal inconsistency, Plaintiffs compare a portion of the FEIS/R that asserts "groundwater levels declin[e] moderately during extended droughts and recover[] to pre-drought levels after subsequent wet periods," *id*. (quoting AR 27424), to a section from the FEIS/R containing hydrographs of various monitoring wells in the Sacramento Valley. *Id*. (quoting AR 25625-666). As discussed above, although Plaintiffs claim the hydrographs show "10 years of persistently declining groundwater levels in the Sacramento Valley," the graphs are more equivocal. *Id*. Therefore, the Court does not find the FEIS/R to be internally inconsistent on this issue. Plaintiffs' motion for summary judgment on this issue is DENIED; the Authority's cross-motion is GRANTED.

(3) Water Supply Demand Baseline

Plaintiffs next argue that the FEIS/R ignores a consistent growth in water supply demand. ECF No. 45 at 23. The CalSim II and SACFEM2013 models are designed to approximate a fixed level of development, with CalSim II using a 2005 level of development and SACFEM2013 using a 2010 level

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[26] Plaintiffs cite an EPA comment to the DEIS/R that raises a similar complaint about internal inconsistency. ECF No. 45 at 23 (citing AR 27462). The EPA's comment makes an argument that is slightly distinct from that raised in Plaintiffs' briefs. It has been difficult enough to unpack the incredibly dense nature of the briefs in this case. The Court is not obligated to incorporate arguments by reference from comments in the AR.

[27] In support of this argument, Plaintiffs cite *San Joaquin Raptor Rescue Center v. County of Merced*, 149 Cal. App. 4th 645 (2007), for the proposition that "[b]ecause of its importance to the EIR's impact analysis, the baseline should be plainly identified and not obscured." ECF No. 45 at 23. First, Plaintiffs fail to provide a pincite to the portion of this case they claim supports this proposition. The Court's own review of the case suggests it is largely inapposite. While *San Joaquin Raptor* does discuss internal inconsistencies in the context of analyzing that EIR's project description, 149 Cal. App. 4th at 659, with regard to the EIR's evaluation of impacts, the case was concerned with the fact that certain fundamental assumptions that went into characterizing the baseline were not plainly stated in that EIR, leading the court to hold that "decisionmakers and general public should not be forced to sift through obscure minutiae or appendices in order to ferret out the fundamental baseline assumptions that are being used for purposes of the environmental analysis." *Id*. at 659. *San Joaquin Raptor*'s discussion of impact analysis is not on point.

of development. AR 27430. "This means that population, land use, and agricultural demands used in the models are representative of demands that existed in those years." *Id.* "These demands are then used with historical hydrology inputs, primarily precipitation, reservoir inflows, and unregulated flows, in model simulations." *Id*. With respect to those aspects of the modeling in the FEIS/R linked to the SACFEM2013 model,[28] the FEIS/R concludes that, even though there have been changes in demand since 2010, the "range of demands simulated in SACFEM2013 is representative of existing conditions in the Sacramento Valley." AR 27431; *see also* AR 27430 (indicating that "[d]emands in SACFEM2013 are based on land use data and surveys taken as recently as 2010 (*see* Appendix M").[29]

The question is whether the record contains substantial information to support this conclusion. *See Bakersfield Citizens*, 124 Cal. App. 4th at 1198. Plaintiffs argue that substantial evidence does not support the use of this approach to setting a baseline, in light of the "backdrop of decades of persistent growth in groundwater demands." ECF No. 45 at 24. Plaintiffs correctly point out that data in the FEIS/R indicates groundwater pumping grew consistently from 1961 (250,000 AF) to 2003 (800,000 AF). AR 25625; *see also* AR 15024 (same information in DEIS/R). In light of this trend, Plaintiffs argue that there is no support for the FEIS/R's conclusion that "the range of demands simulated in SACFEM2013 is representative of existing conditions in the Sacramento Valley." ECF No. 45 at 24. Plaintiffs' argument suggests, therefore, that the modeling parameters must be adjusted to account for the overall upward trend in groundwater demand resulting in greater demand between 2010 (the last year of inputted demand information) and 2015 (the planned starting year of the Project (*see* AR 25365)). *See* ECF No. 58 at 6 (citing 27430) (the Authority conceding that the FEIS/R itself admits that

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[28] The FEIS/R asserts that it is most important to have updated demand information for simulations generated by the SACFEM2013 model, because new demands primarily impact the groundwater supplies modeled by SACFEM2013. AR 27430.

[29] In the version of the FEIS/R lodged with the Court, Appendix M consists simply of a cover page stating: "Appendix M SACFEM2013 Manual." *See* AR 029267. The Court therefore reviewed the separate document in the AR entitled "201502SACFEM_UsersManual_print" (AR 50072) in an effort to determine whether the SACFEM2013 manual indicated that data more recent than 2010 was incorporated into the modeling process. The manual indicates that the modeling incorporated data up to and including 2010, but no further. *See, e.g.*, AR 50147 (discussing revisions to SACFEM in 2011 that incorporated data from 2010).

"since 2010, groundwater demand has likely increased due to additional irrigated lands (particularly in permanent crops) and population increases").

"An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective." CEQA Guidelines § 15125(a). "This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." *Id.* Preparation of the FEIS/R began in early 2011. ECF No. 48 at 15 n. 10.

However, "[i]n appropriate circumstances an existing conditions analysis may take account of environmental conditions that will exist when the project begins operations; the agency is not strictly limited to those prevailing during the period of EIR preparation." *Neighbors for Smart Rail v. Exposition Metro Line Const. Auth.*, 57 Cal. 4th 439, 452 (2013). "An agency may, where appropriate, adjust its existing conditions baseline to account for a major change in environmental conditions that is expected to occur before project implementation." *Id.*

> In so adjusting its existing conditions baseline, an agency exercises its discretion on how best to define such a baseline under the circumstance of rapidly changing environmental conditions. As we explained in our earlier decision, CEQA imposes no uniform, inflexible rule for determination of the existing conditions baseline, instead leaving to a sound exercise of agency discretion the exact method of measuring the existing environmental conditions upon which the project will operate. . . . For example, in an EIR for a new office building, the analysis of impacts on sunlight and views in the surrounding neighborhood might reasonably take account of a larger tower already under construction on an adjacent site at the time of EIR preparation.

Id. at 452-53. An agency "may forgo analysis of a project's impacts on existing environmental conditions if such an analysis would be uninformative or misleading to decision makers and the public." *Id.* at 453. Nonetheless, departure from the norm (i.e., using existing conditions as they existed at the time environmental review commenced) is disfavored because "existing environmental conditions have the advantage that they can generally be directly measured and need not be projected through a

predictive model. However sophisticated and well-designed a model is, its product carries the inherent uncertainty of every long-term prediction, uncertainty that tends to increase with the period of projection." *Id.*

Here, Plaintiffs do not appear to be suggesting that the FEIS/R should make uncertain predictions about water supply demand well into the future. Rather, they appear to be making the narrow request that demand information incorporated into the SACFEM2013 model be updated to include the most up to date information possible. *See* ECF No. 45 at 23-24. Nonetheless, as the Authority explains in its supplemental briefing, the 2010 land use data incorporated into SACFEM2013 was the most recent land use data available in 2011, the time of the initiation of this environmental review. *See* ECF No. 68 at 8 n.19 ("Demands in SACREM2013 are based on the most recent land use data and surveys available in 2011."). Moreover, the land use data was combined in SACFEM2013 "with the historical precipitation record to develop demands that vary in each year of the simulation, with higher demands for groundwater in drier years." *Id.* The Authority contends that the historical data provides a sufficient variety of hydrological conditions to realistically depict the baseline of existing groundwater conditions, ECF No. 68 at 9 (citing AR 25599-697 (period of analysis used in modeling included critical and dry periods as well as multi-year droughts and monthly stress periods)), including droughts more severe than the one persisting at the time the present legal challenge was filed. AR 27429; *see also* AR 25706. Plaintiffs point to no better data set the Authority could have incorporated into its SACFEM2013 modeling. Nor do Plaintiffs explain how additional data would have made any material difference in the informational value of the baseline description. In addition, the FEIS/R includes in its in description of the environmental baseline data on groundwater levels through water year 2014 demonstrating "a general decreasing trend in groundwater levels in the Sacramento Valley." AR 25656. Put another way, the FEIS/R discusses each potentially impacted groundwater basin through the use of both modeling and real data – the real data extending up through and including 2014. In light of the entire record, the Court concludes that substantial evidence supports the Authority's approach to describing existing

groundwater conditions.

In response to the Court's request for supplemental briefing on the issue of the FEIS/R's description of the groundwater baseline, Plaintiffs focus almost exclusively on new arguments about how the CalSim II model operates, without providing any explanation of how the CalSim II model relates to groundwater conditions. ECF No. 69 at 4-7. This is despite the fact that the record suggests SACFEM2013 is the model used to evaluate groundwater levels and demands. AR 27430. The Court will not entertain new arguments regarding CalSim II in the context of Plaintiffs' challenge to how the FEIS/R treats groundwater demand in its description of the baseline. Plaintiffs do make one other argument about SACFEM2013, asserting that the Authority "cannot point to substantial evidence demonstrating that the model considers trends in groundwater demands such that the [F]EIS/R could meaningfully assess the extent to which additional groundwater pumping caused by the project would exacerbate trends in groundwater demands that have cause persistent drawdown over the course of decades. Relying on 2005 demands, the [F]EIS/R does not even describe existing conditions at the time of the [Notice of Publication of the FEIS/R]." ECF No. 69 at 5. Here, Plaintiffs appear to confuse the fact that the CalSim II model set its level of demand at 2005 levels, while the SACFEM2013 model used demand set at 2010 levels. The Court is not in a position to tease out an argument from this confusion and finds nothing in Plaintiffs' response to the request for supplemental briefing that undermines its earlier conclusion that the Authority did not act unlawfully by utilizing a 2010 level of demand for its SACFEM2013 modeling efforts. Plaintiffs' motion for summary judgment on this issue is DENIED; the Authority's cross-motion is GRANTED.

(4) Failure to Utilize Datasets that Better Reflect Climate Change

Finally, Plaintiffs appear to include within their set of challenges to the CEQA "baseline" an argument about climate change. Specifically, as part of Plaintiffs' critique of the FEIS/R's use of an "arbitrary baseline period of 1970-2003," Plaintiffs argue that this period "fails to account for ongoing increases in global temperatures." ECF No. 45 at 23. Yet, Plaintiffs fail to develop this as a "baseline"

argument in any serious way, focusing instead on whether the FEIS/R meaningfully assessed the impacts associated with ongoing climate change. *See id*. at 25. Under the rubric of *Neighbors*, which stands for the general proposition that the baseline should normally be the conditions extant at the time environmental review commences, the arguments Plaintiffs do make about climate change do not fit within the baseline framework. *Id*. at 25-26 (Plaintiffs challenging FEIS/R's conclusion that impacts of climate change over course of project would be minimal). The Court will not manufacture an argument where none is made and where none exists.

b. Analysis of Climate Change Impacts (CEQA and NEPA)

Plaintiffs do argue directly that the FEIS/R as a whole fails to meaningfully assess impacts associated with ongoing climate change.[30] As to this argument, Plaintiffs assert the FEIS/R violates both CEQA and NEPA.

Here, Plaintiffs point to record evidence in the FEIS/R projecting specific, relevant impacts of climate change on California's water supply. For example, the FEIS/R reviews several major reports on the impacts of climate change on California, each based on different global climate models and emissions scenarios, and presents the range of projected changes. *See* AR 25861-65862. With respect to impacts of climate change on snowpack and streamflow, the FEIS/R indicates:

> Snowpack and streamflow amounts are projected to decline because of less late winter precipitation falling as snow and earlier snowmelt (Melillo, Richmond, and Yohe 2014). In California, snow water equivalent (the amount of water held in a volume of snow) is projected to decrease by 16 percent by 2035, 34 percent by 2070, and 57 percent by 2099, as compared to measurements between 1971 and 2000 (Melillo, Richmond, and Yohe 2014). By the end of the century, late spring streamflow could decline by up to 30 percent (CEC 2011).

AR 25864 (emphasis added) . Plaintiffs' comments on the DEIS/R suggested that the Lead Agencies use these figures to calculate projected loss of snowpack over the life of the project, as snowpack is a factor

[30] As the present argument is not limited to the issue of modeling, it is analogous to but more expansive than the one discussed directly above.

in surface water supply projections. AR 21832. Instead of doing so, the FEIS/R acknowledges that "changes to annual temperatures, extreme heat, precipitation, sea level rise and storm surge, and snowpack and streamflow are expected to occur in the future because of climate change," but concludes: "Because of the short-term duration of the Proposed Action (10 years), any effects of climate change on this alternative are expected to be minimal. Impacts to the Proposed Action from climate change would be less than significant." AR 25874. Again, this conclusion appears to be in conflict with the data disclosed in the FEIS/R itself. With snow water equivalent predicted to decline by 16 percent by 2035, one cannot escape the obvious deduction that snow water equivalent is likely to decline by some (possibly significant) fraction of 16 percent by the end of the Proposed Action in 2024.

(1) CEQA Analysis

The Authority takes the position that CEQA does not require an agency to analyze significant effects of climate change on a project. ECF No. 68 at 11. *California Bldg. Indus. Ass'n v. Bay Area Air Quality Mgmt. Dist*., 62 Cal. 4th 369, 386 (2015) ("*CBIA I*"), provides some support for this proposition, but requires considerable explanation. As discussed above, CEQA requires public agencies to conduct an environmental review of discretionary projects they carry out or approve and to prepare an EIR for any project that may have a significant effect on the environment. Cal. Pub. Res. Code §§ 21151, 21100, 21080. The CEQA Guidelines "encourage public agencies to develop and publish 'thresholds of significance' to assist in determining whether a project's effect will be deemed significant." *California Bldg. Indus. Ass'n v. Bay Area Air Quality Mgmt. Dist*., 2 Cal. App. 5th 1067, 1073 (2016), *as modified on denial of reh'g* (Sept. 9, 2016) ("*CBIA II*") (citing CEQA Guidelines § 15064.7). "A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which mean the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant." CEQA Guidelines, § 15064.7(a).

CBIA I evaluated a challenge to thresholds of significance concerning certain air pollutants,

along with guidelines concerning their use, published by the Bay Area Air Quality Management District. *CBIA II*, 2 Cal. App. 5th at 1073. The challenged thresholds directed project proponents to evaluate whether the project would locate "new receptors" (such as residences, schools, school yards, parks, playgrounds, daycare centers, nursing homes, and medical facilities) close to existing or future proposed sources of air pollution and whether those existing sources would adversely affect individuals within the planned project. *Id*. at 1074-75. Building interests sued, arguing, among other things, that the "new receptor" thresholds "were arbitrary and capricious to the extent they required an evaluation . . . of the impacts the environment would have on a given project." *Id*. at 1076. Both the trial and appellate courts resolved the matter on other grounds. *Id*. at 1076-77. The California Supreme Court granted a petition for review of the question: "Under what circumstances, if any, does CEQA require an analysis of how existing environmental conditions will impact future residents or users (receptors) of a proposed project?" *Id*. (citing *CBIA I*, 62 Cal. 4th at 381). The appellate court's summary of the Supreme Court's analysis is concise and accurate:

> In the proceedings before the Supreme Court on review, [the Air] District took the position that "when existing environmental conditions on or near the proposed project site pose hazards to humans brought to the site by the project, the project may have potentially significant environmental effects requiring evaluation." (*Building Association, supra*, 62 Cal. 4th at p. 386.) CBIA took the "contrasting view" that the relevant consideration when determining the need for an EIR was the project's effect on the environment, not the environment's effect on the project. (*Ibid*.) In its opinion, the Supreme Court agreed with CBIA as a general matter: "In light of CEQA's text and structure, we conclude that CEQA generally does not require an analysis of how existing environmental conditions will impact a project's future users or residents." (*Building Association, supra*, 62 Cal.4th at p. 386.)
>
> In reaching this conclusion, the Supreme Court acknowledged District's argument that CEQA is concerned with public health and safety, and requires a finding of "'"a significant effect on the environment"' ([Pub. Res. Code] § 21083(b)) whenever the 'environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.' ([Pub. Res. Code], § 21083(b)(3).)" (*Building Association, supra*, 62 Cal. 4th at p. 387.) But the District's reading of this language "goes too far. . . . The statute does not provide enough of a basis to suggest that the term 'environmental effects' as used in this context is meant, as a

general matter, to encompass these broader considerations associated with the health and safety of a project's future residents or users. [Public Resources Code s]ection 21060.5 defines 'environment' as 'the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, noise, objects of historic or aesthetic significance.' ([Pub. Res. Code,] § 21060.5.) Given the text of [Public Resources Code] section 21083 and other relevant provisions of the statutory scheme to which it belongs—including CEQA's statute-wide definition of 'environment'—the phrase in question is best interpreted as limited to those impacts on a project's users or residents that arise from the project's effects on the environment. Even if one reads into CEQA's definition of 'environment' a concern with people—a reading that, notwithstanding [Public Resources Code] section 21060.5, is conceivable given the Legislature's interest in public health and safety—[Public Resources Code] section 21083 does not contain language directing agencies to analyze the environment's effects on a project. Requiring such an evaluation in all circumstances would impermissibly expand the scope of CEQA." (*Building Association*, at p. 387, italics added.)

The Supreme Court continued: "The rest of the statute's relevant provisions underscore why. Despite the statute's evident concern with protecting the environment and human health, its relevant provisions are best read to focus almost entirely on how projects affect the environment. (*E.g.*, [Pub. Res. Code,] §§ 21060.5 [defining environment], 21068 [' "Significant effect on the environment" means a substantial, or potentially substantial, adverse change in the environment'], 21083(b)(1) [directing that a project shall be found to have a ' "significant effect on the environment" ' if it 'has the potential to degrade the quality of the environment'].) Indeed, the key phrase 'significant effect on the environment' is explicitly defined by statute in a manner that does not encompass the environment's effect on the project. (§ 21068 ['"Significant effect on the environment" means a substantial, or potentially substantial, adverse change in the environment.'].) And nowhere in the statute is there any provision that cuts against the specificity of that definition by plainly delegating power for the agency to determine whether a project must be screened on the basis of how the environment affects its residents or users." (Building Association, supra, 62 Cal.4th at p. 387.)

The court then turned its attention to CEQA Guidelines section 15126.2(a), cited by District in support of its position that CEQA requires a consideration of the environment's effect upon future users of a project. CEQA Guidelines section 15126.2(a) "calls for an EIR to 'identify and focus on the significant environmental effects of the proposed project,' including 'any significant environmental effects the project might cause by *bringing development and people into the area affected*.' (Italics added.)" (*Building Association, supra*, 62 Cal. 4th at p. 385.) It further states: " '[A]n EIR [should] evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions

> (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.' " (CEQA Guidelines, § 15126(a).)
>
> The Supreme Court found valid the above-quoted portions of CEQA Guidelines section 15126(a) "to the extent they call for evaluating a project's potentially significant *exacerbating* effects on existing environmental hazards...." (*Building Association, supra,* 62 Cal. 4th at p. 388.) "Because this type of inquiry still focuses on the *project's impacts on the environment*—how a project might worsen existing conditions—directing an agency to evaluate how such worsened conditions could affect a project's future users or residents is entirely consistent with this focus and with CEQA as a whole." (*Id.* at p. 389.) But the Court found two additional sentences contained in CEQA Guidelines section 15126.2(a) to be "clearly erroneous and unauthorized under CEQA: '[A]n EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there.'" (*Building Association, supra,* 62 Cal. 4th at p. 390.) These two sentences—which described a project that would not itself exacerbate the hazard, but whose occupants might be jeopardized by existing conditions—"impos[ed] a requirement too far removed from evaluating a project's impacts on the environment." (*Ibid*.)

CBIA II, 2 Cal. App. 5th at1077-1079 (parallel citations omitted, italicized emphasis in original, underlined emphasis added). In sum, CEQA "does not generally require an agency to consider the effects of existing environmental conditions on a proposed project's future users or residents" but does mandate "an analysis of how a project might exacerbate existing environmental hazards." *CBIA I*, 62 Cal. 4th at 392 (emphasis added). The California Supreme Court provided an example.

> Suppose that an agency wants to locate a project next to the site of a long-abandoned gas station. For years, that station pumped gasoline containing methyl tertiary-butyl ether (MTBE), an additive—now banned by California—that can seep into soil and groundwater. [Citations.] Without any additional development in the area, the MTBE might well remain locked in place, an existing condition whose risks—most notably the contamination of the drinking water supply—are limited to the gas station site and its immediate environs. But by virtue of its proposed location, the project threatens to disperse the settled MTBE and thus exacerbate the existing contamination. The agency would have to evaluate the existing condition—here, the presence of MTBE in the soil—as part of its environmental review. Because this type of inquiry still focuses on the project's impacts on the environment—how a project might worsen existing conditions—directing an agency to evaluate how such worsened conditions could affect a project's future users or residents is entirely

> consistent with this focus and with CEQA as a whole.

Id. at 389. In *Ballona Wetlands Land Tr. v. City of Los Angeles*, 201 Cal. App. 4th 455, 474 (2011), for example, a case decided before *CBIA I*, a California appellate court held that an EIR was not required to discuss the impact of sea level rise on a planned real estate development project because "identifying the environmental effects of attracting development and people to an area is consistent with CEQA's legislative purpose and statutory requirements, but identifying the effects on the project and its users of locating the project in a particular environmental setting is neither consistent with CEQA's legislative purpose nor required by the CEQA statutes."

The FEIS/R does analyze of the Project's anticipated contribution to global climate change in the form of, for example, increased emissions of greenhouse gasses caused by increased groundwater pumping for groundwater substitution transfers. AR 25382; 25872-77. Plaintiffs do not challenge this aspect of the FEIS/R. Plaintiffs do insist, however, that climate change is an "existing condition" and "hazard," the effects of which the Proposed Action could potentially exacerbate and therefore that additional analysis was required in the FEIS/R. ECF No. 69 at 8. There is scant caselaw applying this "exacerbation" rule. One of the only cases to discuss it in any detail is *East Sacramento Partnership for a Livable City v. City of Sacramento*, 5 Cal. App. 5th 281, 296-97 (2016), *as modified on denial of reh'g* (Dec. 6, 2016) ("*ESPLC*"). Plaintiffs in that case challenged an EIR for a residential infill development, claiming that the "[a]dditional vehicles, residents, visitors, and others coming to the property because of the Project will undeniably contribute to and exacerbate, the already bad air quality, traffic, and other environmental conditions." *Id*. at 297. Critically, the *ESPLC* court demanded of Plaintiffs factual support for their assertions of exacerbation. *Id*.

> In the absence of a specific factual foundation in the record, dire predictions by nonexperts regarding the consequences of a project do not constitute substantial evidence. Unsubstantiated opinions, concerns, and suspicions about a project, though sincere and deeply felt, do not rise to the level of substantial evidence. Thus, project opponents must produce evidence, other than their unsubstantiated opinions, that a project *will produce a particular adverse effect*.

Id. (internal quotation marks and citations omitted, emphasis in original). Here, Plaintiffs point out, correctly, that the record supports a finding that climate change will have an impact on the water supply, which will in turn put pressure on California's water resources "which are already fully utilized by the demands of a growing economy and population." AR 25865. Moreover, the record indicates that "larger agricultural demands may lead to increased stress on the management of surface water resources and, potentially, the over exploitation of groundwater aquifers." *Id*. But, Plaintiffs fail to point to record evidence substantiating their position that the Project may exacerbate impacts to water supply caused by climate change. They repeatedly demand that the Authority provide substantial evidence of the absence of such a connection. *See* ECF No. 69 at 10 (Authority "has failed to incorporate into the FEIS/R any meaningful analysis of whether the Proposed Action would exacerbate existing climate change hazards."). But, as discussed, *ESPLC* suggests Plaintiffs bear the burden of identifying evidence of exacerbation. This makes sense in light of the fact that the exacerbation standard is an exception to the general rule that an EIR need not evaluate the impacts of the environment on a proposed project. Plaintiffs' motion for summary judgment that the FEIS/R's climate change analysis violates CEQA is DENIED; the Authority's cross-motion is GRANTED.

(2) NEPA Analysis

In contrast, the parties appear to be in agreement that NEPA requires an evaluation of the impact of climate change on a project, at least under certain circumstances. *See* ECF No. 67 at 5-6 & n.4. Draft Guidance in place at the time the FIES/R issued indicated:

> When assessing the effects of climate change on a proposed action, an agency typically start[s] with an identification of the reasonably foreseeable future condition of the affected environment for the "no action" alternative based on available climate change measurements, statistics, observations, and other evidence. *See* Considering Cumulative Effects (CEQ 1997) at www.nepa.gov. The reasonably foreseeable affected environment should serve as the basis for evaluating and comparing the incremental effects of alternatives. 40 CFR § 1502.15.

"Draft NEPA Guidance On Consideration of The Effects Of Climate Change And Greenhouse Gas Emissions," (Feb. 18, 2010)(available at https://ceq.doe.gov/docs/ceq-regulations-and-guidance/20100218–nepa-consideration-effects-ghg-draft-guidance.pdf) (hereinafter "Draft Guidance").[31]

At least one climate modeling scenario included in the AR predicts that, statewide, snow water equivalent will decrease by 16 percent by 2035. AR 25864.[32] Despite this, the FEIS/R evaluates the impact of the Project on water supplies using the CalSim II model, which is based upon "82 years of historical hydrology from water year 1922 through 2003." AR 27843. Plaintiffs protest this approach, arguing that it was unreasonable to rely on modeling that utilizes only historic data when the record reflects that "[t]the past century is no longer a reasonable guide to the future for water management." ECF No. 69 at 18 (citing AR 82917, the "Second National Climate Assessment," cited in the FEIS/R and included in the AR).

Federal Defendants offer several explanations in an attempt to justify the approach used in the FIES/R. First, Federal Defendants point to the Draft Environmental Impact Report/Environmental Impact Statement for the Bay Delta Conservation Plan ("Draft Bay Delta EIR/EIS"), which incorporated temperature and precipitation projections drawn from "multiple general circulation models and emissions projections" into rainfall runoff models. ECF No. 67 at 2 (citing AR 139843-58). The results of these runoff models were compared to runoff modeling results based on historic temperature and precipitation information to "define the influences of climate change centered on these future periods." *Id*. The results predict that, on an annual basis, inflow to key reservoirs in California will not be

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[31] The Draft Guidance was superseded by a Final Guidance on August 5, 2016, "Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews," but that Final Guidance was withdrawn on April 5, 2017 by the CEQ in light of Executive Order 13783 (Promoting Energy Independence and Economic Growth, 82 Fed. Reg. 16,093 (Mar. 31, 2017)). *See* 82 Fed. Reg. 16,576 (Apr. 5, 2017). Nonetheless, Federal Defendants indicate that the Draft Guidance, while non-binding, "does not change any law, regulation, or other legally binding requirement." *See* https://ceq.doe.gov/guidance/ceq_guidance_nepa-ghg-climate_final_guidance.html (last visited January 4, 2018).

[32] The Court agrees with Plaintiffs that this is not, as Federal Defendants suggest (ECF No. 67 at 3), based on an outlier study. Other evidence in the record corroborates the assertion that snowpack in California has and likely will continue to decrease as a result of climate change. AR 21886.

substantially different from historic patterns. *Id*. at 3 (citing AR 139849-58). For example, the ratio of projected average inflow in 2025 to historic inflow to Shasta Reservoir is 1:1. AR 139844-45, 139851-52. In theory, this record evidence demonstrating that precipitation overall will not change as a result of climate change could justify reliance on modeling that utilized historic datasets, were it not for a significant limitation of the analysis on which Federal Defendants rely. Plaintiffs point out, correctly, that the modeling results to which Federal Defendants refer are based upon predictions of annual inflows to reservoirs. They argue that reviewing only annual trends misses a key factor: changes in the timing of precipitation. Plaintiffs point to information in the record that indicates "[r]educed snowpack and earlier snow melt will alter the timing and amount of water supplies, posing significant challenges for water resource management in the West." AR 82878. An appendix to the Draft Bay Delta EIR/EIS entitled "Climate Change Effects on Hydrology in the Study Area Used for CALSIM Modeling Analysis" ("CalSim II Appendix") acknowledges this, indicating: "The simulated projected changes in monthly and annual runoff from projected future climate change generally reflect the expected shift from snowpack runoff (in April, May, and June) to rainfall runoff (in January, February, and March)." AR 139843. This is not academic nit-picking. As the CalSim II Appendix explains, this "decrease in inflow during the peak irrigation period of June, July and August will be particularly difficult for existing agricultural water supplies, and will likely require additional groundwater recharge in the spring with increased groundwater pumping in the summer months." AR 139849 (emphasis added).[33] Federal Defendants' focus on annual patterns ignores a critical aspect of the impact in question.

Second, Federal Defendants suggest that the predicted 16 percent snow-water equivalent decrease emphasized by Plaintiff was based upon modeling of a "worst case scenario." ECF No. 67 at 3-4. Specifically, the relied-upon prediction came from the "A2" emissions scenario, one of several

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[33] As Plaintiffs acknowledge, this quote is drawn from a section of the CalSim II Appendix discussing Millerton Reservoir, which, because of its location to the east of Fresno, California, does not impact directly the seller areas at issue in this case. Nonetheless, Plaintiffs point out, correctly, that modeling for other, more relevant reservoirs shows similar seasonal patterns. AR 139844 (Trinity Reservoir); 139845 (Shasta); 139846 (Oroville).

modeled scenarios. *See* AR 25861-62. According to Federal Defendants, "A2" scenario predicts the "highest and worst-case events and assumes continued increases in emissions throughout the century." ECF No. 67 at 3 (citing AR 83089, 83545-547). Presumably, Federal Defendants make this argument because NEPA does not require worst-case analysis. *Methow Valley*, 490 U.S. at 356. But, as Plaintiffs point out, ECF No. 51 at 11, the A2 scenario is not a "worst case" scenario, at least not in the way that term is generally understood, in part because the record reflects that "[r]ecent carbon dioxide emissions have, in fact, been higher than in the A2 scenario. Whether this trend will continue is not possible to predict because it depends on societal choices." AR 83903 (emphasis added).

Federal Defendants make one other argument that is simply illogical, asserting:

> The global dispersion of greenhouse gases means that localized environmental impacts cannot be traced to California's particular emissions. Even if there were a way to trace state-specific emissions to particular climate change impacts, record evidence demonstrates that emissions in California are decreasing, *see e.g.*, AR82457 (indicating that greenhouse gas emissions decreased by 1.6 percent between 2000 and 2012 in California), and that the State has set goals for future reduction in coming years, including over the life of the Project. *See, e.g.* AR82461. Thus, given this and other information in the record discussed above, it was not contradictory for Federal Defendants to conclude that "any effects of climate change on [the Proposed Action] alternative are expected to be minimal. Impacts to the Proposed Action from climate change would be less than significant." AR25874.

ECF No. 67 at 4. In this argument Federal Defendants rely on information demonstrating greenhouse gas emissions from California sources are decreasing to argue that impacts to the Proposed Action from climate change would be less than significant. This adds nothing but confusion to the discussion. As the first sentence of the above-quoted paragraph indicates, it is undisputed (and indisputable) that greenhouse gas emissions from California cannot and will not control the trajectory of climate change overall.

The Authority's relevant arguments on this topic (i.e., those arguments that could arguably be applied to a NEPA analysis), which focus on modeling, are equally unavailing. The Authority emphasizes that "[modeling] is the best available tool to estimate the effects of transfers in a range of

scenarios" and argues that "[a]ny climate change effects that may have occurred in the most recent ten-year period are difficult to discern in context and would be too small to be outside the range of modeling variability." ECF No. 48 at 17 (citing AR 27429, 27934). The Authority then sets up a straw man by arguing that "[i]t is certainly possible that the next ten years may be the driest on record, potentially influenced to an unknown extent by climate change, but it would be speculative to develop hydrology for the period of analysis in the [FEIS/R] (2015-2024) as a series of 10 consecutive critical years based on potential climate change." *Id*. (citing AR 27429). In light of the contrary record evidence cited above concerning decreasing snow water equivalent, the Authority fails to point to record evidence to support its conclusory assertion that it is "speculative to develop hydrology for the period of analysis in the [FEIS/R]." The cited pages from the AR contain no explanation of or support for this conclusion, leaving the Court with nothing upon which it could find that the Authority's assertion is based upon record evidence.[34]

In evaluating the treatment of climate change in the FEIS/R, the Court finds *Wild Fish Conservancy v. Irving*, 221 F. Supp. 3d 1224 (E.D. Wash. 2016), to be instructive, even though the relevant sections of that case concern the ESA's best available science standard. In that case, the National Marine Fisheries Service ("NMFS") was required to evaluate under the ESA whether the operation of a fish hatchery would jeopardize the continued existence of endangered fish that spawn in the same watershed serviced by the hatchery. *Id*. at 1227-28. That analysis contained a detailed discussion of the effects of climate change on salmon recovery in the region, "including that models predict a significant reduction in total snowpack and low-elevation snowpack, affecting streamflow and water temperatures." *Id*. at 1233. Despite the projected changes reflected in the record, NMFS used

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[34] Rather than providing supporting citations, the Authority's brief immediately pivots to explain that "modeling is theoretical and water projects are managed in real time," as a segue to arguing that Mitigation Measure GW-1 is "designed to avoid and reduce impacts based on actual conditions at the time of transfer, rather than predicted conditions from the modeling effort." ECF No. 48 at 17. However, a mitigation measure cannot be used as a substitute for analysis of environmental impacts under NEPA or CEQA. *See N. Plains Res. Council, Inc. v. Surface Transp. Bd*., 668 F.3d 1067, 1084 (9th Cir. 2011); *Lotus*, 223 Cal. App. 4th at 653-54.

historic stream and water temperature data to analyze the hatchery's operations and water use. *Id*. NMFS argued that it properly considered the best available science on region-wide climate change and relied on only historic averages to conduct its analysis of the specific stream on which the hatchery was located because no finer-scale climate change analysis of that stream was available. *Id*.

While acknowledging that a court must give deference to an expert agency on highly scientific or technical questions, the Wild Fish court emphasized that "a voluminous and technical record does not insulate a decision from judicial review under that deferential standard." *Id*.

> The problem with NMFS's analysis is not that it used recent historical streamflow data to model the effects of hatchery operations and water use at different flow levels. [Record citation.] The problem here is that NMFS included no discussion whatsoever of the potential effects of climate change in the BiOp's analysis of the Hatchery's future operations and water use. NMFS discusses the effects of climate change generally and then proceeds with analysis on the apparent assumption that there will be no change to the hydrology of Icicle Creek. NMFS does not necessarily need to conduct a study or build a model addressing the impacts of climate change on the Icicle Creek watershed. But its analysis must consider that the best available science, which it discusses elsewhere in the BiOp, suggests that baseline historical flow averages may not be effective predictors of future flows.

Id. at 1233-34. The failure was not necessarily the failure to build a model based on the more general climate change information, but the failure to consider that information in any meaningful or logical way. This was arbitrary and capricious "fail[ure] to consider an important aspect of the problem." *Id*. at 1234.

The FEIS/R suffers from a strikingly similar failure. It explains that snowpack and streamflow is predicted to decline:

> Snowpack and Streamflow: Snowpack and streamflow amounts are projected to decline because of less late winter precipitation falling as snow and earlier snowmelt (Melillo, Richmond, and Yohe 2014). In California, snow water equivalent the amount of water held in a volume of snow is projected to decrease by 16 percent by 2035, 34 percent by 2070, and 57 percent by 2099, as compared to measurements between 1971 and 2000 (Melillo, Richmond, and Yohe 2014). By the end of the century, late spring streamflow could decline by up to 30 percent.

AR 25864. Nonetheless, the FEIS/R fails to address or otherwise explain how this information about the potential impacts of climate change can be reconciled with the ultimate conclusion that climate change impacts to the Project will be less than significant:

> *Changes to the environment from climate change could affect the Proposed Action.* As described in the Section 3.6.1.3, changes to annual temperatures, extreme heat, precipitation sea, level rise and storm surge, and snowpack and streamflow are expected to occur in the future because of climate change. Because of the short-term duration of the Proposed Action (10 years), any effects of climate change on this alternative are expected to be minimal. Impacts to the Proposed Action from climate change would be less than significant.

AR 25874. As in *Wild Fish*, this amounts to a "failure to consider an important aspect of the problem."[35] Accordingly, Plaintiffs' motion for summary judgment that the FEIS/R's analysis of climate change violates NEPA is GRANTED; Federal Defendants' cross-motion is DENIED.

c. Assessment of Water Quality Impacts (CEQA and NEPA)

Plaintiffs next argue that the FEIS/R is unlawful because it fails to evaluate water quality impacts in a manner that comports with the law. ECF No. 45 at 28. Plaintiffs do not specify whether this challenge is brought under CEQA and NEPA. Because both the Authority and Federal Defendants have responded to the motion substantively, the Court addresses compliance with both statutes.

Plaintiffs first point out that the FEIS/R sets forth certain standards of significance for impacts to water quality as follows:

> Significance Criteria
>
> For the purposes of this EIS/EIR, impacts to water quality would be considered significant if implementation of any of the alternatives would:

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[35] While this specific language – failure to consider an important aspect of the problem – is referenced most often in the context of ESA cases, the language has its roots in the APA standard of review, which applies to NEPA cases as well. *See Cascadia Wildlands v. Bureau of Indian Affairs*, 801 F.3d 1105, 1110 (9th Cir. 2015) (in NEPA case, court "will reverse a decision as arbitrary and capricious only if the agency relied on factors Congress did not intend it to consider, entirely failed to consider an important aspect of the problem, or offered an explanation that runs counter to the evidence before the agency or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise").

- Violate existing water quality objectives or standards;
- Result in long-term adverse effects on beneficial uses; or
- Substantially degrade existing water quality.

AR 25556. Plaintiffs focus on the first trigger.[36] Among applicable water quality standards or objectives, the FEIS/R references those included in D-1641, which "require that the [CVP] and [SWP] be operated to protect water quality, and that DWR and/or Reclamation ensure that the flow dependent water quality objectives are met in the Delta." AR 25539. Plaintiffs complain that the FEIS/R fails to mention that Reclamation and DWR "routinely request relaxation of these standards." ECF No. 45 at 28 (citing AR 30364). The SWRCB relaxed D-1641's outflow and salinity requirements in 2014 and 2015. *See* AR 30364. In 2014, operators were unable to maintain temperature control in the Sacramento River, which resulted in significant impacts to listed fish species that spawn in the upper reaches of the Sacramento River. *See* AR 30348.

While acknowledging that "exceedances of water quality standards have occurred, especially during recent drought years," the FEIS/R concluded that "changes in operations associated with the range of potential water transfer activities . . . are not expected to significantly affect water quality or exceedances." AR 28006. Among other things, as the Authority points out, carriage water is used to maintain compliance with whatever water quality standards are in force and effect. *See* ECF No. 48 at 10-12[37]; *see also supra* at part IV.A.2.b. The fact that the SWRCB may authorize temporary changes to water rights conditions related to water quality is not an impact of this Project and operation under any such temporarily modified water quality regime does not result in a violation of water quality objectives or standards because operating under a TUCP with SWRCB permission excuses any such violation. *See* California Water Code §§ 1435-1442. Therefore, Plaintiffs' argument is at its heart nonsensical. They

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[36] Federal Defendants also argue that "Plaintiffs completely fail to acknowledge that [the significance criteria concerned with violations of water quality standards] is just one of three significance criteria." ECF No. 49-1 at 17. This is unpersuasive, as the FES/R appears to treat all three criteria as independent triggers.

[37] Plaintiffs are not correct that the Authority has conceded this argument. The fact that the Authority's factual response to this argument may be located within a different section of their opposition brief is as much a reflection of the overlapping organization of Plaintiffs' own motion as anything else.

argue the FEIS/R is unlawful because it failed to consider frequent, authorized exceedances of water rights conditions in light of the significance criteria concerned with "violat[ions] of existing water quality objectives or standards." ECF No. 45 at 28. An authorized exceedance cannot be a violation of existing water quality objectives or standards. Without more to this argument (e.g., an argument that water quality is compromised in a material way) – this hyper-technical complaint is unpersuasive.

Plaintiffs next argue that the FEIS/R presents a "skewed and generalized" discussion of the potential for additionally pumped contaminated groundwater to contaminate surface water via irrigation runoff. ECF No. 45 at 29 (citing AR 25559). This argument builds upon the argument, discussed above, that the FEIS/R failed to accurately describe existing groundwater contamination. *See supra* Part IV.A.3.a(3). As mentioned, the FEIS/R revealed that there were numerous active groundwater clean-up sites in the Sacramento Valley, but that most of these sites were clustered around urban areas. AR 25673. As the FIES/R explains, "[g]roundwater substitution transfers would use groundwater for irrigation instead of surface water." AR 25559. However, "[t]he amount of groundwater substituted for surface water under the Proposed Action would be relatively small compared to the amount of surface water used to irrigate agricultural fields in the Seller Service Area." *Id*. "Groundwater would mix with surface water in agricultural drainages prior to irrigation return flow reaching the rivers." *Id*. Therefore, "[c]onstituents of concern that may be present in the groundwater could enter the surface water as a result of mixing with irrigation return flows. Any constituents of concern, however, would be greatly diluted when mixed with the existing surface waters applied because a much higher volume of surface water is used for irrigation purposes in the Seller Service Area." *Id*. In addition, the FEIS/R finds that "groundwater quality in the area is generally good and sufficient for municipal agricultural domestic and industrial uses." *Id*. In their opening brief, Plaintiffs call the FEIS/R's conclusion that constituents of concern would be diluted "specul[ative]," ECF No. 45 at 29, but in response to Federal Defendants citing the groundwater quality analyses in the FEIS/R, *see* ECF No. 49-1 at 13 & 18, Plaintiffs do not address this issue. ECF No. 51 at 13. The Court therefore treats this issue as abandoned.

d. Assessment of Impacts to Giant Garter Snake (CEQA)

Plaintiffs argue that the FEIS/R fails to satisfy CEQA's requirements with respect to analysis of the Project's impacts on Giant Garter Snake ("GGS"). Because the Court dedicates a lengthy section of this decision to evaluating an ESA challenge to the BiOp pertaining to GGS, *see infra* at Part IV.B, and because that discussion informs its analysis of the CEQA challenge, the Court addresses the CEQA challenge after the ESA discussion. *See infra* at Part IV.C.

e. Analysis of Biological Impacts of Reductions to Delta Outflows (CEQA)

Plaintiffs next argue that the FEIS/R fails to adequately analyze impacts resulting from acknowledged reductions to Delta outflows. ECF No. 45 at 32. Specifically, they argue that the FIES/R's threshold of significance related to this particular impact is arbitrary and therefore violates CEQA and that the cumulative impact analysis fails to take into consideration the already degraded condition of the Delta.[38] *Id.*

In connection with the direct (as opposed to cumulative) impact analysis, the FEIS/R indicates that "[m]odeled changes in Delta outflow or X2[39] relative to existing conditions were considered substantial and required further analysis if they were greater than ten percent." AR 25904. In selecting this threshold, the FEIS/R relied upon environmental studies evaluating impacts to fish habitat caused by decreased flows in freshwater streams and rivers. AR 25903. These studies revealed a "consensus that differences in modeled flows [in those circumstances] of less than ten percent would be within the noise of the model outputs and beyond the ability to measure actual changes." AR 25903. Plaintiffs complain that applying this ten percent threshold, derived from studies of impacts to streams and rivers, to Delta

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[38] The Court agrees with Federal Defendants' assessment that Plaintiffs only challenge the FEIS/R's treatment of this issue under CEQA, raising no parallel NEPA challenge. *See* ECF No. 49-1; ECF No. 59 at 6.

[39] "X2 is the point identified by its distance from the Golden Gate Bridge where salinity at the river's bottom is about two parts per thousand (ppt) and is the basis for standards to protect aquatic life." *Ctr. for Envtl. Sci., Accuracy & Reliability v. Cowin*, No. 1:15-CV-00884 LJO, 2015 WL 3797693, at *6 (E.D. Cal. June 18, 2015); *see also Westlands Water Dist. v. U.S. Dep't of Interior*, 376 F.3d 853, 876 (9th Cir. 2004) ("X2 measures the intrusion of water with a salinity level of two parts per thousand concentration of salt into the Sacramento-San Joaquin Delta. X2 represents the number of kilometers the salt water has moved into the Delta from the Golden Gate Bridge. As fresh water inflows to the Delta decrease, X2 moves eastward into the Delta.").

outflow is inappropriate because "non-tidally influenced systems," such as rivers and streams, "are different from tidally-influenced waterbodies," such as the Delta. ECF No. 51 at 16. Plaintiffs maintain that while "a 10% reduction in flow in a purely freshwater system simply means that less water is in the channel, the same is not true in the delta. Instead, reducing freshwater flows changes the chemistry of the water itself. Uncritically adopting the freshwater standard is therefore not adequate." *Id*. However, Plaintiffs cite no factual information to support this assertion. They do cite *San Luis v. Jewell*, 747 F.3d at 595, for that case's explanation that decreased inflow into the Delta from upstream sources increases Delta salinity, which in turn affects the location of X2, which (at least for purposes of the environmental document evaluated in *San Luis v. Jewell*) serves as a proxy for the location of the habitat for at least one protected fish species. But, *San Luis v. Jewell* does not directly or even indirectly support Plaintiffs' factual assertion that a 10% threshold of significance is less appropriate for Delta outflow impacts than it is for streamflow impacts. Information contained in the FEIS/R could support the opposite assertion: because tidal fluctuations can be huge (average daily changes on the order of 170,000 cfs), the modeled changes in outflow (reductions of not more than 147 cfs), would be miniscule in comparison. *See* AR 25920. Without more, the Court is simply not in the position to question the FEIS/R's reliance on a 10% threshold of significance for direct impacts, given that the use of such a threshold seems to be well supported in the related context of freshwater streamflow.[40]

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[40] Moreover, Plaintiffs do not dispute that the analysis provided in the FEIS/R reveals that adverse impacts to Delta Outflows (i.e., reductions in outflow and resulting upstream shifts of X2) come nowhere near the 10% threshold of significance. As the FEIS/R indicates:

> Under the Proposed Action, modeled mean Delta outflows would not be more than 1.3 percent (147 cfs) lower than flows under the No Action/No Project Alternative in any month or water year type. Outflow would be 12.2 percent (500 cfs) higher during July in critically dry water years. The maximum mean monthly upstream shift in X2 location would be 0.1 km (0.2 percent upstream) during periods of decreased flow, and 1.9 km (1.0 percent downstream) during periods of increased flow. Average daily fluctuations in outflow, and therefore X2 position, at Chipps Island due to tides are 170,000 cfs (DWR 1995). Therefore, a change of 500 cfs in Delta outflow would be 0.3 percent of the daily tidal change experienced in this area. These changes to Delta outflow, and resultant changes in X2 position, due to the Proposed Action would not have a substantial adverse impact on biological resources because either outflow reductions would be minimal (less than 1.3 percent) or the potential outflow increase of 12.2 percent could be beneficial.

The Court finds Plaintiffs' arguments regarding the analysis of cumulative impact to Delta outflow to be more compelling. Plaintiffs argue that the FEIS/R violated CEQA because it failed to consider the existing degraded environmental conditions in setting the threshold of significance. In support of this argument, Plaintiffs place great weight on *Communities for a Better Environment v. California Resources Agency*, 103 Cal. App. 4th 98 (2002) ("*CBE*"), disapproved of on other grounds by *Berkeley Hillside Preservation v. City of Berkeley*, 60 Cal. 4th 1086 1109 n. 3 (2015), which addressed a challenge to the implementation of CEQA Guidelines sections 15064(i)(4) and 15130(a)(4). The version of section 15064(i)(4) in force in 2002 stated:

> A lead agency may determine that the incremental impacts of a project are not cumulatively considerable when they are so small that they make only a de minimis contribution to a significant cumulative impact caused by other projects that would exist in the absence of the proposed project. Such de minim[i]s incremental impacts, by themselves, do not trigger the obligation to prepare an EIR. A de minim[i]s contribution means that the environmental conditions would essentially be the same whether or not the proposed project is implemented.

The 2002 version of CEQA Guidelines section 15130(a)(4) states:

> An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable . . . . Where a lead agency is examining a project with an incremental effect that is not 'cumulatively considerable,' a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. [¶] . . . [¶] (4) An EIR may determine that a project's contribution to a significant cumulative impact is de minim[i]s and thus is not significant. A de minim[i]s contribution means that the environmental conditions would essentially be the same whether or not the proposed project is implemented.

The *CBE* court found these two provisions inconsistent with controlling CEQA law because they "turn[ed] cumulative impact analysis on its head by diminishing the need to do a cumulative impact analysis as the cumulative impact problem worsens." *Id*. at 118. The court's reasoning is instructive.

> The seminal decision is *Kings County* [*Farm Bureau v. City of Hanford*,

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AR 25920. The Court therefore finds that in the context of the direct impact evaluation, even if the 10% threshold of significance were inappropriate, any such error would not be prejudicial because the disclosed impact is far lower.

> 221 Cal. App. 3d 692, 718 (1990)]. There the court concluded that an EIR inadequately considered an air pollution (ozone) cumulative impact. The court said: "The []EIR concludes the project's contributions to ozone levels in the area would be immeasurable and, therefore, insignificant because the [cogeneration] plant would emit relatively minor amounts of [ozone] precursors compared to the total volume of [ozone] precursors emitted in Kings County. The EIR's analysis uses the magnitude of the current ozone problem in the air basin in order to trivialize the project's impact." The court concluded: "The relevant question to be addressed in the EIR is not the relative amount of precursors emitted by the project when compared with preexisting emissions, but whether any additional amount of precursor emissions should be considered significant in light of the serious nature of the ozone problems in this air basin."
>
> *Los Angeles Unified* [*Sch. Dist. v. City of Los Angeles*, 58 Cal. App. 4th 1019 (1997)] followed the *Kings County* approach. It found an EIR inadequate for concluding that a project's additional increase in noise level of another 2.8 to 3.3 dBA was insignificant given that the existing noise level of 72 dBA already exceeded the regulatory recommended maximum of 70 dBA. The court concluded that this "ratio theory" trivialized the project's noise impact by focusing on individual inputs rather than their collective significance. The relevant issue was not the relative amount of traffic noise resulting from the project when compared to existing traffic noise, but whether any additional amount of traffic noise should be considered significant given the nature of the existing traffic noise problem.
>
> From *Kings County* and *Los Angeles Unified*, the guiding criterion on the subject of cumulative impact is whether any additional effect caused by the proposed project should be considered significant given the existing cumulative effect.

CBE, 103 Cal. App. 4th at 117-18 (footnotes omitted). "In the end, the greater the existing environmental problems are, the lower the threshold should be for treating a project's contribution to cumulative impacts as significant." *Id*. at 120.

Here, the record suggests that the present condition of the Delta is already precarious, due in part to reduced Delta outflows. AR 151608 (SWRCB Report indicating that current Delta flows are insufficient to support public trust resources, which include fish and wildlife). Yet, the FEIS/R fails to account for this in its cumulative impacts analysis, focusing instead on the fact that changes to Delta outflow and X2 position would be "small" (less than three percent) and that this and all other projects would be subject to numerous regulatory constraints, including requirements imposed under the ESA

and D-1641:

> *The Proposed Action in combination with other cumulative projects could cause Delta outflows to be lower than under the No Action/No Project Alternative.* Long-term water transfer actions under the Proposed Action would have a less than significant impact on fisheries resources that may be influenced by Delta outflow, as changes in Delta outflow and X2 location would be small (less than three percent) in all months and water year types. In addition, all cumulative water operations projects affecting Delta exports would be required to meet Delta water quality standards (e.g., D-1641) and meet the requirements of the USFWS and NOAA Fisheries BOs for the long term coordinated operations of the CVP and SWP. Because changes in Delta outflow and X2 location are predicted to be small and there are additional protections for fisheries and aquatic resources already in place under the ESA and D-1641, these impacts would be less than significant. The Proposed Action in combination with other cumulative actions would not result in a cumulative significant impact on fisheries resources related to changes in Delta outflow and X2 location.

AR 25942. Neither the Authority nor the Federal Defendants respond to this argument directly.

Even if one interprets the above cumulative impacts analysis as imposing a threshold of significance of three percent, the total absence of consideration of the existing environmental problems related to outflow is a legal failure that is potentially prejudicial to the FEIS/R's analysis. The Authority points out, correctly, that "Delta outflow remains the same or increases when water transfers are occurring, which helps alleviate extreme dry conditions," ECF No. 58 at 7 (citing AR 25567, 27473, 27476), but, as the FEIS/R makes very clear, NDO will decrease during other times of the year. AR 25567. The FEIS/R does not discount the potential significance of these increases because of their timing, but rather based upon magnitude. *See id*.; *see also* AR 27473 (FEIS/R agreeing with comment that flows during wet times of the year can be important to aquatic ecosystems, but finding increases to be insignificant because they did not exceed threshold levels). It is the latter form of discounting (and the only one relied upon in the FEIS/R) that has the potential to be prejudicial under CEQA.

In sum, while the Court finds the analysis of direct impacts to Delta outflow passes muster under CEQA, the analysis of cumulative impacts to Delta outflow does not because the thresholds utilized do not take into account existing conditions in the Delta. As to the former, Plaintiffs' motion for summary

judgment is DENIED, and the Authority's cross-motion GRANTED. As to the latter, Plaintiffs' motion for summary judgment is GRANTED, and the Authority's cross-motion DENIED.

5. Evaluation of Mitigation Measures

a. Background on Mitigation Measure GW-1

The FEIS/R concluded that "[g]roundwater substitution transfers could cause a reduction in groundwater levels in the Seller Service Area" that would be significant, but that those impacts would be reduced to a level of insignificance by Mitigation Measure GW-1. AR 25757.

> Groundwater substitution transfers under the Proposed Action could decrease groundwater levels potentially affecting non-transferring wells near participating substitution wells. Declining groundwater levels could also affect land subsidence and groundwater quality; however, these effects would be less than significant. Cropland idling transfers under the Proposed Action could reduce percolation to groundwater, but the reduction would be small because rice (the main crop proposed for idling) is typically grown on soils with low permeability. Potential effects on groundwater resources in the Seller Service Area under Proposed Action would be greater than the No Action/No Project Alternative. These effects could be reduced by Mitigation Measure GW-1 (Section 3.3.4.1).

AR 25758.

Mitigation Measure GW-1 is described in Section 3.3.4.1 of the FEIS/R. The stated objective of GW-1 is "to avoid significant adverse environmental effects" related to groundwater and "ensure prompt corrective action in the event unanticipated effects occur." AR 25759. More specifically GW-1 aims to:

> (1) minimize potential effects to other legal users of water; (2) provide a process for review and response to reported effects to non-transferring parties; (3) assure that a local mitigation strategy is in place prior to the groundwater transfer; and (4) mitigate significant adverse environmental effects.

Id. The measure purports to accomplish these by "monitoring groundwater and/or surface water levels during transfers to avoid potential effects." *Id*.

GW-1 calls upon sellers to implement several sets of measures. First, sellers must submit well data to Reclamation and/or DWR for review. The specific requirements for the well data are incorporated by reference from a separate document: the "DRAFT Technical Information for Preparing

Water Transfer Proposals" ("DTIPWTP") *Id.*; *see also, e.g.*, AR 62603-62650 (2013 version of DTIPWTP).

Second, sellers must implement a monitoring program that "shall, at a minimum," include: (1) "sufficient number of monitoring wells, as determined by Reclamation and the sellers in relation to local conditions, to accurately characterize groundwater levels and response in the area before, during, and after transfer pumping takes place" with possible additional monitoring required near ecological resource areas (AR 25760); (2) installation into "all wells pumping to replace surface water designated for transfer . . . a permanent instantaneous and totalizing flow meter capable of accurately measuring well discharge rates and volumes" with the requirement that "[f]low meter readings will be recorded just prior to initiation of pumping and at designated times, but no less than monthly and as close as practical to the last day of the month throughout the duration of the transfer" (*id.*); (3) collection of groundwater level data from both participating transfer wells and monitoring wells before, during, and after transfer-related pumping at specified intervals[41] (*id.*).

According to the FEIS/R, "[s]ellers thus monitor effects to groundwater levels that may result from the proposed transfer and avoid significant impacts." *Id.* The FEIS/R indicates that "[t]he primary criteria used to identify potentially significant impacts to groundwater levels are the [basin management objectives ("BMOs")] set by [Groundwater Management Plans ("GMPs") promulgated by local

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[41] The specific intervals are as follows:

> • Prior to transfer: Groundwater levels will be measured monthly from March in the year of the proposed transfer-related pumping until the start of the transfer (where possible).
> • Start of transfer: Groundwater levels will be measured on the same day that the transfer-related pumping begins, prior to the pump being turned on.
> • During transfer-related pumping: Groundwater levels will be measured weekly throughout the transfer-related pumping period, unless site specific information indicates a different interval should be used.
> • Post-transfer pumping: Groundwater levels will be measured weekly for one month after the end of transfer-related pumping, after which groundwater levels will be measured monthly through March of the year following the transfer.

AR 25760.

agencies].” AR 25760-61. While several counties in the Sacramento Valley have established GMPs, other areas have not. AR 25671. In areas where quantitative BMOs do not exist, GW-1 sets forth the following procedure:

> Reclamation, [the Authority], and the potential sellers will coordinate closely with potentially impacted third parties to collect and monitor groundwater data. If a third party expects that it may be impacted by a proposed transfer, that party should contact Reclamation and the seller with its concern. The burden of collecting groundwater data will not be the responsibility of the third party. If warranted, groundwater level monitoring to address the third-party’s concern may be incorporated in the monitoring and mitigation plans required by Mitigation Measure GW-1.

Id.

Finally, “to avoid significant effects to vegetation and allow sellers to modify actions before significant effects occur, sellers will monitor groundwater depth data to verify that significant adverse effects to deep-rooted vegetation are avoided.” *Id.* If monitoring data indicate that groundwater levels have dropped below the level of typical root zones “the seller must implement actions set forth in the mitigation plan,” subject to certain exceptions. *Id.* If significant adverse impacts to deep-rooted vegetation occur as a result of the transfer despite the monitoring efforts and implementation of the mitigation plan, the seller “will prepare a report documenting the result of the restoration activity to plant, maintain, and monitor restoration of vegetation for 5 years to replace the losses.” *Id.*

b. CEQA Challenges to GW-1

(1) CEQA’s General Mitigation Measure Requirements

CEQA requires that whenever an EIR finds that an impact to the environment will be significant, the EIR must propose mitigation measures to minimize those significant effects. *See* Cal. Pub. Res. Code § 21100(b)(3). To be legally adequate, mitigation measures must be capable of: “(a) [a]voiding the impact altogether by not taking a certain action or parts of an action[;] (b) [m]inimizing impacts by limiting the degree or magnitude of the action and its implementation[;] (c) [r]ectifying the impact by repairing, rehabilitating, or restoring the impacted environment[;] (d) [r]educing or eliminating the

impact over time by preservation and maintenance operations during the life of the action[;] (e) [c]ompensating for the impact by replacing or providing substitute resources or environments." CEQA Guidelines § 15370; *see also Sacramento Old City Assn. v. City Council of Sacramento*, 229 Cal. App. 3d 1011, 1027 (1991) (citing same).

If the EIR identifies significant environmental effects, the public agency may approve the project only if it makes one or more of the following findings with respect to each significant effect: "(a) ... [¶] (1) Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. . . . [¶] (3) Specific economic, legal, social, technological or other considerations . . . make infeasible the mitigation measures or [project] alternatives identified in the environmental impact report." Cal. Pub. Res. Code. § 21081. "For each significant effect, the EIR must identify specific mitigation measures; where several potential mitigation measures are available, each should be discussed separately, and the reasons for choosing one over the others should be stated." *Lotus*, 223 Cal. App. 4th at 653 (internal citations and quotations omitted).

To comply with CEQA, a mitigation measure must be enforceable and likely to be effective. *See Sierra Club v. Cty. of San Diego*, 231 Cal. App. 4th 1152, 1169 (2014) (finding mitigation measures insufficient where not enforceable and/or not likely to achieve mitigation purposes); *see also* CEQA Guideline § 15126.4(a)(2) ("Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. In the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation, or project design."); *Tracy First v. City of Tracy*, 177 Cal. App. 4th 1, 937 (2009) (citing same). "The purpose of these requirements is to ensure that feasible mitigation measures will actually be implemented as a condition of development, and not merely adopted and then neglected or disregarded." *Fed'n of Hillside & Canyon Associations v. City of Los Angeles*, 83 Cal. App. 4th 1252, 1261 (2000) (emphasis omitted). "[W]here substantial evidence supports the approving agency's conclusion that mitigation measures will be effective, courts will uphold such measures against attacks based on their

alleged inadequacy." *Sacramento Old City*, 229 Cal. App. 3d at 1027 (*citing Laurel Heights*, 47 Cal. 3d at 407). Implementation of measures must occur before the start of the project activity that causes the impact. *POET, LLC v. California Air Res. Bd*., 217 Cal. App. 4th 1214, 740 (2013), *as modified on denial of reh'g* (Aug. 8, 2013).

(2) Draft Technical Information for Preparing Water Transfer Proposals

In the section describing GW-1, the FEIS/R states that the DTIPWTP "provides guidance for the development of groundwater substitution water transfer proposals . . . [and] informs the development of the monitoring and mitigation program for the range of potential transfer activities evaluated in this EIS/ER." AR 25757. Plaintiffs note that GW-1 does not incorporate those requirements by reference into GW-1 itself. *See* ECF No. 45 at 36; AR 25759. Moreover, the DTIPWTP itself states that its purpose is "to help facilitate temporary water transfers (duration of up to 1 year)," and that "multi-year or long-term transfers typically require . . . a more rigorous analysis . . . and . . . may require additional information beyond that specified in this document." AR 76342. In addition, DTIPWTP states that CEQA and NEPA "requirements are not addressed by this technical document." AR 76343. The Authority does not dispute any of these assertions and concedes that the DTIPWTP is merely a "reference" for formulating the independent requirements and guidance of the FIES/R. ECF No. 48 at 27. To the extent the FEIS/R relies on another document as a "reference" in this manner, the FEIS/R must stand on its own in terms of its requirements and performance standards.

(3) Monitoring

When it is uncertain whether a particular impact will occur, an agency may adopt a contingent mitigation measure that will be triggered under certain conditions. *See Save Cuyama Valley v. County of Santa Barbara*, 213 Cal. App. 4th 1059, 1070-71 (2013); *Save Panoche Valley v. San Benito Cnty*., 217 Cal. App. 4th 503, 524-26 (2013). Appropriate monitoring programs will ensure compliance with mitigation obligations. *See City of Hayward v. Cal. State Univ*., 242 Cal. App. 4th 833, 854-55 (2015); *see* CEQA Guidelines § 15091 (when making a finding that "[c]hanges or alterations have been required

in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR . . . the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.").

GW-1's monitoring program requires that at each transfer pumping well "[f]low meter readings will be recorded just prior to initiation of pumping and at designated times, but no less than monthly and as close as practical to the last day of the month, throughout the duration of the transfer." AR 25760. Plaintiffs argue that the FEIS/R fails to provide substantial evidence that this monitoring frequency would avoid significant impacts. In other words, Plaintiffs assert that substantial impacts could occur between monitoring intervals and/or that such infrequent monitoring might not capture day-to-day variations in pumping. ECF No. 45 at 37. Plaintiffs misunderstand how this aspect of GW-1 works. Any transfer "shall be configured with a permanent instantaneous and totalizing flow meter capable of accurately measuring well discharge rates and volumes." AR 25760 (emphasis added). Although no party makes any effort to define this language for the Court, the Court assumes that the plain meaning of the term "totalizing" is pertinent: "to add up; to express as a whole."[42] Accordingly, the frequency of the reading only reflects how often the meter is read, not whether the meter captures variable flow rates. Moreover, any such impacts from the pumping at transfer wells would, presumably, be captured by groundwater level monitoring at those wells and surrounding/nearby monitoring wells. Therefore, the Court does not find error in the FEIS/R's monitoring requirements for pumping well flow rate meters. On this issue, Plaintiffs' motion for summary judgment is DENIED, and the Authority's cross-motions are GRANTED.

GW-1 also requires that monitoring of groundwater levels at both participating transfer wells and

[42] Totalize, Merriam-Webster Online Dictionary, available at: https://www.merriam-webster.com/dictionary/totalize (last visited February 8, 2018).

monitoring wells will occur prior to transfer (at least monthly "where possible"), at the start of transfer (the day of, prior to the pump being turned on), during the transfer period (at least weekly "unless site-specific information indicates a different interval should be used"), and post transfer (weekly for one month, then monthly through March of the year following the transfer). AR 25760. To the extent Plaintiffs suggest that "monthly" monitoring will not capture impacts as a result of groundwater extraction, *see* ECF No. 45 at 37, GW-1 generally requires weekly monitoring during extraction and for a month after. Nothing in the record suggests this is insufficient to recognize impacts in a timely manner. On this issue, Plaintiffs' motion for summary judgment is DENIED, and the Authority's cross-motions are GRANTED.

Plaintiffs do raise a more significant concern with the seemingly open-ended exceptions to the "minimum" monitoring requirements set forth in GW-1, questioning what the FEIS/R means by requiring pre-pumping monitoring on a monthly basis "where possible" and during-pumping monitoring weekly "unless site specific information indicates a different interval should be used." ECF No. 45 at 37. The Authority makes only minimal effort to address this concern, asserting that the monitoring requirements set forth in GW-1 are only "minimum" requirements. *See* ECF No 58 at 11. But the Authority cites documents that merely regurgitate the language of GW-1, which in turn incorporates the above-mentioned exceptions into the minimum requirements. The public is left guessing what these exceptions mean and, critically, the extent to which monitoring might be lessened and under what circumstances. The presence of such open-ended exceptions makes it impossible for the Court to find that the monitoring program is enforceable or will be effective at avoiding potential significant impacts. On this issue, Plaintiffs' motion for summary judgment is GRANTED and the Authority's cross-motion is DENIED.[43]

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[43] The Court is not persuaded by Plaintiffs' related assertion that the FEIS/R suggests monitored data will be provided to the lead agencies only before and after a transfer occurs. *See* ECF No. 45 at 37-38. GW-1 plainly sates that "[a]t a minimum, sellers will provide data summary tables to Reclamation, both during and after transfer-related groundwater pumping." ECF No. 45. The wording of requirements related to final reports does not diminish this relatively clear requirement.

(4) GW-1 Performance Standards

An EIR may not defer the formulation of mitigation measures to a future time, but mitigation measures may instead specify performance standards which would mitigate the project's significant effects and that may be accomplished in more than one specified way. CEQA Guidelines § 15126.4(a)(1)(B). *Sacramento Old City Ass'n*, 229 Cal. App. 3d at 1028-29. Thus, "for [the] kinds of impacts for which mitigation is known to be feasible, but where practical considerations prohibit devising such measures early in the planning process (e.g., at the general plan amendment or rezone stage), the agency can commit itself to eventually devising measures that will satisfy specific performance criteria articulated at the time of project approval." *Defend the Bay v. City of Irvine*, 119 Cal. App. 4th 1261, 1275-76 (2004) (internal quotation and citation omitted). "Impermissible deferral of mitigation measures occurs when an EIR puts off analysis or orders a report without either setting standards or demonstrating how the impact can be mitigated in the manner described in the EIR." *Clover Valley Foundation v. City of Rocklin*, 197 Cal. App. 4th 200, 236 (2011). For example, "[a]n EIR is inadequate if [t]he success or failure of mitigation efforts . . . may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR." *CBE v. Richmond*, 184 Cal. App. 4th 70, 92 (internal citations and quotations omitted); *compare Pres. Wild Santee v. City of Santee*, 210 Cal. App. 4th 260, 281-82 (2012) (EIR providing for post-approval formulation of habitat plan to mitigate impacts to butterfly insufficient where EIR failed to include any performance standards or other measures to demonstrate that project's significant effects would be mitigated) *with Rialto*, 208 Cal. App. 4th at 942 (mitigation measure that included specific performance standards sufficient to ensure potential impact would be mitigated).

Plaintiffs contend that GW-1 unlawfully defers mitigation without setting appropriate performance measures regarding groundwater impacts. ECF No. 45 at 38-39. The FEIS/R explains that changes in groundwater levels are not, viewed in isolation, significant impacts. *See* AR 25679. It is the secondary effects of reduced groundwater levels that are of concern, including, among other things:

"(1) increased groundwater pumping costs due to increased pumping depth; (2) decreased yield from groundwater wells due to reduction in the saturated thickness of the aquifer; or (3) lowered groundwater table elevation to a level below the vegetative root zone, which can result in environmental effects." *Id.*[44] In addition, excessive groundwater extraction can "lower groundwater levels and decrease pore-water pressure" which can result in land subsidence, which, in turn, can, under certain circumstances, be permanent and cause damage to infrastructure, wells, and drainage patterns. *Id.*

Plaintiffs do not seem to take issue with the measures and performance standards in GW-1 pertaining to vegetation (#3 above). Whether or not GW-1 contains sufficient performance standards and monitoring in relation to subsidence is discussed separately below. The remaining two concerns – increased pumping costs and decreased yield – relate to impacts on third parties. Plaintiffs argue that GW-1 fails to include appropriate performance standards to avoid these impacts because, while it relies on BMOs for those areas where BMOs exist, where BMOs do not exist, the articulated procedure amounts to no performance standard at all. ECF No. 45 at 38. In areas where quantitative BMOs do not exist:

> Reclamation, [the Authority], and the potential sellers will coordinate closely with potentially impacted third parties to collect and monitor groundwater data. If a third party expects that it may be impacted by a proposed transfer, that party should contact Reclamation and the seller with its concern. The burden of collecting groundwater data will not be the responsibility of the third party. If warranted, groundwater level monitoring to address the third-party's concern may be incorporated in the monitoring and mitigation plans required by Mitigation Measure GW-1.

AR 25761. Plaintiffs contend that the promise to "coordinate closely" and incorporate additional groundwater monitoring "if warranted" provides absolutely no standards. In response, the Authority argues these "[r]equirements involving third parties are directly linked to satisfying the significance criteria and avoiding effects on other water users." ECF No. 48 at 27. The relevant significance criterion

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[44] As discussed elsewhere in this decision, changes in groundwater levels can impact groundwater quality by, among other things, mobilization of areas of poorer quality water. AR 25698. But, the FEIS/R correctly determined that such impacts are not likely to be significant. AR 25572; *see also supra* Part IV.A.4.c.

classifies an impact as potentially significant if it causes "[a] net reduction in groundwater that would result in substantial adverse environmental effects or effect to non-transferring parties." AR 25702; AR 28035 (clarifying that impacts to non-transferring parties must be substantial to be considered significant).

The Authority cites *Save Cuyama Valley v. Cty. of Santa Barbara*, 213 Cal. App. 4th 1059, 1071 (2013), *as modified* (Feb. 8, 2013), in support of the proposition that sufficient criteria are present. The EIR in *Cuyama Valley* reviewed the impacts of a proposed project to mine gravel from the bed of the Cuyama River. *Id*. at 1062. The EIR identified a number of potential off-site hydrologic impacts from the project. *Id*. at 1064. While the EIR concluded the possible impacts were "expected to be minor" and "appear to be less than significant," the EIR acknowledged "the inherent uncertainty of simulation models and the potential to underestimate hydrological effects." *Id*. at 1065. The EIR accordingly deemed these impacts "potentially significant but mitigatable." *Id*. The EIR then proposed a mitigation measure, which required semi-annual river bottom elevation surveys, submission of the results of those surveys to regulatory officials, and a requirement that should "adverse hydraulic conditions [be] evident, or appear to be developing, which could result in off-site impacts," the project proponent must "confer" with the regulatory agencies "to modify the mining pit layout, width and/or depth to avoid these impacts." *Id*. The plaintiffs in *Cuyama* asserted that the mitigation measure did "not spell out the criteria by which effectiveness will be evaluated." *Id*. at 1071. The Court disagreed, finding that the mitigation measure's command to "avoid these impacts" necessarily referred to the "adverse hydraulic conditions . . . which could result in off-site impacts." *Id*. "Because these impacts are caused by how water flows into and out of the mining pits, measures to reconfigure the orientation of those pits (that is, their layout, width and depth) address those impacts." *Id.*

While the command in *Cuyama Valley* was sufficiently specific because it required avoidance of specific adverse hydraulic conditions and offered measures that could address those conditions and their impacts, Mitigation Measure GW-1 is far less specific in relation to the third party impacts of pumping

costs and decreased yield. What exactly is the impact to be avoided? Although GW-1 generically identifies increased pumping costs and decreased yield as types of impacts to third parties, there is no indication as to when such impacts might be considered "significant." That regulators and sellers will "coordinate closely with potentially impacted third parties to collect and monitor groundwater data. . . . and address the third-party's concern," provides no assurance, for example, that the third party's concerns will be deemed significant enough to require action. *See Endangered Habitats League, Inc. v. Cty. of Orange*, 131 Cal. App. 4th 777, 793-94 (2005) (finding mitigation measure that requires construction to "meet 'exterior and interior noise standards' satisfactory to the manager of the county's building permit division insufficient" because "[n]o criteria or alternatives to be considered are set out. Rather, this mitigation measure does no more than require a report be prepared and followed, or allow approval by a county department without setting any standards."). This case does not present, as the Authority seems to suggest, an EIR with clear performance standards where future monitoring is then relied upon to tailor on the ground measures. *See City of Hayward v. Bd. of Trustees of the California State Univ.*, 242 Cal. App. 4th 833, 855 (2015) (identifying as performance standard the "goal to reduce drive-alone vehicle trips," while permitting project proponent flexibility in designing mitigation measures to reach that goal). While the Authority is correct that CEQA "does not define how specific the performance standards set forth in an EIR must be," *Ctr. for Biological Diversity v. Dep't of Fish & Wildlife*, 234 Cal. App. 4th 214, 242 (2015), it does not permit the situation present here, where performance standards are effectively absent. On this issue, the Court finds Plaintiffs have met their burden of establishing no performance standard exists. As to this issue, Plaintiffs' motion for summary judgment is GRANTED and the Authority's cross-motion is DENIED.

(5) GW-1 Monitoring and Mitigation for Land Subsidence

Plaintiffs next argue that GW-1's monitoring and mitigation related to land subsidence is unlawful under CEQA because it "allows irreversible impacts to occur." ECF No. 45 at 39. The Court interprets this as an argument that GW-1 is not likely to be effective at preventing or alleviating land

subsidence. As discussed above, CEQA requires that mitigation measures be enforceable and likely to be effective. *See Sierra Club*, 231 Cal. App. 4th at 1169 (finding mitigation measures insufficient where not enforceable and/or not likely to achieve mitigation purposes); *see also* CEQA Guideline § 15126.4(a)(2) ("Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments."); *Sacramento Old City*, 229 Cal. App. 3d at 1027 (*citing Laurel Heights*, 47 Cal. 3d at 407) ("[W]here substantial evidence supports the approving agency's conclusion that mitigation measures will be effective, courts will uphold such measures against attacks based on their alleged inadequacy.").

GW-1 requires sellers to examine historic pumping events or groundwater substitution transfers to estimate whether groundwater levels are "likely to decline below historic levels," which would trigger "land surface elevation measurements." AR 25762. More specifically, if, based upon the monitoring discussed above, "the measured groundwater level falls below the historic low level, the seller must confirm the measurement within seven days." *Id.* If by that time the water level has risen above the historic low level, the seller may continue transfer pumping. *Id*. If, however, the "measured groundwater level remains below the historic low level the seller will stop transfer-related pumping immediately or begin land surface elevation measurements in strategic locations within and/or near the transfer-related pumping area." *Id.*

Plaintiffs take issue with two specific aspects of this arrangement. First, they complain that the seven-day delay between initial indications that groundwater levels are dropping below historic levels and the requirement that the seller confirm those measurements "only extends the severity of the impact." ECF No. 45 at 39. In addition, they complain that, upon confirmation that groundwater levels remain below historic levels, the seller may, instead of stopping transfer-related pumping, alternatively "begin land surface elevation measurements in strategic locations." *Id.* This, according to Plaintiffs, "further allows an increase in the severity of any land subsistence occurring." *Id.* Relatedly, "if the land surface elevation survey indicates an elevation decrease between 0.1 foot and 0.2 foot from the initial

measurement," GW-1 indicates that "the seller could have significant impacts and would need to start the process identified below in the Mitigation Plan." AR 25762 (emphasis added). Plaintiffs argue that this "unlawfully allows the Project's significant impacts to begin before implementing any mitigation measure." ECF No. 45 at 39-40.

The Authority responds to all these arguments by asserting that "[l]ike groundwater levels, lowered land-surface elevations are not, of themselves, significant environmental impacts, but may result in significant impacts if they cause permanent loss of aquifer capacity or damage to structures or physical features." ECF No. 48 at 28 (citing AR 25697). GW-1 does contain a relevant threshold that triggers further action:

> If the land surface elevation survey indicates an elevation decrease between 0.1 foot and 0.2 foot from the initial measurement, the seller could have significant impacts and would need to start the process identified below in the Mitigation Plan (Section 3.3.4.1.3). The seller will also work with Reclamation to assess the accuracy of the survey measurements based on current limitations of technology, professional engineering/surveying judgment, and any other data available in or near the transferring area.
>
> The threshold of 0.1 foot was chosen as this value is typical of the elastic (i.e., recoverable) portion of subsidence; the threshold of 0.2 foot was selected considering limitations of current land survey technology. This threshold is supported by a review of data from extensometers within the Sacramento Valley. Figure 3.3-39 shows the subsidence data from extensometer 22N02W15C002M in Glenn County. This extensometer has not been identified as having long-term declining trends, but exhibits a small amount of movement (up to about 0.1 foot).

AR 25762. While Plaintiffs do not appear to challenge the choice of 0.1-0.2 feet of subsidence as a trigger,[45] they do question the nature of the further action that the trigger would "trigger." Instead of requiring specific actions to prevent permanent subsidence, the seller "would need to start the process identified . . . in the Mitigation Plan (Section 3.3.4.1.3)." *Id.* That Mitigation Plan section in turn requires that sellers "must complete and implement a mitigation plan to avoid potentially significant

[45] The choice appears to be supported by substantial evidence pertaining to the amount of subsidence that recovers each winter. *See* AR 25762-63.

groundwater impacts and ensure prompt corrective action in the event unanticipated effects occur." Mitigation actions could include:

> • Curtailment of pumping until natural recharge corrects the issue.
>
> • Lowering of pumping bowls in non-transferring wells affected by transfer pumping.
>
> • Reimbursement for significant increases in pumping costs due to the additional groundwater pumping to support the transfer.
>
> • Curtailment of pumping until water levels rise above historic lows if non-reversible subsidence is detected (based on local data to identify elastic versus inelastic subsidence).
>
> • Reimbursement for modifications to infrastructure that may be affected by non-reversible subsidence.
>
> • Other appropriate actions based on local conditions, as determined by Reclamation.

AR 25764. This menu of options does not impose any particular specific action in the face of subsidence that exceeds the trigger, but this is not required. This mitigation measure in the FEIR/R is not unlike the EIR found to be lawful in *Cuyama Valley*. As mentioned, in *Cuyama Valley*, an EIR was found sufficient where it articulated a performance standard requiring "avoidance" of "adverse hydraulic conditions" that could cause off-site impacts and required that should "adverse hydraulic conditions [be] evident, or appear to be developing, which could result in off-site impacts," the project proponent must "confer" with the regulatory agencies "to modify the mining pit layout, width and/or depth to avoid these impacts." 213 Cal. App. 4th at 1065, 1071. The *Cuyama Valley* court found it significant that measures to reconfigure the orientation of those pits would address those impacts. *Id.* at 1071.

Read in its entirety, the Court interprets GW-1 as requiring sellers to "avoid potentially significant groundwater impacts" including "non-reversible subsidence" and "ensure prompt corrective action in the event unanticipated effects occur." AR 25764. Likewise, here, the menu of options includes measures (e.g., suspending pumping) that will curtail non-reversible subsidence and correct damage to infrastructure caused by subsidence. The Court finds that the FEIS/R complies with CEQA insofar as it

does not fail to spell out the criteria by which its effectiveness will be avoided: avoiding non-reversible subsidence. It is not impermissible for the Authority to use a mechanism that requires monitoring for reversible subsidence and then curtails or modifies activities to halt the impact.

Plaintiffs are correct that GW-1 may allow a certain amount of irreversible subsidence to occur before mitigation procedures are triggered. But the Court cannot identify any authority suggesting this is per se unlawful, so long as the mitigation measures overall reduce the impact to less than significant. As to the specific argument that GW-1 is unlawful for failing to identify performance standard, Plaintiffs' motion for summary judgment is DENIED and the Authority's motion is GRANTED.

Plaintiffs separately raise a number of arguments all going to the question of whether the record supports a finding that the measures associated with land subsidence in GW-1 will be effective. ECF No. 45 at 41-42. Plaintiffs criticize the monitoring frequency for subsidence-related impacts. Specifically, whenever measured groundwater levels remain below the historic low level, the seller "will stop transfer-related pumping or begin land surface elevation measurements in strategic locations within and/or near the transfer related-pumping area . . . . on a monthly basis during the transfer." AR 25762 (emphasis added). The Authority rejoins by citing record evidence that groundwater flows more slowly than surface water, because groundwater flows through porous media rather than in open channels. *See* ECF No. 48 at 24-25. Specifically, groundwater flows at a "very slow rate, usually less than 1,000 feet per year because of the great amount of friction resulting from movement through the spaces between grains of sand and gravel." AR 74372. In addition, the Authority argues that "[m]ore frequent measurements would serve no purpose because subsidence generally occurs in small increments, and shorter intervals would not be expected to provide reliable data outside the margin of error." ECF No. 58 at 12-13. The record indicates "[s]ubsidence generally occurs in small increments during dry years when groundwater pumping lowers groundwater levels below historical lows in areas that are geologically susceptible because they have compressible clays." AR 25667. Plaintiffs fail to cite any record evidence to suggest that the movement of groundwater (or any other aspect of the subsidence) would warrant

more than monthly monitoring. Taking all of this together, the record supports the FEIS/R's implied conclusion that monthly monitoring of subsidence is sufficient. Accordingly, on this issue, Plaintiffs' motion for summary judgment is DENIED and the Authority's cross- motion GRANTED.

Plaintiffs next challenge a number of specific aspects the mitigation approach set forth in of GW-1 "Stage 3":

> *Stage 3: Local Investigation*
>
> If the threshold of 0.2 foot of ground surface elevation change is exceeded, the seller shall cease groundwater substitution pumping for the transfer until one of the following occurs: (1) groundwater levels recover above historic low groundwater levels; (2) seller completes a more detailed local investigation identifying hydrogeologic conditions that could potentially allow continued transfer-related pumping from a subset of wells (if the seller can provide evidence that this pumping is not expected to cause additional subsidence); or (3) seller completes an investigation of local infrastructure that could be affected by subsidence (such as water delivery infrastructure, water supply facilities, flood protection facilities, highways etc.) indicating the local threshold of subsidence that could be experienced before these facilities would be adversely affected. Any option should also consider the effect of non-transfer pumping that may be causing subsidence.

AR 25766. Plaintiffs complain that item 1 in the above paragraph "simply does not mitigate land subsidence at all, as groundwater levels could have recovered due to any number of reasons, even where land elevations have not. Moreover, the mitigation measure fails to provide direction to the seller if groundwater level[s] never recover." ECF No. 45 at 42. This ignores the record evidence discussed above indicating that subsidence is caused by groundwater withdrawal and irreversible subsidence is not irreversible if it does not exceed the threshold levels.

According to Plaintiffs, the second element is ineffective because it "provides no criteria by which the agencies would make this determination to allow groundwater pumping to continue even where groundwater levels have dropped to below historic lows, and land surface elevations have been measured to appreciably drop." ECF No. 45 at 42. This is an overly cramped reading of the second element, which permits it to operate as an exception to the prohibition against further pumping only if

"the seller can provide evidence that this pumping is not expected to cause additional subsidence." AR 25766. This provides a criterion: no additional subsidence.

Finally, Plaintiffs complain that the third element "impermissibly prioritizes 'infrastructure,' such as the transferring agencies' own 'water supply facilities,' above physical environmental features not considered, such as local residences, or the capacity of the aquifer itself, impacts to which GW-1 is silent." ECF No. 45 at 42. On this point, the Court agrees. The use of the operative "or" in the paragraph quoted above indicates that a seller may resume pumping if it satisfies any of the three factors. Therefore, this paragraph indeed suggests that if a seller is able to demonstrate that subsidence would not exceed "the local threshold of subsidence[46] that could be experienced before these facilities would be adversely affected," the seller may continue to pump even though there might be other, non-infrastructure related impacts, such as impacts to aquifer capacity. AR 25697. This creates an unlawful loophole in the mitigation plan that would permit impacts to occur. As to this issue, Plaintiffs' motion for summary judgment is GRANTED and the Authority's cross-motion is DENIED.

(6) Re-Circulation in Light of New Information Regarding GW-1

Plaintiffs assert that the FEIS/R should have been re-circulated in light of the fact that the final version of GW-1 added several new components (including the above-mentioned reliance on BMOs) to the mitigation measure after comments on the Draft of GW-1 requested additional detail to enable meaningful evaluation of the viability and effectiveness of the mitigation plan. *See* ECF No. 45 at 43 (citing AR 27454).

As discussed above, if a CEQA lead agency adds "significant new information" to an EIR

[46] The Court is not persuaded by Plaintiffs' separate argument that GW-1 is unlawful because it "fails to provide any criteria or performance standards to guide how [the] determination of the ["local threshold of significance"] will be made." ECF No. 45 at 42. Plaintiffs express concern that it is infeasible for groundwater sellers to make such technical determinations and that the process impermissibly defers to them the formulation of a performance standard. *Id*. The Court does not agree. The language in question calls for a technical determination of how much subsidence local infrastructure can tolerate and places the burden of proving that tolerance upon the sellers. If sellers cannot acquire the relevant expertise to demonstrate to the regulators' satisfaction that subsidence can be tolerated, they cannot take advantage of this exception. Such judgments of sufficiency are exactly the kind of technical matters the law leaves up to the regulating agencies. *See Laurel Heights*, 47 Cal. 3d at 393 ("A court's task is not to weigh conflicting evidence and determine who has the better argument when the dispute is whether adverse effects have been mitigated or could be better mitigated.").

subsequent to the close of the public comment period but prior to certification of the final EIR, CEQA requires that the lead agency provide a new public comment period. Cal. Pub. Res. Code § 21092.1.

> (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
>
> (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
>
> (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.
>
> (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

CEQA Guidelines § 15088.5(a)(emphasis added). "Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR." *Id.* at § 15088.5(b).

Here, Plaintiffs argument fails to trigger the legal standard. Nowhere do they demonstrate that use of BMOs as the operative performance standard (where BMO's exist) is problematic in any way. (This is unlike their separate argument above, that complains of how GW-1 operates in circumstances where BMOs are not present.) While Plaintiffs point out that some commenters raised "serious concerns" about whether "the disparate BMOs are effective mitigation measures," Plaintiffs fail to provide support for any such "serious concerns" and therefore fail to establish that the inclusion of BMOs as triggers in the FEIS/R raised any "significant new information."

Plaintiffs' motion on this ground is DENIED; the Authority's cross-motion is GRANTED.

c. CEQA Challenges to Mitigation Measure WS-1

The FEIS/R evaluated whether the Project would impact surface water supplies and concluded that "[g]roundwater substitution transfers could decrease flows in neighboring surface water bodies following a transfer while groundwater basins recharge, which could decrease pumping at Jones and

Banks Pumping Plants and or require additional water releases from upstream CVP reservoirs." AR 25519. The FEIS/R explains that some of the groundwater recharge "would occur during periods when there is higher flow in waterways," and that "[d]uring these times although the recharge would decrease flows in the waterways, the decreased flows would not affect water supplies or the ability to meet flow or quality standards." AR 25520. "However if the recharge occurs during dry periods, then the recharge would decrease river flows at times when it would affect Reclamation and DWR," because "Reclamation and DWR are responsible for meeting river flow and water quality standards on the Sacramento River, its tributaries, and within the Delta." *Id.* "If decreased river flows affect the ability to meet these standards, Reclamation and DWR would need to either decrease Delta exports or release additional flow from upstream reservoirs to meet flow or water quality standards." *Id*. While transfers would not impact whether water flow or water quality standards are met, "the actions taken by Reclamation and DWR to meet these standards because of instream flow reductions due to the groundwater recharge could affect CVP and SWP water supplies." *Id*. In sum, while the impacts to water supplies as a result of streamflow depletion would be small on average, "the greater depletion in some years could have a potentially significant effect on water supply." AR 25522.

To reduce these effects, WS-1 imposes a streamflow depletion factor "to be incorporated into transfers to account for the potential water supply impacts to the CVP and SWP." *Id*. As briefly discussed above, WS-1 mandates that a streamflow depletion factor will be applied to transfers "to mitigate potential water supply impacts from the additional groundwater pumping due to groundwater substitution transfers." AR 25526. "The streamflow depletion factor equates to a percentage of the total groundwater substitution transfer that will not be credited to the transferor and is intended to offset the streamflow effects of the added groundwater pumping due to transfer. *Id*. "The exact percentage of the streamflow depletion factor will be assessed and determined on a regular basis by Reclamation and DWR in consultation with buyers and sellers based on the best technical information available at that time. The percentage will be determined based on hydrologic conditions, groundwater and surface water

modeling, monitoring information and past transfer data," but will never be less than 13 percent. AR 25526-27. "The streamflow depletion factor may not change every year but will be refined as new information becomes available and may become more site specific as better data and groundwater modeling becomes available." AR 25526. "Reclamation and DWR require the imposition of a streamflow depletion factor because they will not move transfer water if doing so will violate the no injury rule. This process to evaluate and determine the streamflow depletion factor will help verify that the factor reduces potential impacts to avoid legal injury to CVP or SWP water supplies and a substantial impact or injury." AR 25526-27.

Plaintiff argues that WS-1 unlawfully defers mitigation without articulating a clear performance standard. The Court disagrees. The streamflow depletion factor is a performance standard designed to avoid significant impacts. While Plaintiffs argue that it is inappropriate to apply one streamflow depletion factor to multiple areas, they do not explain how 13 percent is insufficient for any particular area or set of conditions. Plaintiffs acknowledge that WS-1 delineates a "minimum value" of 13 percent for the streamflow depletion factor, but complain that WS-1 "also admits that the specific value will be identified at a later time, based on information not currently available to the agencies." ECF No. 45 at 44. However, the plain language of WS-1, as confirmed by the Authority, *see* ECF No. 48 at 30,[47] indicates the 13 percent minimum streamflow depletion factor is a minimum value. Plaintiffs fail to explain how later modifications of that value to increase the streamflow depletion factor undermines WS-1 or its performance standard. The Court will not manufacture an argument where there is none.

As to this issue, Plaintiffs' motion for summary judgment is DENIED and the Authority's cross-motion is GRANTED.

d. NEPA Challenge to Mitigation Measures

NEPA and its implementing regulations also require agencies to consider mitigation measures

[47] There is no support for Plaintiffs' suggestion that the Authority offers no rebuttal to its motion regarding WS-1. *See* ECF No. 51.

before approving a major agency action. 42 U.S.C. § 4332(C)(ii) (EIS must include a detailed statement on "any adverse environmental effects which cannot be avoided should the proposal be implemented") (emphasis added); 40 C.F.R. § 1502.14 (requiring EIS alternatives analysis to include "appropriate mitigation measures not already included in the proposed action or alternatives"). "Implicit in NEPA's demand that an agency prepare a detailed statement on 'any adverse environmental effects which cannot be avoided should the proposal be implemented,' is an understanding that the EIS will discuss the extent to which adverse effects can be avoided." *Methow Valley*, 490 U.S. at 351-52 (quoting 42 U.S.C. § 4332(2)(C)(ii)). NEPA does not contain, however, "a substantive requirement that a complete mitigation plan be actually formulated and adopted." *Id*. at 352. Such a requirement "would be inconsistent with NEPA's reliance on procedural mechanisms." *Id*. at 353.

Plaintiffs rely on *South Fork Band Council of Western Shoshone of Nevada v. U.S. Dep't of Interior*, 588 F.3d 718, 727 (9th Cir. 2009), to argue that the FEIS/R violated NEPA by failing to analyze the effectiveness of GW-1. The plaintiffs in *South Fork* challenged the Bureau of Land Management's ("BLM") approval of a mining project on federal land. 588 F.3d at 721. Among other things, the EIS in that case conceded that the mining project would cause significant impacts to groundwater, resulting in the drying up of local springs and streams. *Id*. at 727. The plaintiffs argued that BLM failed to conduct an appropriate mitigation analysis in connection with this dewatering impact. *Id*. at 726-27. Citing *Methow Valley*, the Ninth Circuit reasoned that "[t]hough NEPA . . . does not require that these harms actually be mitigated, it does require that an EIS discuss mitigation measures, with 'sufficient detail to ensure that environmental consequences have been fairly evaluated.'" *Id*. at 727 (quoting *Methow Valley*, 490 U.S. at 352). *South Fork* made it clear that "[a]n essential component of a reasonably complete mitigation discussion is an assessment of whether the proposed mitigation measures can be effective." *Id*. (*comparing Neighbors of Cuddy Mountain v. U.S. Forest Service*, 137 F.3d 1372, 1381 (9th Cir. 1998) (disapproving an EIS that lacked such an assessment) *with Okanogan Highlands Alliance v. Williams*, 236 F.3d 468, 477 (9th Cir. 2000)

(upholding an EIS where "[e]ach mitigating process was evaluated separately and given an effectiveness rating")). Again referencing *Methow Valley*, *South Fork* concluded: "[a] mitigation discussion without at least some evaluation of effectiveness is useless in making that determination." *Id*.; *see also Protect Our Communities Found. v. Jewell*, 825 F.3d 571, 582 (9th Cir. 2016) (quoting with approval *S. Fork* for the proposition that an agency must provide "an assessment of whether the proposed mitigation measures can be effective . . . [and] whether anticipated environmental impacts can be avoided). Applying those parameters, the Ninth Circuit rejected the EIS for the mining project, finding it did not "assess the effectiveness of the mitigation measures relating to groundwater." *S. Fork*, 588 F.3d at 727. Rather the EIS only stated: "[f]easibility and success of mitigation would depend on site-specific conditions and details of the mitigation plan." *Id*. Critically, "[n]othing whatsoever [was] said about whether the anticipated harms could be avoided by any of the listed mitigation measures." *Id*.

The BLM argued that an effectiveness discussion was not required because it was "impossible to predict the precise location and extent of groundwater reduction, and that problems should instead be identified and addressed as they arise." *Id*. The Ninth Circuit rejected this argument, reasoning: "NEPA requires that a hard look be taken, if possible, before the environmentally harmful actions are put into effect." *Id*. (internal citation omitted). Given that the EIS conceded that a large number of perennial springs and creeks would likely dry up as a result of the project, the fact that the specific identity of impacted streams and seeps could not be conclusively determined in advance due to limited understanding of the relevant hydrology did not excuse the agency from discussing "mitigation of reasonably likely impacts at the outset." *Id*. "Even if the discussion must necessarily be tentative or contingent, NEPA requires that the agency give some sense of whether the drying up of these water resources could be avoided." *Id*.

Federal Defendants attempt to distinguish *South Fork*, by arguing that, unlike the EIS in *South Fork*, the FEIS/R here does not concede any significant impacts are likely to occur. Federal Defendants cite AR 25758 in support of this factual assertion. The relevant language on that page states:

> Groundwater substitution transfers under the Proposed Action could decrease groundwater levels potentially affecting non-transferring wells near participating substitution wells. Declining groundwater levels could also affect land subsidence and groundwater quality; however, these effects would be less than significant. Cropland idling transfers under the Proposed Action could reduce percolation to groundwater, but the reduction would be small because rice (the main crop proposed for idling) is typically grown on soils with low permeability. Potential effects on groundwater resources in the Seller Service Area under Proposed Action would be greater than the No Action/No Project Alternative. These effects could be reduced by Mitigation Measure GW-1 (Section 3.3.4.1).

AR 25758. Notably, this text does not indicate that groundwater impacts would be insignificant in all respects. In fact, Table 3.3-9 on the immediately preceding page indicates that "[g]roundwater substitution transfers could cause a reduction in groundwater levels in the Seller Service Area" that would be significant. AR 25757. The Court cannot comprehend how Federal Defendants could read these pages of the AR and conclude that the "agencies determined that effects caused by groundwater substitution would be less than significant" prior to mitigation. ECF No. 49-1 at 21 (citing AR 25758).

The Court is then left to determine the extent to which effectiveness must be evaluated explicitly in an EIS. The district court in *Wilderness Society v. U.S. Bureau of Land Mgmt.*, 822 F. Supp. 2d 933, 940-41 (D. Ariz. 2011), *aff'd sub nom. Wilderness Soc. v. Bureau of Land Mgmt.*, 526 F. App'x 790 (9th Cir. 2013), reviewed several relevant cases, exploring how much analysis of mitigation was required relative to the predicted impacts of the project. For example, *Robertson* held that proposed mitigation measures could not be "deemed overly vague or underdeveloped" when the EIS revealed minimal impacts that could be "easily mitigated." 490 U.S. at 357-58. In *Neighbors of Cuddy Mountain*, the Ninth Circuit rejected a U.S. Forest Service EIS because it appeared that "the Forest Service did not even consider mitigating measures for the creeks actually affected by the [timber] sale." 137 F.3d at 1381.

> It is also not clear whether any mitigating measures would in fact be adopted. Nor has the Forest Service provided an estimate of how effective the mitigation measures would be if adopted, or given a reasoned explanation as to why such an estimate is not possible. The Forest Service's own experts suggest that the mitigation measures suggested by

> the Forest Service "are not mitigation and are so general that it would be impossible to determine where, how, and when they would be used and how effective they would be."

Id. at 1381 (quoting the administrative record).

In contrast, in *Okanogan*, the Ninth Circuit found that the Forest Service did take a "hard look" at the environmental effects and mitigating measures. 236 F.3d at 476. The EIS in that case predicted that the environmental effects from a mine on groundwater would be minimal, nonetheless required extensive monitoring. *Id*. The EIS then proposed several ways to prevent mine operations from affecting water quality. *Id*. If those measures proved unsuccessful, the EIS provided a process for achieving compliance with water-quality standards. *Id*. at 476-77. Similar processes were described for other potential impacts. Critically, "[e]ach mitigating process was evaluated separately and given an effectiveness rating." *Id*. at 477. Accordingly, while "the mitigating measures are described in general terms and rely on general processes, not on specific substantive requirement," this approach was appropriate because, in the face of uncertain impacts, the EIS set up a "procedure to determine [whether] specific mitigation or treatment, if any, is required." *Id*. (record citation omitted in original). The EIS also required deposit of a "performance security," assuming that treatment of discharged water would be necessary. *Id*. In sum, "[b]ecause the actual adverse effects are uncertain, and the EIS considered extensively the potential effects and mitigation processes," the Ninth Circuit concluded that the *Okanogan* was "closer to *Methow Valley*" and therefore found the discussion of mitigating measures in the EIS adequate. *Id*.

After considering the cases above, the district court in *Wilderness Society* adopted a flexible rule articulated in *Okanogan*: the difference between adequate and inadequate mitigation discussions "appears to be one of degree." *Wilderness Society*, 822 F. Supp. 2d at 941. This malleable standard is mirrored in *Methow Valley*'s requirement that "mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated." 490 U.S. at 353; *see also City of Carmel-By-The-Sea v. U.S. Dep't of Transp*., 123 F.3d 1142, 1172 (9th Cir. 1997) (citing same); *Alaska Survival v.*

Surface Transp. Bd., 705 F.3d 1073, 1088 (9th Cir. 2013) ("Perfunctory descriptions or mere lists of mitigation measures are insufficient."). The Court finds it appropriate to apply this standard here.

No case provides a perfect analogy to aid in the application of these standards. Nonetheless, in light of all the authorities discussed above, the Court concludes it has no choice but to find a NEPA violation here because the FEIS/R does not contain any evaluation of the effectiveness of mitigation measure GW-1, and the parties have not directed the Court's attention to any other record document that does so in the FEIS/R's stead.[48] This is particularly troubling in the context of an FEIS/R that finds at least one groundwater impact to be potentially significant and then relies upon GW-1 to reduce that impact. *See* AR 25757.[49] Plaintiffs' motion for summary judgment that the FEIS/R violates NEPA because it fails to evaluate the effectiveness of the GW-1 is GRANTED; Federal Defendants' cross-motion is DENIED.

6. Alternatives Analysis (NEPA)

Plaintiffs next challenge the FEIS/R's selection of alternatives for examination. This challenge is brought under NEPA against Reclamation only. *See* ECF No. 45 at 45-49 (discussing only Reclamation's actions and NEPA authorities). NEPA requires the action agency to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves

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[48] In this way, the present case is distinguishable from *Gaule v. Meade*, 402 F. Supp. 2d 1078 (D. Alaska 2005), upon which Federal Defendants rely for the proposition that a discussion of effectiveness is not required under NEPA. In that case, the Forest Service evaluated the environmental impacts of issuing a permit to a heli-ski operation in an Alaskan National Forest. *Id*. at 1080. Although the EIS in that case contained only a very brief discussion of mitigation, *id*. at 1085-86, the EIS did contain a discussion of why certain measures were chosen, a discussion the district court concluded "[went] to the probable effectiveness of the mitigation measures." *Id*. at 1087. Here, although it is relatively clear why certain mitigation measures were chosen (e.g., curtailment of pumping is a mitigation measure designed to avoid irreversible subsidence should certain monitoring triggers be exceeded), the "probable effectiveness" of mitigation measures designed to avoid impacts to third parties remains unclear.

[49] Federal Defendants make a separate attempt to divert Plaintiffs' NEPA challenge by focusing on the undisputed legal principle that NEPA permits a mitigation plan to rely on ongoing monitoring. *See Protect Our Communities Found. v. Jewell*, 825 F.3d 571, 582 (9th Cir. 2016) (approving of mitigation measures that rely on continuous monitoring to complement other mitigation measures). It is true that "a mitigation plan need not be legally enforceable, funded or even in final form to comply with NEPA's procedural requirements." *Nat'l Parks & Conservation Ass'n v. U.S. Dep't of Transp*., 222 F.3d 677, 681 n. 4 (9th Cir. 2000); *Laguna Greenbelt, Inc. v. United States Dep't of Transp*., 42 F.3d 517, 528 (9th Cir. 1994) (NEPA does not require a fully developed plan that will mitigate all environmental harm before an agency may act). But, Plaintiffs clearly describe their NEPA mitigation challenge as an attempt not to impose a substantive mitigation requirement, but rather to enforce "NEPA's procedural requirement that an agency evaluate the effectiveness of the mitigation it proposes." ECF No. 51 at 22. This the agency has not done.

unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E). This "alternatives provision" requires the agency to give full and meaningful consideration to all reasonable alternatives. *Native Ecosystems*, 428 F.3d at 1245. Agencies shall "rigorously explore and objectively evaluate all the reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." 40 C.F.R. § 1502.14(a). Department of the Interior NEPA procedures define reasonable alternatives as "alternatives that are technically and economically practical or feasible and meet the purpose and need of the proposed action." 43 C.F.R. § 46.420(b). "The existence of a viable but unexamined alternative renders an [EIS] inadequate." *Western Watersheds Project v. Abbey*, 719 F.3d 1035, 1050 (9th Cir. 2013) (internal citations and quotations omitted).

The FEIS/R screened a large number of possible alternatives based on "their ability to meet key elements of the purpose and need/basic project objectives" by reference to the following factors:

> • Immediate: the term proposed for this EIS/EIR is 2015 through 2024. This period is relatively short, and measures need to be able to provide some measurable benefit within this time period.
>
> • Flexible: project participants need water in some years, but not in others. They need measures that have the flexibility to be used only when needed.
>
> • Provide Substantial Water: project participants need measures that have the capability of providing additional water to regions that are experiencing shortages.

AR 26364. Alternatives were required "to meet these three criteria to move forward for further evaluation." *Id*.

a. Buyer Service Area Conservation Alternative

Plaintiffs first take issue with the treatment of an alternative that would have required buyer service area ("BSA") conservation. *See* ECF No. 45 at 45-47. Of Plaintiffs' several arguments on this issue, the most persuasive is that the FEIS/R treats conservation in the BSA differently than conservation in the seller service areas upstream of the delta. An alternative including BSA conservation

was rejected from consideration based upon the following reasoning.

> . . . CVP contractors currently implement [agricultural water use efficiency ("WUE") best management practices ("BMPs")], as required by CVPIA Section 3405(e). Reclamation also supports WUE through the WaterSMART program. This [alternative] proposes additional WUE to existing and proposed plans. As part of the existing plans, CVP contractors have already implemented (or are currently implementing) WUE measures. Additional measures would generally require substantial infrastructure and investment and would not be immediately implementable. Flexibility depends on how the measures are implemented; WUE could be flexible, but the flexibility decreases when the measures are implemented for permanent crops.
>
> The purpose and need for water transfers is to provide additional water to reduce shortages. Buyers are taking actions to address shortages, such as WUE measures, within the No Action/No Project, and these measures would help users accommodate shortages but would not provide any additional supply. Implementing agricultural WUE in the Buyer Service Area would not provide water to users with existing demands affected by CVP shortages.

AR 26379-80. Based upon this analysis, this alternative was rejected because its benefits would not be immediate and would not provide substantial water. AR 26379.

In the very next paragraph, the FEIS/R screens an alternative that would require conservation in the seller service areas upstream of the Delta:

> This measure would be both immediate and flexible upstream from the Delta for measures such as weed control. Agricultural WUE practices can be implemented relatively quickly. Sellers would need to prove that water saved is irrecoverable and reduces a beneficial use. Water could then be sold to buyers. Buyers could call on the transfer annually as needed. Transfer water would provide water to existing demands in the Buyer Service Area to reduce potential shortages.

AR 26380. This alternative passed the screening process for further evaluation with a finding that the benefits would be immediate and would create substantial water. *Id*. Plaintiffs take issue with this apparent disparate treatment of water conservation as a source of supply. *See* ECF No. 45 at 46. Federal Defendants argue that the EIS explained this distinction by indicating that "immediately implementable conservation methods are already being used in the [BSA] and thus there is no room for more water saving this way." ECF No. 59 at 7. NEPA only requires a brief discussion of why an alternative is

eliminated, but even that brief discussion must be rational and supported by some information in the record. *Cf. Wyoming v. U.S. Dep't of Agric.*, 661 F.3d 1209, 1245 (10th Cir. 2011) (finding agency's rejection of an alternative to be reasonable and supported by record evidence).

Here, the record only partially supports Federal Defendants' assertion. The FEIS/R explains that Reclamation already requires CVP contractors in the BSA to "implement cost-effective [best management practices] to manage water use" and explains that an alternative that would increase BSA water use efficiency would need to do so by increasing efficiency "above current and proposed practices identified in the water management plans." AR 26365. However, the Court cannot identify and the parties have not pointed to record evidence distinguishing the efficiency/conservation status of the seller agencies. In fact, some evidence suggests seller agencies may struggle to improve efficiency in a meaningful way. For example, several of the seller agencies hold Sacramento River Settlement Contracts. AR 25509. An environmental document prepared in connection with the renewal of those Settlement Contracts indicates that "many water conservation measures that could be taken on the Sacramento River have only limited economic practicality. Many [Sacramento River Settlement Contractors] have indicated that they cannot implement additional conservation without substantial (or perhaps total) outside funding." AR 62674. The citations provided by Federal Defendants are simply too generic to establish a valid distinction in terms of water use efficiency. *See* ECF No. 59 at 7 (citing AR 26379 (indicating contractors in BSA "have already implemented (or are currently implementing) [water use efficiency] measures," but providing no basis for comparison with upstream of delta (seller) agencies/contractors); AR 26365 (same); AR 27977 (same)).

The decision to reject the BSA conservation alternative could, alternatively, be justified by the FEIS/R's conclusion that such an alternative would not satisfy the Project's stated purposed and need because it would not provide an "immediate benefit." As quoted above, the FEIS/R defines the immediacy criteria as follows: "Immediate: the term proposed for this EIS/EIR is 2015 through 2024. This period is relatively short, and measures need to be able to provide some measurable benefit within

this time period." Plaintiffs suggest that a component would satisfy the immediacy requirement if it provided some benefit by 2024, and argue that "[i]t defies common sense to claim that no conservation measures could be implemented in 10 years. Without more information, [Reclamation] has utterly failed to demonstrate that no additional conservation measures could be implemented in the BSA that would provide "some measureable benefit by [the time period of 2015-2024]." ECF No. 45 at 46. While Federal Defendants assert in reply that "because immediately implementable conservation methods are already being used in the buyer service area . . . there is no room for more water saving this way." ECF No. 59 at 7. But, again, the record does not fully support this assertion. The FEIS/R indicates that BSA "Districts and farmers would need to identify and invest in additional district-level or on-farm practices to improve irrigation efficiencies," AR 26365, and that "[a]dditional measures would generally require substantial infrastructure and investment and would not be immediately implementable," AR 26379, but nowhere does the record provide information to support the proposition that further improvements in BSA efficiency would not be possible within the timeframe of the Project. Again, the record citations do not support such a conclusion, especially in light of the contrary conclusion reached regarding the potential for seller efficiency gains.

The third screening criterion screened for measures "that have the capability of providing additional water to regions that are experiencing shortages." AR 26379. According to the screening protocol, if a measure did not meet a criterion, it was screened out from further consideration. *Id*. The FEIS/R independently supports its rejection of the BSA conservation alternative by concluding that such an alternative would not "provide substantial water," because it "would not provide any additional supply." AR 26380. Plaintiffs do not argue that the "provide substantial water" criterion itself or the screening protocol is unlawful. Rather, they argue that "other measures that advanced to the Project Alternative stage were not required to individually satisfy all CPV shortages. (AR 26382) (noting that Groundwater Substitution would allow water transfers that would "reduce potential shortages."); AR 26384 (discussing fact that reservoir releases "could reduce potential CVP shortages.")." ECF No. 45 at

47. This is an overly cramped view of the record. The "provide substantial water" criterion explained that "project participants need measures that have the capability of providing additional water to regions that are experiencing shortages." AR 26379. The other measures to which Plaintiffs refer were found to satisfy this criterion (and the other two). For example, groundwater substitution would permit surface water to be transferred to the BSA. AR 26382. The reservoir release alternative would do the same, because it would involve release by sellers of water stored in upstream non-CVP reservoirs "for transfer through the Delta to the [BSA]." AR 26384. Plaintiffs have failed to demonstrate that the inclusion of the "provide substantial water" criterion is improper or was improperly applied. Accordingly, Plaintiffs' motion for summary judgment that an alternative requiring BSA conservation was improperly rejected is DENIED; Federal Defendants' cross-motion is GRANTED.

b. Buyer Area Transfers Alternative

Plaintiffs next challenge the FEIS/R's treatment of an alternative that would have included transfers solely within the BSA. ECF No. 45 at 47. The FEIS/R declined to consider this alternative, claiming that additional transfers within the BSA would not provide substantial water because "[e]ven after in-basin transfers occur, CVP contractors continue to face shortages." AR 26384. Again, Plaintiffs argue that the treatment of the BSA transfers alternative was inconsistent with the way other alternatives were treated in the FEIS/R. Specifically, an alternative that would involve sellers using groundwater substitution in lieu of surface water passed the screening stage because the FEIS/R found it would "provide substantial amounts of water for local irrigators and allow for CVP water to be transferred to the Buyer Service Area to reduce potential shortages." AR 026382. Similarly, an alternative that would have called upon seller agencies upstream of the Delta to release water from local (non-CVP) reservoirs passed the screening phase because this would produce water that "would not have otherwise been released downstream," and would therefore "provide water to reduce potential CVP shortages." AR 26384.

The Court does not find an internal inconsistency here. The FEIS/R explained that the "provision

of substantial water" criterion was designed to confirm a measure's "capability of providing additional water to regions that are experiencing shortages." AR 26364. The record indicates that agencies in the BSA experience the most severe water constraints due to shortages. AR 25427 ("Water shortages lead to severe water constraints especially in the southern portion of the CVP."); AR 25556 ("Under the No Action/No Project Alternative, significant water shortages are anticipated in the [BSA]."). This fact provides sufficient basis to distinguish measures that would produce water in the seller areas from those that would produce water in the buyer areas. Plaintiffs' motion for summary judgment is DENIED on this ground; Federal Defendants' cross-motion is GRANTED.

c. Land Retirement Alternative

Plaintiffs also challenge the FEIS/R's elimination of an alternative that included land retirement in the BSA. ECF No. 45 at 47. The FEIS/R considered but eliminated such an alternative because it did not comply with the project's purpose as follows:

> Under the San Luis Drainage Feature Re-evaluation, Reclamation is working to retire 194,000 acres of drainage impaired farmland. Irrigation water for retired lands will be distributed to other lands in the San Luis Unit. This [alternative] measure proposes to retire additional land above the 194,000 acres. Identifying and negotiating land retirement agreements with willing landowners would take several years to implement. This measure is not flexible because land would go out of irrigated agricultural production permanently. Further, land retirement does not provide additional water to address basin-wide CVP shortages, but rather provides a way for users to address shortages in the No Action/No Project Alternative.

AR 26382; *see also* AR 27586 (land retirement alternative "not carried forward for more detailed analysis because it did not meet the key elements of the purpose and need or basic project objectives as it would not be immediate or flexible, and would not provide additional water").

As with the BSA conservation alternative, Plaintiffs complain, among other things, that Reclamation has failed to justify the FEIS/R's finding that this alternative fails to satisfy the "provide substantial water" requirement. They argue that the "position that retiring land will not provide water" is "baffling," particularly in light of the fact that the FEIS/R finds that land retirement in the seller area

does provide water. ECF No. 45 at 48 (citing AR 26382). Again, Plaintiffs' real concern here is with the definition of the Project itself. The Project proponents have defined the Project as one designed to bring additional water from the seller service areas to the BSA. Plaintiffs have failed to identify anything unlawful about this Project definition, nor with the specific criterion which embodies this purpose. Absent such an argument, the Court cannot find the alternatives analysis unlawful. Plaintiffs' motion for summary judgment is DENIED on this ground; Federal Defendants' cross-motion is GRANTED. Because this basis, standing alone, is sufficient to support the FEIS/R's refusal to subject this alternative to further analysis, the Court declines to address Plaintiffs' other arguments regarding this alternative.

d. Alternative that Excluded Reservoir Releases

As mentioned, the FEIS/R did consider an alternative that would have called upon seller agencies upstream of the Delta to release water from local (non-CVP), reservoirs for transfer through the Delta to the BSA. AR 26384. At least one third party commenter requested that the FEIS/R consider another alternative that would have included all other water supply source concepts except reservoir releases, "so reservoir release impacts from the water transfers could have been identified, characterized, quantified and disclosed." AR 27587. Plaintiffs complain that the FEIS/R failed to provide any justification for its decision not to evaluate this alternative. Plaintiffs point out that Alternative 3 eliminated crop modification and Alternative 4 eliminated groundwater substitution, allowing for the analytical isolation of the effects of these sources of water. AR 25452. However, the FEIS/R gives some explanation for why it might not be necessary to create an alternative that selectively eliminated each water source scheme. As the FEIS/R explains, the Alternatives "mix and match" elements so that the analysis would allow decision-makers to "create an alternative that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant environmental effects." AR 25452. The Court can identify nothing legally or factually inappropriate with this as a general matter. More specifically, as Federal Defendants indicate, ECF No. 49-1 at 23-24, the impacts from reservoir releases are evaluated in the FEIS/R in a manner that permits those impacts to be

distinguished from other impacts, even though the are not isolated from yet another alternative as Plaintiffs request. *See* AR 25522-23, 25525 (Table 3.1-2); 25561-62; 25574. The Court further notes that Plaintiffs do not address this issue in their reply brief. ECF No. 51 at 22-24. Plaintiffs' motion for summary judgment is DENIED on this ground; Federal Defendants' cross-motion is GRANTED.

7. Public Trust Doctrine

Plaintiffs next argue that "the [F]EIS/R failed to evaluate consistency with the Public Trust Doctrine." ECF No. 45 at 49-50. The origins of the public trust doctrine were explained by the California Supreme Court in *National Audubon Society v. Superior Court*, 33 Cal. 3d 419 (1983):

> "By the law of nature these things are common to mankind—the air, running water, the sea and consequently the shores of the sea." (Institutes of Justinian 2.1.1.) From this origin in Roman law, the English common law evolved the concept of the public trust, under which the sovereign owns "all of its navigable waterways and the lands lying beneath them 'as trustee of a public trust for the benefit of the people.' " The State of California acquired title as trustee to such lands and waterways upon its admission to the union; from the earliest days its judicial decisions have recognized and enforced the trust obligation.

Id. at 433-34 (internal citations and quotations omitted); *see also San Luis & Delta-Mendota Water Auth. v. Jewell*, 52 F. Supp. 3d 1020, 1068-69 (E.D. Cal. 2014), aff'd in part, rev'd in part sub nom. *San Luis & Delta-Mendota Water Auth. v. Haugrud*, 848 F.3d 1216 (9th Cir. 2017), as corrected (Mar. 23, 2017). California "has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible." *Id*. at 446.

To understand Plaintiffs' argument (and what is wrong with it), one must examine the nature of the public trust claim alleged in this case. While it is possible to maintain a direct cause of action against an agency for violating the public trust doctrine, *see generally Baykeeper*, 242 Cal. App. 4th 202, the FAC contains no direct cause of action based upon the public trust doctrine. In other words, the FAC does not directly allege that any state agency actually violated the public trust doctrine. Rather, Plaintiffs only allege that "[t]he EIS/EIR fails to demonstrate consistency with Public Trust Doctrine requirements." FAC ¶ 139(cc).

Plaintiffs cite *Baykeeper*, 242 Cal. App. 4th at 242, for the proposition that state agencies have an affirmative duty to perform [an analysis under the public trust doctrine], based on substantial evidence in the administrative record, as a part of their CEQA review." ECF No. 45 at 58:23-25. *Baykeeper* concerned a challenge to the approval by the California State Lands Commission ("SCL") of a sand mining project and an associated EIR. 242 Cal. App. 4th at 210-11. Plaintiffs in *Baykeeper* argued that the approval of the project was contrary to the public trust doctrine because the SLC failed to consider whether the project constituted a permissible use of public trust property. *Id*. at 232. The court concluded that sand mining is "indisputably a public trust use of sovereign land," *id*. at 234-35, and that "SLC's authority to approve private sand mining leases of public trust property carries with it an affirmative duty to take the public trust into account and to protect public trust uses whenever feasible." *Id*. at 234 (internal citations omitted). Because SLC did not make public trust findings about the project, it did not satisfy its duty. *See id*. at 234-35.

SLC argued that it satisfied its public trust review duties by completing a CEQA review. *Id*. at 240. The *Baykeeper* court agreed that "[c]ompliance with other environmental statutes can serve to fulfill an agency's trust obligation." *Id*. at 241 (emphasis added). However, CEQA review of a project involving sovereign property does not necessarily satisfy the SLC's public trust obligations. *Id*. Only where the CEQA review process encompasses public trust issues does the CEQA review satisfy the project proponent's public trust obligations. *Id*. at 241-42.

Here, Plaintiffs assert that the Authority violated CEQA by not including a public trust discussion in its CEQA document. FAC ¶ 139(cc); ECF No. 45 at 49-50. As *Baykeeper* held, an analysis under the public trust doctrine is an independent duty that attaches to any agency approval of a project that implicates public trust resources. 242 Cal. App. 4th at 235. That duty may be discharged through the CEQA process, *see id.* at 240-43, but nothing in *Baykeeper* or any other authority suggests the duty must be discharged as part of the CEQA process. *Cf.* Cal. Pub. Resources Code § 21083.1 (cautioning against interpreting CEQA in a manner that imposes requirements beyond those explicitly stated in the statute or

in the Guidelines). In other words, *Baykeeper* does not stand for the proposition that failure to include a public trust analysis within a CEQA document amounts to a violation of CEQA. As this is the only claim Plaintiffs allege, *Baykeeper* does not support their claim.

In their reply, Plaintiffs cite two additional cases to support their assertion that Defendant violated CEQA by failing to include in the CEQA document a public trust doctrine analysis. ECF No. 51 at 19 (citing *Citizens for E. Shore Parks v. State Lands Comm'n*, 202 Cal. App. 4th 549, 570 (2011); *National Audubon Society v. Superior Court*, 33 Cal. 3d 419, n.27 (1983)). In *Citizens for East Shore Parks*, the plaintiffs alleged the SCL violated both CEQA and the public trust doctrine when it approved a lease allowing a petroleum company to continue operating a marine terminal. 202 Cal. App 4th at 553. Both claims were rejected. The public trust doctrine had not been violated because the SLC's decision had not changed, derogated, or otherwise diminished a public trust use; rather it simply continued an existing, long-standing public trust use of the navigable waters and submerged and partially submerged lands in question. *Id*. at 576. The plaintiffs' independent (i.e., unrelated to the public trust) CEQA violations were addressed and rejected. *Id*. at 557-568. Although the court did note that the CEQA analysis addressed public trust issues, these comments were made in the context of evaluating the direct public trust claim, not the CEQA claim. *Id*. at 578-79. Nowhere in *Citizens* was it suggested that CEQA required an internal "public trust consistency" analysis.

Nor is the Court moved by Plaintiffs' citation to footnote 27 from *National Audubon*. As mentioned, *National Audubon* held that the California and its agencies have "an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible." 33 Cal. 3d at 446. Footnote 27, appended to that holding, states in its entirety:

> Amendments to the Water Code enacted in 1955 and subsequent years codify in part the duty of the Water Board to consider public trust uses of stream water. (*See* [*id.* at 444].) The requirements of the California Environmental Quality Act (Pub. Resources Code, § 21000 *et seq*.) impose a similar obligation. [Citation]
>
> These enactments do not render the judicially fashioned public trust

> doctrine superfluous. Aside from the possibility that statutory protections can be repealed, the noncodified public trust doctrine remains important both to confirm the state's sovereign supervision and to require consideration of public trust uses in cases filed directly in the courts without prior proceedings before the board.

Id. at 446 n.27 (parallel and certain other citations omitted). When placed in context, this footnote does not suggest the existence of any obligation under CEQA to perform a public trust consistency analysis. Rather, it addresses the policy underpinnings of CEQA, which require, by its own text, consideration of public trust issues.

While there is authority to support the proposition that a CEQA consistency analysis may suffice to show that an agency has considered public trust issues, *see Citizens*, 202 Cal. App. 4th at 577, Plaintiffs do not cite, and the Court cannot find, any authority to support Plaintiffs' assertion that a CEQA document must contain a public trust consistency analysis, and certainly not in the absence of an otherwise valid, stand-alone public trust claim.

Plaintiffs' motion for summary judgment that the FEIS/R violated CEQA because it failed to include a public trust consistency analysis is DENIED; the Authority's cross-motion is GRANTED.

B. ESA Claims

1. ESA Claims Against Reclamation

Plaintiffs' Fourth Claim for Relief asserts that Reclamation violated the ESA by failing to re-initiate consultation with FWS in connection with the Project, which, according to Plaintiffs, "results in additional adverse effects not contemplated in prior FWS (2008) and NMFS (2009) BiOps." FAC at ¶ 159. In their opening brief, Plaintiffs moved for summary judgment on this claim. In opposition, Federal Defendants and the Authority argue that this Court lacks jurisdiction over any ESA claim against Reclamation because Plaintiffs failed to comply with the notice provisions set forth in the ESA's citizen suit provision. *See* ECF No. 48 at 26-27; ECF No. 49-1 at 24-25.

The Fourth Claim for Relief arises directly under the ESA's citizen suit provision, 16 U.S.C. § 1540(g)(1)(A). *See Yurok Tribe v. U.S. Bureau of Reclamation*, 231 F. Supp. 3d 450, 466 (N.D. Cal.

2017) ("While plaintiffs bring the same failure to reinitiate claims against both [Reclamation] and NMFS, the claim against [Reclamation] may be brought under the ESA citizen suit provision, while the claim against NMFS, as discussed above, may only be brought under the APA."); *see also Forest Guardians v. Johanns*, 450 F.3d 455, 466 (9th Cir. 2006) (granting summary judgment in favor of plaintiffs on claim alleging federal agency failed to re-initiate consultation under the ESA).[50] The ESA's citizen suit provision requires notice to the alleged violator (in this claim, Reclamation), as well as to the Secretary of the Interior and/or Commerce, sixty days prior to filing any suit that arises under the citizen suit provision. 16 U.S.C. § 1540(g)(2)(A)(i). This requirement is jurisdictional. *Sw. Ctr. for Biological Diversity v. U.S. Bureau of Reclamation*, 143 F.3d 515, 520 (9th Cir. 1998). "A failure to strictly comply with the notice requirement acts as an absolute bar to bringing suit under the ESA." *Id*.

Plaintiffs do not even attempt to overcome this jurisprudence in their opposition/reply brief. *See* ECF No. 51 at 24-30 (addressing only ESA claim(s) against FWS). Accordingly, because this Court lacks jurisdiction over the Fourth Claim for Relief because Plaintiffs failed to comply with the ESA citizen suit notice requirements, Plaintiffs' motion for summary judgment on that claim is DENIED and Federal Defendants' cross-motion is GRANTED.

2. ESA Claim(s) Against FWS

Plaintiffs' Fifth Claim for Relief alleges that FWS violated the ESA by failing to use "best available science" to determine whether the Project would jeopardize GGS. FAC at ¶¶ 163-166.

a. Background Relevant to ESA Claims Against FWS

"Under the ESA, the Secretary of the Interior and the Secretary of Commerce are charged with identifying threatened and endangered species and designating critical habitats for those species." *Nat. Res. Def. Council v. Jewell*, 749 F.3d 776, 779 (9th Cir. 2014) ("*NRDC v. Jewell*") (citing 16 U.S.C. §

[50] If a claim falls within the scope of the ESA's citizen suit provision, review under the APA is unavailable and cannot be used as an alternative means to obtain judicial review of a claim that fails to comply with the procedural requirements of the citizen suit provision. *See Hawaii Cty. Green Party v. Clinton*, 124 F. Supp. 2d 1173, 1193 (D. Haw. 2000).

1533). FWS and NMFS administer the ESA on behalf of the Departments of the Interior and Commerce, respectively.[51] *See* 50 C.F.R. §§ 17.11, 222.101(a), 223.102, 402.01(b). Section 7 of the ESA requires federal agencies to ensure that their activities do not jeopardize the continued existence of listed endangered or threatened species or adversely modify those species' critical habitats. 16 U.S.C. § 1536(a)(2); *see also Karuk Tribe of Cal. v. U.S. Forest Serv.*, 681 F.3d 1006, 1020 (9th Cir. 2012).

Section 7's implementing regulations provide that "[e]ach Federal agency shall review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat[s]." 50 C.F.R. § 402.14(a). "Once an agency has determined that its action 'may affect' a listed species or critical habitat, the agency must consult, either formally or informally, with the appropriate expert wildlife agency." *Karuk Tribe*, 681 F.3d at 1027 (internal citation omitted). An agency may avoid the consultation requirement only if it determines that its action will have 'no effect' on a listed species or critical habitat." *Id.* (internal citation omitted). If the wildlife agency determines during informal consultation that the proposed action is "not likely to adversely affect any listed species or critical habitat," formal consultation is not required and the process ends. *Id*. (citing 50 C.F.R. § 402.14(b)(1)). "Thus, actions that have any chance of affecting listed species or critical habitat—even if it is later determined that the actions are 'not likely' to do so—require at least some consultation under the ESA." *Id*. (internal citation omitted).

Formal consultation results in the issuance of a "biological opinion" ("BiOp") by FWS. *See* 16 U.S.C. § 1536(b). If the BiOp concludes that the proposed action would jeopardize the species or destroy or adversely modify critical habitat, *see id*. § 1536(a)(2), then the action may not go forward

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[51] Generally, FWS has jurisdiction over species of fish that either (1) spend the major portion of their life in fresh water, or (2) spend part of their lives in estuarine waters, if the remaining time is spent in fresh water. *See Cal. State Grange v. Nat'l Marine Fisheries Serv*., 620 F. Supp. 2d 1111, 1120 n.1 (E.D. Cal. 2008), *as corrected* (Oct. 31, 2008). NMFS is granted jurisdiction over fish species that (1) spend the major portion of their life in ocean water, or (2) spend part of their lives in estuarine waters, if the remaining portion is spent in ocean water. *Id*. FWS exercises jurisdiction over the delta smelt; NMFS exercises jurisdiction over the winter-run and spring-run Chinook salmon, the latter of which are the subjects of other claims in this case not at issue in the present motion.

unless FWS can suggest a "reasonable and prudent alternative[]" ("RPA") that avoids jeopardy, destruction, or adverse modification. *Id*. § 1536(b)(3)(A). If the BiOp concludes that jeopardy is not likely and that there will not be adverse modification of critical habitat, or that there is a RPA to the agency action that avoids jeopardy and adverse modification, and that the incidental taking of endangered or threatened species will not violate Section 7(a)(2), the consulting agency shall issue an "Incidental Take Statement" ("ITS") which, if followed, exempts the action agency from the prohibition on takings found in Section 9 of the ESA. 16 U.S.C. § 1536(b)(4); *Aluminum Co. of Am. v. Administrator, Bonneville Power Admin.*, 175 F.3d 1156, 1159 (9th Cir. 1999).

In October 2014, Reclamation developed a biological assessment ("BA") that provided the basis for formal consultation on how the Project would impact various species, including the GGS, which is listed under the ESA as "threatened." AR 2625. Reclamation's BA concluded that the Project was likely to adversely affect GGS "as a result of increased mortality from reduction in available habitat for the species." AR 2666. However, certain conservation measures were identified as part of the proposed action "to avoid or minimize transfers within areas likely to support GGS and to maintain migration corridors (i.e., canals with water) in areas where rice fields are idled." *Id*. In November 2014, Reclamation asked FWS to prepare a BiOp, specifically seeking FWS's concurrence with the findings of the BA. *See* AR 7913. As mentioned, in formulating a BiOp, the ESA separately required FWS to evaluate whether the Project would "jeopardize the continued existence" of the GGS. *See* AR 7943.[52]

Based on the BA and supplemental information requested by FWS, AR 7915, FWS issued an initial BiOp on April 30, 2015 ("April 2015 BiOp"). AR 7006. Shortly thereafter, Reclamation contacted FWS to point out that the April 2015 BiOp relied upon conservation measures that Reclamation had not included in the Project description and that were not measures Reclamation "can commit to." AR 7267-68. On June 4, 2017, FWS issued a corrected, superseding BiOp ("Final BiOp" or "BiOp"). AR 7913.

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[52] Because critical habitat had not been formally designated for GGS, *see* AR 2632, FWS was not required to evaluate separately whether the Project would adversely modify GGS critical habitat. *See* 16 U.S.C. § 1536(a)(2).

The Final BiOp's jeopardy analysis first evaluated the "status of the species," which acknowledged that "loss of habitat" was the "most significant effect" on the species. AR 7931. The BiOp reviewed recent research on snake distribution and ecology, noting generally that GGS "have not been able to disperse into all suitable habitats, and are largely restricted to areas near locations at which they were likely historically abundant." AR 7933. The BiOp also reviewed in detail documented sightings of GGS. AR 7936-37.

Next, the BiOp evaluated factors affecting the GGS within the Project's action area, noting "the overall status of the snake has not improved since its listing." AR 7938. Of particular relevance here, the BiOp acknowledged that "rice fields and agricultural waterways can provide valuable seasonal foraging and upland habitat for the snake," but that "fluctuations in rice production and changes in water management including reductions in water availability due to drought and water transfers were cited as threats to the continued existence of the snake" to such an extent that FWS concluded that "these factors in combination with other threats put the Butte, Colusa, and Sutter Basin populations of snakes at risk of moving from the status of threatened to endangered," with all other areas considered "to be at risk of extirpation." *Id*. Overall "by far the most serious threats to snakes continues to be loss and fragmentation of habitat from urban and agricultural development and loss of habitat associated with changes in rice production." AR 7939. Of particular concern are activities that diminish "hydrologic links to suitable habitat during periods of drought, flooding, or diminished habitat quality." *Id*. The big picture for the snake is complicated vis-a-vis rice field fallowing generally and fallowing due to water transfers specifically:

> Sacramento Valley populations of the snake depend on agricultural croplands, leaving them vulnerable to wide-scale habitat loss in the event of changes in agricultural management such as changes in crops or fallowing large areas of rice fields (Paquin et al. 2006). Long-term fallowing can reduce or eliminate habitat, yet short-term fallowing can ultimately improve rice agriculture and associated habitat components and sustain them over the long term while reducing chemical inputs and discharges (J. Roberts in litt. 2011, referenced in Service 2012). When rice fields are left out of production there is a substantial reduction or

> elimination in the use of the surrounding and nearby water conveyance structures by snakes where water supply is dependent upon surface or ground water from non-adjacent or on-site sources (Service 2012). Radio tracked snakes are known to leave previously occupied rice land sites when fallowing is continued for more than one season (Wylie pers. Comm. 2008, E Hansen 2008). If rice fields are planted with a rotation crop, especially one that is irrigated, essential habitat components for the snake may be maintained, and the long term values may be enhanced if the rice crop is made more sustainable where it otherwise might be eliminated (Service 2012). Fallowing fields alternately in a 'checkerboard' pattern may minimize the impacts to snakes (Service in litt. 2008 referenced in Service 2012).
>
> Recent studies have concluded that snakes have adapted to the mosaic of seasonal wetlands and upland habitats that rice cultivation mimics, and use flooded rice fields for foraging, and irrigation dikes for basking sites (Service 2012). Regular long-term water transfers have the potential to reduce significantly the amount of rice lands and the temporary and artificial wetlands they produce (Service 2012). Impacts may be especially severe in those areas adjacent to State and Federal wildlife refuges which may function as the core habitat to lead recovery efforts (Service 2012).

AR 7939.

The BiOp next evaluated the "effects of the action," assuming that a maximum of 60,693 acres of rice land will be fallowed each year for 10 years if the full amount of permitted transfer water is transferred as a result of cropland idling/crop shifting. AR 7940. This would amount to approximately 12.3% of the average annual rice acreage grown in the Sacramento valley from 1992 to 2012. *Id*. The BiOp concluded that "[t]his reduction in habitat will likely result in increased stress on snakes that must disperse further to find suitable habitat, a likely reduction in prey base due to less available habitat, the potential displacement of individual snakes, increased risk of predation on snakes, and the potential for reduced reproduction and recruitment," and that "[a]ll of these factors may result in the loss of individual snakes through increased mortality or reduced or forgone reproduction by snakes in affected areas." *Id*. The BiOp also repeatedly notes that "rice cultivation is important," and "fallowing of rice fields reduces the amount and availability of habitat" and "may reduce foraging success for snakes that have left their home range in search of shallow summer aquatic habitat," may expose snakes to other mortality risks while they are dispersing, may reduce prey availability, and may impact reproductive

success and juvenile survival. *See generally* AR 7941-42.

Nonetheless, the BiOp concludes Reclamation's conservation measures, discussed in greater detail below, will minimize the effects of the proposed project by: (1) "ensur[ing] that most or all canals and waterways, which make up a portion of snake aquatic habitat, will remain wetted during the summer months, thereby providing refuge to snakes"; (2) "providing assurances that in specific high priority snake habitat areas, as shown in Attachment A [to the BiOp], conservation will be implemented"; and (3) "[i]n other areas where high quality snake habitat exists and snakes are known to occur, sellers will be required to maintain habitat features (ditches, drains, conveyance structures, etc.) in an aquatic condition that can be used by snakes, thus providing habitat across the action area." AR 7942.

The BiOp concluded that these measures were "developed using the best available science on snake biology, habitat use and suitability, and known occurrences," focusing on "conservation in the most important areas for snakes, considering high quality habitat and known use by snakes." *Id*. Of particular importance to the conservation measures is "maintain[ing] water in canals and ditches known to be suitable for snakes," which "represent 85% of the known snake occurrence." *Id*.

In sum, the BiOp concluded that the conservation measures are "expected to reduce the severity of some of the adverse effects described previously, such as loss or reduction of consistently available wetted areas and isolation of snakes in islands of idled cropland with no movement corridor to enable them to leave the area." *Id*. Yet, "because there is some uncertainty that snakes will respond as anticipated, that the areas identified as priority habitat are sufficiently well distributed or have the capacity to maintain a large proportion of the resident snake population," the BiOp acknowledged that expected responses, "while supported by science, have not been validated by monitoring." *Id*. Accordingly, the BiOp acknowledged that an adaptive management approach proposed by Reclamation would be important to address any uncertainty and allow scientists to adapt the program as new information becomes available. *Id*. The adaptive management protocols include: (1) development of performance measures and metrics to monitor trends in snake numbers, reproduction, and distribution;

(2) annual reporting by Reclamation detailing crop idling, compliance with conservation measures (including maintaining water in ditches around affected fields), results of snake monitoring, snake detections, known incidental snake "take," and other pertinent information; and (3) communication between Reclamation and FWS to discuss annual reports and develop additional conservation measures if needed. AR 7946.

Finally, "[a]fter reviewing the current status of the snake, [the] environmental baseline for the action area, [the] effects of the proposed project cumulative effects, and [the] proposed conservation measures" the BiOp concludes that the Project is not likely to jeopardize the continued existence of the GGS.

> The proposed project will likely result in the loss of an unknown number of snakes as a result of increased mortality from temporal loss of habitat, increased competition for resources, reduced reproductive rates, and increased mortality from predation. We expect that crop idling and shifting will temporarily remove suitable snake habitat and may also reduce reproduction, recruitment, and survival of the snakes and these effects will extend beyond the project time frame.
>
> However, Reclamation is implementing a comprehensive conservation strategy that is based on recent research that focuses on maintaining suitable habitat conditions in priority areas throughout the action area. Water will be maintained in areas most important to snakes and water will not be transferred from priority conservation areas (e.g., Natomas). In addition Reclamation will identify where idling has occurred, collect and verify habitat conditions, synthesize species data and implement adaptive management measures to assure effective implementation of the conservation measures.

AR 7943-44.

b. <u>Mootness of Challenges to April 2015 BiOp</u>

Plaintiffs attempts to assert claims against both the April 2015 BiOp as well as the Final BiOp. Claims regarding a superseded BiOp are moot. *See, e.g., American Rivers v. Nat'l Marine Fisheries Serv*., 126 F.3d 1118, 1124 (9th Cir. 1997); *Idaho Dept. of Fish & Game v NMFS*, 56 F.3d 1071 (9th Cir. 1995); *Rio Grande Silvery Minnow v. Bureau of Reclamation*, 601 F.3d 1096, 1111-12 (10th Cir. 2010). Plaintiffs attempt to distinguish these cases by arguing that the April 2015 BiOp was not

superseded by the Final BiOp because the Final BiOp nowhere indicates that the April 2015 BiOp was rescinded and because both BiOps were issued in connection with the "same project." ECF No. 51 at 25. Plaintiffs' position on this issue is not tenable. It is clear from the record that the Final BiOp was issued at least in part to correct the April 2015 BiOp's Project description. Accordingly, the two BiOps were not issued in connection with the "same project"; rather, the project addressed by the April 2015 BiOp did not exist. Any direct challenges to the April 2015 BiOp are moot, and no exception to the mootness doctrine applies. Nonetheless, the Court has treated any arguments raised by Plaintiffs in connection with the April 2015 BiOp as though those arguments were raised against the Final BiOp, so long as those arguments are relevant to the Final BiOp (e.g., if the language is substantially similar).

c. Challenges to Conservation Measures

(1) "Abandonment" of Protective Measures Found in Earlier BiOps

Plaintiffs argue that FWS violated the ESA because it "abandoned" protective measures required in older biological opinions addressing the impact of water transfer projects on GGS, in favor of the conservation measures proposed by Reclamation in connection with the Project. ECF No. 45 at 50-53. In connection with certain previous water transfer projects, earlier biological opinions limited the "block size" of idled parcels to 320 acres, limited the amount of rice field fallowing to 20% in each county, prohibited idled parcels from being adjacent to other idled parcels, prohibited idled parcels from being located on the opposite side of canals or other waterways from other idled parcels, prohibited fallowing of fields for more than two consecutive irrigation seasons, and prohibited transfers from sensitive areas. AR 47644; *see also* AR 22275-77, AR 22329-30.

It is undisputed that the "new" conservation measures adopted by the Final BiOp do abandon many of these specific limitations, opting instead for an approach that claims to preclude crop idling/substitution near certain priority snake habitat areas and leave water in other types of priority habitat. Plaintiffs are correct that FWS cannot change its own policy or precedent without providing a reasoned justification for doing so. *See SW Ctr. for Biological Diversity v. U.S. Bureau of Reclamation*,

143 F.3d 515, 53 n. 4 (9th Cir. 1998); *see also Modesto Irr. Dist v. Gutierrez*, 619 F.3d 1024, 1034 (9th Cir. 2010). However, as Federal Defendants point out, the conservation measures incorporated into the BiOp are not FWS policy.[53] Rather, they are part of the action agency's (i.e., Reclamation's) proposed Project. Neither the ESA nor the APA prohibits changed positions under these circumstances.[54] Plaintiffs' motion for summary judgment that FWS unlawfully abandoned a prior policy is DENIED; Federal Defendants' cross-motion is GRANTED.

The relevant question here is whether FWS lawfully concluded that the proposed Project would not jeopardize GGS.[55] *See SW Ctr.*, 143 F.3d at 523 (in evaluating FWS's selection of one RPA over another, finding that FWS "need only have adopted a final RPA which complied with the jeopardy standard and which could be implemented by the agency"); *see also* 16 U.S.C. § 1536(a)(2) (FWS decision must be based on the "the best scientific and commercial data available.").[56] That question is addressed below.

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[53] It is of no moment that FWS has broad discretion regarding whether and how to use an agency's BA in evaluating whether a species is present in an action area or how a Project may impact a species. *See* 50 C.F.R. § 402.12(k). Nothing in the ESA indicates FWS has any authority to craft, edit, or otherwise modify a proposed project.

[54] Relatedly, Plaintiffs argue that FWS "arbitrarily weakened" the "April BiOp." ECF No. 45 at 54. Specifically, Plaintiffs point out that the April 2015 BiOp contained slightly more stringent conservation measures than the Final BiOp. For example, the Preliminary BiOp prohibited cropland idling/shifting transfers in "priority habitats with a high likelihood of snake occurrence (60 percent or greater probability)." AR 7019. This prohibition was eliminated from the Final BiOp. AR 7840. Plaintiffs argue that because the April 2015 BiOp indicated that this and other conservation measures that were later altered in the Final BiOp were necessary to avoid jeopardy to the GGS, FWS had a duty to explain how dramatically weakening those protections would still minimize adequately incidental take of GGS. ECF No. 45 at 55. Instead of providing any such explanation, Plaintiffs argue that the conservation measures were modified to make them consistent with the conservation measures proposed by Reclamation, AR 7450 (email from Reclamation to FWS requesting correction of April 2015 BiOp to "accurately reflect the Conservation Measures related to cropland idling transfers within the [2015 Water Transfer BA]") or because they simply were not acceptable to Reclamation, AR 7270 (email from Reclamation to FWS explaining why one conservation measure included in April 2015 BiOp but excluded from Final BiOp "isn't something that we can commit to"). But this is exactly why FWS did not need to provide an explanation for making changes to the April BiOp. Again, the key question is whether the Final BiOp satisfied the relevant legal standard.

[55] Contrary to Plaintiffs' suggestion by citation to Mr. Hanson's letter, the question is not whether the agency has identified new science indicating the new approach does not affect GGS probability of persistence. *See* ECF No. 45 at 51 (citing AR 47644 (Mr. Hanson opining that "the agency did not identify new science indicating that limitations on the size and distribution of fallowed parcels do not affect the snake's probability of persistence")).

[56] For the same reasons, the Plaintiffs' argument that FWS "arbitrarily weakened" the April BiOp, *see* ECF No. 45 at 54, is unpersuasive. The Final BiOp must stand or fall on its own merits. Although nothing precludes Plaintiff from citing reasoning from the April 2015 BiOp (e.g., an explanation as to why a specific restriction is required) to argue FWS acted unlawfully by later adopting a less restrictive measure, Plaintiffs make no such arguments here. Rather, the argument here is simply that certain, more restrictive conservation measures found in the April 2015 BiOp were abandoned without explanation and for the "improper" purpose of correcting the project description. *See* ECF No. 45 at 55-56.

(2) FWS's Reliance on the Conservation Measures to Support No Jeopardy Conclusion

The Final BiOp asserts the new conservation measures it adopts are based on the best available science, including data on where GGS populations are likely to be found. AR 7942. The BiOp itself does not explain the scientific basis for the new conservation measures. AR 7924. Instead, it explains that the Project "would incorporate conservation measures consistent with the Central Valley Project 2014 Water Transfers Biological Opinion." *Id*. The 2014 Water Transfers BiOp likewise does not provide a scientific basis for the conservation measures, instead referencing how those conservation measures are described in Reclamation's 2014 BA. AR 1950. The 2014 BA, in turn, explains that Reclamation engaged in a mapping process designed to "generate a map of priority habitat." AR 1248. Reclamation used two datasets "recently developed" by the U.S. Geological Survey. First, Reclamation used a habitat suitability dataset that utilized information on habitat attributes such as canopy cover, distance to rice agricultural land, and canal density to "model the current likely locations of suitable GGS habitat in the Sacramento Valley." *Id*. The resulting suitability predictions were validated against actual GGS location data. *Id*. This dataset revealed that "[l]ocations with certain factors appeared most predictive of GGS occurrences." *Id*. Specifically, sites near rice agriculture with low stream densities and sites with high canal densities and near wetlands appeared most suitable for GGS. *Id*.

A second dataset was used to examine whether "historic or contemporary conditions" were better predictors of GGS occurrence in areas of rice agriculture. *Id*. Of all the variables examined, historic marshland "proved most predictive of GGS occurrences." AR 1249. Accordingly, this dataset was interpreted to conclude that "proximity to historic habitat such as historic areas of tule marsh is the most important variable for predicting occurrence of GGS in the Sacramento Valley." *Id*.

These two datasets were then used to construct a "priority habitat map" that used a computational approach to "correct" the habitat suitability map for the "probability of occurrence as it varies with distance from historic tule marsh." *Id*. This, the BA concluded, "is the best available estimate

of the contemporary distribution of GGS in the Sacramento Valley." Again, this priority habitat map was validated against GGS occurrence data. *Id*. The resulting maps are found at Attachment A to the Final BiOp and depict seller water districts overlain with priority habitat data (depicted by various gradations of the color blue) and known GGS occurrence information (depicted by red dots, red outlined shapes, or red hashmarked shapes). AR 7954-67. Notably, as the 2014 Water Transfer BA explained, several seller water districts were found to contain 100% "priority habitat," while other districts contained a "smaller percentage" of priority habitat (70.15%).

Table 1: Water Districts and Area of Priority Habitat

Water District	Area of Water District (Acres)	Area of Priority Habitat in Water District (Acres)	Habitat in District (Percentage)
GLENN-COLUSA I.D.	175,621	139,496	79.43%
CANAL FARMS	426	426	100.00%
CONAWAY PRESERVATION GROUP, LLC	18,965	18,965	100.00%
GOOSE CLUB FARMS & TEICHERT	5,728	5,528	96.51%
MAXWELL I.D.	6,803	6,803	100.00%
PELGER M.W.C.	2,969	2,969	100.00%
PLEASANT GROVE-VERONA M.W.C.	7,432	7,432	100.00%
PRINCETON-CORDORA-GLENN I.D.	12,162	8,872	72.95%
PROVIDENT I.D.	16,798	11,784	70.15%
RECLAMATION DISTRICT NO. 1004	23,235	21,766	93.68%
RECLAMATION DISTRICT NO. 108	58,820	58,820	100.00%
ROBERTS DITCH IRRIGATION COMPANY	1,785	1,785	100.00%
SYCAMORE FAMILY TRUST	8,431	8,431	100.00%
TE VELDE REVOCABLE FAMILY TRUST	1,282	1,282	100.00%
T&P FARMS	425	425	100.00%

AR 1250.

Plaintiffs raise several general challenges to the science underlying this approach. A 2014 BA prepared by Reclamation for a related project indicates that some of the assumptions underlying the modeling approach used to generate the maps in Attachment A have "not been tested." ECF No. 45 at 52 (citing AR 1249). But, the 2014 BA indicates the assumptions "should be reasonable" and although "much uncertainty still exists," the assumptions rely on "the best information currently available." AR 1249. Plaintiffs do not point to any record evidence to the contrary. To the extent Plaintiffs are challenging the modeling approach selected, they have not sustained their burden. *See San Luis v.*

Jewell, 747 F.3d at 593 (holding that an agency's decision to use one modeling approach over another "requires a high level of technical expertise" and courts "must be at [their] most deferential" in reviewing challenges to those choices).

Plaintiffs also make much of the fact that the 2014 BA indicates that the model's results give only "some indication" of where GGS may occur. ECF No. 45 at 52 (citing AR 1249). While admitting that such information might be helpful to supplement existing science, Plaintiffs assert the results of the modeling are irrelevant to determining "how to best protect existing GGS populations and their priority habitat." *Id*. at 52 (citing AR 47644). What Plaintiffs overlook, however, is that the legal standard does not require FWS to adopt conservation measures that "best protect" GGS. As discussed previously, the question is whether FWS lawfully determined that the conservation measures avoid jeopardy. In sum, Plaintiffs do not point to better data that could have been used to generate the maps presented in Attachment A, nor do they point to a better methodology FWS should have relied upon in this effort. *See San Luis v. Jewell*, 747 F.3d at 602 (best available data requirement "prohibits [an agency] from disregarding available scientific evidence that is in some way better than the evidence [it] relies on").

Plaintiffs also raise several, more targeted challenges to FWS's reliance on the conservation measures. Generally, FWS described the new conservation measures as: "focus[ing] on cropland idling restrictions in areas where snakes have a high likelihood of occurrence." AR 7924. However, close inspection of the conservation measures reveals a troubling lack of clarity in how the restrictions are described (and therefore how they would be implemented). As mentioned, in finding that the Project would not jeopardize GGS, FWS imposed certain terms and conditions on the Project, including that Reclamation incorporate within any contract certain conservation measures.

"Areas with known priority snake populations," including lands "adjacent to naturalized lands and refuges and corridors between these areas," will not be permitted to participate in cropland idling/shifting transfers. AR 7926. The BiOp indicates that water sellers can request a "case-by-case evaluation" of whether a specific field would be precluded from participating in long-term transfers and

provides the following examples of lands where cropland idling/shifting transfers will not be permitted because they encompass "[a]reas with known priority snake populations":

> Fields abutting or immediately adjacent to Little Butte Creek between Llano Seco and Upper Butte Basin Wildlife Area (WA), Butte Creek between Upper Butte Basin and Gray Lodge WAs, Colusa Basin drainage canal between Delevan and Colusa National Wildlife Refuges (NWR), Gilsizer Slough, Colusa Drainage Canal, the land side of the Toe Drain along the Sutter Bypass, Willow Slough, and Willow Slough Bypass in Yolo County, Hunters and Logan Creeks between Sacramento and Delevan NWRs; and Lands in the Natomas Basin.

AR 7926. As Plaintiffs point out, however, some of the maps in Attachment A designate known observations of GGS that are inexplicably not included on this list. ECF No. 51 at 28. For example, on the habitat priority map for Conway Preservation Group ("CPG"), a number of areas are identified as being "specific occurrence" areas for GGS, while others are identified as "nonspecific occurrences" of GGS. AR 7958. Yet, according to Plaintiffs[57] none of these areas is enumerated among the "areas with known priority snake populations."

This lack of specificity is problematic in light of the relevant legal requirements. The Ninth Circuit has held that mitigation measures[58] may be included as part of a proposed action (and therefore be relied upon when determining whether jeopardy will result) only where they involve "specific and binding plans" and "a clear, definite commitment of resources for future improvements" to implement those measures. *Nat'l Wildlife Fed'n v. Nat. Marine Fisheries Serv*, 524 F.3d 917, 935-36 (9th Cir. 2008) (finding agency's "sincere general commitment to future improvements" inadequate to support no jeopardy conclusion). One district court persuasively provided further guidance, holding that mitigation measures supporting a BiOp's no jeopardy or no adverse modification conclusion must be "reasonably specific, certain to occur, and capable of implementation; they must be subject to deadlines or

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[57] Plaintiffs have asserted and Federal Defendants have not disputed that the areas within Conway Preservation Trust designated as having GGS occurrences map are not among those listed. Mr. Hanson's letter provides additional support for Plaintiffs' position. *See* AR 47645 (noting that while Conaway Preservation Group is identified as potential participants in the water transfer program, the area encompasses well-documented GGS populations).

[58] The Court agrees with *Oregon Nat. Desert Ass'n v. Tidwell*, 716 F. Supp. 2d 982, 1001 n.7 (D. Or. 2010), "conservation measures," as they are termed by Federal Defendants, are synonymous with "mitigation measures" discussed in the caselaw.

otherwise-enforceable obligations; and most important, they must address the threats to the species in a way that satisfies the jeopardy and adverse modification standards." *Ctr. for Biological Diversity v. Rumsfeld*, 198 F. Supp. 2d 1139, 1152 (D. Ariz. 2002) (internal citation omitted). Where one cannot determine what will happen when mitigation measures are implemented, they may not be relied upon to avoid jeopardy. *See Ctr. for Biological Diversity v. Salazar*, 804 F. Supp. 2d 987, 1002 (D. Ariz. 2011) (finding unlawful BiOp that relied on water saving mitigation projects where court had difficulty ascertaining exactly what projects were planed and the estimated water savings were uncertain); *see also Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv.*, 184 F. Supp. 3d 861, 873 (D. Or. 2016) (confidence intervals used in proposed mitigation measures were so broad "that falling within them is essentially meaningless"); *Nat. Res. Def. Council v. Kempthorne*, 506 F. Supp. 2d 322, 356 (E.D. Cal. 2007) (finding it inappropriate to adopt adaptive management process as a mitigation measure, where adaptive management process has no quantified objectives and does not require that actions ever be taken).

A court must "strike a difficult balance in reviewing the enforcement strategy outlined in the administrative record. The court cannot substitute its judgment for that of the expert agency tasked with adaptively managing [a natural resource], however, the court must also ensure that there are substantive measures in place to deal with noncompliance." *Oregon Nat. Desert Ass'n v. Tidwell*, 716 F. Supp. 2d 982, 1002 (D. Or. 2010). Here, is impossible to tell from the record whether idling transfers will be permitted from areas marked on Attachment A maps as having known snake occurrences or whether "case-by-case" evaluation would result in transfers being precluded from these areas. This is because the BiOp does not define the term "known priority snake population," and the exemplar locations suggest that not all marked occurrences qualify for treatment as an area of known priority snake population. This must be clarified on remand.

Relatedly, as the BiOp indicates, "by far the most serious threat to snakes continues to be loss and fragmentation of habitat." AR 7939. Plaintiffs argue that the BiOp fails to consider harm to GGS

from habitat fragmentation. ECF No. 45 at 53; ECF No. 51 at 29. In the effects analysis section of the BiOp, the BiOp reasons that "[b]y requiring crop idling/substitution to occur away from high priority habitat and areas with high likelihood of snake occurrence, and by maintaining movement corridors for snakes in areas where crop idling occurs, it is expected that snakes will be able to reach suitable habitat despite drying due to crop idling." AR 7943 (emphasis added). But, at least one aspect of the above sentence is inconsistent with the language of the actual conservation measures, which do not "requir[e] crop idling/substitution to occur away from high priority habitat areas," or at least do not clearly delineate how such prohibitions would apply. To the contrary, the BiOp permits crop idling/substitution in so-called "priority habitat" so long as "adequate water" remains available for those "priority habitat" areas. AR 7925. The BiOp's use of the term "adequate water" is confusing and requires some explanation. First, the conservation measures require all water sellers will keep "adequate water" in major irrigation and drainage canals. AR 7925. In connection with this requirement, the BiOp defines "adequate water" as water at depths similar to years when transfers do not occur, or at least two feet where information on existing water depth is limited. *Id*. Second, water sellers proposing transfers from idled rice fields will ensure that "adequate water is available for priority habitat with a high likelihood of giant garter snake occurrence." *Id*. "Priority habitat" is defined as "fields abutting or immediately adjacent to federal wildlife refuges" and areas indicated on the priority habitat maps discussed above. *Id*. The very next paragraph explains what adequate water means in the context of "priority habitat":

> Maintaining water in smaller drains and conveyance infrastructure supports key habitat attributes such as emergent vegetation for snake for escape cover and foraging habitat. If crop idling/shifting occurs in priority habitat areas, Reclamation will work with contractors to document that adequate water remains in drains and canals in those priority areas.

AR 7925. If the BiOp intended the "high priority areas" in which it promises to not permit crop idling to be something other than the "priority areas" indicated in the above-quoted conservation measures section, it provides no clear explanation of that distinction. This too must be clarified on remand.

Plaintiffs also argue that the conservation measures were legally inadequate because (1) they permitted idled parcels to be located adjacent to or across from other idled parcels; and (2) they permitted idling of individual parcels on more than two consecutive years. The Final BiOp acknowledges that fallowing fields in a "checkerboard pattern" may be beneficial to snakes and indicated that long term fallowing can reduce or eliminate habitat. AR 7939. So far as the Court can determine, the BiOp does not explain how, in light of these findings, the conservation measures avoid jeopardy. A BiOp is arbitrary and capricious if it fails to "consider the relevant factors and articulate a rational connection between the facts found and the choice made." *Ctr. for Biological Diversity v. U.S. Bureau of Land Mgmt.*, 698 F.3d 1101, 1121 (9th Cir. 2012). Here, the BiOp explicitly considers the issue of fallowing patterns (both spatial and temporal) and acknowledges the import of those patterns, but then fails to articulate why the conservation measures avoid jeopardy, in light of the fact that the measures contain no constraints on how close fallowed fields may be to one another nor any limit on the number of consecutive years a field may lie fallow.

Relatedly, Plaintiffs argue the BiOp's acceptance of these conservation measures as avoiding jeopardy conflicts with the BiOp's own findings that: (1) "both rice fields and canals are important habitats for the snake" (AR 7932); and (2) "[d]itches, canals and other agricultural conveyances typically provide limited cover" and that large predators are typically more prevalent in ditches and canals (AR 7942). The BiOp appears to explain that the conservation measures' focus on prioritizing retention of water in drains and canals is sufficient because "canals and ditches known to be suitable for snakes . . . represent 85% of the known snake occurrence." *Id.* But, even assuming snakes are found more frequently in canals and ditches, this does not explain why it is acceptable to focus on retention of water in canals and ditches to the detriment of maintaining appropriate rice field habitat the BiOp itself considers "important." This is particularly troubling in light of the discussion above finding that the conservation measure that prohibits cropland idling/shifting in "[a]reas with known priority snake

populations," unlawfully imprecise.[59] As to the above described areas of concern, Plaintiffs' motion for summary judgment that the BiOp's conservation measures are unlawful is GRANTED; Federal Defendants' and Defendant Intervenors' cross-motions are DENIED.

Several other specific challenges leveled by Plaintiffs are less compelling. For example, Plaintiffs suggest that adopting the conservation measures was arbitrary and capricious because they contain no block size restrictions. ECF No. 45 at 53. Mr. Hanson's letter states that the 320 acre block size restriction imposed in the past was the product of "expert consensus" reflecting "special extent consistent with documented giant garter snake movement patterns" based upon "extensive mark-recapture and radiotelemetry data on [GGS] home range and movement" in fragmented rice landscapes since the 1990s. AR 47654. But, neither Mr. Hanson nor Plaintiffs point to any study or record document that suggests the 320 acre block size restriction (or, for that matter, any block size restriction at all) is the ideal (let alone the only) approach to GGS conservation that would avoid jeopardy. In fact, as Federal Defendants point out, in a 2010 BiOp, FWS acknowledged that it had "no data" that:

> indicate the extent that snakes successfully relocate and assimilate into adjacent or nearby habitat when rice lands are fallowed, the extent to which the configuration of the landscape mosaic of rice fields and fallowed rice affects the success of individuals to assimilate, the extent to which snake population trends respond not only to following but to subsequent increases in rice cultivation, or the degree to which fluctuation in rice acreage over time mirrors variability in the snake population over time.

AR 652. Without more, this boils down to a disagreement among experts that must be resolved in favor of Federal Defendants. *San Luis v. Jewell*, 747 F.3d at 603-04 ("[W]hen specialists express conflicting

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[59] The Court is not moved by Federal Defendants' contention that the conservation measures address uncertainties in how snakes will respond to the conservation measures through adaptive management. The adaptive management in question is so non-specific as to be essentially meaningless, save that it promises what is already required by law: reinitiation of consultation should the project have unanticipated effects. AR 7926; *see also* 50 C.F.R. § 402.16. (requiring agency to reinitiate consultation where two elements are present: (1) "discretionary Federal involvement or control over the action has been retained or is authorized by law"; and (2) "new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered."). As mentioned, to support a no jeopardy finding, conservation measures must be "reasonably specific, certain to occur, and capable of implementation; they must be subject to deadlines or otherwise-enforceable obligations; and most important, they must address the threats to the species in a way that satisfies the jeopardy and adverse modification standards." *Ctr. for Biological Diversity*, 198 F. Supp. 2d at 1152.

views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive.") (internal citation and quotation omitted).

Plaintiffs also challenge the following additional conservation measure that requires all Reclamation contracts with sellers to reflect that:

> Sellers will continue to voluntarily perform snake best management practices, including educating maintenance personnel to recognize and avoid contact with snakes, cleaning only one side of a conveyance channel per year, and implementing other measures to enhance habitat for snakes.

AR 7926. Plaintiffs argue that requiring Reclamation to include in its contracts the requirement that a contractor abide by "voluntary" best management practices is meaningless, as "including a voluntary term in a contract does not transform it into a mandatory term." ECF No. 51 at 28. The Court does not agree. This is imprecise drafting, at best, but the Court accepts Federal Defendants' position that Reclamation's project description and the BiOp require implementation of the best management practices. ECF No. 59 at 16-17. As to these remaining issues Plaintiffs' motion for summary judgment that the BiOp's conservation measures are unlawful is DENIED; Federal Defendants' and Defendant Intervenors' cross-motions are GRANTED.

C. Remaining CEQA Challenge to Assessment of Impacts to Giant Garter Snake

As explained above, Plaintiffs argue that the FEIS/R fails to satisfy CEQA's requirements with respect to analysis of the Project's impacts on Giant Garter Snake ("GGS"). The FEIS/R concludes that "[c]ropland idling/shifting actions under the Proposed Action would have a less than significant impact on giant garter snakes because a relatively small proportion (no more than 10.5 percent of the rice acreage) would be affected in any given year" and the "Environmental Commitments" described in the Project would "avoid or reduce many of the potential impacts associated with this activity and the displacement of giant garter snake that could result." AR 26016. Plaintiffs take issue with this conclusion on two central grounds. First, they argue the FEIS/R fails to explain how fallowing 10.5

percent of rice acreage is less than significant in light of the fact that, according to the BiOp, "[b]y far the most serious threat[] to [GGS] continues to be loss and fragmentation of habitat from urban and agricultural development and loss of habitat associated with changes in rice production." AR 7939; *see also* ECF No. 45 at 30-31. In particular, the BiOp indicates "the quantification of habitat loss as a result of the proposed action serves as a direct surrogate for the snakes that will be lost." AR 7945. Thus, Plaintiffs contend, "a loss of 10.5% of available habitat would presumably result in the same or similar percentage of population loss." ECF No. 45 at 31. Plaintiffs point out that the FEIS/R does not explain how such a loss would not constitute a "substantial adverse effect" on the GGS population. *Id*.

The Authority responds by pointing out, correctly, that Plaintiffs' description of the factual picture is overly simplistic, in part because, "idling would be focused in areas where [GGS] occurrence probability is low." AR 27449. But, as discussed above, the Environmental Commitments designed to ensure that idling would be focused in areas where GGS occurrence probability is low are fatally unclear. As a result, the Court finds that the FEIS/R cannot lawfully rely on the Environmental Commitments to avoid evaluating what may otherwise be a substantial adverse effect. As to Plaintiffs' motion for summary judgment that the FEIS/R's reliance on Environmental Commitments in relation to its analysis of impacts to GGS violates CEQA, Plaintiffs' motion for summary judgment is GRANTED; the Authority's cross-motion is DENIED.

Plaintiffs raise a separate challenge to the FIES/R's CEQA analysis under *Lotus*, 223 Cal. App. 4th at 655-56, a case discussed at length above. As mentioned, *Lotus* concerned an EIR for a highway construction project through an old growth redwood forest that would have required construction activity in and around numerous protected trees.. *Id*. at 649. Certain "avoidance minimization and/or mitigation measures" were incorporated into the project to "avoid and minimize impacts as well as to mitigate expected impacts," including numerous procedures designed solely to avoid impact to the trees. *Id*. at 650-51. In part because of these mitigation measures, the EIR concluded there would be no significant environmental effects caused by the project. *Id*. at 651. The California Court of Appeal found

the EIR unlawful, in part because it incorporated the proposed mitigation measures into its description of the project before concluding that any potential impacts from the project were less than significant. *Id*. at 655-56. The "avoidance, minimization and/or mitigation measures," as they were characterized in the *Lotus* EIR, were not "part of the project," but, rather, were "mitigation measures designed to reduce or eliminate the damage to the redwoods anticipated from disturbing the structural root zone of the trees by excavation and placement of impermeable materials over the root zone." *Id*. at 656. In this way, the EIR improperly "compress[ed] the analysis of impacts and mitigation measures into a single issue," thereby "disregard[ing] the requirements of CEQA." *Id*. This type of failure was deemed dangerous because the lack of analysis and findings about the extent of impacts makes it impossible to determine if the mitigation measures are sufficient. *Id*.

Unlike the concept of carriage water, which, as the Court found above, serves both project and mitigation purposes, *see supra* Part IV.A.2.b, there can be no such finding in connection with the Environmental Commitments related to controlling where idling may or may not occur. No Defendant argues and the Court can find no evidence to support a finding that those Environmental Commitments serve any independent project purpose. Therefore, incorporating these Commitments into the project description runs afoul CEQA according to *Lotus*. No party argues that *Lotus* was wrongly decided. Accordingly, the FEIS/R's analysis of GGS does not comport with CEQA for this additional reason. As to Plaintiffs' motion for summary judgment that the FEIS/R's analysis of impacts to GGS violates *Lotus*, Plaintiffs' motion for summary judgment is GRANTD; the Authority's cross-motion is DENIED.

V. CONCLUSION AND ORDER

For the reasons set forth above:

(1) Plaintiffs' motion for summary judgment is GRANTED IN PART AND DENIED IN PART;

(2) Federal Defendants' motion for summary judgment is GRANTED IN PART AND DENIED IN PART; and

(3) The Authority's motion for summary judgment is GRANTED IN PART AND DENIED IN PART.

As the Court has concluded that both challenged documents (the FEIS/R and the BiOp) are at least in some part unlawful, the parties are directed to meet and confer before submitting a joint proposed form of judgment that identifies a schedule for remand and/or a joint proposed schedule for any anticipated further proceedings in this case. Any such documents(s) shall be filed on or before March 16, 2018.

The Court has provided ample and specific direction to give the parties and counsel what they need to make this happen without further involvement by this Court. The only matter beyond the control of the Court is a desire by both sides to accomplish this directive. The Court relies on the duty, competence, and professionalism of those involved to accomplish the mission.

IT IS SO ORDERED.

Dated: **February 15, 2018**

/s/ Lawrence J. O'Neill
UNITED STATES CHIEF DISTRICT JUDGE