

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND  
SOUTHERN DIVISION

DOW AGROSCIENCES LLC, <i>et al.</i> ,	*	
Plaintiffs,	*	
	*	
v.	*	Civil Action No. 09-cv-00824-AW
	*	
NATIONAL MARINE FISHERIES	*	
SERVICE, <i>et al.</i> ,	*	
Defendants	*	
and	*	
	*	
NORTHWEST CENTER FOR	*	
ALTERNATIVES TO PESTICIDES	*	
P.O Box 1393	*	
Eugene, OR 97440	*	
	*	
PACIFIC COAST FEDERATION OF	*	
FISHERMEN’S ASSOCIATIONS	*	
P.O. Box 11170	*	
Eugene, OR 97440-3370	*	
	*	
INSTITUTE FOR FISHERIES	*	
RESOURCES	*	
Eugene, OR 97440-3370	*	
	*	
DEFENDERS OF WILDLIFE	*	
1130 – 17 <sup>th</sup> Street, N.W.	*	
Washington, D.C. 20036	*	
Defendant-Intervenors	*	
	*	

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**Memorandum Opinion**

Plaintiffs Dow AgroSciences, LLC, Makhteshim Agan of North America, Inc., and  
Cheminova, Inc. USA bring this action against Defendants National Marine Fisheries Service

(“NMFS”) and James W. Balsiger (“Balsiger”)<sup>1</sup> (collectively “Federal Defendants”) asserting violations of the Administrative Procedure Act, 5 U.S.C. § 701, *et seq.* (“APA”) and the Endangered Species Act, 16 U.S.C. § 1531, *et seq.* (“ESA”). On August 23, 2011, the Court granted a motion to intervene by Northwest Center for Alternatives to Pesticides, Pacific Coast Federation of Fishermen’s Associations, Institute for Fisheries Resources, and Defenders of Wildlife (collectively “Intervenor Defendants”). *See* Doc. No. 70. Currently pending before the Court are the Parties’ cross-motions for summary judgment, *see* Doc. Nos. 58, 64, 66, and Plaintiffs’ motion to strike declarations, *see* Doc. No. 72. The Court has reviewed the entire record, as well as the pleadings and exhibits, with respect to the instant motion. The issues have been fully briefed, and no hearing is deemed necessary. *See* Local Rule 105.6 (D. Md. 2010). For the reasons stated more fully below, the Court will deny Plaintiffs’ motion for summary judgment, grant Federal Defendants and Intervenor Defendants’ cross-motions for summary judgment, and grant-in-part and deny-in-part Plaintiffs’ motion to strike declarations.

## **I. FACTUAL & PROCEDURAL BACKGROUND**

The following facts are based on the nearly 20,000 pages of material compiled by the NMFS in the administrative record. Plaintiffs hold registrations issued by the Environmental Protection Agency (“EPA”) that authorize them to sell products containing three insecticides: chlorpyrifos, diazinon and malathion. Plaintiffs challenge a biological opinion (“BiOp”) issued by the National Marine Fisheries Service (“NMFS”) which found that registration of the three products without restrictions not previously imposed by the EPA would jeopardize the continued

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<sup>1</sup>Balsiger is the Acting Assistant Administrator of NMFS. In that role, Balsiger is responsible for administering the Endangered Species Act (“ESA”).

existence of 27 protected species of Pacific salmonids (salmon and steelhead fish) and their habitat. Plaintiffs allege that the BiOp is not based on the best scientific and commercial data available as required by the ESA. Intervenor Defendants are conservation and fishing organizations. Federal Defendants and Intervenor Defendants contend that the three pesticides at issue jeopardize the continued existence of Pacific coast salmonids and that the the agency actions taken were necessary to mitigate the harm and were not arbitrary and capricious.

A. Requirements of the Endangered Species Act

Section 7 of the Endangered Species Act (“ESA”) imposes affirmative duties on the EPA and other federal regulatory agencies to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification” of the species’ critical habitat. 16 U.S.C. § 1536(a)(2). When an agency determines that a proposed action is likely to “affect listed species or critical habitat,” that agency must consult with the NMFS or the Fish and Wildlife Service.<sup>2</sup> *Id.* § 1536(c).

Once the consultation is initiated, the NMFS must analyze all relevant information and provide the EPA with a BiOp addressing the potential impact of the EPA’s action. The ESA requires the NMFS to “use the best scientific and commercial data available” in determining whether the EPA’s action (here, its authorization of the use of the pesticides at issue) is likely to result in jeopardy to the salmonids. *Id.* § 1536(a)(2). If the NMFS determines that the action will jeopardize the continued existence of a species or adversely modify critical habitat, the NMFS

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<sup>2</sup>The NMFS has jurisdiction over anadromous fish species such as the salmon and steelhead at issue in the instant action.

must suggest reasonable and prudent alternatives to the proposed action that will avoid such impacts. *Id.* § 1536(b)(3). The NMFS must also provide the EPA with an Incidental Take Statement (“ITS”). *Id.* § 1536(b)(4). To “take” under the ESA means to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” *Id.* § 1532(19). Taking is generally prohibited by the ESA. *Id.* An ITS authorizes a limited take of a protected species, establishes the limit of the taking, and describes “reasonable and prudent measures” (“RPMs”) to “minimize” the impact of the take. 16 U.S.C. § 1536(b)(4)(C).

#### B. Requirements of the Federal Insecticide, Fungicide and Rodenticide Act

Pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”), pesticides must be registered by the EPA prior to their distribution and sale. 7 U.S.C. § 136, *et seq.* Two of the pesticides at issue, malathion and diazinon, were first registered in 1956. Chlorpyrifos was registered in 1965.

Under FIFRA, the EPA has implemented a reregistration process for older chemicals, including chlorpyrifos, malathion, and diazinon. The purpose of the reregistration process is to ensure that all existing registrations are consistent with contemporary science and that the products are imposing no unreasonable adverse effects on the environment. *See id.* § 136a(c)(5), 136a-1. During reregistration, companies holding prior registrations for these chemicals submit scientific data supporting reregistration and inform the EPA of the future intended uses for these chemicals.<sup>3</sup> Upon completion of the reregistration process for chlorpyrifos, malathion and diazinon, the EPA issued Registration Eligibility Decisions in July 2006 that imposed new

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<sup>3</sup>Some former uses of the three chemicals at issue were cancelled voluntarily by the product registrants.

restrictions on future product uses of the chemicals.<sup>4</sup> These decisions represented the EPA's human health and ecological risk assessments and conclusions regarding reregistration eligibility of the chemicals. The eligibility decisions listed the uses of the chemicals that would be lawful once the decisions were implemented. A party violates FIFRA and may face an enforcement action if it uses a pesticide containing a registered chemical in a manner inconsistent with the product's label. 16 U.S.C. § 1536(a)(2).

### C. Factual Background

In early 2001, the EPA was sued for failing to consult with the NMFS regarding the potential impact of the reregistration of 54 pesticides (including chlorpyrifos, malathion, and diazinon) on 28 protected species of Pacific salmonids and their critical habitat. As discussed above, such a consultation is required by Section 7 of the ESA. Accordingly, on July 2, 2002, the United States District Court for the Western District of Washington ordered the EPA to determine which of the 54 pesticides impacted protected salmonids and to initiate consultations with the NMFS for each of those chemicals. The EPA determined that several dozen of these pesticides (including chlorpyrifos, malathion, and diazinon) could affect protected species of Pacific salmonids, and made formal consultations to the NMFS relating to their registration. The EPA formally requested NMFS' opinion as to diazinon use in November 2002, chlorpyrifos use in April 2003, and malathion use in December 2004. The NMFS initially did not respond to the EPA's consultation requests.

In 2007, the NMFS was sued for unreasonable delay in completing the EPA's

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<sup>4</sup>The EPA also issued Interim Registration Eligibility Decisions for two of the three chemicals at issue in this case. The Court understands that these interim decisions were essentially draft versions of the final registration decisions.

consultation requests. On July 30, 2008, the NMFS entered into a stipulated settlement agreement with the plaintiffs in that case and agreed to a schedule for the outstanding consultation requests.

1. The Draft Biological Opinion

On July 31, 2008, the NMFS released a draft BiOp regarding the EPA's consultation requests for chlorpyrifos, malathion, and diazinon. The draft BiOp found that the EPA's registration decisions for these chemicals were likely to jeopardize the continued existence of 28 protected species of Pacific salmonids and to destroy or adversely modify the critical habitat of 26 of those species. Release of the draft BiOp met with criticism from the EPA, California's Department of Pesticide Regulation, the Washington State and Idaho Departments of Agriculture, and Plaintiffs. Specifically, these groups complained that the draft did not address the reregistration actions the EPA had taken since requesting consultation in 2002-2004; actions which had already reduced the use of the three chemicals and had placed additional restrictions to limit the pesticides from reaching waterways. These groups provided the NMFS with input on its draft in the form of written comments, copies of and citations to scientific studies and data, and in-person explanations by experts on the significance of those studies and data. Through these meetings and studies, Plaintiffs sought to convince the NMFS that the proposed uses of chlorpyrifos, malathion, and diazinon did not jeopardize the protected Pacific salmonids or their habitat.

2. The Final Biological Opinion

On November 18, 2008, the NMFS released the final BiOp. The final BiOp found that the EPA's registration decisions were likely to jeopardize the continued existence of 27 protected species of salmonids (rather than 28, as listed in the draft BiOp), and would destroy or adversely modify critical habitats for 25 (as opposed to 26) of those species. As part of the BiOp, the NMFS offered six reasonable and prudent alternatives ("RPAs"), to be implemented by the EPA within a year. Plaintiffs especially contest the first element of the RPA, which requires the EPA to prohibit use of the chemicals by ground application within 500 feet, and aerial application within 1,000 feet, of any salmonid habitat. As part of the BiOp, the NMFS also issued an ITS, non-discretionary RPMs, and non-discretionary terms and conditions to implement the RPMs. The EPA must comply with the RPMs terms and conditions in order to be exempt from liability under Section 9 of the ESA. If the EPA does not respond to the BiOp and the RPAs, it will face civil and criminal penalties. 16 U.S.C. § 1540.

D. Procedural History

In April 2009, Plaintiffs filed suit in this Court. In their complaint, Plaintiffs argue that the NMFS violated the APA and ESA by developing and issuing the BiOp and associated RPA, ITS, and RPMs. *See* Doc. No. 1. Specifically, Plaintiffs contend that the NMFS failed to: (1) base the BiOp on the "best scientific and commercial data available" as required by the ESA; (2) explain the connection between the conclusions expressed in the BiOp and the facts the NMFS found; and (3) respond to the substantive comments the NMFS received from the EPA, the State agencies and Plaintiffs which criticized the BiOp's analysis, findings and conclusions. On March 2, 2011, the Fourth Circuit held that review of the BiOp in this Court was appropriate. *Dow*

*AgroSciences LLC v. Nat'l Marine Fisheries Serv.*, 637 F.3d 259 (4<sup>th</sup> Cir. 2011). On July 18, 2011, Plaintiffs filed a motion for summary judgment on these claims. *See* Doc. No. 58. On August 22, 2011, Intervenor Defendants filed a cross-motion for summary judgment, and Federal Defendants filed a separate cross-motion for summary judgment. *See* Doc. Nos. 64, 66. In order to further explain the NMFS' decision-making process, Defendants attached to their cross-motions the declarations of Ed Whitelaw and Anthony W. Hawkes. *See* Doc. No. 64 Ex. 3; Doc. No. 67 Ex. 1. Plaintiffs have filed a motion to strike these declarations, *see* Doc. No. 72, on the grounds that they are inadmissible post-hoc rationalizations of the NMFS' decision.

## **II. STANDARD OF REVIEW**

### **A. Plaintiffs' Motion to Strike Declarations Providing Additional Explanations for the NMFS' Decision**

In a record review case under the APA, the scope of judicial review is limited to the administrative record. 5 U.S.C. § 706. The reviewing court must apply the “appropriate APA standard of review . . . to the agency decision based on the record the agency presents to the reviewing court.” *Florida Power & Light Co. v. Lorion*, 470 U.S. 729, 743-44 (1985). Because the Court's review is confined to the administrative record, “no *do novo* proceeding may be held.” *United States v. Carlo Bianchi & Co.*, 373 U.S. 709, 715 (1963). Rather, “the focal point for judicial review should be the administrative record already in existence, not some new record made initially in the reviewing court.” *Camp v. Pitts*, 411 U.S. 138, 142 (1973).

However, if an agency has not provided an explanation for its action sufficient to allow effective judicial review, the Court may “obtain from the agency, either through affidavits or



testimony, such additional explanation of the reasons for the agency decision as may prove necessary.” *Id.* at 142-43. This does not mean that courts will accept “post-hoc rationalizations” for agency actions, however.<sup>5</sup>

Courts of Appeals have interpreted *Camp* to allow agencies to submit declarations that “illuminate[]” or “explain” the original record, as opposed to declarations that “advance new rationalizations for the agency’s action.” *Yale-New Haven Hosp. v. Leavitt*, 470 F.3d 71, 82 (2d Cir. 2006). *See Envtl. Def. Fund v. Costle*, 657 F.2d 275, 285 (D.C. Cir. 1981) (“The new material should be merely explanatory of the original record and should contain no new rationalizations.”); *see also Sierra Club v. Marsh*, 976 F.2d 763, 772-72 (1<sup>st</sup> Cir. 1992) (same); *Sierra Club v. United States Army Corps of Eng’rs*, 771 F.2d 409, 413 (8<sup>th</sup> Cir. 1985) (“Any new materials submitted should . . . be merely explanatory of the original record and should contain no new rationalizations for the agency’s decision.”); *Bunker Hill Co. v. EPA*, 572 F.2d 1286, 1292 (9<sup>th</sup> Cir. 1977) (finding that the “augmenting materials were merely explanatory of the original record” and “[n]o new rationalization . . . was offered.”).

Thus, agencies are limited to the submission of declarations that explain “the decisionmakers’ action at the time it occurred,” *Sierra Club v. Marsh*, 946 F.2d at 772-73 or that “clarify[y]” the administrative record, *Bunker Hill*, 572 F.2d at 1292. To the extent the augmenting materials offer new rationalizations for the agency’s action not supported by the administrative record, at least one circuit court has found that the solution “is not to ignore the affidavits altogether, but rather to view them ‘critically.’” *Sierra Club v. Marsh*, 976 F.2d at 772-73 (citations omitted).

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<sup>5</sup>A post-hoc rationalization is a new rationale for an agency action that is put forth for the first time after the action is final. *Nat’l Oilseed Processors Ass’n v. Browner*, 924 F. Supp. 1193, 1204 (D.D.C. 1996), *aff’d in part, remanded on other grounds*, 120 F.3d 277 (D.C. Cir. 1997).

B. Summary Judgment

BiOps prepared pursuant to Section 7 of the ESA are final agency actions reviewable pursuant to the APA. *Dow AgroSciences*, 637 F.3d at 268. The APA requires that the agency action not be “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law” or taken “without observance of procedure required by law.” 5 U.S.C. § 706(2)(A), (D); *Pac. Coast Fed’n of Fishermen’s Ass’ns v. NMFS*, 265 F.3d 1028, 1034 (9<sup>th</sup> Cir. 2001).

This is a narrow standard of review in which the Court may not substitute its own judgment for that of the agency. *See Darden v. Peters*, 488 F.3d 277, 284-85 (4<sup>th</sup> Cir. 2007). The Court’s task under this standard is to determine whether the agency considered the relevant factors or whether it “entirely failed to consider an important aspect of the problem [or] offered an explanation for its decision that runs counter to the evidence before the agency . . .” *Sierra Club v. EPA*, 162 F. Supp. 2d 406, 411 (D. Md. 2001) (internal quotation marks and citations omitted). While courts must defer to an agency’s reasonable interpretation of ambiguous scientific evidence, the “presumption of agency expertise may be rebutted if its decisions, even though based on scientific expertise, are not reasoned.” *Greenpeace v. Nat’l Marine Fisheries Serv.*, 80 F. Supp. 2d 1137, 1147 (W.D. Wash. 2000).

**III. ANALYSIS**

A. Plaintiff’s Motion to Strike Declarations

In support of their cross-motions for summary judgment, Federal Defendants attached the June 21, 2010 declaration of Anthony W. Hawkes and Intervenor Defendants attached the April

13, 2004 declaration of Ed Whitelaw. *See* Doc. No. 64 Ex. 2; Doc. No. 67 Ex. 1. These declarations provide further explanation of the NMFS’ analysis and decision-making process. *See id.* Plaintiffs have filed a motion to strike these declarations, *see* Doc. No. 72, arguing that they are inadmissible post-hoc rationalizations of the NMFS’ decision.

A post-hoc rationalization is a new rationale for an agency action that is put forth for the first time after the action is final. *Nat’l Oilseed Processors*, 924 F. Supp. at 1204. Although the Fourth Circuit has not addressed this issue, six lower appellate courts have held that agencies may submit declarations that “illuminate[]” or “explain” the original record, but not declarations that “advance new rationalizations for the agency’s action.” *Yale-New Haven Hosp.*, 470 F.3d at 82 (2d Cir. 2006). *See also Env’tl. Def. Fund*, 657 F.2d at 285 (D.C. Cir. 1981) (“The new material should be merely explanatory of the original record and should contain no new rationalizations.”); *see also Sierra Club v. Marsh*, 976 F.2d at 772-72 (1<sup>st</sup> Cir. 1992) (same); *Sierra Club v. United States Army Corps of Engr’s*, 771 F.2d at 413 (8<sup>th</sup> Cir. 1985) (same); *Bunker Hill*, 572 F.2d at 1292 (9<sup>th</sup> Cir. 1977) (same).

#### 1. The Hawkes’ Declaration

Plaintiffs contend that the Hawkes Declaration contains post hoc rationalizations because it provides new explanations for the NMFS’ actions that are not based on the original record. The vast majority of the Declaration consists of Hawkes explaining why the NMFS disregarded certain studies or data submitted by Plaintiffs and continued to rely on others. *See* Doc. No. 67 Ex. 1 ¶¶ 12-14, 20-21, 23, 25. In each instance, Hawkes provides an explanation not already

given in the administrative record.<sup>6</sup> However, the Court finds that these explanations do not constitute post hoc rationalizations because they stem from information provided in the administrative record, albeit on a more generalized level, regarding the NMFS' review of data and studies submitted by Plaintiffs and others.

For example, the record reveals an ongoing review of the data and studies submitted by Plaintiffs, the EPA and others. *See* AR at 763 (“reviewing studies and comments provided by EPA and applicants”); *see also* AR at 818 (same); AR at 761 (“[o]ur priority will be reviewing comments from the three EPA-designated applicants, EPA, and the plaintiffs.”). The record also documents generally the NMFS' decision to revise the final BiOp to include some of the studies and data submitted by Plaintiffs and others. *See* AR at 834-35 (“The applicant-submitted studies were useful in revising [the Response Analysis] section. Some of the mesocosm studies were incorporated.”)

Moreover, although the general references on the record are a far cry from the specific explanations contained in the Hawkes Declaration, the record contains a general discussion of the NMFS' reasons for discounting certain categories of studies or data submitted by Plaintiffs, or at least proves that such a discussion occurred. *See* AR at 753 (noting that “substantial revision to the analysis” of the draft BiOp will not be necessary “as most of the objections [cited by Plaintiffs] relate to non-ag uses of the products”); *see also* AR at 756 (“The majority of the pushback . . . NMFS is encountering is focused on the use of particular studies rather than the scientific procedures for analysis . . . responding to the majority of comments will consist of

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<sup>6</sup>For instance, Hawkes explains that the NMFS considered a certain study by Hall, Killen, and Allen but did not include it in the final BiOp because of concerns with the study design and because it did not provide useful information beyond that already presented in the draft BiOp. *Id.* at ¶ 12. This explanation is not contained in the administrative record.

justifying the use of some studies and explaining the rationale for not considering others, rather than repeating analyses.”). The Court finds that the foundation laid on the record concerning the review of these data and studies by the NMFS renders the Hawkes Declaration an explanation or illumination rather than a post hoc rationalization of the NMFS’ actions. *See Motor Vehicle*, 463 U.S. at 43. Accordingly the Court declines to strike the Hawkes Declaration.

## 2. The Whitelaw Declaration

Plaintiffs contend that the Whitelaw Declaration is irrelevant to the issues at hand and should be struck on that basis. Intervenor Defendants submitted the Whitelaw Declaration to counter evidence presented by Plaintiffs that the buffers required by the NMFS will result in great financial impacts to Plaintiffs. Intervenor Defendants contend that the Whitelaw Declaration “details the flawed assumptions and analytical errors underlying the types of broad estimates” presented by Plaintiffs. Doc. No. 76 at 1. Intervenor Defendants acknowledge that this evidence is relevant only to the extent that the Court considers Plaintiffs’ allegations of financial impacts. As discussed below, the Court finds that the ESA does not require the NMFS to consider financial impacts on third parties such as Plaintiffs in determining whether the buffers are economically feasible. Accordingly, the Court grants Plaintiffs’ motion to strike the Whitelaw Declaration as irrelevant.

## B. Summary Judgment

Plaintiffs contend that the NMFS failed to base the BiOp on the best scientific and commercial data available, to explain the connection between the conclusions expressed in the

BiOp and the facts the NMFS found, and to respond to substantive comments it received from the EPA, State agencies and Plaintiffs which criticized the BiOp's analysis, findings and conclusions. Specifically, Plaintiffs allege that the NMFS erroneously (1) relied on old and invalid toxicity data and disregarded newer studies that used more reliable scientific methodologies, without explanation; (2) ignored the use restrictions that had already been developed as part of the reregistration process for the three pesticides, relying instead on environmental monitoring data that pre-date reregistration decisions; and (3) based its assessment of population-level exposure and effects on assumptions and models that the EPA and the affected State agencies have shown are wrong.

In response, Federal Defendants and Intervenor Defendants contend that the NMFS' analysis is exhaustive and thoroughly documented in the BiOp, that its "jeopardy" conclusion is rational and fully supported by the "best scientific and commercial data available," and that Plaintiffs have ignored the effects of these pesticides, especially on the vulnerable shallow water habitat and the sensitive juvenile salmonids that use it. Defendants argue that they relied on a multitude of studies, including studies submitted by Plaintiffs, in determining that the pesticides are toxic to salmonids at very low concentrations. Defendants contend that the NMFS rationally relied on mathematical models to develop a realistic range of exposures, and that these models together with the monitoring data, used correctly by the NMFS, are the best data available. Additionally, Defendants contend that even though the registrations for these pesticides have changed, salmonids may continue to be exposed to the concentrations of pesticides identified by the NMFS because customers still possess stocks of pesticides with the older labels and continue to use them.

Upon reviewing the extensive administrative record and briefings by the parties, the Court discerns a rational connection between the voluminous facts and studies considered by the NMFS and the decisions reached in the NMFS' final BiOp. Although Plaintiffs disagree with many of the NMFS' findings and conclusions and have presented persuasive arguments as to why the NMFS should have used different numbers and reached different conclusions, Plaintiffs have not shown that the NMFS ignored the best scientific and commercial data available or that the NMFS' conclusions are irrational. Although Plaintiffs have demonstrated that the BiOp is of "less than ideal clarity" at points and that the NMFS could have reasonably reached a conclusion more favorable to Plaintiffs, the Court finds that the BiOp is not arbitrary and capricious. In the paragraphs that follow, the Court will address and dispose of Plaintiffs' principal contentions relating to the BiOp.

1. The NMFS ignored Changes to Pesticide Registrations and Relied Instead on Old, Non-representative Water Monitoring Data

Plaintiffs contend that the NMFS' conclusions about the amount of the pesticides reaching salmon-bearing waters rely on old water monitoring data that fail to account for the extensive use cancellations and mitigation measures imposed by the EPA in reregistration. Plaintiffs argue that the use restrictions imposed have already substantially and significantly reduced the use and environmental impacts of all three pesticides at issue,<sup>7</sup> and that the BiOp provides no reasonable justification for the NMFS' continued reliance on the old and non-

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<sup>7</sup> Plaintiffs point to the fact that the percentage of agricultural detects for diazinon declined in 2006 from 14.14% to 2.5%, and urban detects declined from 71.85% to 25.3%. AR 1442-43. Diazinon use in California has also decreased by 70%, AR at 1432, after "[o]utdoor residential uses of diazinon by homeowners, lawn care operators, and pest control operators were phased out or canceled as of December 31, 2004," AR at 887, and agricultural uses were severely restricted, AR at 1428-31.

representative data in light of these new measures. Plaintiffs contend that the NMFS was provided with more recent data as well as a study completed in June 2008, and that it failed to rely on this data, the best available data, in reaching its conclusions.

However, the NMFS addressed these concerns in its final BiOp, where it notes that “[c]ommon aspects that limit the utility of the available monitoring data as accurate depictions of exposure within listed salmonids habitats include: . . . lack of representativeness of current and future pesticide uses and conditions.” AR at 1109. The Court can reasonably discern that it was because of this perceived limitation in the water monitoring data that the NMFS supplemented that data with detailed modeling that accounts for the current available labels for these pesticides.

Moreover, the NMFS provides an explanation for its continued reliance on the older data in the BiOp. The BiOp notes that although “[r]ecent data show a decrease in use of chlorpyrifos and diazinon in California that may be associated with restrictions on residential uses . . . pesticide use patterns change and may result in either increases or decreases in use of pesticide products.” AR at 1109-10. In other words, actual pesticide use does not necessarily correlate with the maximum allowances listed on the labels, and thus use restrictions that decrease those maximum allowances will not necessarily result in a corresponding decrease in pesticide use.

Defendants’ briefings and the Hawkes’ Declaration provide additional explanations for the NMFS’ use of the water monitoring data.<sup>8</sup> *See* Doc. No. 67 at 36; Ex. 1. These explanations

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<sup>8</sup>Defendants reason that there simply have not been enough data collected since the recent label changes for the NMFS to base its findings solely on more recent data. Defendants argue that the NMFS’ duty to consider the “best available data” necessarily means considering certain older but more comprehensive studies. In particular, Defendants point to studies by the National Water Quality Assessment Program of the U.S. Geological Survey (“USGS”) in which, over a period of 10 consecutive years, the USGS scientists regularly analyzed water samples from 186 stream sites, bed sediment samples from 1,052 stream sites, and fish from 700 stream sites across the continental United States. *See* Doc. No. 78 at 14; AR at 1031. Defendants contend that these studies, although completed before recent labeling changes, constitute the “most comprehensive look at pesticide contamination in the nation’s waterways.” Doc. No. 78 at 14. Defendants also point out that the BiOp specifically states that it



are grounded in language contained within the BiOp—language suggesting that the NMFS considered the very limitations in the water monitoring data now put at issue by Plaintiffs in deciding whether to rely on it. In their briefings and in the Hawkes’ Declaration, Defendants merely propound on the limitation issue already recognized and addressed in the BiOp. As such, the Court construes Defendants’ cited rationales as explaining and illuminating the BiOp rather than as new, post hoc rationalizations. Accordingly, Defendants have satisfactorily articulated their choice to consider all water monitoring data, not just the most recent, and the Plaintiffs have not demonstrated that this decision was arbitrary and capricious.

2. The NMFS Improperly Employed the PRZM-EXAMS and AgDrift Models

Plaintiffs contend that the NMFS improperly employed and relied on two models, the PRZM-EXAMS model and the AgDrift Model, to predict the levels of pesticide that would reach salmonid-bearing waters. Particularly, Plaintiffs contend that the BiOp improperly relied on the PRZM-EXAMS model given the EPA’s comments to the NMFS that these modeled scenarios “are quite unrealistic for use with Pacific salmon and steelhead.” AR at 4914.

However, the NMFS includes a satisfactory explanation for its reliance on the PRZM-EXAMS model within the BiOp, where it pointedly addresses the EPA’s concerns with the PRZM-EXAMS estimates. AR at 1088. The BiOp puts the EPA’s statements in context.<sup>9</sup>

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considered the use restrictions in developing its opinion. *See* Doc. No. 79 at 18; AR at 882. Finally, Defendants contend that even if reductions in use have in fact occurred, the data in the studies may not capture the change because much of the available monitoring data was not designed to capture peak exposure. *See* Doc. No. 78 at 16; AR at 1109.

<sup>9</sup> It notes, for example, that “[a]lthough EPA characterized these exposure estimates as ‘worst case’ in the BEs, it has also acknowledged that measured concentrations in the environment sometimes exceed PRZM-EXAMS [estimates].

Although the EPA commented on the shortcomings of the PRZM-EXAMS model, it was the EPA itself that ran the PRZM-EXAMS model and submitted the results to the NMFS for use in compiling the BiOp. AR at 4919. That the EPA included a full disclosure of the model's shortcomings in its submission does not disqualify the model as a useful tool but rather forces the NMFS to consider those shortcomings in determining the weight to accord the model. The BiOp reveals that the NMFS addressed these shortcomings as part of its examination of the relevant data<sup>10</sup> and proceeded to make a rational connection between the facts found and the choice made.

Plaintiffs argue more convincingly that the AgDrift model does not accurately predict exposure estimates for shallow off-channel habitats where the model unrealistically assumes a flat field with wind blowing directly toward salmon habitats. In employing the model this way, the NMFS reached an extremely high exposure estimate of 1,000 ug/L for all three compounds. AR at 1117-18. Plaintiffs contend that an exposure of 1,000 ug/L cannot legally be reached for diazinon, that such an exposure can be reached for chlorpyrifos only if no buffer is used for airblast spray, and for malathion only in California and only adjacent to citrus. Federal Defendants now concede that, at least in regard to diazinon, "NMFS was being somewhat overbroad when it stated that it 'predicted concentrations exceed[] 1,000 ug/L for all three compounds.'"<sup>11</sup> Doc. No. 79 at 21. Plaintiffs contend that this 1,000 ug/L value was an "essential" and "necessary" part of the NMFS' determination of population level consequences, and that the BiOp should therefore be vacated.

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Rather than worst case, EPA has clarified that PRZM-EXAMS estimates are protective for the vast majority of applications and aquatic habitats." AR at 1088-89 (citations omitted).

<sup>10</sup>The NMFS refutes concerns that the PRZM-EXAMS model overestimates risk by citing to monitoring data showing that concentrations of the pesticides actually measured in aquatic habitats sometimes exceed PRZM-EXAMS estimates. *Id.* at 1088-89.

<sup>11</sup>Notably, Intervenor Defendants do not concede this point but rather present evidence suggesting that it is "not only 'possible' to reach that 1,000 ug/L concentration that NMFS considered in the BiOp, it is possible to exceed it." Doc. No. 78 at 20.

Thus, the Court must determine how much weight the NMFS put on the overbroad 1,000 ug/L estimate in reaching its ultimate conclusions. The NMFS' use of the AgDrift model constituted the first stage of the NMFS' risk analysis. AR at 1088. The concentrations predicted by that model led the NMFS to draw certain conclusions about the effects to individual salmon and steelhead, from which it went on to analyze the effects to the species as a whole using its population model. AR at 1157-65. The BiOp itself states that the first stage of its risk analysis is "essential[,] as adverse effects to individuals may result in population level consequences," and that "[c]haracterization of impacts to individuals provides necessary information to assess potential impacts to populations, and ultimately to the species." AR at 1088. The importance of the preliminary risk analysis creates concerns that errors at this stage will permeate the NMFS' ultimate conclusions.

However, the values used by the NMFS in its subsequent population model analysis do not reflect the overbroad 1,000 ug/L number cited in its preliminary analysis. Rather, the NMFS modeled population-level exposures based on a range of exposure data from multiple sources. AR at 1179-82. Accordingly, the population model considers the effects of concentrations as high as 100 ug/L for chlorpyrifos and malathion and 400 ug/L for diazinon. This model focuses on the threshold concentrations of the pesticides at which the salmonids experience adverse effects. AR at 1157-65. For example, the NMFS cites the adverse effects threshold of diazinon at a mere 90 ug/L because studies suggest that diazinon will kill half of the salmonids exposed to it at that concentration. Plaintiffs argue that employing the AgDrift model correctly would have revealed a maximum concentration of 304 ug/L rather than the 1,000 ug/L cited in the BiOp. However, even if the lower 304 ug/L concentration had been utilized in the BiOp, such a

concentration is still much higher than the adverse effects threshold of diazinon. Thus, the NMFS would have reached the same conclusion in the first stage of its analysis—that application of diazinon results in individual-level effects—which would have led it to perform the same population-level analysis. Although Plaintiffs have demonstrated that the NMFS’ initial analysis was an “essential” and “necessary” part of its ultimate conclusions, Plaintiffs has not shown that inclusion of a lower concentration of diazinon at this initial stage of the analysis would have changed those conclusions.

Moreover, Defendants have acknowledged that the AgDrift model used legal rates in reaching the 1,000 ug/L predictions for malathion and chlorpyrifos. While there seems to be a reasonable difference of opinion regarding whether the model accurately predicted concentrations of diazinon,<sup>12</sup> it is not within the purview of this Court to weigh the evidence supporting these extremely divergent scientific opinions and decide which of them is correct. “When specialists express conflicting 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.” *Ohio Valley Envtl. Coal. v. Aracoma Coal Co.*, 556 F.3d 177, 205 (4<sup>th</sup> Cir. 2009) (quoting *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 378 (1989)).

Given the difference of opinion regarding the correct concentration of diazinon in the AgDrift model, it is unclear whether the 1,000 ug/L number is an error. However, a comprehensive examination of the individual effects and population effects analysis in the BiOp and their interaction, as described above, reveals that employing a concentration of 1,000 ug/L

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<sup>12</sup>Plaintiffs contend that inputting legal rates for diazinon in the AgDrift model results in a concentration no greater than 304 ug/L, while Federal Defendants contend that lawful aerial applications would yield concentrations of up to 666 ug/L, and Intervenor Defendants argue that areal application would result in an exposure of 1,332 ug/L.

would not produce an ultimate outcome different than would employing a concentration of 304 ug/L or 666 ug/L. Accordingly, the Court declines to vacate the BiOp on this ground.

3. The NMFS Used Incorrect Toxicity Data or Endpoints in Determining Exposure Risks and Accordingly Set Concentration Levels that are Much Too Low

Plaintiffs next contend that the NMFS relied on improper toxicity levels in determining what concentrations would have adverse effects on individual fish. Plaintiffs take issue with the BiOp's use of an LC<sub>50</sub><sup>13</sup> of 2.8 ug/L as the lower end assessment endpoint for malathion's lethal toxicity to salmon. Plaintiffs contend that this value is based on a study that is more than forty years old and ignores more recent data suggesting that the LC<sub>50</sub> is closer to 91 ug/L. Plaintiffs contend that the NMFS relied solely on this value when running its population model with respect to acute toxicity. Second, Plaintiffs take issue with the BiOp's use of 0.03 ug/L and 0.2 ug/L for diazinon, contending those values are also far too low and that the NMFS relied on the 0.03 ug/L value as a key diazinon assessment endpoint in the initial phase of its risk assessment process. Finally, Plaintiffs criticize the NMFS' use of 0.8 ug/L as the low-end assessment endpoint for the acute toxicity of chlorpyrifos. Plaintiffs submit that the NMFS should have instead used the much higher toxicity values of 91 ug/L for malathion, 2 ug/L for diazinon, and 10 ug/L for chlorpyrifos.

However, Defendants have convincingly demonstrated that the BiOp discloses the lowest LC<sub>50</sub> values as part of a range but does not rely on or use those extreme values in its predictive models. The NMFS merely included those values in its graphs to see whether the range of

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<sup>13</sup>The term "LC50" which is often used when referring to toxicity levels, is the "statistically-derived concentration sufficient to kill 50% of the test population." AR at 1125.

available exposure concentrations overlapped with the range of available effects concentrations. AR at 1158-60. Plaintiffs support their contention that the lowest values were used in the population model by citing to the BiOp, which states that the NMFS used “the lowest reported LC<sub>50</sub>” in its population model “to ensure that risk is not underestimated.” AR at 1178. However, in the portion of the administrative record cited by Plaintiffs, the BiOp was not discussing the lowest values cited in the preliminary graphs (i.e. those graphs with the ug/L values Plaintiff contends were inordinately low) but rather was discussing the lowest values that the EPA had submitted to the NMFS. AR at 1304 n.2. The lowest values submitted by the EPA were much higher than the values contested by Plaintiffs: 90 ug/L for diazinon, 3 ug/L for chlorpyrifos, and 30 ug/L<sup>14</sup> for malathion. The language in the BiOp makes clear that the NMFS used these higher, more realistic values in modeling population effects, rather than the lower values used in the preliminary graphs.

Admittedly, the NMFS’ general statement that it selected the “lowest reported LC<sub>50</sub>s” is ambiguous in light of the fact that the BiOp contains not only the lowest LC<sub>50</sub>s ever reported but also the lowest LC<sub>50</sub>s reported by the EPA. Intervenor Defendants were evidentially also confused by this language. *See* Doc. No. 78 at 10 (stating in part that “[w]hatever the precise meaning of the single phrase [relating to the lowest reported LC<sub>50</sub>s] that Registrants isolate from the rest of the BiOp . . .”). However, Federal Defendants have guided the Court to the correct footnote clarifying the ambiguity. *See* Doc. No. 1304 n.2 (“[v]alues from EPA BEs”). While the BiOp provides “less than ideal clarity” on this point, the Court finds that this situation is one in which “the agency’s path may reasonably be discerned.” *See 1000 Friends of Md. v. Browner*,

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<sup>14</sup>The EPA apparently reported a lowest value of 4.1 ug/L for malathion, but the NMFS chose to use the next highest value of 30 ug/L due to perceived flaws in the experiment producing the 4.1 ug/L value. AR 1134-35.

265 F.3d 216, 238 (4<sup>th</sup> Cir. 2001) (quoting *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983)). Accordingly, the Court declines to disturb the NMFS' use of toxicity data and endpoints in determining exposure risks.

4. The NMFS Has Not Justified its Predictions of Population Level Effects

As discussed above, the NMFS used a quantitative population model to simulate how the pesticides at issue would affect the salmonid species. As part of that model, the NMFS made the simplifying assumption that each juvenile salmon and steelhead would be exposed to high levels of these pesticides for four straight days. Plaintiffs take issue with this four-day assumption, contending that it is arbitrary and that the NMFS entirely failed to explain the basis of its four-day assumption in the BiOp.

Plaintiffs are correct that the NMFS provides scant explanation for this assumption in the BiOp. While the BiOp suggests that a four-day period is one of the standard periods for acute toxicity testing, it also states that this test normally occurs in laboratories under controlled conditions. *See* AR at 1125. If the NMFS were to rely solely on this four-day test in drawing conclusions about the degree to which actual populations of salmonids are affected, it would have an obligation to explain why such a test, which relies on laboratory-based assumptions of consistent exposure, serves as a basis for predicting population exposure or survival in the field.

However, the NMFS notes in the BiOp that “[t]he degree to which an actual threatened or endangered population is affected will depend on a host of factors” not included in this test, such as “the number of individuals exposed, the duration of exposure, when they are exposed, and if individuals are exposed more than once.” This supports Federal Defendants’ explanation (albeit

post-hoc, and viewed critically by the Court,) that the four-day assumption was not the final step in the NMFS' analysis but rather provided NMFS with a "yardstick" to measure population-level effects. *See* Doc. No. 79 at 20. Moreover, it makes sense that the NMFS would utilize such an assumption as part of its analysis where this assumption is standard for acute toxicity testing in this field.<sup>15</sup> While four days may seem arbitrary to a layperson, it is not the duty of the Court to sit in judgment of scientific standards. The Court also declines to second-guess the NMFS' decision to utilize this standard, ordinarily confined to laboratory tests, as a part of its larger analysis and determination of population-level effects. Plaintiffs have not demonstrated that the NMFS' decision to utilize the four-day assumption was arbitrary and capricious.

5. The NMFS' "Buffer" Recommendations are Unsupported and Unlawful

Plaintiffs take issue with the NMFS' choice of reasonable and prudent alternatives ("RPAs"), particularly the NMFS' requirement of no-use buffers. These buffers would require the EPA to prohibit use of the three pesticides by ground application within 500 feet, and aerial application within 1,000 feet, of any salmonid habitat. Plaintiffs argue that the buffers are vastly larger than would be appropriate, and far too inflexible. Plaintiffs contend that the buffers should vary according to channel depth and width and the potential presence of salmonids.

First, the BiOp itself explains the choice of the buffers. *See* AR 1251 ("Pesticide buffers are recognized tools to reduce pesticide loading into aquatic habitats from draft. EPA, USFWS,

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<sup>15</sup>For example, the EPA generally requires all registrants to support their pesticide registrations by submitting four-day acute toxicity studies for fish. 40 C.F.R. § 158.630(b)(3); EPA OPPTS Ecological Effects Test Guidelines 850.1075 (Apr. 1996); 40 C.F.R. § 797.1400(e)(9); AR at 7094 (stating that the EPA assumes an "instantaneous" exposure as part of its standard risk assessment procedure that would "elicit acute effects comparable to those observed over . . . periods tested in the laboratory, typically . . . 96 hours.").



NMFS, courts, and state agencies routinely enlist buffers as pesticide load reduction measures.”). However, the BiOp does not explain why the buffers it requires do not vary according to channel depth and width, and Plaintiffs’ suggestion appeals to common sense. Apparently, uniform buffers are the industry standard.<sup>16</sup> The Court declines to hold the NMFS to Plaintiffs’ creative but novel suggestion.

Plaintiffs also take issue with the fact that the NMFS never explained why the buffers should be applied to drainage ditches. However, an explanation can be deduced from the fact that the buffers are to apply to all salmonid habitats, and the BiOp notes that these habitats “also include all known types of off-channel habitats as well as drainages, ditches, and other man-made conveyances to salmonid habitats that lack salmonid exclusion devices.” AR at 1251 n.14. While it is not obvious that drainage ditches would serve as a home or temporary respite for salmonids, the Court defers to the conclusions of the NMFS in the area of salmonid habitats, an area clearly within its expertise. Moreover, Plaintiffs have not introduced evidence undermining its conclusions on this issue.

Additionally, Plaintiffs assert that the ESA requires the NMFS to consider and to articulate on the record whether the buffers are economically and technologically feasible for Plaintiffs. Plaintiffs contend that the buffers required by the NMFS substantially threaten the value of their products to growers and thus threaten Plaintiffs’ sales, and that the NMFS unlawfully never considered this fact. The ESA’s implementing regulations define RPAs as alternative actions that (1) “can be implemented in a manner consistent with the intended purpose of the action:”; (2) “can be implemented consistent with the scope of the Federal

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<sup>16</sup>Federal Defendants state that “none of the buffers that NMFS reviewed vary by watershed or channel depth or width.” *See* Doc. No. 79 at 23. In support, Federal Defendants cite to several examples of agency and court impositions of buffers that apply to all water bodies. *Id.*

agency's legal authority and jurisdiction"; (3) are "*economically and technologically feasible*"; and (4) "that the Director [of the NMFS] believes would avoid the likelihood of jeopardizing the continued existence of listed species . . ." 50 C.F.R. § 402.02 (emphasis added). *See also Bennett v. Spear*, 520 U.S. 154, 177 (1997) ("economic consequences are an explicit concern of the ESA . . ."). Plaintiffs find support in an Eastern District of California case finding that "the public is entitled under law to receive, some exposition in the record of why the agency concluded (if it did so at all) that all four regulatory requirements for a valid RPA were satisfied." *San Luis & Delta-Mendota Water Auth. v. Salazar*, 760 F. Supp. 2d 855, 957 (E.D. Cal. 2010).

While the NMFS arguably discussed the technological feasibility of the buffers in discussing their recognized use as a tool used to reduce pesticide loading into aquatic habitats, *see* AR at 1251, the NMFS does not discuss the economic feasibility of the buffers in the BiOp or elsewhere in the administrative record. However, the ESA and its regulations do not state that the NMFS must undertake an economic analysis regarding its alternative action. The regulations do specify other requirements, such as that the BiOp include a "detailed discussion of the effects of the action on listed species or critical habitat." 50 C.F.R. § 402.14(h)(2). The fact that the regulations state only that the BiOp "shall include reasonable and prudent alternatives, if any", *Id.* at § 402.14(h)(3), in light of its specification in other areas, weighs against a finding that such an analysis is required.

As Plaintiffs suggest, the district court in *San Luis* did require such an explanation where the agency had "articulated absolutely no connection between the facts in the record and the required conclusion that the RPA is (1) consistent with the purpose of the underlying action; (2) consistent with the action agency's authority; and (3) economically and technologically

feasible.” However, this case is distinguishable; the NMFS cannot be said to have “articulated absolutely no connection” here where the BiOp includes a section entitled “Rationale” that explains the use of buffers generally and the NMFS’ rationale for requiring them in this case. *See* AR at 1251-54.

Moreover, the district court’s holding in *San Luis* is not binding here and is in tension with other courts that have addressed the matter. *See Greenpeace v. NMFS*, 55 F. Supp. 2d 1248, 1268 (W.D. Wash 1999) (“The guiding standard for determination of RPAs is jeopardy, not economic impact on third parties such as the fishing industry.”) (citations omitted); *see also Kandra v. United States*, 145 F. Supp. 2d 1192, 1207 (D. Or. 2001) (“True, an RPA is defined as an alternative action which is . . . economically and technically feasible. Read in context, however, the RPAs must be economically and technically feasible for the government to implement.”) (citations and quotation marks omitted); *In re: Operation of the Missouri River Sys. Litig.*, 363 F. Supp. 2d 1145, 1161 (D. Minn. 2004), *aff’d in part, vacated in part on grounds of mootness*, 421 F.3d 618 (8<sup>th</sup> Cir. 2005) (“the requirement that the RPA be economically and technologically feasible only requires that the [government agency] have the resources and technology necessary to implement the RPA.”) (citations and quotation marks omitted).

The Court agrees with the rationale of the courts above that, read in context and with an eye toward the purpose of the ESA, the economic and technological feasibility requirement can more reasonably be interpreted to apply to the abilities of the EPA to implement the buffers than the ability of pesticide manufacturers to absorb the costs. This also makes sense in light of the fact that “[t]he plain intent of Congress in enacting [the ESA] was to halt and reverse the trend

toward species extinction, *whatever the cost.*” *TVA v. Hill*, 437 U.S. 153, 184 (1978) (emphasis added). Although the BiOp does not explicitly state that the buffers it requires are economically feasible to implement, it conveys as much when it introduces the buffers as “recognized tools” to reduce pesticides in aquatic habitats and states that the “EPA, USFWS, NMFS, courts, and state agencies routinely enlist buffers as pesticide load reduction measures.” AR at 1251. Accordingly, the Court declines to vacate the BiOp on this basis.

6. The NMFS Failed to Respond to Many Substantive Comments on the Draft BiOp

Finally, Plaintiffs argue that the APA requires the NMFS to explain its conclusions and respond to comments, and the NMFS did not do this for the BiOp. Plaintiffs contend that they and others provided the NMFS with numerous comments, studies, and data that raised significant criticisms of the draft BiOp, and the NMFS failed to respond to many of these comments or even address the criticisms raised. Although Federal Defendants contend that the APA’s public notice and comment requirements, 5 U.S.C. § 553, do not apply to consultations like the one at issue undertaken pursuant to ESA § 7(a)(2), we need not decide that question. Assuming that the APA’s notice and comment provision applies, the Court finds that the NMFS adequately considered and, where appropriate, responded to comments.

To satisfy the APA’s notice and comment requirement, an agency must “demonstrate the rationality of its decision-making process [and] respond[] to those comments that are relevant and significant.” *Grand Canyon Air Tour Coal. v. FAA*, 154 F.3d 455, 468 (D.C. Cir. 1998); *see also Reyblatt v. U.S. Nuclear Regulatory Comm’n*, 105 F.3d 715, 722 (D.C. Cir. 1997) (“An

agency need not address every comment, but it must respond in a reasoned manner to those that raise significant problems.”).

Plaintiffs contend that nothing in the BiOp, or even the larger record, reveals that the NMFS responded to the nearly 130 studies and other information either identified by, or provided to, NMFS by the EPA, the States and Plaintiffs. Surely, however, the notice and comment requirement cannot be understood as an obligation that the agency cite to and discuss on the record each study provided by Plaintiffs and others. *See Oregon Natural Desert Ass’n v. Tidwell*, 716 F. Supp. 2d 982, 997 (D. Or. 2010) (“While the NMFS cannot ignore relevant biological information, it is another thing altogether to require that they cite every potentially relevant study, especially such studies that do not constitute the best available science in the estimation of the expert agency.”).

Moreover, the record demonstrates that the NMFS met with Plaintiffs and the EPA to discuss the draft BiOp, *see* AR at 709-713, and that NMFS scientists requested copies of a number of the studies referenced by Plaintiffs during that meeting, *see* AR at 717, 725, 728, as well as raw data sets from some of those studies, *see* AR at 719, so that they could be reviewed more thoroughly. The NMFS developed questions in response to the materials submitted, *see* AR at 727, 739, 715, scheduled two additional meetings with Plaintiffs and the EPA to discuss their questions, *see* AR at 745-752, and then requested additional information from Plaintiffs in order to consider their comments, *see* AR at 802, 803. The record also demonstrates that the NMFS revised the parameters of the population model based on malathion comments, *see* AR at 769, 835, revised its exposure analysis to reflect current-registered uses, *see* AR at 834, revised its response analysis to include field study data information from Oregon and toxicity studies

submitted by Plaintiffs, *see* AR at 834-35, and added 28 new summaries to its exposure analysis, *see* AR at 835.

Finally, the record demonstrates that the NMFS “reviewed materials sent by EPA and the three applicants” and that some of the information submitted was not “specific to the draft BIOP” but rather consisted of a compilation of “information that was apparently generated over years by the registrants to support reregistration of products . . .” AR at 769-70. The record also reflects that Dow and MANA sent the NMFS “3 file boxes of documents” without explanation as to “why the materials were applicable or how [Dow and MANA] thought they should be used.” Although presumably most of Plaintiff’s comments were not provided in such a haphazard fashion, it bears noting that the law does not require the NMFS to blindly sift through unlabeled documents that may or may not be relevant and then provide explanations on the record as to why such evidence is or is not relevant.

Overall, the record reveals an ongoing review of the comments submitted by Plaintiffs and others. *See* AR at 763 (“reviewing studies and comments provided by EPA and applicants”); *see also* AR at 818 (same); AR at 761 (“[o]ur priority will be reviewing comments from the three EPA-designated applicants, EPA, and the plaintiffs.”). In some instances, the record reveals that the NMFS engaged in discussions regarding whether or why it would discount certain studies or data submitted by Plaintiffs. *See* AR at 753 (noting that “substantial revision to the analysis” of the draft BiOp will not be necessary “as most of the objections [cited by Plaintiffs] relate to non-ag uses of the products”); *see also* AR at 756 (“The majority of the pushback . . . NMFS is encountering is focused on the use of particular studies rather than the scientific procedures for

analysis . . . responding to the majority of comments will consist of justifying the use of some studies and explaining the rationale for not considering others, rather than repeating analyses.”).

Plaintiffs seem to suggest that the NMFS had a further duty to provide on the record an analysis of each document submitted by Plaintiffs and others, as well as the NMFS’ decision about whether to include such document as part of the final BiOp and what weight to assign it, or if such document was not included, to explain why not. The law does not exact such a high standard. *See Oregon Nat’l Desert*, 716 F. Supp. 2d at 997.

Plaintiffs contend that the Hawkes Declaration, submitted by Federal Defendants to more fully explain the NMFS’ rejection of specific studies, constitutes an impermissible post hoc rationalization that cannot be credited. The Court would agree if the administrative record was devoid of evidence suggesting that the NMFS considered Plaintiffs’ comments and engaged in discussions with Plaintiffs and others regarding those comments. However, given that the record in this case “articulate[s] a satisfactory explanation” of the NMFS’ review of these comments, the Court finds that the Hawkes Declaration merely supplements and illuminates the record rather than serving as a post-hoc rationalization. *See Motor Vehicle*, 463 U.S. at 43.

Plaintiffs simply have not made a sufficient case that, of the voluminous data provided to the NMFS, it failed to adequately consider and respond to significant and relevant comments and to incorporate them in the BiOp. Although Plaintiffs may disagree with the weight accorded different studies or the NMFS’ conclusions that some studies were repetitive, this is not a basis for vacating the BiOp. Accordingly, the Court declines to vacate the BiOp on this basis.

#### **IV. CONCLUSION**

For the foregoing reasons, Plaintiffs' motion for summary judgment is denied, Federal Defendants and Intervenor Defendants' cross-motions for summary judgment are granted, and Plaintiffs' motion to strike declarations is granted as to the Whitelaw Declaration and denied as to the Hawkes Declaration. A separate order will follow.

October 31, 2011  
Date

/s/  
Alexander Williams, Jr.  
United States District Judge