

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF CALIFORNIA

CALIFORNIA STATE GRANGE, *et al.*,  
*Plaintiffs,*  
  
v.  
  
NATIONAL MARINE FISHERIES SERVICE, *et al.*,  
*Defendants,*  
  
and  
  
FEDERATION OF FLY FISHERS, *et al.*,  
*Defendant-Intervenors.*

1:06-CV-00308 OWW DLB  
1:06-CV-00453 OWW DLB  
CONSOLIDATED FOR  
DECISION ON CROSS  
MOTIONS FOR SUMMARY  
JUDGMENT

ORDER RE CROSS MOTIONS  
FOR SUMMARY JUDGMENT  
(GRANGE DOCS. 29, 39,  
43; MID II Docs. 79, 90,  
94)

MODESTO IRRIGATION DISTRICT, *et al.*,  
*Plaintiffs,*  
  
v.  
  
CARLOS M. GUTIERREZ, Secretary of  
Commerce, *et al.*,  
*Defendants,*  
  
and  
  
NORTHERN CALIFORNIA COUNCIL OF  
FEDERATION OF FLY FISHERS, *et al.*,  
*Defendant-Intervenors.*

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I. INTRODUCTION

Before the court for decision are two sets of cross-motions for summary judgment filed in two separate, but similar lawsuits, *California State Grange, et al. v. National Marine Fisheries Service, et al.*, 1:06-CV-00308 OWW DLB (“Grange”), and *Modesto Irrigation District, et al. v. Carlos M. Gutierrez, et al.*, 1:06-

1 CV-453 OWW ("MID II"), which have been consolidated for the  
2 purposes of summary adjudication. (Grange Docs. 29, 39 & 43; MID  
3 II Docs. 79, 90 & 94.) The Grange lawsuit concerns the listing  
4 of five populations of West Coast steelhead (a life form of  
5 *Oncorhynchus mykiss* (*O. mykiss*)) as threatened or endangered  
6 species under the Endangered Species Act ("ESA"). A coalition of  
7 forestry interests led by California State Grange (collectively,  
8 "Grange") challenge all five listings, arguing that, in reaching  
9 the listing determinations, the federal defendants unlawfully  
10 distinguished populations of anadromous *O. mykiss* from  
11 populations of resident *O. mykiss*, and populations of naturally-  
12 spawned *O. mykiss* from hatchery-born *O. mykiss*. (Grange Compl.  
13 at ¶1.) Three non-profit organizations dedicated to the  
14 promotion of fly fishing and to the conservation of fishery  
15 resources have intervened in that lawsuit. (Grange Doc. 38.)

16 MID II is a more factually detailed challenge to the listing  
17 of the Central Valley Distinct Population Segment of *O. mykiss*,  
18 one of the five listings at issue in the Grange suit. The  
19 plaintiffs in MID II, a coalition of irrigation districts  
20 (collectively "MID"), similarly argue that federal defendants  
21 unlawfully distinguished between populations of anadromous and  
22 resident *O. mykiss*, and between populations of naturally-spawned  
23 and hatchery-born *O. mykiss*. Four non-profit organizations  
24 dedicated to the promotion of fly fishing and to the conservation  
25 of fishery resources have intervened in that lawsuit. (MID II  
26 Doc. 34.)

27 Although Grange and MID II share the same administrative  
28 record, a largely common factual backdrop, and many common

1 issues, the cases are not identical, and these differences are  
2 separately analyzed.

3  
4 II. BACKGROUND

5 A. Relevant Endangered Species Act Provisions.

6 The purposes of the Endangered Species Act ("ESA"), 16  
7 U.S.C. §§ 1531, *et seq.*, are "to provide a means whereby the  
8 ecosystems upon which endangered species and threatened species  
9 depend may be conserved, [and] to provide a program for the  
10 conservation of such endangered species and threatened species."

11 16 U.S.C. § 1531(b). The term "conservation" is defined to mean:

12 ...the use of all methods and procedures which are  
13 necessary to bring any endangered species or threatened  
14 species to the point at which the measures provided  
15 pursuant to [the ESA] are no longer necessary. Such  
16 methods and procedures include, but are not limited to,  
17 all activities associated with scientific resources  
18 management such as research, census, law enforcement,  
19 habitat acquisition and maintenance, propagation, live  
20 trapping, and transplantation, and, in the  
21 extraordinary case where population pressures within a  
22 given ecosystem cannot be otherwise relieved, may  
23 include regulated taking

24 16 U.S.C. § 1532(3).

25 Section 4(a) of the ESA directs the Secretary of Commerce or  
26 the Secretary of the Interior to "determine whether any species  
27 is endangered or threatened." 16 U.S.C. § 1533(a)(1). The  
28 Secretary of Commerce has delegated this authority to the  
National Marine Fisheries Service ("NMFS"); the Secretary of the  
Interior to the United States Fish and Wildlife Service ("FWS").<sup>1</sup>

---

29 <sup>1</sup> Under the ESA, the respective responsibilities of the  
Secretary of Commerce and the Secretary of the Interior were to  
be governed by the provisions of Reorganization Plan 4 of 1970.

1  
2 When determining whether a species is "endangered" or  
3 "threatened," NMFS must consider:<sup>2</sup>

4 (A) the present or threatened destruction,

5  
6 See 16 U.S.C. § 1533(a)(2). However, because that Plan  
7 inadequately identified and established which species of fauna  
8 and flora are under the jurisdiction of each agency, on August  
9 29, 1974, NMFS and FWS entered into a Memorandum of Understanding  
10 ("1974 MOU") to (a) establish procedures for the implementation  
11 of the ESA, and (b) define their respective jurisdictions under  
12 the ESA. AR 2380 at 2-3.

13 In the 1974 MOU, FWS is granted jurisdiction, including the  
14 responsibility for determining whether a species shall be added  
15 to the lists of threatened or endangered species, over fish  
16 species which either (1) spend the major portion of their life in  
17 fresh water, or (2) spend part of their lives in estuarine  
18 waters, if the remaining time is spent in fresh water. *Id.* at  
19 ¶2. NMFS is granted jurisdiction over fish species which (1)  
20 spend the major portion of their life in ocean water, or (2)  
21 spend part of their lives in estuarine waters, if the remaining  
22 portion is spent in ocean water. *Id.* at ¶1(a).

23 In addition to dividing jurisdiction between them, FWS and  
24 NMFS agreed in the 1974 MOU on the process for making decisions  
25 regarding species that were not specifically assigned in the 1974  
26 MOU to either FWS or NMFS. In those cases, the directors of FWS  
27 and NMFS "shall have joint jurisdiction over, and shall jointly  
28 determine whether species ... shall be added to or removed from  
the lists of endangered and threatened species...." *Id.* at  
¶3(a).

This exercise of joint jurisdiction required that any  
decision to list could only be done with the concurrence of both  
FWS and NMFS, and that all notices, proposed determinations,  
consultations and other processes, including publication in the  
Federal Register, were to be done jointly by both FWS and NMFS.  
*Id.* at ¶3(a)-(b).

<sup>2</sup> An "endangered species" is "any species which is in  
danger of extinction throughout all or a significant portion of  
its range." 16 U.S.C. § 1532(6). A "threatened species" is "any  
species which is likely to become an endangered species within  
the foreseeable future throughout all or a significant portion of  
its range." § 1532(20).

1 modification, or curtailment of its habitat or  
2 range;

3 (B) overutilization for commercial, recreational,  
4 scientific, or educational purposes;

5 (C) disease or predation;

6 (D) the inadequacy of existing regulatory mechanisms;  
7 or

8 (E) other natural or manmade factors affecting its  
9 continued existence.

10 16 U.S.C. § 1533(a) (1). More generally,

11 The Secretary shall make [listing] determinations  
12 ...solely on the basis of the best scientific and  
13 commercial data available to him after conducting a  
14 review of the status of the species and after taking  
15 into account those efforts, if any, being made by any  
16 State or foreign nation, or any political subdivision  
17 of a State or foreign nation, to protect such species,  
18 whether by predator control, protection of habitat and  
19 food supply, or other conservation practices, within  
20 any area under its jurisdiction, or on the high seas.

21 16 U.S.C. § 1533(b) (1) (A).

22 The ESA defines "species" to include "any subspecies of fish  
23 or wildlife or plants, and any distinct population segment of any  
24 species of vertebrate fish or wildlife which interbreeds when  
25 mature." 16 U.S.C. § 1532(16). The ESA does not define the term  
26 "distinct population segment" ("DPS") or provide further direct  
27 guidance as to the scope and meaning of the term. *Alsea Valley  
28 Alliance v. Evans*, 161 F. Supp. 2d 1154, 1157 (D. Or. 2001).

To the maximum extent possible, "concurrently with making a  
determination ... that a species is an endangered species or a  
threatened species," NMFS is directed to "designate any habitat  
of such species which is then considered to be critical  
habitat...." 16 U.S.C. § 1533 (a) (3).

Once a species is listed as threatened or endangered under

1 the ESA, it is unlawful for any person to "take"<sup>3</sup> members of the  
2 species without a permit. 16 U.S.C. § 1538(a)(1)(B)-(C) [ESA §  
3 9(a)(1)(B)-(C)]. NMFS "shall issue such regulations as [it]  
4 deems necessary and advisable to provide for the conservation of  
5 [threatened] species." 16 U.S.C. § 1533(d) [§ 4(d)]. In the  
6 case of threatened fish or wildlife, NMFS "may by regulation  
7 prohibit ... any act prohibited under section 1538(a)(1) [§ 9's  
8 take provisions ]...." *Id.*

9 Pursuant to § 4(f) NMFS must "develop and implement plans...  
10 for the conservation and survival of endangered species and  
11 threatened species listed pursuant to this section, unless [the  
12 Secretary] finds that such a plan will not promote the  
13 conservation of the species." 16 U.S.C. § 1533(f). "[T]he  
14 Secretary must not merely avoid elimination of that species, but  
15 is required to bring the species back from the brink sufficiently  
16 to obviate the need for protected status." *Fed'n of Fly Fishers*  
17 *v. Daley*, 131 F. Supp. 2d 1158, 1163 (N.D. Cal. 2000).

18 B. Biological Background on West Coast *O. mykiss*.

19 *O. mykiss* exhibit a highly complex life cycle. All *O.*  
20 *mykiss* are born and rear in fresh water. After spending anywhere  
21 from a few hours to several years in freshwater areas, some *O.*  
22 *mykiss*, commonly known as "steelhead," migrate downstream to the  
23 ocean. In order to do so, they undergo a physiological change,  
24 known as smolting, which enables them to live in saltwater.  
25 Juvenile and subadult steelhead spend one to five years foraging

---

26  
27 <sup>3</sup> The term "take" means to "harass, harm, pursue, hunt,  
28 shoot, wound, kill, trap, capture, or collect, or to attempt to  
engage in any such conduct." 16 U.S.C. § 1532 (19).

1 in the Pacific Ocean before returning to fresh water to spawn.  
2 For the most part, steelhead return to spawn in the fresh water  
3 stream where they were born, although some stray to "non-natal"  
4 streams.<sup>4</sup> 69 Fed. Reg. 33,102, 33,108 (June 14, 2004).<sup>5</sup> The  
5 present distribution of steelhead extends from Kamchatka in  
6 northeast Asia, across to Alaska, and down the length of the west  
7 coast of the United States to the border between the United  
8 States and Mexico *Id.* at 33,109 For reasons that are not well-  
9 understood, some *O. mykiss* never smolt, remaining in fresh water  
10 throughout their lives. These freshwater "resident" *O. mykiss*  
11 are known as "rainbow" (or "redband") trout. *Id.* at 33,106.

12 The steelhead life form is considered to be important to the  
13 health and continued viability of *O. mykiss* populations.  
14 According to the Northwest Fisheries Science Center ("NWFSC"), an  
15 arm of NMFS, steelhead "represent[s] a critical component of the  
16 species' evolutionary 'bet-hedging' strategy for coping with  
17 environmental and ecological challenges." AR 1460 at 3. For  
18 example, even if a particular resident *O. mykiss* population is  
19 decimated by a disturbance event in a particular river, such as a  
20 disease outbreak or low water year, the anadromous steelhead that  
21 return to the area in subsequent years can repopulate the river.  
22 The Recovery Science Review Panel ("RSRP"), a panel of scientists

---

23  
24 <sup>4</sup> Unlike Pacific salmon, which die after spawning, *O.*  
25 *mykiss* can return to the ocean. 69 Fed. Reg. at 33,109.

26 <sup>5</sup> The parties rely heavily on various Federal Register  
27 Notices, sometimes citing to the Federal Register, other times to  
28 the Document Number corresponding to the place in which the  
particular Notice was inserted into the Administrative Record.  
This decision utilizes the Federal Register citations.

1 that meets once a quarter to, among other things, review NMFS  
2 recovery plans,<sup>6</sup> concluded that "[t]he anadromous component of a  
3 salmonid ESU, by maintaining the population's access to ocean  
4 habitat and food resources, can affect productivity over the  
5 short term and the probability that the ESU can persist in the  
6 long term.... [E]stimates suggest that eliminating the anadromous  
7 component of steelhead eliminates fish from 99.97% of their  
8 potential natural habitat." AR 1471 at 9.

9 Under some circumstances, either life form (steelhead or  
10 rainbow trout) can yield offspring that follow the alternative  
11 life form. However, NMFS's Pacific Salmonid Biological Review  
12 Team ("BRT"), an expert panel of scientists from several federal  
13 agencies, concluded that the frequency of such occurrences are  
14 "relatively rare, and there is even less empirical evidence that,  
15 once lost, a self-sustaining anadromous run can be regenerated  
16 from a resident salmonid population." AR 2185 at 211.<sup>7</sup> A  
17 separate panel of scientific experts, led by Dr. Jody Hey, (the  
18 "Hey Panel") found that while "[r]esident populations of *O.*

---

19  
20 <sup>6</sup> "An Introduction to the Recovery Science Review Panel,"  
21 available at <http://www.nwfsc.noaa.gov/trt/rsrp.cfm#tasks> (last  
22 visited Oct. 4 2008).

23 <sup>7</sup> This administrative record was presented to the court  
24 as a set of compact disks containing numerous .pdf files. Each  
25 .pdf file was given a document number, which is referenced in  
26 this decision as "AR" followed by a number and then, if  
27 applicable, a page number. Confusingly, the parties' citations  
28 to the record sometimes reference the internal pagination of the  
document, while other times referencing the pagination of the  
.pdf file. The two are not always identical. This decision  
endeavors to uniformly use the pagination of the .pdf file to  
reference pages within the record documents.

1 *mykiss* have often been established from resident, steelhead, and  
2 mixed sources ... the reverse process has been documented to have  
3 occurred just once." AR 793 at 14. Because the prospect of  
4 regeneration of steelhead from resident populations is  
5 speculative, the Hey Panel concluded that "it is important to  
6 conserve the evolutionary potential of the anadromous component  
7 of the conservation unit." AR 793 at 14. The RSRP reached  
8 similar conclusions, finding "only one published report of  
9 anadromy developing from a resident population ... that of the  
10 Santa Cruz River [in] Patagonia," AR 1471 at 6, as did the  
11 Independent Scientific Advisory Board ("ISAB"), which noted that  
12 there is no reliable method to predict where and when resident  
13 populations are possible of reestablishing anadromy at all, "much  
14 less within a timeframe important to recovery," AR 581 at 25.  
15 Moreover, even if it were possible to conclude with more  
16 certainty that resident populations could reestablish anadromous  
17 runs, there would still be a scientific basis for addressing the  
18 reasons for the decline of anadromous populations. The BRT found  
19 that "if the conditions that promote and support the anadromous  
20 life history continue to deteriorate ... the expectation would be  
21 that natural selection would gradually eliminate the migratory or  
22 anadromous trait from the population, as individuals inheriting a  
23 tendency for anadromy migrate out of the population but do not  
24 survive to return as adults and pass on their genes to subsequent  
25 generations." AR 2185 at 211.

26 C. Administrative History.

27 1. The ESU Policy.

28 In 1991, NMFS promulgated its "Policy on Applying the

1 Definition of Species Under the Endangered Species Act to Pacific  
2 Salmon," referred to as the "Evolutionarily Significant Unit"<sup>8</sup>  
3 Policy or the "ESU Policy". 56 Fed. Reg. 58,612 (Nov. 20, 1991).  
4 The ESU Policy provides that a population of Pacific salmonids is  
5 considered to be an ESU, and therefore may be considered for  
6 listing under the ESA, if it meets the following two criteria:

- 7 (1) It must be substantially reproductively isolated from  
8 other nonspecific population units; and
- 9 (2) it must represent an important component in the  
evolutionary legacy of the species.

10 *Id.* The ESU Policy is an interpretation by NMFS of what  
11 constitutes a "distinct population segment." This interpretation  
12 has been found to be a "permissible agency construction of the  
13 ESA." *Alea*, 1612 F. Supp. 2d at 1161. Until recently, NMFS  
14 applied this policy to all salmonid species, including *O. mykiss*,  
15 for the purposes of defining ESUs.

## 16 2. The DPS Policy.

17 Concurrent with the development of the ESU Policy, NMFS and  
18 FWS developed a joint policy to "clarify their interpretation of  
19 the phrase 'distinct population segment of any species of  
20 vertebrate fish or wildlife' for the purpose of listing,  
21 delisting, and reclassifying species under the [ESA]..." ("Joint  
22 DPS Policy"). 59 Fed. Reg. 65,884 (Dec. 21, 1994). A draft  
23 Joint DPS Policy was published in 1994, *id.*, public comment was  
24 solicited on it, and a final Joint DPS Policy was published in  
25 1996, 61 Fed. Reg. 4,722 (Feb. 7, 1996).

---

26  
27 <sup>8</sup> ESUs are the functional equivalent of DPSs under the  
28 ESU Policy.

1 The Joint DPS Policy relies on three factors to determine  
2 whether a population may be considered a DPS:

- 3 1. Discreteness of the population segment in relation  
4 to the remainder of the species to which it  
belongs;
- 5 2. The significance of the population segment to the  
6 species to which it belongs; and
- 7 3. The population segment's conservation status in  
8 relation to the Act's standards for listing (i.e.,  
is the population segment, when treated as if it  
were a species, endangered or threatened?).

9 *Id.* at 4,725 (emphasis added).

10 A population segment of a species is considered "discrete"  
11 if it satisfies either one of the following conditions:

- 12 1. It is markedly separated from other populations of  
13 the same taxon as a consequence of physical,  
physiological, ecological, or behavioral factors.  
14 Quantitative measures of genetic or morphological  
discontinuity may provide evidence of this  
15 separation.
- 16 2. It is delimited by international governmental  
17 boundaries within which differences in control of  
exploitation, management of habitat, conservation  
18 status, or regulatory mechanisms exist that are  
significant in light of section 4(a)(1)(D) of the  
Act.

19 *Id.* (emphasis added).

20 If a population segment is found to be discrete, its  
21 biological and ecological "significance" is evaluated, "in light  
22 of Congressional guidance ... that the authority to list [DPSs]  
23 is to be used '...sparingly' while encouraging the conservation  
24 of genetic diversity." *Id.* The significance analysis may  
25 include, but is not limited to, an evaluation of:

- 26 (1) persistence of the DPS in an ecological setting  
27 unusual or unique for the taxon;
- 28 (2) evidence that loss of the DPS would result in a  
significant gap in the range of the taxon;

1 (3) evidence that the DPS represents the only  
2 surviving natural occurrence of a taxon that may  
3 be more abundant elsewhere as an introduced  
4 population outside its historic range; or

5 (4) evidence that the DPS differs markedly from other  
6 populations of the species in its genetic  
7 characteristics.

8 *Id.* The Joint DPS Policy recognizes that "[b]ecause precise  
9 circumstances are likely to vary considerably from case to case,  
10 it is not possible to describe prospectively all the classes of  
11 information that might bear on the biological and ecological  
12 importance of a discrete population segment." *Id.*

13 If a population is found to be both "discrete" and  
14 "significant," it is evaluated against the five factors set forth  
15 in ESA § 4(a) in order to determine whether listing the  
16 population as endangered or threatened is warranted. *Id.*

17 The Joint DPS Policy finds that the ESU Policy is  
18 "consistent with" and is a "detailed extension of" the Joint DPS  
19 policy. *Id.* At the time the Joint DPS Policy was first  
20 promulgated, NMFS indicated that it would "continue to exercise  
21 [its alternative ESU Policy] with respect to Pacific salmonids."  
22 *Id.* (NMFS recently determined that it is more appropriate to  
23 apply the DPS policy to *O. mykiss*, a policy shift that is  
24 discussed in greater detail below.)

### 25 3. The Interim Hatchery Listing Policy.

26 In 1993, NMFS published an "Interim Policy on Artificial  
27 Propagation of Pacific Salmon Under the Endangered Species Act,"  
28 58 Fed. Reg. 17,573 (April 5, 1993) ("Interim Hatchery Listing  
Policy" or "Interim Policy"). In this Interim Policy, NMFS  
indicated that "[g]enetic resources important to the species'

1 evolutionary legacy may reside in hatchery fish as well as in  
2 natural fish, in which case the hatchery fish can be considered  
3 part of the biological ESU in question." *Id.* at 17,574. The  
4 policy also provided that "[h]atchery fish considered to be part  
5 of the ESU could also be included as part of the listed species  
6 and protected under the ESA." *Id.*

7 Determinations about existing hatchery fish were conducted  
8 by first determining whether "available information" indicates  
9 that either:

10 (1) the hatchery population in question is of a  
11 different genetic lineage than the listed natural  
12 populations, (2) artificial propagation has produced  
13 appreciable changes in the hatchery population in  
14 characteristics that are believed to have a genetic  
15 basis, or (3) there is substantial uncertainty about  
16 the relationship between existing hatchery fish and the  
17 natural population....

18 *Id.* at 17,574-17,575.

19 If any of the above characteristics were present, "the  
20 existing hatchery fish will not be considered part of the  
21 biological ESU and will not be included as part of the listed  
22 species." *Id.* If, however, available information "indicates  
23 that existing hatchery fish can be considered part of the  
24 biological ESU, a decision must be made whether to include them  
25 as part of the listed species." *Id.* In general, "such fish will  
26 not be included as part of the listed species...[although] [a]n  
27 exception may be made for existing hatchery fish if they are  
28 considered to be essential for recovery...." *Id.*

The policy also explained that "[u]nder any scenario,  
progeny of fish from the listed species that are propagated  
artificially are considered part of the listed species and are

1 protected under the ESA." *Id.*

2 The Interim Policy provided that "a listing determination  
3 for an ESU depended solely upon the relative health of the  
4 natural populations in an ESU, and that most hatchery stocks  
5 determined to be part of an ESU were excluded from any listing of  
6 the ESU." 70 Fed. Reg. 37,204, 37,205 (June 28, 2005).<sup>9</sup>

7 4. Initial Listings for the Populations at Issue.

8 In 1996, NMFS completed a comprehensive status review of *O.*  
9 *mykiss* populations in Washington, Oregon, Idaho, and California  
10 and published a proposed rule identifying 15 ESUs within that  
11 broad geographic area. Five of the ESUs were proposed to be  
12 listed as threatened, five as endangered. 61 Fed. Reg. 41,541  
13 (Aug. 9, 1996). (Four of the remaining five proposed ESUs were  
14 ultimately found not warranted for listing, while one was  
15 identified as a candidate for listing. *Id.*)

16 Following this proposal, FWS became concerned that NMFS  
17 would expand its proposed listing to include the resident form of  
18 *O. mykiss*. As a result, staff from FWS met twice with staff from  
19 NMFS to discuss the treatment of resident *O. mykiss* in the  
20 proposed listing. AR 2314-05 at 1. FWS then wrote to NMFS on  
21 July 29, 1997, and stated that FWS had sole jurisdiction over the  
22 resident form of *O. mykiss* and therefore "any listing decision

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23  
24 <sup>9</sup> The term "natural population" refers to the population  
25 whose members originate from spawning in the wild, "recognizing  
26 that these fish may be the progeny of naturally-spawned and  
27 hatchery-origin fish in varying proportions." 70 Fed. Reg. at  
28 37,214. The term "hatchery stocks" refers to "genetic lineage of  
hatchery fish propagated at one or more hatchery facilities,  
recognizing that a hatchery stock can have a wide range of gene  
flow with populations of natural-origin fish...." *Id.*

1 regarding rainbow [trout] rests with [FWS]." *Id.* FWS also  
2 indicated its belief that the two "behavioral forms can be  
3 regarded as separate DPSs" and therefore would not support any  
4 listing which included the resident form of *O. mykiss* "absent  
5 evidence suggesting that the resident rainbow trout needed the  
6 [ESA's] protection." *Id.*

7 Subsequently, NMFS revised the proposed listing to apply to  
8 only five ESUs of steelhead, two as endangered, including the  
9 Southern California ESU, and three as threatened, including the  
10 Central California Coast and South-Central California Coast ESUs.  
11 62 Fed. Reg. 43,937 (Aug. 18, 1997). On March 19, 1998, NMFS  
12 listed two additional ESUs as threatened, including the  
13 California Central Valley ESU, but determined that the other  
14 three proposed ESUs, including the Northern California ESU, did  
15 not warrant listing at that time. 63 Fed. Reg. 13,347 (March 19,  
16 1998). After further review, NMFS determined that the Northern  
17 California ESU warranted listing as threatened. 65 Fed. Reg.  
18 36,074 (June 7, 2000).

19 5. The Alsea Decision and the 2004 Status Review.

20 Over approximately the same time period and applying the  
21 same policies and procedures used during the above-described *O.*  
22 *mykiss* listing process, NMFS completed a status review of west  
23 coast salmon, and issued a proposed rule to list six ESUs of coho  
24 salmon as threatened. One of the proposed listings was for the  
25 "Oregon Coast ESU." NMFS subsequently revoked this proposed  
26 listing based in part on conservation measures being undertaken  
27 as part of the Oregon Coastal Salmon Restoration Initiative. See  
28 *Alsea*, 161 F. Supp. 2d at 1159. Subsequently, in *Oregon Natural*

1 *Resources Council v. Daley*, 6 F. Supp. 2d 1139 (D. Or. 1998),  
2 NMFS was found to have acted unlawfully in considering the  
3 conservation measures and was ordered to reconsider its decision.  
4 On August 10, 1998, NMFS issued a final rule listing the Oregon  
5 Coast coho ESU as threatened. See *Alsea*, 161 F. Supp. 2d at  
6 1159.

7 Despite the fact that the ESU included nine hatchery  
8 populations, "NMFS only listed all 'naturally-spawned' coho  
9 inhabiting streams between Cape Blanco and the Columbia River."

10 *Id.*

11 In reaching this listing decision, NMFS applied its  
12 April 5, 1993 Hatchery Policy to the coho salmon. 63  
13 Fed. Reg. 42,589. NMFS concluded that nine Oregon  
14 hatchery populations were part of the same Oregon Coast  
15 ESU as the natural populations. However, the hatchery  
16 populations were not included in the listing decision  
17 because the hatchery populations were not "deemed  
18 'essential' to recovery." *Id.* Although excluded from  
19 the listing decision, NMFS stated that it might  
20 consider using these hatchery populations for future  
21 recovery but that "in this context, an 'essential'  
22 hatchery population is one that is vital for full  
23 incorporation into recovery efforts." *Id.*

24 *Id.*

25 The *Alsea* plaintiffs argued that the listing was invalid,  
26 arguing the distinction NMFS drew "between hatchery spawned and  
27 naturally-spawned coho is untenable under the ESA because the ESA  
28 does not allow the Secretary to make listing distinctions below  
that of species, subspecies or a distinct population segment of a  
species." *Id.* at 1161.

The *Alsea* court began its analysis by examining NMFS's ESU  
policy, pursuant to which "a species is considered an ESU, and  
hence a DPS, if it is 'substantially reproductively isolated from  
other conspecific population units' and 'represent[s] an

1 important component in the evolutionary legacy of the species.'"  
2 *Id.* (citing 56 Fed. Reg. at 58,618). This policy, the court  
3 concluded, is a "permissible agency construction of the ESA" and  
4 the "factors used to define it, geography and genetics, are  
5 within permissible limits under the ESA." *Id.* (citing *PanAmSat*  
6 *Corp. v. FCC*, 198 F.3d 890, 894 (D.C. Cir. 1999)) & 1162 n. 5  
7 (genetics and geography are permissible considerations during the  
8 listing process).

9 *Alsea* found that the listing had a fundamental flaw.

10 The central problem with the NMFS listing decision of  
11 August 10, 1998, is that it makes improper  
12 distinctions, below that of a DPS, by excluding  
13 hatchery coho populations from listing protection even  
though they are determined to be part of the same DPS  
as natural coho populations.

14 The ESA "specifically states in the definition of  
15 'species' that a 'species' may include any  
16 subspecies...and any distinct population segment (DPS)  
17 of any species...which interbreeds when mature." 16  
18 U.S.C. § 1532(16); *Southwest Center for Biological*  
19 *Diversity v. Babbitt*, 980 F. Supp. 1080, 1085 (D. Ariz.  
20 1997). Listing distinctions below that of subspecies or  
21 a DPS of a species are not allowed under the ESA.  
22 *Southwest Center*, 980 F. Supp. at 1085. Yet, this is  
23 precisely what the NMFS did in its final listing  
24 decision of August 10, 1998. NMFS concluded that nine  
25 hatchery stocks were part of the same Oregon Coast  
26 ESU/DPS as the "natural" populations but none of the  
27 hatchery stocks were included in the listing decision  
28 because NMFS did not consider them "essential for  
recovery." 63 Fed. Reg. 42,589.

29 The distinction between members of the same ESU/DPS is  
30 arbitrary and capricious because NMFS may consider  
31 listing only an entire species, subspecies or distinct  
32 population segment ("DPS") of any species. 16 U.S.C. §  
33 1532(16). Once NMFS determined that hatchery spawned  
34 coho and naturally-spawned coho were part of the same  
35 DPS/ESU, the listing decision should have been made  
36 without further distinctions between members of the  
37 same DPS/ESU.

38 *Id.* at 1162 (emphasis added).

39 The *Alsea* court next noted, in dicta, that the listing of

1 only the naturally-spawned population "could arguably be proper  
2 under the ESA if the NMFS had defined 'hatchery spawned' coho as  
3 a separate DPS...." *Id.* at 1162. However, under the facts and  
4 circumstances of that case, the *Alsea* court surmised that such a  
5 definition was not reasonable:

6 Here, hatchery spawned coho are likely not  
7 "substantially reproductively isolated" from naturally-  
8 spawned coho because, once released from the hatchery,  
9 it is undisputed that 'hatchery spawned' coho and  
10 "naturally-spawned" coho within the Oregon Coast ESU  
11 share the same rivers, habitat and seasonal runs,"  
12 among other factors. It is undisputed that "hatchery  
13 spawned" coho may account for as much as 87% of the  
14 naturally spawning coho in the Oregon coast ESU. In  
15 addition, hatchery spawned and natural coho are the  
16 same species, and interbreed when mature (*Id.* at ¶ 4).  
17 Finally, the NMFS considers progeny of hatchery fish  
18 that are born in the wild as "naturally-spawned" coho  
19 that deserve listing protection.

20 *Id.* at 1162-63 (citations omitted).

21 The court concluded NMFS's listing decision was arbitrary  
22 because it "creates the unusual circumstance of two genetically  
23 identical coho salmon swimming side-by-side in the same stream,  
24 but only one receives ESA protection while the other does not."

25 *Id.*

26 Finally, *Alsea* rejected NMFS's argument "that its listing  
27 decision does not contradict the terms of the ESA because the  
28 listing decision, and relevant polices, are in accordance with  
ESA goals that prioritize 'natural' salmon populations and  
'genetic diversity' within those populations." *Id.*

Although I agree with the general concept that "genetic  
diversity" is one factor in the long term success of a  
threatened species, and thus is one of many underlying  
goals of the ESA, genetics cannot, by itself, justify a  
listing distinction that runs contrary to the  
definition of a DPS.

The term "distinct population segment" was amended in

1 the ESA in 1978 so that it "would exclude taxonomic  
2 [biological] categories below subspecies [smaller taxa]  
3 from the definition." H.R. Conf. Rep. No. 95-1804, at  
4 17 (1978), reprinted in 1978 U.S.C.C.A.N. 9485, 14855.

5 Congress adopted the DPS language stating:

6 The committee agrees that there may be instances  
7 in which [the Fish and Wildlife Service] should  
8 provide for different levels of protection for  
9 populations of the same species. For instance, the  
10 U.S. population of an animal should not  
11 necessarily be permitted to become extinct simply  
12 because the animal is more abundant elsewhere in  
13 the world. Similarly, listing populations may be  
14 necessary when the preponderance of evidence  
15 indicates that a species faces a widespread  
16 threat, but conclusive data is available with  
17 regard to only certain populations.

18 S. Rep. No. 96-151.

19 Thus, Congress expressly limited the Secretary's  
20 ability to make listing distinctions among species  
21 below that of subspecies or a DPS of a species. Here,  
22 the NMFS listing decision was based on distinctions  
23 below that of subspecies or distinct population segment  
24 of a species.

25 Therefore, the NMFS's listing decision is arbitrary and  
26 capricious, because the Oregon Coast ESU includes both  
27 "hatchery spawned" and "naturally-spawned" coho salmon,  
28 but the agency's listing decision arbitrarily excludes  
"hatchery spawned" coho....

*Id.* at 1163.

Following the *Alsea* decision, in 2002, NMFS began a review  
of the 27 West Coast salmonid listings. AR 12; AR 807; AR 808.  
One of the purposes of this review was to further consider the  
relationship between the resident and anadromous forms of *O.*  
*mykiss*. See *Modesto Irrig'n Dist. v. Evans*, 1:02-CV-6553 OWW DLB  
("MID I"), Doc. 79 at 55.)

6. *The Modesto Irrigation District v. Evans Decision.*

On December 11, 2002, the *MID I* plaintiffs filed suit  
against NMFS regarding its 1998 decision to list the California

1 Central Valley *O. mykiss* ESU as threatened. The *MID I* Plaintiffs  
2 alleged that NMFS violated the ESA and the Administrative  
3 Procedura Act ("APA") by: (1) listing naturally-spawning, but not  
4 hatchery, populations of *O. mykiss*; and, (2) listing anadromous,  
5 but not resident, members of *O. mykiss* in certain rivers within  
6 the Central Valley of California. (*Id.* at 3.)

7 On May 12, 2004, this Court issued a decision on plaintiffs'  
8 motion for summary judgment in *MID I*. (*MID I*, Doc. 79.) With  
9 respect to the first allegation, as in *Alsea*, NMFS's final rule  
10 pertaining to the listing of the Central Valley steelhead, issued  
11 March 19, 1998, included hatchery populations as part of the ESU,  
12 but listed as endangered only naturally-spawning steelhead. The  
13 federal defendants conceded this claim, acknowledging, that,  
14 under *Alsea*, "distinctions below that of a distinct population  
15 segment when making listing determinations are improper." (*Id.*  
16 at 28.) Federal defendants also admitted that the 1998 listing  
17 of the Central Valley California steelhead was "legally flawed"  
18 in light of *Alsea*, and did not oppose plaintiffs' motion for  
19 summary judgment on that claim. (*Id.*) However, intervenors, a  
20 coalition of fisheries resource advocacy groups, did oppose  
21 plaintiffs' motion for summary judgment, arguing that hatchery-  
22 spawned steelhead are not only not eligible for listing under the  
23 ESA, but that they should not have been included as part of any  
24 ESU in the first place. (*Id.* at 29.) The district court first  
25 rejected intervenors' argument that NMFS's decision to include  
26 hatchery populations in the ESU should be declared unlawful.

27 Intervenor allege [federal defendants'] determination  
28 that "hatchery populations...[were] part of the same  
ESU as the naturally-spawned populations" is unlawful.

1 Intervenor's conclusion is predicated on their  
2 contention that, given the nature of hatchery fish,  
3 "[p]rotecting [them] cannot be reconciled with the  
4 ESA's purpose and provisions. Intervenor's admit,  
5 however, that "NMFS added some of the hatchery  
6 populations to the ESU based on its conclusion that the  
7 stocks had not diverged from wild steelhead to such a  
8 degree that they could never be used for recovery."

9 Intervenor's provide selected passages from the AR and  
10 Federal Register to support their claims that hatchery  
11 fish threaten wild populations. The AR cited, however,  
12 does not contain sufficient evidence to invalidate  
13 NMFS' classification of the hatchery population.  
14 Assuming that the hatchery fish do pose a threat of  
15 harm to the naturally-spawned population, there is  
16 insufficient evidence to decide whether this threat  
17 rises to such a level as to preclude classification of  
18 hatchery spawned population in the same ESU or DPS with  
19 naturally-spawned steelhead. Even assuming that  
20 hatchery fish "can pose serious threats" as Intervenor's  
21 claim, no studies indicate that they do so in this  
22 case. Where a significant scientific dispute exists  
23 over an issue within the agency's expertise, deference  
24 is ordinarily required.

25 [Federal defendants'] classification does not require  
26 that fish hatcheries replace natural ecosystems.  
27 Intervenor's do not explain why the use of hatchery fish  
28 as a conservation tool precludes their ESA listing.  
29 Although excluding hatchery populations from the  
30 listing may be "[c]onsistent" with the ESA, there is no  
31 evidence indicating that the ESA requires or  
32 necessitates such exclusion. NMFS's studies also  
33 indicate that hatchery populations could be useful in  
34 the recovery of wild steelhead and that when interbred,  
35 the two form a distinct genetic group. Intervenor's do  
36 not provide their own scientific evidence to prove that  
37 Defendants' classification was arbitrary, capricious,  
38 and unlawful.

39 (*Id.* at 35-36 (internal citations omitted).)

40 The district court next considered intervenor's argument,  
41 based on *National Association of Home Builders v. Norton*, 340  
42 F.3d 835 (9th Cir. 2003), that it was unlawful for NMFS to  
43 include hatchery-born *O. mykiss* in the ESU/DPS, but only list  
44 naturally-spawned fish. In *Home Builders*, the Ninth Circuit  
45 suggested that FWS could have subdivided a particular owl  
46 population into smaller DPSs. Intervenor's argued that this

1 indicates NMFS could have listed a unit smaller than an ESU under  
2 the ESA. The district court found *Home Builders* to be  
3 inapplicable, reasoning:

4           Intervenors...confuse two separate issues. The issue  
5           in *Home Builders* was whether FWS properly applied the  
6           DPS Policy when it classified the Arizona pygmy-owl  
7           population as a DPS. The issue here is whether the  
8           NMFS could list under the ESA a unit smaller than a  
9           DPS. As a result, the holding in *Home Builders* does  
10           not conflict with that in *Alsea* and is not binding on  
11           this case.

12 (*Id.* at 38 (emphasis added).)

13           The district court next addressed plaintiffs' allegation  
14           that NMFS violated the ESA by listing only anadromous *O. mykiss*,  
15           while excluding resident fish from the listing. Plaintiffs  
16           maintained that the resident fish had been made part of the ESU  
17           and therefore, under *Alsea*, the listing of only anadromous fish  
18           was unlawful. The issue was factual: "whether resident and  
19           anadromous populations are groups within the same DPS or are  
20           separate DPS[s], distinguished by their behavior." (*Id.* at 41-  
21           42.) After reviewing the evidence, the district court recognized  
22           NMFS's conclusion: "resident *O. mykiss* should be included in the  
23           listed steelhead ESU 'in certain cases,' such as '(1) where  
24           resident *O. mykiss* have the opportunity to interbreed with  
25           anadromous fish below manmade barriers or (2) where resident fish  
26           of native lineage once had the ability to interbreed with  
27           anadromous fish but no longer do so because they are currently  
28           above human-made barriers and are considered essential for  
29           recovery of the ESU.'" *Id.* at 43. Plaintiffs did not allege  
30           that this two-part test was insufficient or that NMFS failed to  
31           apply it properly. The court concluded:

1 Given that [federal defendants] did not classify  
2 resident steelhead as part of the DPS, [federal  
3 defendants] did not err in the same way as they did in  
4 failing to account for hatchery-bred populations in the  
5 listing decisions. Whether [federal defendants] erred  
6 in failing to classify resident *O. mykiss* as part of  
7 the DPS is a separate question, and Plaintiffs do not  
provide enough evidence from the AR or otherwise to  
support a finding that the agency's ruling here was  
unlawful. The issue remains "unclear." Plaintiffs  
motion for summary judgment that NMFS's failure to list  
resident populations under the ESA [is] impermissible  
is DENIED.

8 *Id.* at 43-44.

9 7. Revised Hatchery Listing Policy.

10 In light of the *Alsea* decision, NMFS announced it would  
11 reconsider its Interim Hatchery Listing Policy. 67 Fed. Reg.  
12 6,215, 6,217 (Feb. 11, 2002). NMFS published a proposed revised  
13 hatchery listing policy on June 3, 2004, 69 Fed. Reg. 31,354,  
14 followed by a final revised Hatchery Listing Policy ("HLP") on  
15 June 28, 2005, 70 Fed. Reg. 37,204. In the HLP, NMFS first  
16 emphasized that "[a] key feature of the ESU concept is the  
17 recognition of genetic resources that represent the ecological  
18 and genetic diversity of the species. These genetic resources  
19 can reside in a fish spawned in a hatchery (hatchery fish) as  
20 well as in a fish spawned in the wild (natural fish)." *Id.* at  
21 37,215. In delineating an ESU for listing consideration "NMFS  
22 will identify all components of the ESU, including populations of  
23 natural fish (natural populations) and hatchery stocks that are  
24 part of the ESU." *Id.* Those hatchery stocks "with a level of  
25 genetic divergence relative to the local natural population(s)  
26 that is no more than what occurs within the ESU: (a) are  
27 considered part of the ESU; (b) will be considered in determining  
28 whether an ESU should be listed under the ESA; and (c) will be

1 included in any listing of the ESU." *Id.* (emphasis added).

2 Status determinations (i.e., determinations as to whether  
3 the ESU should be listed as threatened, endangered, or neither)  
4 for steelhead ESUs "will be based on the status of the entire  
5 ESU." *Id.* However, "NMFS will apply this policy in support of  
6 the conservation of naturally-spawning salmon and the ecosystems  
7 upon which they depend, consistent with section 2 (b) of the ESA  
8 (16 U.S.C. 1531(b))." *Id.* (emphasis added). Accordingly,  
9 "[h]atchery fish will be included in assessing an ESU's status in  
10 the context of their contributions to conserving natural  
11 self-sustaining populations." *Id.* (emphasis added).

12 Specifically, the effects of hatchery fish on the status of an  
13 ESU will depend on which of four key attributes -- abundance,  
14 productivity, genetic diversity, and spatial distribution -- are  
15 currently limiting the ESU, and "how the hatchery fish within the  
16 ESU affect each of the attributes." *Id.* (emphasis added).

17 The presence of hatchery fish within the ESU can  
18 positively affect the overall status of the ESU, and  
19 thereby affect a listing determination, by contributing  
20 to increasing abundance and productivity of the natural  
21 populations in the ESU, by improving spatial  
22 distribution, by serving as a source population for  
23 repopulating unoccupied habitat, and by conserving  
24 genetic resources of depressed natural populations in  
25 the ESU. Conversely, a hatchery program managed without  
26 adequate consideration of its conservation effects can  
27 affect a listing determination by reducing adaptive  
28 genetic diversity of the ESU, and by reducing the  
reproductive fitness and productivity of the ESU. In  
evaluating the effect of hatchery fish on the status of  
an ESU, the presence of a long-term hatchery monitoring  
and evaluation program is an important consideration.

25 *Id.*

26 NMFS concluded that "[m]any hatchery programs are capable of  
27 producing more fish than are immediately useful in the  
28

1 conservation and recovery of an ESU and can play an important  
2 role in fulfilling trust and treaty obligations with regard to  
3 harvest of some Pacific salmon and steelhead populations." *Id.*  
4 Accordingly, NMFS determined that, where appropriate, it will  
5 "exercise its authority under section 4(d) of the ESA to allow  
6 the harvest of listed hatchery fish that are surplus to the  
7 conservation and recovery needs of the ESU, in accordance with  
8 approved harvest plans." *Id.* at 37,215-37,216.

9 D. The Challenged Listing Process.

10 On June 14, 2004, NMFS issued new proposed listings for 27  
11 ESUs of West Coast salmonids. 69 Fed. Reg. 33,102. NMFS first  
12 applied its ESU policy to define the 27 ESUs, noting that the  
13 *Alsea* court had approved of the ESU Policy as an interpretation  
14 of the statutory term "distinct population segment." 69 Fed.  
15 Reg. 33,111. Five California *O. mykiss* ESUs were defined:  
16 Southern California, South-Central California Coast, Central  
17 California Coast, California Central valley, and Northern  
18 California.

19 Neither the Southern California nor the South-Central  
20 California Coast proposed *O. mykiss* ESUs included hatchery  
21 stocks, but the other three (Central California Coast, California  
22 Central Valley, and Northern California *O. mykiss* ESUs) were  
23 proposed to include two hatchery programs each. 69 Fed. Reg. at  
24 33,117-33,118.

25 With respect to the inclusion of resident (versus  
26 anadromous) *O. mykiss*, NMFS found that "no suite of morphological  
27 or genetic characteristics has been found that consistently  
28 distinguishes between the two life-history forms." *Id.* at

1 33,113. Consistent with the ESU Policy, NMFS evaluated the  
2 "extent of reproductive isolation and biological divergence from  
3 other populations within the ESU." *Id.* NMFS found, overall,  
4 that populations of *O. mykiss* from the same life history form  
5 that were geographically separated were more genetically  
6 divergent from one another than were resident and anadromous  
7 forms found in the same geographical area. *Id.*

8 In previous listings, NMFS carefully examined the  
9 relationship between nearby resident and anadromous populations  
10 to determine whether the resident population belonged in the ESU.  
11 *Id.* As a general rule, given that the available data suggested  
12 that "resident rainbow trout and steelhead in the same area  
13 generally share a common gene pool (at least over evolutionary  
14 time periods)," both resident and anadromous populations were  
15 included in the same ESU. *Id.* However, resident populations  
16 above long-standing natural barriers and those populations that  
17 resulted from the introduction of non-native rainbow trout, were  
18 excluded from ESU. *Id.* In the case of resident populations  
19 upstream of impassable human-caused migration barriers (e.g.,  
20 large mainstem hydroelectric dams), NMFS found "insufficient  
21 information to merit their inclusion in steelhead ESUs," but  
22 recommended these populations be "evaluated on a case-by-case  
23 basis as more information becomes available on their  
24 relationships to below-barrier populations, or on the role these  
25 above-barrier resident populations might play in conserving  
26 below-barrier populations of *O. mykiss*." *Id.*

27 After *Alsea*, the BRT adopted a similar framework for  
28 determining the ESU/DPS membership of resident *O. mykiss*

1 populations geographically associated with anadromous  
2 populations:

3 These evaluations were guided by the same biological  
4 principles used to define ESUs of natural fish and  
5 determine ESU membership of hatchery fish: the extent  
6 of reproductive isolation and biological divergence  
7 from other populations within the ESU. Ideally, each  
8 resident population would be evaluated individually on  
9 a case-by-case basis, using all available biological  
10 information. In practice, little or no information is  
11 available for most resident *O. mykiss* populations. To  
12 facilitate determinations of the ESU/DPS membership of  
13 resident *O. mykiss*, the BRT identified three different  
14 cases, reflecting the range of geographic relationships  
15 between resident and anadromous forms within different  
16 watersheds: (1) No obvious physical barriers to  
17 interbreeding between resident and anadromous forms;  
18 (2) long-standing natural barriers (e.g., a waterfall)  
19 between resident and anadromous forms; and (3)  
20 relatively recent (e.g., within the last 100 years)  
21 human-imposed barriers (e.g., a dam without a fish  
22 ladder) between resident and anadromous forms.

23 The BRT adopted the following working assumptions about  
24 ESU membership of resident fish falling in each of  
25 these three cases. Where there was no obvious physical  
26 barrier to interbreeding between the two life-history  
27 forms, resident fish were considered part of the ESU.  
28 Empirical studies show that resident and anadromous *O.*  
*mykiss* are typically very similar genetically when they  
co-occur with no physical barriers to migration or  
interbreeding. Where long-standing natural barriers  
separate resident and anadromous forms, resident  
populations were not regarded as part of the ESU. Many  
populations in this category have been isolated from  
contact with anadromous populations for thousands of  
years. Empirical studies show that in these cases the  
resident fish typically show substantial genetic and  
life-history divergence from the nearest downstream  
anadromous populations. In cases where the resident  
fish were separated from the anadromous form by  
relatively recent human actions (e.g., impassable dams  
and culverts), the BRT was unable to justify any  
particular default assumption. The two life-history  
forms most likely coexisted without any barriers to  
interbreeding prior to the establishment of the manmade  
barrier(s). However, as a result of rapid divergence in  
a novel environment, or displacement by or genetic  
introgression from non-native hatchery rainbow trout,  
these resident populations may no longer represent the  
evolutionary legacy of the *O. mykiss* ESU. Given these  
uncertainties, the BRT left unresolved the ESU

1 membership of *O. mykiss* above recent (usually man-made)  
2 impassable barriers. In the absence of information  
3 indicating that they are part of a common ESU, NMFS  
4 does not find such above-barrier populations to be part  
5 of the *O. mykiss* ESUs under review.

6 *Id.* at 33,113-114. (These working assumptions are referenced by  
7 the parties and the administrative record as the "null  
8 hypothesis.")

9 Based in part on these conclusions, NMFS proposed that all  
10 five *O. Mykiss* ESUs include resident rainbow trout below  
11 impassable barriers that co-occur with anadromous populations.

12 *Id.* Resident rainbow trout located above one particular  
13 impassible barrier were considered part of the Central California  
14 Coast proposed ESU because genetic data indicated they were more  
15 similar to each other and to other populations within the ESU  
16 than they were to outside populations. *Id.* at 33,118.

17 Once the ESUs were defined, NMFS assessed the extinction  
18 risk faced by each ESU. NMFS relied in part upon conclusions  
19 reached by the BRT, which evaluated the risk of extinction to the  
20 various ESUs based upon the "performance of the naturally  
21 spawning populations in each of the ESUs...." *Id.* at 33,110. To  
22 perform this evaluation, the BRT employed the "Viable Salmonid  
23 Populations" ("VSP") criteria, developed "to provide a consistent  
24 and logical reference for making viability determinations and are  
25 based on a review and synthesis of the conservation biology and  
26 salmon literature." *Id.* Specifically, "the viability of salmon  
27 and steelhead ESUs is characterized by the health, abundance,  
28 productivity, spatial structure, and genetic/behavioral diversity  
of the individual populations within the ESU." *Id.*

ESUs with fewer populations are more likely to become

1 extinct due to catastrophic events, and have a lower  
2 likelihood that the necessary phenotypic and genotypic  
3 diversity will exist to maintain future viability. ESUs  
4 with limited geographic range are similarly at  
5 increased extinction risk due to catastrophic events.  
6 ESUs with populations that are geographically distant  
7 from each other, or are separated by severely degraded  
8 habitat, may lack the connectivity to function as  
9 metapopulations (i.e., a group of interconnected  
10 subpopulations) and are more likely to become extinct.  
11 ESUs with limited diversity are more likely to go  
12 extinct as the result of correlated environmental  
13 catastrophes or environmental change that occurs too  
14 rapidly for an evolutionary response. ESUs comprised of  
15 a small proportion of populations meeting or exceeding  
16 VSP criteria may lack the source populations to sustain  
17 the non-viable declining populations during  
18 environmental down-turns. ESUs consisting of a single  
19 population are especially vulnerable in this regard.

20 *Id.* at 33,110-33,111.

21 NMFS acknowledged that the BRT's work was hampered by  
22 limited data:

23 As noted above, little or no population data  
24 are available for most resident *O. mykiss* populations,  
25 greatly complicating assessments of ESU-level  
26 extinction risk.... As was often the case, no data on  
27 the abundance, productivity, spatial structure, or  
28 diversity were available for resident populations in an  
ESU.

*Id.* at 33,113. Nevertheless, based on available data, the BRT  
concluded that, even with the presence of large resident  
populations, the complete elimination of the anadromous  
populaiton might be irreversible.

The BRT noted that the presence of relatively numerous  
resident populations can significantly reduce risks to  
ESU abundance. However, there is considerable  
scientific uncertainty as to how the resident form  
affects extinction risk through its influence on ESU  
productivity, spatial structure, and diversity. The  
threats to *O. mykiss* ESUs extend beyond low population  
size and include declining productivity, reduced  
resilience of productivity to environmental variation,  
curtailed range of distribution, impediments to  
population connectivity and reproductive exchange,  
depleted diversity stemming from loss or blockage of  
habitat and associated erosion of local adaptation, and

1 erosion of the diversity of expressed migratory  
2 behaviors. Thus, the BRT concluded that, despite the  
3 reduced risk to abundance for certain *O. mykiss* ESUs  
4 due to numerically abundant residents, the collective  
5 contribution of the resident life-history form to the  
6 viability of an ESU in-total is unknown and may not  
substantially reduce extinction risks to an ESU  
in-total (NMFS, 2004). Based on present scientific  
understanding, the BRT could not exclude the  
possibility that complete loss of anadromous forms from  
within an ESU may be irreversible.

7 *Id.* at 33,113-114.

8 After analyzing each ESU under the VSP criteria, the BRT  
9 assessed the ESU's extinction risk based on the performance of  
10 the naturally spawning populations. *Id.* at 33,111.

11 The BRT's assessment of ESU-level extinction risk uses  
12 categories that correspond to the definitions of  
13 endangered species and threatened species,  
14 respectively, in the ESA: in danger of extinction  
15 throughout all or a significant portion of its range,  
16 likely to become endangered within the foreseeable  
17 future throughout all or a significant portion of its  
18 range, or neither. As discussed above, these  
19 evaluations do not include consideration of hatchery  
20 stocks included in ESUs, and do not evaluate efforts  
21 being made to protect the species. Therefore, the BRT's  
22 findings are not to be considered recommendations  
23 regarding listing. The BRT's ESU-level extinction risk  
24 assessment reflects the BRT's professional scientific  
25 judgment, guided by the analysis of the VSP criteria,  
26 as well as by expectations about the likely  
27 interactions among the individual VSP criteria. For  
28 example, a single VSP criterion with a "High Risk"  
score might be sufficient to result in an overall  
extinction risk assessment of "in danger of  
extinction," but a combination of several VSP criteria  
with more moderate risk scores could also lead to the  
same assessment, or a finding that the ESU is "likely  
to become endangered."

*Id.* at 33,111.

24 NMFS treated the BRT's recommendations as "a partial  
25 assessment of the ESU's extinction risk," but not as a final  
26 determination as to whether listing was warranted. NMFS then  
27 incorporated an assessment of the "contributions of within-ESU  
28

1 hatchery programs to the viability of an ESU in-total." *Id.* at  
2 33,112. The result is NMFS's Salmonid Hatchery Inventory and  
3 Effects Evaluation Report ("SHIEE Report"), an assessment of the  
4 contributions of ESU hatchery programs on ESU viability and  
5 extinction risk. See *id.*; AR 1459. NMFS proposed to list the  
6 Southern California ESU as endangered, and the other four  
7 California ESUs as threatened. *Id.* at 33,162-33,163.

8 Following the publication of the proposed listing, NMFS  
9 commissioned three separate, independent scientific evaluations,  
10 in part to examine the use of the null hypothesis as a means of  
11 identifying members of a DPS using the ESU Policy. First, the  
12 Salmon Recovery Science Review Panel ("RSRP"), comprised of seven  
13 scientists from U.S. and Canadian universities, was convened to  
14 provide guidance on the scientific and technical aspects of  
15 recovery planning for West Coast populations of salmon and  
16 steelhead. AR 1471 at 1. The RSRP concurred with the BRT's  
17 "null hypothesis" that separation of anadromous from resident  
18 forms by the existence of longstanding natural barriers justified  
19 the decision that the two forms not be considered part of the  
20 same DPS under the ESU Policy. AR 1471 at 6.

21 In April 2005, the second panel, the ISAB, concluded that  
22 "the presence of both resident and anadromous life-history forms  
23 is critical for conserving the diversity of steelhead/rainbow  
24 trout populations and, therefore, the overall variability fo  
25 ESUs." AR 1443 at 39.

26 Finally, on June 13, 2005, the Hey Panel issued a written  
27 report responding to four questions posed by NMFS. Pertinently,  
28 NMFS asked the Hey Panel: "Is there a reasonable biological

1 justification for excluding from a conservation unit resident  
2 populations that are similar to anadromous populations in that  
3 unit?" AR 1442 at 13. Beginning with the three scenarios  
4 developed by the BRT in the null hypothesis, the Hey Panel found  
5 that where anadromous and resident *O. mykiss* co-occur and are  
6 located below impassible barriers, the null hypothesis'  
7 conclusion that both members belonged in the same ESU was  
8 correct. *Id.* at 13-15. The Hey Panel stated: "In those cases  
9 where the two populations co-occur and the lifestyle variation is  
10 present as a polymorphism, then it would be biologically  
11 justified for the conservation unit to include both the resident  
12 and anadromous fish." *Id.* at 15.

13 NMFS staff concluded that these three studies "strongly  
14 confirm" and are consistent with its recommended final listing  
15 determinations that included both resident and anadrmous forms of  
16 *O. mykiss* in the same ESU. AR 2215R (email from Scott Rumsey to  
17 others within the National Oceanographic and Atmospheric  
18 Administration, of which NMFS is a part).

19 Following an initial public comment period of 90 days, NMFS  
20 extended the public comment period two times. 69 Fed. Reg.  
21 53,031 (Aug. 31, 2004); 69 Fed. Reg. 61,348 (Oct. 18, 2004).  
22 NMFS received comments disagreeing with the proposal to include  
23 rainbow trout in the ESUs and criticism on how it considered  
24 resident rainbow trout in evaluating the risk to the continued  
25 existence of the entire ESU. 70 Fed. Reg. 37,219, 37,220 (June  
26 28, 2005); 71 Fed. Reg. 834, 836-7 (Jan. 5, 2006) ("[C]ommenters  
27 felt that rainbow trout and steelhead should be considered  
28 separate ESUs for biological reasons (differences in behavior,

1 morphology, and ecology); or for policy or legal reasons (such as  
2 implementing the purposes of the ESA).”).

3 In June 2005, FWS wrote to NMFS, raising concerns about  
4 NMFS's proposed listings of *O. mykiss*, stating, in pertinent  
5 part:

6 [FWS] understands...that you must reconsider the  
7 listing of the Pacific coast steelhead (*O. mykiss*) per  
8 several court actions...and that NMFS has conducted  
9 assessments of both life forms of *O. mykiss* (resident  
10 rainbow trout and anadromous steelhead). As you know,  
11 pursuant to [the 1974 MOU], the NMFS exercises [ESA]  
12 jurisdiction over the anadromous form and the FWS  
13 exercises jurisdiction over the resident form of *O.*  
14 *mykiss*.

15 Based on informal discussions with NMFS regarding their  
16 assessment of both life forms of *O. mykiss*, the FWS  
17 requested copies of all underlying information and data  
18 NMFS is using to develop its potential listing  
19 determinations for both life forms, and particularly  
20 all underlying information related to the species of  
21 jurisdiction to the FWS, the resident form. To date,  
22 we have not received the bulk of the requested  
23 information.

24 It is our understanding that [the BRT] did not have  
25 specific biological information on many facets of the  
26 relationship between resident and anadromous forms of  
27 *O. mykiss* as they made their determinations to list or  
28 not to list the various ESUs. Instead, great weight  
was put on the fact the two forms are the same species,  
so where they occurred in sympatry, listing decisions  
were primarily if not wholly based on the status of the  
anadromous form and the fact the forms are genetically  
the same species. It is not clear to the FWS the  
extent that non-genetic information on these two forms  
of *O. mykiss* were considered in the deliberations to  
list the species. If not included in your record of  
scientific review, we would recommend that additional  
information be solicited to define the relationship  
between resident and anadromous forms, particularly in  
regards to frequency and significance of genetic  
interchange (spawning) between the two forms, the  
frequency, significance, and triggers for reversion to  
anadromy of the resident form and vice versa, and risk  
assessments to the entire ESU that analyzes the  
relative contributions to population status and  
stability of both resident and anadromous forms. In  
addition, we would need information regarding your  
determination of the ESU itself to ensure that it

1 complies with the joint FWS/NMFS policy on distinct  
2 population segments. Until we receive information from  
3 you that demonstrates this analysis, the FWS is not  
4 persuaded that the conservation status of the rainbow  
5 trout form warrants Section 4 listing action. If such  
6 a determination is warranted, the Secretary of Commerce  
7 does not have legal jurisdiction to undertake a listing  
8 action for this freshwater fish and the Secretary of  
9 the Interior would have to make such a determination.

6 Of course, we stand ready to examine carefully all  
7 scientific data in your custody....To accomplish this  
8 cooperative review, we recommend that you consider  
9 invoking section 4(b)(6)(B)(I) of the ESA to allow for  
10 further scientific evaluation, data gathering, and  
11 debate among the scientific experts within FWS and NMFS  
12 before any final decision is made as to whether to list  
13 the species under section 4.

10 \*\*\*

11 AR 1439.

12 In light of FWS's concerns and those of other commentators,  
13 and to provide NMFS additional time to assimilate the new  
14 scientific information, NMFS announced that it was invoking the  
15 six month statutory extension of the deadline for a final  
16 determination on the ten proposed listings, pursuant to 16 U.S.C.  
17 § 1533(b)(6)(B)(I). 70 Fed. Reg. at 37,220. According to NMFS's  
18 Federal Register Notice announcing the invocation of the six  
19 month extension, the FWS letter raised concerns about "the  
20 factual and legal bases for the proposed *O. mykiss* listings," and  
21 indicated that there was substantial disagreement regarding the  
22 relationship between resident rainbow trout and steelhead  
23 populations and the best way to assess extinction risk to  
24 populations containing both resident and anadromous fish. *Id.*  
25 According to NMFS, FWS identified in its letter three specific  
26 areas of "substantial disagreement" with regard to the  
27 sufficiency and/or accuracy of the available scientific data  
28

1 underlying NMFS's proposed listing decision: (1) the  
2 determination that resident and anadromous forms comprise a  
3 single ESU; (2) the relatedness of co-occurring resident and  
4 anadromous forms; and (3) the assessment of the risk of  
5 extinction for ESUs comprised of both resident and anadromous  
6 members. *Id.* In addition, NMFS noted that it had received the  
7 three reports from the independent scientific panels containing  
8 information bearing on the relationship between resident rainbow  
9 trout and steelhead. *Id.*

10 NMFS again solicited public comment on the issues relating  
11 to the scientific disagreement and uncertainty surrounding the  
12 relationship between resident and anadromous populations. *Id.*

13 Notably, in its June 2005 letter, FWS suggested that NMFS  
14 "ensure that [its] delineation of *O. mykiss* ESUs complies with  
15 the [joint] DPS policy." AR 1439. NMFS indicated it its request  
16 for comment on a proposal to switch from the ESU to the DPS  
17 Policy, that it "agreed that the facts before it made it  
18 appropriate to consider departing from the past practice of  
19 applying the ESU policy to *O. mykiss* and instead applying the DPS  
20 policy when determining what 'species' of *O. mykiss* warranted  
21 listing." 70 Fed. Reg. 67,131 (Nov. 4, 2005). NMFS noted that  
22 applying the DPS policy would be consistent with the past  
23 application, by both agencies, in defining DPSs of Atlantic  
24 Salmon, another species over which the two agencies share  
25 jurisdiction. *Id.* NMFS explained that the primary difference  
26 between the two policies was that the ESU policy focuses on  
27 "substantial reproductive isolation" to define an ESU, while the  
28 DPS policy relies on "marked separation," which accounts for

1 physical, physiological, ecological, and behavioral factors, in  
2 addition to genetics. *Id.*

3 NMFS further opined that unlike the ESU Policy, which relies  
4 on reproductive isolation, the DPS Policy's first criteria of  
5 discreteness focuses on whether there is "marked separation of  
6 population groups as a consequence of biological factors." *Id.*  
7 at 67,132. Applying the discreteness factor to *O. mykiss*, NMFS  
8 found that despite apparent reproductive exchange between rainbow  
9 trout and steelhead, the two life forms "remain markedly  
10 separated physically, physiologically, ecologically, and  
11 behaviorally," so that a steelhead-only grouping would satisfy  
12 the discreteness criterion of the DPS policy. *Id.* NMFS  
13 reasoned:

14 Steelhead differ from resident rainbow trout physically  
15 in adult size and fecundity, physiologically by  
16 undergoing smoltification, ecologically in their  
17 preferred prey and principal predators, and  
18 behaviorally in their migratory strategy. Where the two  
19 life forms co-occur, adult steelhead typically range in  
20 size from 40-72 cm in length and 2-5 kg body mass,  
21 while adult rainbow trout typically range in size from  
22 25-46 cm in length and 0.5-2 kg body mass (Shapovalov  
23 and Taft, 1954; Wydoski and Whitney, 1979; Jones,  
24 1984). Steelhead females produce approximately 2,500 to  
25 10,000 eggs, and rainbow trout fecundity ranges from  
26 700 to 4,000 eggs per female (Shapovalov and Taft,  
27 1954; Buckley, 1967; Moyle, 1976; McGregor, 1986;  
28 Pauley et al., 1986), with steelhead eggs being  
approximately twice the diameter of rainbow trout eggs  
or larger (Scott and Crossman, 1973; Wang, 1986; Tyler  
et al., 1996). Steelhead undergo a complex  
physiological change that enables them to make the  
transition from freshwater to saltwater  
(smoltification), while rainbow trout reside in  
freshwater throughout their entire life cycle. While  
juvenile and adult steelhead prey on euphausiid  
crustaceans, squid, herring, and other small fishes in  
the marine environment, the diet of adult rainbow trout  
is primarily aquatic and terrestrial insects and their  
larvae, mollusks, amphipod crustaceans, fish eggs, and  
minnows (LeBrasseur, 1966; Scott and Crossman, 1973;  
Wydoski and Whitney, 1979). Finally, steelhead migrate

1 several to hundreds of miles from their natal streams  
2 to the ocean, and spend up to 3 years in the ocean  
3 migrating thousands of miles before returning to  
4 freshwater to spawn (Busby et al., 1996). Rainbow  
trout, in contrast, may exhibit seasonal migrations of  
tens of kilometers but generally remain associated with  
their natal drainages (Meka et al., 1999).

5 *Id.* at 67,132.

6 As to significance, NMFS referenced to prior status reviews  
7 which that concluded the steelhead represent an important  
8 component in the evolutionary legacy of the species, which met  
9 the significance criterion. *Id.* NMFS then reopened the comment  
10 period a final time to take comment on whether it should apply  
11 the joint DPS policy to delineate ten steelhead-only DPSs. 70  
12 Fed. Reg. at 67,131.

13 On August 1, 2005, representatives of NMFS and FWS met to  
14 discuss the proposed listings. At the meeting, the two agencies  
15 and their staffs preliminarily agreed that there was no  
16 scientific dispute concerning NMFS's identification of the ESUs,  
17 nor with NMFS's decision to include both resident and anadromous  
18 members in certain ESUs. Specifically, NMFS and FWS agreed: (1)  
19 that "[t]he *O. mykiss* ESUs delineated relative to taxonomic  
20 subspecies appear to be well supported by the best available  
21 scientific information and are consistent with the statutory  
22 provision of the Endangered Species Act (ESA)...."; (2) the "best  
23 available scientific information supports the inclusion of co-  
24 occurring resident and anadromous forms in the same *O. mykiss*  
25 ESU. Although there is often a lack of site-specific  
26 information, the scientific literature strongly indicates that  
27 where resident and anadromous *O. mykiss* co-occur they share a  
28 common gene pool, interbreed, produce progeny of the alternative

1 life form, and collectively exhibit adaptive life history traits  
2 composing an important component of the evolutionary legacy of  
3 the species." AR 2238-01 at 1.

4 In September 2005, Dr Scott Rumsey of NMFS conducted a  
5 review of the available literature on the relationship between  
6 the anadromous and resident forms of *O. mykiss*. Dr. Rumsey noted  
7 that of the 27 articles he reviewed, 25 provided evidence that  
8 co-occurring residents interbreed with the anadromous form. AR  
9 2241R. Dr. Rumsey noted that the "notion that 'co-occurring  
10 resident and anadromous *O. mykiss* interbreed and produce the  
11 alternative life-history form' is regarded as established fact in  
12 the scientific literature, by our co-managers, and by 10 years of  
13 BRT reviews (although the frequency and magnitude is unknown)."  
14 *Id.*

15 At the end of September 2005, NMFS continued to assert that,  
16 pursuant to the ESU Policy, the best available scientific  
17 evidence supported the inclusion of both resident and anadromous  
18 forms in the same ESUs where they co-occur below impassible  
19 barriers. In a document entitled "Approach for Resolving Shared  
20 NOAA Fisheries and U.S. Fish and Wildlife Jurisdiction under the  
21 Endangered Species Act for Steelhead and Rainbow Trout  
22 (*Oncorhynchus mykiss*)" NMFS explained:

23 It is well established in the scientific literature  
24 that resident (rainbow trout) and anadromous  
25 (steelhead) *O. mykiss* are very similar genetically  
26 where they co-occur with no physical barriers to  
27 migration or interbreeding. It is also well established  
28 that the resident form occasionally produces anadromous  
migrants, and vice versa. Accordingly, in past NMFS'  
steelhead status reviews, co-occurring resident and  
anadromous *O. mykiss* were regarded as a polymorphism  
within an interbreeding population and the two  
life-history forms were considered as part of the same

1 ESU...

2 In response to several petitions, pending litigation,  
3 and in an effort to comply with the Alsea ruling, NMFS  
4 conducted a comprehensive status review of 27 West  
5 Coast salmonid ESUs, including all ten ESA-listed  
6 steelhead ESUs. This recent review included an updated  
7 assessment of the best available scientific information  
8 concerning the relationship between resident and  
9 anadromous *O. mykiss*, and their relative contributions  
10 to the viability of delineated *O. mykiss*  
11 ESU...Consistent with previous reviews, our recent  
12 review concluded that where resident and anadromous *O.*  
13 *mykiss* co-occur they are not substantially  
14 reproductively isolated, they collectively represent an  
15 important component in the evolutionary legacy of the  
16 species, and they are part of the same ESU.

17 AR 2245-01 at 3 (emphasis added).

18 On January 5, 2006, NMFS published a final rule regarding  
19 the proposed listings, adopting the reasoning presented in the  
20 notice, announcing the shift from the ESU to the DPS policy, and  
21 addressing numerous comments. 71 Fed. Reg. 834. The boundaries  
22 of the previously defined *O. mykiss* ESUs were unchanged, but,  
23 applying the Joint DPS Policy, all resident *O. mykiss* were  
24 excluded and the groupings were referred to as "DPSs" rather than  
25 "ESUs." The hatchery programs included in the final steelhead  
26 DPS listings were unchanged from those included in the 2004  
27 proposed listing. *Id.* at 848. The Southern California steelhead  
28 DPS is listed as endangered and the other four California  
steelhead DPSs are listed as threatened. *Id.* at 857.

29 E. Challenged Prohibitions and Protective Regulations.

30 The final NMFS listing promulgated certain protective  
31 measures. Although ESA § 9(a), 16 U.S.C. § 1538(a)(1)(B), take  
32 provisions apply to all species listed as endangered, for  
33 threatened species, ESA § 4(d) grants NMFS discretion whether and  
34 to what extent to extend § 9(a) "take" protections. Section 4(d)

1 also directs the agency to issue regulations it considers  
2 necessary and advisable for the conservation of the species.<sup>10</sup>

3 On June 28, 2005, as part of the final listing  
4 determinations for 16 West Coast salmon ESUs, NMFS amended the  
5 previously promulgated 4(d) protective regulations for threatened  
6 salmon and steelhead. 70 Fed. Reg. 37,160. The amendment was  
7 designed to "provide the necessary flexibility to ensure that  
8 fisheries and artificial propagation programs are managed  
9 consistently with the conservation needs of threatened salmon and  
10 steelhead." 71 Fed. Reg. 857. Under the amended regulation,  
11 section 4(d) protections were extended only to natural and  
12 hatchery fish with an intact adipose fin, but not to listed  
13 hatchery fish that have had their adipose fin removed prior to  
14 release into the wild. The regulation applied to steelhead being  
15 listed as threatened in the South-Central California, Central  
16 California Coast, California Central Valley, Northern California,

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17  
18 <sup>10</sup> Section 4(d) provides in its entirety:

19 Whenever any species is listed as a threatened species  
20 pursuant to subsection (c) of this section, the Secretary  
21 shall issue such regulations as he deems necessary and  
22 advisable to provide for the conservation of such species.  
23 The Secretary may by regulation prohibit with respect to any  
24 threatened species any act prohibited under section 1538(a)  
25 (1) of this title, in the case of fish or wildlife, or  
26 section 1538(a) (2) of this title, in the case of plants,  
27 with respect to endangered species; except that with respect  
to the taking of resident species of fish or wildlife, such  
regulations shall apply in any State which has entered into  
a cooperative agreement pursuant to section 1535(c) of this  
title only to the extent that such regulations have also  
been adopted by such State.

28 16 U.S.C. § 1533.

1 DPSs, among others.

2  
3 III. SUMMARY OF PLAINTIFFS' MOTIONS

4 A. Grange Motions.

5 Grange filed this lawsuit on March 20, 2006, alleging  
6 generally that, in listing the five California *O. mykiss* DPSs,  
7 NMFS failed to comply with the ESA and the APA. (*Grange* Doc. 1.)  
8 Grange now moves for summary judgment on the following grounds:

9 First, the Grange argues these NMFS listings unlawfully  
10 distinguished between hatchery and naturally-spawned *O. mykiss* by  
11 first defining some of the DPSs to include hatchery fish, but  
12 then distinguished between hatchery and naturally-spawned fish  
13 during the listing process. Grange relies heavily on the holding  
14 from *Alsea* that "[l]isting distinctions below that of subspecies  
15 or a DPS of a species are not allowed under the ESA." 161 F.  
16 Supp. 2d at 1163. Grange asserts that the phrase "listing  
17 distinctions" should apply not only to "listing decisions" (i.e.,  
18 the final determination whether to place a species or DPS on the  
19 threatened or endangered list) but to any distinctions made at  
20 any point of the listing process once the members of a DPS are  
21 defined.<sup>11</sup> (*Id.* at ¶¶ 84-91.)

22 Next, Grange challenges NMFS's decision to apply the Joint  
23 DPS policy to *O. mykiss*, which resulted in the exclusion of all

24  
25  
26 <sup>11</sup> With respect to this argument, is not entirely clear  
27 whether Grange is (a) challenging just the listing decision, or  
28 (b) alleging an as-applied challenge to the HLP, which provides  
the framework for the process used by NMFS in its listing  
decision.

1 resident *O. mykiss* from the five challenged DPSs, leaving only  
2 steelhead in those DPSs. Grange first argues that NMFS had  
3 insufficient justification for applying the Joint DPS policy to  
4 *O. mykiss*, which was a departure from its prior practice of  
5 applying the ESU Policy. (*Id.* at ¶¶ 99-102.) Second, Grange  
6 argues that drawing any distinction between migratory and  
7 resident *O. mykiss* "results in an inconsistent and artificial  
8 species definition that is not supported by the ESA and is  
9 contrary to the ESA's intent." (Doc. 1 at ¶ 82.) (Grange Doc. 1  
10 at ¶¶ 79-83.)

11 Finally, Grange challenges the ESA § 4(d) protective  
12 regulations for the four challenged DPSs designated as  
13 threatened. The regulation applies the anti-take protections of  
14 ESA § 9 to only the "naturally-spawned" portion of the listed  
15 populations and those members of the hatchery-born population  
16 with an intact adipose fin, while those hatchery-born fish whose  
17 adipose fins have been clipped are deemed "surplus to the  
18 conservation needs of the species."

19 Grange maintains that allowing the take of fish which have  
20 been deemed "surplus to the conservation needs of the species"  
21 violates the ESA. Specifically, for threatened species, the ESA  
22 requires NMFS to "issue such regulations as [NMFS] deems  
23 necessary and advisable to provide for the conservation of such  
24 species." 16 U.S.C. § 1533(d) (emphasis added). The ESA defines  
25 "conservation," as "the use of all methods and procedures which  
26 are necessary to bring any endangered species or threatened  
27 species to the point at which the measures provided pursuant to  
28 this chapter are no longer necessary." § 1532(3). The

1 definition of conservation provides: "[s]uch methods and  
2 procedures include, but are not limited to, all activities  
3 associated with scientific resources management such as research,  
4 census, law enforcement, habitat acquisition and maintenance,  
5 propagation, live trapping, and transplantation, and, in the  
6 extraordinary case where population pressures within a given  
7 ecosystem cannot be otherwise relieved, may include regulated  
8 taking." *Id.* (emphasis added). The Grange asserts that this  
9 language operates as a prohibition against permitting the take of  
10 any listed species except in extraordinary cases, making NMFS's  
11 protective regulation unlawful. (*Grange Doc. 1* at ¶¶ 103-108.)

12 The *Grange* advances one additional claim, premised on the  
13 ESA's definition of a "species" to include "any subspecies of  
14 fish or wildlife or plants, and any distinct population segment  
15 of any species of vertebrate fish or wildlife which interbreeds  
16 when mature." 16 U.S.C. § 1532(16) (emphasis added). *Grange*  
17 alleges that each of the challenged DPSs consist of numerous sub-  
18 populations spread across large areas and that, for example,  
19 "[s]ome *O. mykiss* return to spawn in Redwood Creek in Humboldt  
20 County, in the far north portion of the DPS, while others return  
21 to spawn in the Gualala River in Mendocino County, in the far  
22 south portion of the DPS - over 200 miles away." (*Grange Doc. 1*  
23 at ¶95.) This allegedly conflicts with the ESA's plain language  
24 requiring DPSs to "interbreed when mature." However, as Federal  
25 Defendants point out in their cross-motion, this claim was not  
26 raised in Grange's motion for summary judgment. Rather, the  
27 claim was raised for the first time in the reply brief. To mask  
28 this untimeliness, the argument is characterized as a response to

1 a different argument made in Defendants' cross motion.  
2 Specifically, Grange's opening brief (in the context of a  
3 separate claim) argued that all DPSs of *O. mykiss* must include  
4 both resident and anadromous fish because they "interbreed when  
5 mature." NMFS responded, *inter alia*, that "[t]he ESA requirement  
6 that a group of organisms defined as a DPS must 'interbreed when  
7 mature' is a necessary but not exclusive condition." (*Grange*  
8 Doc. 45 at 25.) Defendants discussed this statutory language in  
9 the context of Grange's Fourth and First Claims for relief (which  
10 challenge the distinction between resident and migratory *O.*  
11 *mykiss*). Grange's reply reintroduces their entire Third claim as  
12 a response to Defendants' reference to the "interbreed[ing] when  
13 mature" language. This procedure deprives Defendants of a fair  
14 opportunity to respond.

15 B. MID II Motions.

16 MID advances five arguments why NMFS's listing of the  
17 Central Valley Steelhead DPS is arbitrary, capricious, and  
18 unlawful, some of which overlap with the Grange's claims. First,  
19 MID claims that NMFS's interpretation of the term "distinct  
20 population segment" is arbitrary because it contradicts the plain  
21 language of the ESA. Second, NMFS's decision to separate  
22 anadromous and resident forms of *O. mykiss* is arbitrary because  
23 it is inconsistent with its own and FWS's treatment of other fish  
24 species with anadromous and resident life histories. Third,  
25 NMFS's switch from the ESU to the DPS policy is arbitrary and  
26 capricious because the reasons for the switch are unsupported by  
27 the administrative record. Fourth, the best available science  
28

1 does not support NMFS's determination that anadromous *O. mykiss*  
2 are discrete from resident *O. mykiss*. Finally, NMFS provided no  
3 rational basis to justify including some genetically divergent *O.*  
4 *mykiss* and excluding other genetically divergent *O. mykiss* from  
5 the defined DPS.

6  
7 IV. STANDARD OF REVIEW

8 Plaintiffs seek summary judgment setting aside NMFS's  
9 listing determinations for the five DPSs of California steelhead.  
10 It is not disputed that the listings are final agency actions.  
11 Review of an agency's final action is governed by APA section  
12 706(2) of the APA, which provides:

13 To the extent necessary to decision and when presented,  
14 the reviewing court shall decide all relevant questions  
15 of law, interpret constitutional and statutory  
16 provisions, and determine the meaning or applicability  
17 of the terms of an agency action. The reviewing court  
18 shall-

19 \*\*\*

20 (2) hold unlawful and set aside agency action,  
21 findings, and conclusions found to be -

22 (A) arbitrary, capricious, an abuse of  
23 discretion, or otherwise not in  
24 accordance with law;

25 \*\*\*

26 In making the foregoing determinations, the  
27 court shall review the whole record or those  
28 parts of it cited by a party, and due account  
shall be taken of the rule of prejudicial  
error.

5 U.S.C. § 706.

Courts will award summary judgment in an APA case if they  
determine, after reviewing the administrative record, that the

1 agency's action was arbitrary and capricious, an abuse of  
2 discretion, not in accordance with law, or unsupported by  
3 substantial evidence on the record taken as a whole. *Morongo*  
4 *Band of Mission Indians v. FAA*, 161 F.3d 569, 573 (9th Cir.  
5 1998); 5 U.S.C. § 706(2) (A). According to the Ninth Circuit, a  
6 decision is arbitrary and capricious if the agency

7 (1) has relied on factors which Congress has not intended  
8 it to consider,

9 (2) entirely failed to consider an important aspect of the  
10 problem,

11 (3) offered an explanation for its decision that runs  
12 counter to the evidence before the agency, or

13 (4) is so implausible that it could not be ascribed to a  
14 difference in view or product of agency expertise.

15 *United States v. Snoring Relief Labs., Inc.*, 210 F.3d 1081, 1085  
16 (9th Cir. 2000).

17 "Review under the arbitrary and capricious standard is  
18 narrow, and the reviewing court may not substitute its judgment  
19 for that of the agency." *Morongo Band*, 161 F.3d at 573; see also  
20 *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402,  
21 414-16 (1971), overruled on other grounds by *Califano v. Sanders*,  
22 430 U.S. 99, 105 (1977). Despite this "narrow" scope of review,  
23 the court is still expected to make a "thorough, probing, in-  
24 depth review" of the administrative record to ensure the validity  
25 of the agency action, and "must consider whether the decision was  
26 based on a consideration of the relevant factors and whether  
27 there has been a clear error of judgment." *Id.* at 415-16.

28

1 Whenever scientific experts express conflicting views, "an agency  
2 must have discretion to rely on the reasonable opinions of its  
3 own qualified experts even if, as an original matter, a court  
4 might find contrary views more persuasive." *Marsh v. Oregon*  
5 *Natural Res. Council*, 490 U.S. 360, 378 (1989). A court must be  
6 "at its most deferential" when an agency is "making predictions  
7 within its area of expertise, at the frontiers of science."  
8 *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S.  
9 87, 103 (1983).

10  
11 V. ANALYSIS<sup>12</sup>

12 A. Standing.

13 To establish constitutional standing, a plaintiff first must  
14 "have suffered an injury in fact -- an invasion of a legally  
15 protected interest which is (a) concrete and particularized and  
16 (b) actual or imminent, not conjectural or hypothetical." *Lujan*  
17 *v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992) (internal  
18 quotations and citations omitted). Second, "there must be a  
19 causal connection between the injury and the conduct complained  
20 of -- the injury has to be fairly traceable to the challenged  
21 action of the defendant and not the result of some independent  
22 action of some third party not before the court." *Id.* Finally,  
23 "it must be likely, as opposed to merely speculative, that the  
24 injury will be redressed by a favorable decision." *Id.* at 561.

25  
26 <sup>12</sup> Defendant-Intervenors in *Grange* raised evidentiary  
27 objections which have been resolved in a separate memorandum  
28 decision. (*Grange* Doc. 82; *MID II* Doc. 115.)

1 Plaintiffs bear the burden of establishing these elements. *Id.*

2 At the summary judgment stage, Plaintiffs "can no longer  
3 rest on ... mere allegations, but must set forth by affidavit or  
4 other evidence specific facts, which for the purposes of [a]  
5 summary judgment motion will be taken to be true." *Id.*

6 When the suit is one challenging the legality of  
7 government action or inaction, the nature and extent of  
8 facts that must be averred (at the summary judgment  
9 stage) or proved (at the trial stage) in order to  
10 establish standing depends considerably upon whether  
11 the plaintiff is himself an object of the action (or  
12 forgone action) at issue. If he is, there is ordinarily  
13 little question that the action or inaction has caused  
14 him injury, and that a judgment preventing or requiring  
15 the action will redress it. When, however, as in this  
16 case, a plaintiff's asserted injury arises from the  
17 government's allegedly unlawful regulation (or lack of  
18 regulation) of someone else, much more is needed. In  
19 that circumstance, causation and redressability  
20 ordinarily hinge on the response of the regulated (or  
21 regulable) third party to the government action or  
22 inaction-and perhaps on the response of others as well.  
23 The existence of one or more of the essential elements  
24 of standing depends on the unfettered choices made by  
25 independent actors not before the courts and whose  
26 exercise of broad and legitimate discretion the courts  
27 cannot presume either to control or to predict; and it  
28 becomes the burden of the plaintiff to adduce facts  
showing that those choices have been or will be made in  
such manner as to produce causation and permit  
redressability of injury. Thus, when the plaintiff is  
not himself the object of the government action or  
inaction he challenges, standing is not precluded, but  
it is ordinarily substantially more difficult to  
establish.

*Id.* at 561-62 (internal citations and quotations omitted).

Plaintiffs must "demonstrate standing for each claim [they] seek  
to press." *DaimlerChrysler Corp v. Cuno*, 547 U.S. 332, 335  
(2006).

1. Standing of the Grange Plaintiffs.

Federal Defendants assert that the Grange Plaintiffs' have

1 failed to meet their burden of establishing standing. (*Grange*  
2 Doc. 45 at 14.) The Grange Plaintiffs do not directly address  
3 the issue of standing in either their motion for summary judgment  
4 or their reply brief. Nor have the Grange Plaintiffs submitted  
5 declarations (or any other evidence) from any individuals  
6 associated with either California State Grange or Greenhorn  
7 Grange. The Complaint does contain some basic allegations  
8 regarding the purpose of California State Grange and Greenhorn  
9 Grange, as well as the general interests they might have in the  
10 *O. mykiss* listing. However, at the summary judgment stage, mere  
11 allegations are insufficient. As neither California State Grange  
12 nor Greenhorn Grange have submitted any evidence regarding  
13 standing, they have totally failed to meet their burden under  
14 *Lujan* and their claims must be dismissed from the case for lack  
15 of standing.

16 Other Plaintiffs remain. Standing declarations have been  
17 submitted by (1) David Bischel, the President of the California  
18 Forestry Association ("CFA") (*Grange* Doc. 54); (2) Robert Briggs,  
19 the Director of the Central Coast Forest Association  
20 ("CCFA") (*Grange* Doc. 56); and (3) James Kentosh, the Manager of  
21 Resource Planning for United Water Conservation District ("UWCD")  
22 (*Grange* Doc. 55).

23 David Bishel states that as a result of the listing of  
24 several populations of salmonids, including the steelhead, the  
25 California Forest Practice Rules were amended to "increase the  
26 prescriptive measures already in place for the protection of  
27 watershed resources." (*Grange* Doc. 54 at ¶2.) Specifically, the  
28

1 added protections "include requiring landowners to retain trees  
2 which would have previously been harvested and impose additional  
3 requirements for erosion control, watercourse crossings,  
4 restoration, monitoring, and selection of alternatives. These  
5 measures dramatically increased the costs of harvesting and  
6 reduce the numbers of trees removed near streams." (*Id.* at ¶4.)  
7 Bishel estimates that "[p]rivate timber harvests in California  
8 dropped by 380 million board feet due to the imposition of the  
9 [new] pr[e]scriptive measures." (*Id.* at ¶6.) However, Bishel  
10 does not provide any evidence pertaining to the membership of the  
11 CFA, or how its members have been harmed by the new regulations.  
12 The Complaint explains that the CFA consists of "forestry  
13 professionals, companies, and individuals," who are "committed to  
14 staying abreast of issues facing the forest products industry."  
15 (*Grange Compl.* at ¶9A.) However, nothing in Bishel's  
16 declaration provides evidence to support basis for these  
17 allegations, nor does he provide any affidavits from individual  
18 CFA members or timber owners who have been impacted by the new  
19 regulations.

20 An organization may sue on behalf of its members (i) where  
21 at least one member would have standing to sue in his or her own  
22 right, (ii) where the interests the association seeks to protect  
23 are germane to its purpose, and (iii) where neither the claim nor  
24 the remedy requires the members to participate individually.  
25 *Hunt v. Wash. State Apple Adver. Comm'n*, 432 U.S. 333, 342-43  
26 (1977). Although the third element is not reasonably in dispute  
27 here, Bishel's declaration fails to establish either the first or  
28

1 second element, as it contains absolutely no evidence regarding  
2 the organization's purpose or whether any of its members have  
3 individualized injury to confer standing.

4 Robert Briggs' declaration, made on behalf of CCFA, also  
5 fails to provide evidence regarding the organizational goals of  
6 CCFA. Although the Complaint alleges that CCFA is "a California  
7 nonprofit alliance of small forestland owners, forestry  
8 professionals, and forest oriented businesses with close affinity  
9 to the woods, mountains, streams, and wildlife of the Central  
10 Coast of California," Briggs' declaration contains no evidence to  
11 support these allegations. Briggs' does provide some information  
12 as to the harm caused to CCFA members by the listing of the  
13 steelhead. He states unequivocally, that "the listing of the  
14 steelhead has justified federal and state interference in the  
15 lives and livelihoods of people in the Santa Cruz Mountains area  
16 in numerous ways." (*Grange Doc.* 56 at ¶2.) Briggs describes  
17 several specific impacts of the listing and resulting logging  
18 restrictions upon CCFA members. For example, Briggs explains  
19 that CCFA member Charles Burton harvested a 55 acre plot of  
20 redwood on his lands in Santa Cruz County in 1999. As a result  
21 of a stream buffer requirement enacted by the California Board of  
22 Forestry "at the instigation of NMFS to protect the steelhead,"  
23 Mr. Burton was required to leave a 150 foot uncut strip of timber  
24 approximately 1,000 feet long, resulting in \$72,000 in lost  
25 harvest revenue. (*Id.* at ¶3Bi.) Briggs offers several other  
26 specific examples of harm caused to CCFA members as a result of  
27 the stream buffer requirement. (*Id.*) Briggs also explains how  
28

1 other steelhead protection measures have harmed CCFA members.  
2 For example, CCFA member Big Creek Lumber Company is now required  
3 to haul water 40 miles roundtrip to a logging site because  
4 drafting water from an on-site stream is restricted to protect  
5 steelhead. (*Id.* at 3ii.)

6 James Kentosh, the Manager of Resource Planning for United  
7 Water Conservation District ("UWCD"), states in his declaration  
8 that UWCD "manages groundwater and delivers water to cities and  
9 agricultural water users within a large part of Ventura County,  
10 in Southern California. UWCD is a public agency with an elected  
11 board of directors, created under the Water Conservation District  
12 Law of 1931." (*Grange Doc.* 55 at ¶2.) Kentosh explains that  
13 NMFS's recommendations for the protection of the steelhead  
14 include reducing the amount of water that may be diverted out of  
15 the Santa Clara River at UWCD's Freeman Diversion by  
16 approximately 10,000 acre feet per year. UWCD estimates that it  
17 would cost approximately \$7.25 million per year to acquire  
18 replacement water in that region, although Kentosh does not  
19 indicate that it is necessary for UWCD to replace this water or  
20 that it has paid for replacement water. (*Id.* at ¶¶ 8-9.) In  
21 addition to the water diversion restrictions, NMFS has also  
22 concluded that a fish ladder installed at the Freeman diversion  
23 does not work and recommends replacing it with a "rock ramp."  
24 UWCD estimates that such a rock ramp would cost around \$100  
25 million to construct. UWCD also has incurred and continues to  
26 incur costs related to studying impacts of its operations on  
27 listed steelhead. UWCD estimates these costs related to the

28

1 relicensing of its operations at Lake Piru to be over \$100,000 to  
2 date. (*Id.* at ¶16.) In addition, partly because of the listing  
3 of the steelhead, UWCD is being required to upgrade fish screens  
4 and build a natural fishway at Piru Creek, at an estimated cost  
5 of \$600,000. (*Id.* at ¶17.)

6 There is no question that UWCD has been harmed by the  
7 listing of the steelhead. UWCD also claims to be harmed by  
8 NMFS's promulgation of a protective regulation that allows the  
9 harvest of hatchery-born *O. mykiss* because, as a regulated party,  
10 any decision that permits the take of some listed individuals may  
11 impact the overall capacity of the listed species (or DPS) to  
12 survive and recover. Accordingly, UWCD has standing to challenge  
13 the listing determinations, the policies and practices that led  
14 to the listings, and NMFS's promulgation of a protective  
15 regulation that allows the harvest of hatchery-born *O. mykiss* who  
16 have had their adipose fin clipped.

17 The California State Grange and Greenhorn Grange have  
18 totally failed to demonstrate they have standing. The CFA has  
19 not provided evidence as to its organizational purpose and has  
20 not demonstrated that any of its members have been harmed by  
21 Defendants' conduct. CCFA has also failed to provide evidence as  
22 to its organizational purpose. UWCD, however, has demonstrated  
23 that it has been harmed by the listing of the steelhead.

24 2. Standing of the MID II Plaintiffs.

25 No standing challenge is raised in *MID II*. A brief review  
26 of the MID II Plaintiffs' interests reveals that they have  
27 standing to pursue their claims.

28

1 Plaintiffs Modesto Irrigation District ("Modesto ID"),  
2 Turlock Irrigation District ("Turlock ID"), Merced Irrigation  
3 District ("Merced ID"), Oakdale Irrigation District ("Oakdale  
4 ID"), and South San Joaquin Irrigation District ("South San  
5 Joaquin ID"), are all irrigation districts and public agencies  
6 organized and operating pursuant to California Law. Cal Water  
7 Code §§ 20500, *et seq.* Modesto ID and Turlock ID own and operate  
8 the Don Pedro Project, which is subject to a license issued by  
9 the Federal Energy Regulatory Commission ("FERC"), making Modesto  
10 ID's and Turlock ID's operations subject to consultation between  
11 NMFS and FERC under Section 7 of the ESA. Merced ID owns and  
12 operates facilities that divert water from the Merced River.  
13 These facilities are also subject to licenses issued by FERC, and  
14 are similarly subject to Section 7 consultation. Oakdale ID and  
15 South San Joaquin ID own and operate facilities that divert water  
16 from the Stanislaus River. Some of these facilities are the  
17 subject of permits issued by FERC. (*See generally MID II Doc. 1*  
18 *at 5-6.*)

19 Stockton East Water District ("Stockton East WD") is a  
20 special district formed by special action of the California  
21 Legislature, and is generally governed as a water conservation  
22 district pursuant to California Water Code §§ 74000-76501.  
23 Stockton East WD owns and operates facilities that divert water  
24 from the Stanislaus River, Calaveras River, and Mormon Slough in  
25 Calaveras, Tuolumne, Stanislaus, and San Joaquin Counties. Some  
26 of Stockton East WD's facilities are the subject of permits  
27 issued by the United States Army Corps of Engineers ("USACOE")  
28

1 pursuant to section 404 of the Clean Water Act (13 U.S.C. §  
2 1344), and are subject to Section 7 consultation between NMFS and  
3 the USACOE. (*Id.* at 6.)

4 Each *MID II* Plaintiff depends upon or operates facilities on  
5 rivers allegedly occupied by Central Valley Steelhead. (*Id.* at  
6 ¶9.) Not only are the *MID II* Plaintiffs' operations on these  
7 rivers subject to ESA Section 7, their operations are subject to  
8 Section 4(d) "take" prohibitions and penalties if a listed fish  
9 is taken as a result of these operations. Plaintiffs have a  
10 concrete interest in ensuring that the ESA listing decisions that  
11 will form the subject of further regulation of their activities  
12 are proper. They are and will continue to be injured by listing  
13 decisions that affect the timing and volume of water that they  
14 can divert and deliver. It is undisputed that the listing  
15 decision is the cause of Plaintiffs' injury and that the  
16 invalidation of the listing decision would redress the alleged  
17 harm. In addition, as regulated parties, the *MID II* Plaintiffs  
18 fall within the zone of interest of the ESA. The *MID II*  
19 Plaintiffs have standing to bring this suit.

20  
21 B. Hatchery-Born v. Naturally-Spawned: Challenges to the  
22 Manner by Which NMFS Treated Hatchery *O. mykiss* During  
the Listing Process.

23 1. Grange's Claim That NMFS Acted Unlawfully by  
24 Defining Some of the DPSs to Include Hatchery Fish  
25 but Then Distinguished Between Hatchery and  
Naturally-Spawned Fish During the Listing Process.

26 Grange argues generally that NMFS unlawfully distinguished  
27 between hatchery and naturally-spawned *O. mykiss* by first  
28 defining some of the DPSs to include hatchery fish but then

1 distinguished between hatchery and naturally-spawned fish during  
2 the listing process. Grange insists that (1) "[u]nder the ESA's  
3 clear terms, NMFS must treat equally, without distinction, all  
4 members of a species it includes in a species population,"  
5 (*Grange Doc. 29 at 13*), and (2) NMFS acted unlawfully when it (a)  
6 reviewed the status of only the naturally-spawned portion of the  
7 population to determine if that portion warranted listing, and  
8 (b) only evaluated hatchery *O. mykiss* to determine how hatchery  
9 *O. mykiss* impacted the natural population. (*Id.*) The *Grange*  
10 relies upon language from *Alsea*, the plain language of the ESA,  
11 and portions of the ESA's legislative history.

12 Federal Defendants and Defendant-Intervenors cross-move for  
13 summary judgment on this claim, contending that they lawfully  
14 drew distinctions between hatchery-born and naturally-spawning *O.*  
15 *mykiss* during the listing process.

16 a. Two of the Five Challenged DPSs Do Not  
17 Include Hatchery Fish.

18 It is undisputed that two of the five challenged California  
19 Steelhead DPSs, the Southern California and South-Central  
20 California DPSs, do not include hatchery fish. Grange's Second  
21 Claim for Relief is based on the argument that NMFS cannot  
22 include hatchery fish in a DPS and then treat them differently  
23 from naturally-spawned fish during the listing process. This  
24 claim cannot possibly apply to the two California DPSs that do  
25 not include hatchery fish. Accordingly, Federal Defendants and  
26 Defendant-Intervenors' cross-motion for summary judgment on the  
27 Second Claim for Relief is GRANTED with respect to these two  
28 DPSs.

1                   b. Alsea does not Control the Outcome of this  
2                   Claim.

3                   Plaintiffs rely heavily on *Alsea*, maintaining it controls  
4                   the outcome of this case. *Alsea* addressed NMFS's listing of the  
5                   Oregon Coast Coho ESU as threatened. 161 F. Supp. 2d at 1159.  
6                   Under its ESU Policy, NMFS concluded that nine hatchery  
7                   populations were part of the disputed ESUs, but nonetheless  
8                   listed only the naturally-spawned fish as threatened. The  
9                   hatchery populations were not included in the listing because the  
10                  hatchery populations were not deemed "essential to recovery."  
11                  *Id.*

12                  The *Alsea* listing was invalid because NMFS's distinction  
13                  "between hatchery spawned and naturally-spawned coho is untenable  
14                  under the ESA because the ESA does not allow the Secretary to  
15                  make listing distinctions below that of species, subspecies or a  
16                  distinct population segment of a species." *Id.* at 1161. *Alsea*  
17                  concluded that NMFS's ESU Policy is a "permissible agency  
18                  construction of the ESA" and the "factors used to define [an ESU  
19                  during the listing process], geography and genetics, are within  
20                  permissible limits under the ESA," *id.* & 1162 n.5, but found  
21                  NMFS's approach to be fundamentally flawed:

22                         The central problem with the NMFS listing decision of  
23                         August 10, 1998, is that it makes improper  
24                         distinctions, below that of a DPS, by excluding  
25                         hatchery coho populations from listing protection even  
26                         though they are determined to be part of the same DPS  
27                         as natural coho populations.

28                         The ESA "specifically states in the definition of  
                          'species' that a 'species' may include any subspecies  
                          ... and any distinct population segment (DPS) of any  
                          species ... which interbreeds when mature." 16 U.S.C. §  
                          1532(16); *Southwest Center for Biological Diversity v.*  
                          *Babbitt*, 980 F. Supp. 1080, 1085 (D. Ariz. 1997).

1 Listing distinctions below that of subspecies or a DPS  
2 of a species are not allowed under the ESA. Southwest  
3 Center, 980 F. Supp. at 1085. Yet, this is precisely  
4 what the NMFS did in its final listing decision of  
5 August 10, 1998. NMFS concluded that nine hatchery  
6 stocks were part of the same Oregon Coast ESU/DPS as  
7 the "natural" populations but none of the hatchery  
8 stocks were included in the listing decision because  
9 NMFS did not consider them "essential for recovery." 63  
10 Fed.Reg. 42,589.

11 The distinction between members of the same ESU/DPS is  
12 arbitrary and capricious because NMFS may consider  
13 listing only an entire species, subspecies or distinct  
14 population segment ("DPS") of any species. 16 U.S.C. §  
15 1532(16). Once NMFS determined that hatchery spawned  
16 coho and naturally-spawned coho were part of the same  
17 DPS/ESU, the listing decision should have been made  
18 without further distinctions between members of the  
19 same DPS/ESU.

20 *Id.* at 1162 (emphasis added).

21 Plaintiffs assert here that the phrase "listing  
22 distinctions" should be read broadly to apply not only to  
23 "listing decisions" (i.e., the final determination whether to  
24 place a species or DPS on the threatened or endangered list) but  
25 to any distinctions made in any point of the ESA listing process  
26 as applied to the members of a DPS. (Grange Doc. 1 at ¶¶ 84-  
27 91.) In support, Plaintiffs point to *Alsea's* analysis of the  
28 ESA's text and legislative history, which rejects NMFS's argument  
"that its listing decision does not contradict the terms of the  
ESA because the listing decision, and relevant policies, are in  
accordance with ESA goals that prioritize 'natural' salmon  
populations and 'genetic diversity' within those populations."

*Id.*

Although I agree with the general concept that "genetic  
diversity" is one factor in the long term success of a  
threatened species, and thus is one of many underlying  
goals of the ESA, genetics cannot, by itself, justify a  
listing distinction that runs contrary to the

1 definition of a DPS.

2 The term "distinct population segment" was amended in  
3 the ESA in 1978 so that it "would exclude taxonomic  
4 [biological] categories below subspecies [smaller taxa]  
5 from the definition." H.R. Conf. Rep. No. 95-1804, at  
6 17 (1978), reprinted in 1978 U.S.C.C.A.N. 9485, 14855.

7 Congress adopted the DPS language stating:

8 The committee agrees that there may be instances  
9 in which [the Fish and Wildlife Service] should  
10 provide for different levels of protection for  
11 populations of the same species. For instance, the  
12 U.S. population of an animal should not  
13 necessarily be permitted to become extinct simply  
14 because the animal is more abundant elsewhere in  
15 the world. Similarly, listing populations may be  
16 necessary when the preponderance of evidence  
17 indicates that a species faces a widespread  
18 threat, but conclusive data is available with  
19 regard to only certain populations.

20 S. Rep. No. 96-151.

21 Thus, Congress expressly limited the Secretary's  
22 ability to make listing distinctions among species  
23 below that of subspecies or a DPS of a species. Here,  
24 the NMFS listing decision was based on distinctions  
25 below that of subspecies or distinct population segment  
26 of a species.

27 Therefore, the NMFS's listing decision is arbitrary and  
28 capricious, because the Oregon Coast ESU includes both  
"hatchery spawned" and "naturally-spawned" coho salmon,  
but the agency's listing decision arbitrarily excludes  
"hatchery spawned" coho....

20 *Id.* at 1163. Plaintiffs claim this suggests it is appropriate to  
21 bar NMFS from drawing any distinctions between naturally-spawned  
22 and hatchery-born fish at any stage during the listing process.  
23 Neither *Alsea's* holding nor its analysis of the ESA suggests such  
24 a limitation. Rather, *Alsea* emphasizes that Congress limited  
25 NMFS's ability to list a population that is taxonomically smaller  
26 than a subspecies or distinct population segment. It is  
27 undisputed that NMFS listed the entire DPSs in dispute here.

1 Alsea does not address whether it is proper for NMFS to emphasize  
2 the health of the natural components of the DPSs during its  
3 analysis of the extinction risks faced by the DPSs.<sup>13</sup> Defendants  
4 and Defendant-Intervenors are correct that Alsea "does not  
5 require a particular approach to assessing extinction risk."  
6 Alsea does not resolve Plaintiffs' claims as a matter of law.

7 c. Parsing Grange's Naturally-Spawned v.  
8 Hatchery-Born Challenge to Determine the  
9 Appropriate Standard of Review.

9 Grange also argues that, under the relevant statutory text  
10 and legislative history, the listing decision is contrary to the  
11 ESA's intent. Grange does not directly challenge the lawfulness  
12 of NMFS's HLP. Rather, Grange attacks the listing determinations  
13 alone. A challenge to a policy is reviewable under *Chevron*; a  
14 challenge to the application of a policy is reviewed under the  
15 arbitrary and capricious standard. See *Nat'l Ass'n of Home*  
16 *Builders v. Norton*, 340 F.3d 835, 841 (9th Cir. 2003). The  
17 parties have analyzed this case under the "arbitrary and  
18 capricious" standard, however the nature of the Grange's  
19 challenge and its relationship to the HLP makes less clear the  
20 appropriate standard of review.

---

21  
22 <sup>13</sup> The decision in *MID I*, 1:02-cv-06553, is equally  
23 unhelpful. There, as in in *Alsea*, NMFS's final rule concerning  
24 listing of the Central Valley steelhead included hatchery  
25 populations as part of the ESU, but listed as endangered only  
26 naturally-spawning steelhead. The federal defendants agreed  
27 that, under *Alsea*, "distinctions below that of a distinct  
28 population segment when making listing determinations are  
improper," and did not oppose plaintiffs' motion for summary  
judgment. (*Id.* at 28.) The *MID I* case was not directly premised  
on *Alsea*, as the point was conceded by the federal government.

1 The HLP provides that, when delineating an ESU for listing  
2 consideration, "NMFS will identify all components of the ESU,  
3 including populations of natural fish (natural populations) and  
4 hatchery stocks that are part of the ESU." 70 Fed. Reg. at  
5 37,215. However, when making status determinations (i.e., as to  
6 whether the ESU should be listed as threatened, endangered, or  
7 neither), "NMFS will apply this policy in support of the  
8 conservation of naturally-spawning salmon and the ecosystems upon  
9 which they depend, consistent with section 2(b) of the ESA (16  
10 U.S.C. 1531(b))." *Id.* (emphasis added). Accordingly,  
11 "[h]atchery fish will be included in assessing an ESU's status in  
12 the context of their contributions to conserving natural  
13 self-sustaining populations." *Id.*

14 NMFS used the HLP process to reach the challenged listing  
15 determinations and cited the HLP in the final listing. 71 Fed.  
16 Reg. 834, 836, 848. Grange does not assert that the HLP was  
17 applied improperly or that the agency's conclusions under the HLP  
18 (or any other policy) were unsupported by the record. (Either of  
19 these contentions would be reviewed under an arbitrary and  
20 capricious standard.) Rather, it asserts that the process NMFS  
21 utilized -- a process explicitly set forth in the HLP -- is  
22 contrary to law. Most, if not all, of the agency's  
23 justifications for applying this process are set forth in the  
24 HLP, not within the listing determinations. Although neither  
25 party has characterized this claim as a challenge to the HLP,<sup>14</sup>

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27 <sup>14</sup> For example, the Federal defendants assert that  
28 Grange's challenge "does not encompass a direct challenge to the

1 Plaintiffs' claim implies that the HLP is unlawful.

2 The parties extensively debate whether *Chevron* deference  
3 should apply to the HLP. For *Chevron* to apply to review of  
4 agency policy, Congress must delegate rule-making authority to  
5 the agency, and the agency's interpretation of its rules, having  
6 the force of law, must have been promulgated in the exercise of  
7 that authority. *United States v. Mead Corp.*, 533 U.S. 218, 226-  
8 27 (2001). The Ninth Circuit interprets *Mead* to require *Chevron*  
9 deference "when it appears that Congress delegated authority to  
10 the agency generally to make rules carrying the force of law."  
11 *Alaska Dept. of Health and Human Servs. v. Ctrs. for Medicare and*  
12 *Medicaid Servs.*, 424 F.3d 931 (9th Cir. 2005) (quoting *Mead*, 533  
13 U.S. at 226-27).

14 Grange argues the HLP is owed no *Chevron* deference because  
15 "[a]lthough the ESA authorizes NMFS to make rules carrying the  
16 force of law, NMFS did not exercise that authority by issuing its  
17 [HLP]." (*Grange* Doc. 53 at 3.) Grange correctly points out that  
18 the policy explicates that it is a general policy statement not  
19 subject to APA notice and comment procedures. See 70 Fed. Reg.  
20 at 37,215. This language is taken out of context. This  
21 statement was part of a section of the final rule in which NMFS  
22 determined that the Regulatory Flexibility Act<sup>15</sup> ("RFA") did not

23 \_\_\_\_\_  
24 [HLP]." (*Doc.* 64 at 2.)

25 <sup>15</sup> The Regulatory Flexibility Act requires that whenever  
26 an agency is required to publish notice of a proposed rule under  
27 5 U.S.C. 553 (formal rule making procedure, which exempts  
28 interpretive rules and general statements of policy from its  
coverage), that agency must analyze how the proposed rule would

1 apply to the promulgation of the HLP:

2 Required Determinations

3 This Policy on the Consideration of Hatchery-Origin  
4 Fish in Endangered Species Act Listing Determinations  
5 for Pacific Salmon and Steelhead is a general statement  
6 of policy, to which the requirement of notice and  
7 comment procedures under the Administrative Procedure  
8 Act does not apply, pursuant to 5 U.S.C. 553(b) (A).  
9 Because prior notice and opportunity for public comment  
10 are not required under 5 U.S.C. 553(b) (A) or any other  
11 law, the analytical requirements of the Regulatory  
12 Flexibility Act are not applicable to this action.

13 *Id.* NMFS correctly concluded that the RFA does not apply to  
14 interpretive rules or general statements of policy. The RFA's  
15 non-applicability is not dispositive of whether an interpretive  
16 rule or general statement of policy should be afforded *Chevron*  
17 deference.

18 Although not technically a "rule" subject to notice and  
19 comment rulemaking procedures, the HLP is a "policy" intended to  
20 fill a statutory gap and was established after public notice and  
21 opportunity for public comment. The Joint DPS Policy is  
22 similarly a "policy" rather than a "rule" that was published in  
23 draft form providing an opportunity for public comment. The  
24 Joint DPS Policy has repeatedly been afforded *Chevron* Deference.  
25 See *Nw. Ecosystem Alliance v. U.S. Fish and Wildlife Serv.*, 475  
26 F.3d 1136, 1141-42 (9th Cir. 2007); *Maine v. Norton*, 257 F. Supp.  
27 2d 357, 385 (D. Me. 2003) ("The Joint DPS Policy was issued as an  
28 official position of the agencies after both the proposed and  
29 final versions of the policy were published in the Federal  
30 Register and the policy was subject to public notice and

31 \_\_\_\_\_  
32 impact small businesses. See 5 U.S.C. § 603.

1 comment.").

2 In this case, as with the Joint DPS policy, NMFS promulgated  
3 the HLP with sufficient public notice and opportunity for comment  
4 to qualify the HLP for *Chevron* deference. Despite the parties  
5 arguments to the contrary, this claim is most appropriately  
6 characterized and analyzed as a challenge to the HLP's legality.  
7 *Chevron* deference applies to this as-applied challenge to the  
8 HLP's application.

9 d. Chevron Deference.

10 Under *Chevron's* two-part test, a court "must decide  
11 (1) whether the statute unambiguously forbids the Agency's  
12 interpretation, and, if not, (2) whether the interpretation, for  
13 other reasons, exceeds the bounds of the permissible." *Hemp*  
14 *Indus. v. Drug. Enf. Admin.*, 357 F.3d 1012, 1015 (9th Cir. 2004)  
15 (citing *Barnhart v. Walton*, 535 U.S. 212, 218 (2002)). At step  
16 one, a court "must give effect to the unambiguously expressed  
17 intent of Congress." *Id.* However, if "the statute is silent or  
18 ambiguous with respect to the specific issue," at step two a  
19 court will "sustain the Agency's interpretation if it is based on  
20 a permissible construction" of a statute. *Id.*

21 e. Does the ESA Unambiguously Preclude Drawing  
22 Distinctions Between Naturally-Spawned and  
23 Hatchery-Born Fish During Any Stage of the  
Listing Process?

24 Grange's central complaint is that once NMFS had already  
25 defined its DPSs to include hatchery-born *O. mykiss*, it was  
26 unlawful for the agency to thereafter focus on the conservation  
27 of naturally-spawning *O. mykiss* by considering hatchery-born  
28 fishes' contributions the DPSs status only "in the context of

1 their contributions to conserving natural self-sustaining  
2 populations." This approach was set out in the HLP and expressly  
3 referenced by NMFS in its listing decisions. Under the first  
4 *Chevron* step, does the ESA unambiguously preclude drawing any  
5 distinctions between naturally-spawned and hatchery-born fish  
6 during the listing process?

7 The Ninth Circuit has prescribed implementation of the first  
8 step of the *Chevron* analysis.

9 To determine whether Congress has directly spoken to  
10 the issue, we employ the traditional tools of statutory  
11 construction. These tools of construction require us  
12 first to engage in a textual analysis of the relevant  
13 statutory provisions and to read the words of a statute  
14 in their context and with a view to their place in the  
15 overall statutory scheme. If the proper interpretation  
16 is not clear from this textual analysis, the  
17 legislative history offers valuable guidance and  
18 insight into congressional intent. However, it is well  
19 established that legislative history which does not  
20 demonstrate a clear and certain congressional intent  
21 cannot form the basis for enjoining regulations.

22 In conducting this analysis, we are not vested with the  
23 power to rewrite the statutes, but rather must construe  
24 what Congress has written. It is for us to  
25 ascertain—neither to add nor to subtract, neither to  
26 delete nor to distort.

27 *Arizona State Bd. For Charter Schools v. U.S. Dept. of Educ.*, 464  
28 F.3d 1003, 1007 (9th Cir. 2006) (internal quotations and citations  
omitted).

Grange contends the ESA requires NMFS to treat hatchery and  
naturally-spawned *O. mykiss* equally throughout the entire listing  
process, relying almost exclusively on the ESA's definition of  
species and relevant legislative history. The ESA defines  
species to include "any subspecies of fish or wildlife or plants,  
and any distinct population segment of any species of vertebrate  
fish or wildlife which interbreeds when mature." 16 U.S.C. §

1 1532(16). The ESA does not define the term "distinct population  
2 segment," and provides no direct guidance as to the scope and  
3 meaning of the term. *Alea*, 161 F. Supp. 2d at 1157.

4 Grange points out that Congress originally defined "species"  
5 in the 1973 version of the ESA to include "any subspecies of fish  
6 or wildlife of the same species or smaller taxa in common spatial  
7 arrangement that interbreed when mature." The ESA was amended in  
8 1978 by changing the definition of "species" so it "would exclude  
9 taxonomic categories below subspecies from the definition as well  
10 as distinct populations of invertebrates." H.R. Conf. Rep. No.  
11 95-1804 at 17 (1978), reprinted in 1978 U.S.C.C.A.N. 9485,  
12 14,855. Grange correctly asserts that this was an expression of  
13 Congressional intent that the term "DPS of a species" apply only  
14 to "species" not to "smaller taxa." However, this does not  
15 resolve the issue: Whether Congress expressed an intent to bar  
16 the agency from considering any distinctions below the species or  
17 DPS level when determining whether a properly defined DPS should  
18 be listed as threatened or endangered? Grange identifies no  
19 language in the statute, the legislative history (or any relevant  
20 case<sup>16</sup>) that

21 \_\_\_\_\_  
22 <sup>16</sup> Grange cites *Defenders of Wildlife v. Norton*, 258 F.3d  
23 1136, 1144 (9th Cir. 2001), for the narrow proposition that,  
24 while it is permissible to list portions of a species based on  
25 geographic considerations, other considerations, such as the form  
of land ownership exercised over the species habitat, may not be  
taken into account.

26 *Defenders of Wildlife* concerned a challenge to FWS's  
27 decision not to list the flat-tailed horned lizard as a  
28 threatened species. Although the plaintiffs in that case  
maintained that the lizard faced significant threats in those  
parts of its habitat held in private ownership, the agency based

1  
2  
3 its decision, in part, on the fact that, regardless of the  
4 threats to the lizard on private land, large areas of habitat  
5 with few anticipated threats existed on public land. The agency  
6 did not consider the specific question of whether the lizard "is  
7 or will become extinct in 'a significant portion of its range,'  
8 as that term is used in the [ESA]." *Id.* at 1140. Contrary to  
9 Grange's assertion, the Ninth Circuit did not expressly reject  
10 drawing distinctions between habitat on private and public lands.  
11 Rather, the court focused on whether the agency's conclusion that  
12 the "lizard's potential survival in its public land habitat is  
13 sufficient to preclude ESA protection." *Id.* This, the court  
14 concluded, turned "largely on the meaning of the phrase "in  
15 danger of extinction throughout ... a significant portion of its  
16 range," which is contained in the definitions of both "endangered  
17 species" and "threatened species." The *Defenders of Wildlife*  
18 plaintiffs complained that, even though the record clearly  
19 indicated that the area in which the lizard was expected to  
20 survive is much smaller than its historical range, FWS failed to  
21 explain why the area in which the species can no longer live is  
22 not a "significant portion of its range," thereby warranting  
23 listing. The Ninth Circuit agreed, and reversed the listing  
24 determination for further consideration. *Id.* at 1146.

25 Grange also asserts that *Defenders of Wildlife* recognizes  
26 that "although congress eliminated NMFS's ability to list  
27 portions of a species based on genetics, Congress preserved the  
28 ability to list species according to geographical range."  
(Grange Doc. 29 at 17.) Although *Defenders of Wildlife* confirms  
that a species may be listed according to its geographical range,  
the case says absolutely nothing about the propriety of listing  
on the basis of genetics.

Finally, Plaintiffs correctly note that *Defenders of  
Wildlife* cites Senator Tunney's explanation of why Congress  
placed such importance upon geographical distinctions within the  
ESA:

An animal might be "endangered" in most States but  
overpopulated in some. In a State in which a species  
is overpopulated, the Secretary would have the  
discretion to list that animal as merely threatened or  
to remove it from the endangered species list entirely  
while still providing protection in areas where it was  
threatened with extinction.

*Id.* at 1144 (quoting H.R. Rep. No. 412, 93rd Cong., 1 Sess.

1 illuminates Congress' intent regarding whether distinctions among  
2 members of a DPS may be considered during the listing process.  
3 Congress has not spoken on the issue. This is the type of gap  
4 which agencies commonly fill by way of regulation or policy that  
5 is due *Chevron* deference. See also *Am. Rivers v. FERC*, 201 F.3d  
6 1186, 1197 (9th Cir. 2000) ("When relevant statutes are silent on  
7 the salient question, we assume that Congress has implicitly left  
8 a void for an agency to fill. We must therefore defer to the  
9 agency's construction of its governing statutes, unless that  
10 construction is unreasonable.").

11 By not addressing the question of whether an agency may use  
12 distinctions below the DPS to evaluate whether a properly defined  
13 DPS should be listed as threatened or endangered, the legislature  
14 cedes the authority to do so to the agency. The analysis turns  
15 to the second *Chevron* step.

16 f. Was the Approach Used by NMFS During the  
17 Listing Process -- Emphasizing the Health of  
18 Natural Populations and Considering Hatchery-  
19 born Fish Only Insofar as They Contribute to  
20 the Health of Natural Populations -- a  
21 "Permissible Construction" of the ESA?

22 In the second *Chevron* step, a reviewing court must ask  
23 "whether the agency's [interpretation] is based on a permissible  
24 construction of the statute." *New Edge Network, Inc. v. F.C.C.*,  
25 461 F.3d 1105, 1009 (9th Cir. 2006). "If a statute is ambiguous,

26 (1973)). The fact that the legislative history discusses  
27 geographic distinctions does not necessarily preclude all other  
28 types of distinctions from being made. In fact, the court in  
*Aalsea* notes that genetics is a factor that may be considered in  
delineating a DPS. 161 F. Supp. 2d at 1162.

In sum, *Defenders of Wildlife* adds nothing to *Grange's* case.

1 and if the implementing agency's construction is reasonable,  
2 *Chevron* requires a federal court to accept the agency's  
3 construction of the statute, even if the agency's reading differs  
4 from what the court believes is the best statutory  
5 interpretation." *Id.*; see also *Earth Island Institute v.*  
6 *Ruthenbeck*, 459 F.3d 954, 965 (9th Cir. 2006) ("`[R]easonableness  
7 is the standard [by which] courts review regulations under  
8 *Chevron's* second step").

9 Defendants and Defendant-Intervenors maintain that the ESA  
10 permits, if not requires, as part of the listing decision, the  
11 agency to pay attention to the differences between hatchery and  
12 wild steelhead. They argue that focusing on the health of  
13 naturally-spawned *O. mykiss* (part of which focus considers  
14 hatchery-born fish within a DPS only to the extent that those  
15 hatchery-born fish contribute to the viability of natural  
16 populations) is, at least impliedly, called for by ESA language  
17 that emphasizes protecting ecosystems. (*Grange* Doc. 45 at 2.)  
18 Second, Federal Defendants and Defendant-Intervenors argue that  
19 because (a) the statute requires the agencies to rely upon the  
20 best available science during the listing process, and (b) the  
21 best available science regarding *O. mykiss* indicates that natural  
22 populations should be given priority in order to best ensure the  
23 long term viability of DPSs, the ESA requires that NMFS take  
24 account of the differences between natural and hatchery-born  
25 fish.

26 (1) Statutory Language Regarding Protection  
27 of Ecosystems and Implying That Natural  
28 Populations Should Be Protected.

Although *Grange* correctly points out that "nowhere in the

1 ESA does Congress refer to 'natural populations' or 'naturally-  
2 spawned species,'" (*Grange* Doc. 53 at 5), Defendants and  
3 Defendant-Intervenors point to a number of provisions in the ESA  
4 which emphasize ecosystem protection.

5 First, the stated purpose of the ESA is "to provide a means  
6 whereby the ecosystems upon which endangered species and  
7 threatened species depend may be conserved, [and] to provide a  
8 program for the conservation of such endangered species and  
9 threatened species." 16 U.S.C. § 1531(b). Effectively conceding  
10 that the ESA recognizes ecosystem protection as one of its goals,  
11 *Grange* argues that this is of no consequence because hatchery-  
12 born fish depend on the same ecosystems as naturally-spawned  
13 fish. 69 Fed. Reg. 33,102, 33,113; 70 Fed. Reg. at 37,212,  
14 37,215 (noting, among other things, that hatchery fish coexist  
15 with "naturally-spawned" fish in the wild and interbreed with  
16 naturally-spawned fish). (*Doc.* 53 at 5.) *Grange's* argument  
17 implies that it is permissible for NMFS to allow wild steelhead  
18 to become extinct so long as its habitat was preserved and  
19 hatchery programs were maintained in perpetuity. But, this  
20 argument ignores express provisions of the ESA which suggest that  
21 the long-term goal of the ESA is to get species off the life  
22 support of human intervention.<sup>17</sup> For example, the term

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23  
24 <sup>17</sup> *Grange* also maintains that hatchery *O. mykiss* are not  
25 dependent on human intervention for survival, because they "swim  
26 side-by-side with 'naturally-spawned' *O. mykiss*, and return to  
27 their native streams in which they were released, where they  
28 often spawn naturally with so-called 'naturally-spawned' *O.*  
*mykiss*." (*Grange* Doc. 29 at 16.) Specifically, *Grange* notes  
that NMFS determined that "[m]any hatchery stocks are  
reproductively integrated with natural populations in an ESU and

1 "conservation" is defined to mean:

2       ...the use of all methods and procedures which are  
3       necessary to bring any endangered species or threatened  
4       species to the point at which the measures provided  
5       pursuant to [the ESA] are no longer necessary. Such  
6       methods and procedures include, but are not limited to,  
7       all activities associated with scientific resources  
8       management such as research, census, law enforcement,  
9       habitat acquisition and maintenance, propagation, live  
10       trapping, and transplantation, and, in the  
11       extraordinary case where population pressures within a  
12       given ecosystem cannot be otherwise relieved, may  
13       include regulated taking

14 16 U.S.C. § 1532(3) (emphasis added).

15 Concurrent with listing, a species' "critical habitat" must  
16 be designated. § 1533(a)(3). "Critical habitat" is defined as:

17 (i) the specific areas within the geographical area  
18 occupied by the species, at the time it is listed in  
19 accordance with the provisions of section 1533 of this  
20 title, [in] which are found those physical or  
21 biological features (I) essential to the conservation  
22 of the species and (II) which may require special  
23 management considerations or protection; and

24 (ii) specific areas outside the geographical area  
25 occupied by the species at the time it is listed in  
26 accordance with the provisions of section 1533 of this  
27 title, upon a determination by the Secretary that such  
28 areas are essential for the conservation of the

---

exhibit the local adaptations composing ecological and genetic  
diversity." 70 Fed. Reg. at 37,209. But, they ignore the very  
nature of a hatchery -- that it is built, maintained, and  
operated by *H. sapiens*. If hatchery supplementation were to  
cease, the hatchery input into the system would vanish. Although  
some previously released hatchery fish would return to spawn  
naturally, the overall effect would be a decline. See AR 581 at  
20; see also AR 51 at 6 ("there is no biological justification  
for believing that populations dependent on artificial  
propagation can be considered viable in the long term"); *id.* at  
16 ("hatcheries are resource intensive operations that require  
substantial and unbroken commitment of capital as well as human  
expenditures ... [I]t is impossible to conclude with any  
certainty that our society will be committed to perpetuating  
salmon in hatcheries into the indefinite future.").

1 species.

2 § 1532(5)(A). Once a species is listed as endangered or  
3 threatened, the ESA prohibits actions that would "jeopardize" a  
4 listed species or "adversely modify" its critical habitat.

5 § 1536(a)(2). Jeopardy has been defined as any act that will  
6 "reduce appreciably the likelihood of both the survival and  
7 recovery of a listed species in the wild." 50 C.F.R. § 402.02  
8 (emphasis added). This definition of jeopardy, including the "in  
9 the wild" language, was expressly endorsed by Congress when it  
10 was incorporated into the criteria the NMFS and FWS must use when  
11 approving habitat conservation plans and issuing incidental take  
12 permits. 16 U.S.C. § 1539(a)(2)(B)(iv).

13 Defendant-Intervenors identify the Senate Report  
14 accompanying the 1973 version of the ESA, which explained that  
15 "many [imperiled species] perform vital biological services to  
16 maintain a 'balance of nature' within their environments."  
17 S. Rep. No. 307, 93rd Cong., 1st Sess. 2 (1973). The House  
18 Report which accompanied the 1978 amendments to the ESA explained  
19 that "[t]he primary purpose of the [ESA] is to prevent animal and  
20 plant species endangerment and extinction caused by man's  
21 influence on ecosystems, and to return the species to the point  
22 where they are viable components of their ecosystems." H.R. Rep.  
23 No. 1625, 95th Cong., 2d Sess. 5 (1978). Senator Tunney  
24 expressed concern that humans have altered natural habitats so  
25 significantly that "they are unsuitable environments for natural  
26 populations of fish and wildlife." 119 Cong. Rec. 25,669 (1973).  
27 Senator Domenici acknowledged that "programs of captive  
28 propagation would be beneficial for rare and endangered species

1 in order that progeny raised in captivity could be used to  
2 replenish the wildlife population." 119 Cong. Rec. 25,693 (1973)  
3 (emphasis added). Senator Annunzio expressed concern that "[o]ur  
4 powerful technologies and our blind desire for 'progress' [have]  
5 enabled us to interrupt the rhythm of nature." 119 Cong. Rec.  
6 30,166 (1973) (emphasis added).

7 The agencies charged with implementing the listing  
8 provisions of the ESA for terrestrial and freshwater species have  
9 historically taken approaches consistent with the interpretation  
10 NMFS now advances. For example, FWS's recovery plan for the  
11 California Condor requires that the condor population be  
12 "reproductively self-sustaining" before downlisting is  
13 warranted.<sup>18</sup> When FWS listed the Kootenai River white sturgeon,  
14 the agency considered recovery plans that included hatchery  
15 supplementation, but concluded that although "captive propagation  
16 and supplementation can be valid conservation tools and assist in  
17 recovery efforts, they, by themselves, do not contribute to the  
18 maintenance of a secure, self-sustaining Kootenai River white  
19 sturgeon population in the wild." 59 Fed. Reg. 45,989, 45,994  
20 (Sept. 6, 1994). Finally, FWS and NMFS jointly listed the Gulf  
21 of Maine DPS of Atlantic salmon, the listing determination stated  
22 that "hatchery populations are vital to compensate for the  
23 prolonged period of low adult returns, but they are not counted  
24

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25  
26 <sup>18</sup> Recovery Plan for the California Condor, available at  
27 [http://ecos.fws.gov/docs/recovery\\_plans/1996/960425.pdf](http://ecos.fws.gov/docs/recovery_plans/1996/960425.pdf) at p. v  
28 (April 1996). This recovery plan is public record that is  
judicially noticeable for its existence and for its contents,  
although not for the truth of the matters asserted therein.

1 as part of the recovery goal. That goal is based upon wild  
2 spawners returning." 65 Fed. Reg. 69,459, 69,473 (Nov. 17,  
3 2000).<sup>19</sup>

4 The ESA sets forth specific criteria that the agency must  
5 consider when making listing determinations:

- 6 (A) the present or threatened destruction,  
7 modification, or curtailment of its habitat or  
8 range;  
9 (B) overutilization for commercial, recreational,  
10 scientific, or educational purposes;  
11 (C) disease or predation;  
12 (D) the inadequacy of existing regulatory mechanisms;  
13 or  
14 (E) other natural or manmade factors affecting its  
15 continued existence.

16 U.S.C. § 1533(a) (1). Under this provision, NMFS arguably must  
17 consider the impact of hatcheries upon the DPSs in question.

18 The only contrary language identified by Grange is from  
19 *Alsea*. In response to NMFS's argument that the ESA prioritizes  
20 "natural" salmon, the *Alsea* court reasoned:

21 Finally, NMFS argues that its listing decision does not  
22 contradict the terms of the ESA because the listing

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23 <sup>19</sup> Defendants note that, when NMFS promulgated its 1993  
24 Interim Artificial Propagation Policy, the agency directed that  
25 the evaluation of a species' status for listing or delisting  
26 depends on natural populations. 58 Fed. Reg. at 17,573. While  
27 recognizing artificial propagation as a potential conservation  
28 tool, NMFS emphasized that the status of a species depends on the  
viability of the population in the natural habitat. *Id.* at  
17,574. *Alsea* invalidated the Interim Policy because it  
permitted listing only those hatchery stocks determined to be  
"essential for recovery," regardless of whether the hatchery  
stocks were part of the ESU. However, *Alsea* did not address  
NMFS's interpretation that the ESA focuses on natural  
populations.

1 decision, and relevant polices, are in accordance with  
2 ESA goals that prioritize "natural" salmon populations  
3 and "genetic diversity" within those populations.  
4 Although I agree with the general concept that "genetic  
5 diversity" is one factor in the long term success of a  
6 threatened species, and thus is one of many underlying  
7 goals of the ESA, genetics cannot, by itself, justify a  
8 listing distinction that runs contrary to the  
9 definition of a DPS.

10 *Alsea*, 161 F. Supp. 2d at 1163. Notably, the *Alsea* court did not  
11 directly address NMFS's argument regarding ESA's goal of  
12 prioritizing "natural" populations, focusing instead on the  
13 narrower parallel concept of "genetic diversity" within "natural  
14 populations." Most critically, the district court agreed that  
15 "genetic diversity" (impliedly referencing genetic diversity that  
16 exists within natural populations) is a relevant factor and one  
17 of the "underlying goals of the ESA." *Id.* at 1163. The *Alsea*  
18 court did not find these underlying policy rationales sufficient  
19 to justify listing only part of a DPS. But, *Alsea* says nothing  
20 about whether these underlying policy interests justify treating  
21 natural populations differently during the process of determining  
22 whether a particular DPS should be listed as endangered or  
23 threatened.

24 It is a well accepted rule of statutory construction that  
25 "statutory interpretations which would produce absurd results are  
26 to be avoided." *Arizona State Bd. For Charter Schools*, 464 F.3d  
27 at 1009. The reading of the ESA advanced by Grange would lead to  
28 an absurd result. If taken to its logical extreme, such a  
reading would permit NMFS to rely entirely on hatchery programs.  
This however, runs contrary to the ESA's purpose of aiding the  
species' (or DPSs') recovery "to the point where the measures  
provided pursuant to the [ESA] are no longer necessary." §

1 1532(3). Defendant-Intervenors also point out:

2 [P]rotecting hatchery fish in their own right could  
3 lead to the protection of the concrete raceways and  
4 plastic spawning buckets of hatcheries as "critical  
5 habitat" for the listed fish. 16 U.S.C. § 1533(a)(3). A  
6 federal agency could be prohibited from closing down  
7 harmful or ineffective hatcheries. 16 U.S.C. §  
8 1536(a)(2) (agency cannot take action that risks  
9 jeopardy to listed species). A technical malfunction or  
10 funding shortfall at a state or tribal hatchery could  
11 trigger civil liabilities for harming listed species.  
12 16 U.S.C. § 1538 (prohibiting "take" of listed  
13 species).

14 (Grange Doc. 40 at 21.)

15 NMFS reasonably interpreted the ESA to allow, if not  
16 require, that emphasis be placed on natural (i.e., "wild")  
17 populations of species being considered for listing. Most  
18 importantly, the ESA requires that the condition of listed  
19 species (or DPSs) be improved so that they will no longer need  
20 the protection of the ESA. The reasonable implication of this  
21 requirement is that agencies should aim recovery efforts toward  
22 establishing self-sustaining populations. An interpretation that  
23 would permit exclusive reliance on hatcheries for "recovery"  
24 purposes is antithetical to the creation of a self-sustaining  
25 population. NMFS adopted an alternative, more reasonable,  
26 interpretation.

27 (2) The Best Available Science Demands That  
28 Distinctions Be Drawn Between Naturally-  
Spawned and Hatchery-Born Fish, Even If  
Both Are Part of the Same DPS.

Even if nothing in the ESA indicated a preference for the  
preservation of natural populations, the ESA requires NMFS to  
consider the best available science when making listing  
determinations:

The Secretary shall make [listing] determinations...

1 solely on the basis of the best scientific and  
2 commercial data available...after conducting a review  
3 of the status of the species and after taking into  
4 account those efforts, if any, being made by any State  
5 or foreign nation, or any political subdivision of a  
6 State or foreign nation, to protect such species,  
7 whether by predator control, protection of habitat and  
8 food supply, or other conservation practices, within  
9 any area under its jurisdiction, or on the high seas.

10 16 U.S.C. § 1533(b) (1) (A). Here, Federal Defendants and  
11 Defendant-Intervenors maintain that the best available science  
12 concerning *O. mykiss* justifies, if not requires, drawing  
13 distinctions between naturally-spawned and hatchery-born fish  
14 during the listing process. Federal Defendants maintain that if  
15 Grange's position prevails here, the agencies will be forced to  
16 ignore the best available science, a result which would be  
17 contrary to the statute's plain language.

18 Unlike in many APA cases, the underlying science regarding  
19 the impact of hatchery fish on natural populations and the  
20 conclusions reached by NMFS based on that science are entirely  
21 undisputed here. Defendant-Intervenors provide a helpful summary  
22 of the relevant scientific conclusions:

- 23 • Hatchery fish are less fit for survival in the  
24 wild than genetically similar wild fish. The  
25 fitness of hatchery-produced fish diminishes  
26 rapidly after only a few generations in the  
27 hatchery.
- 28 • Hatchery fish tend to be poorly adapted to life in  
a river and are subject to high predation and  
mortality. Hatchery fish are less successful at  
feeding in the wild, and are less wary of  
predators than wild fish, have altered growth  
rates, and are weaker swimmers.
- Hatcheries will never produce salmonids with the  
same evolutionary potential as those spawned and  
reared in the wild. A perpetual metapopulation  
between wild and hatchery salmonid populations is  
not an acceptable recovery for listed salmonids  
under the ESA. Fish removed from nature to

1 propagate in hatcheries always constitute a loss  
2 to the evolutionarily significant natural  
3 population.

- 4 • It is a fact that no one has ever used a salmon  
5 hatchery to restore a depressed wild population to  
6 the point where it is self-sustaining.
- 7 • There is little or no evidence that hatcheries  
8 have been effective over the long term at  
9 assisting in the recovery of wild populations.
- 10 • Hatchery releases have a significant negative  
11 effect, on the productivity of wild populations by  
12 competing with wild fish for food and space;  
13 diluting the fitness of wild fish when adult  
14 hatchery fish stray and spawn with wild fish; and  
15 by potentially spreading disease.

16 (Grange Doc. 66 at 2-3 (internal citations and quotations  
17 omitted.)

18 The Federal Defendants' summary of the best available  
19 science, which is also undisputed, embodies similar conclusions:

20 Numerous scientific panels have concluded that  
21 artificial propagation can potentially benefit or  
22 decrease the viability of salmonid populations. See AR  
23 506 at 14-16, 104-110; AR 505 at 1-10, 59-63; AR 507 at  
24 14-16, 104-110; AR 1555 at 37-52. Furthermore, poorly  
25 run hatcheries have been found to be detrimental to the  
26 long-term health of the species. See, e.g., AR 491 at  
27 1-2, 5-9 (Oct. 20, 2004 Memorandum from Northwest and  
28 Southwest Fisheries Science Centers); AR 1458 at 22.  
Scientists and managers at the Artificial Propagation  
Evaluation Workshop recognized ESUs that lack self-  
sustaining natural populations are not viable, and  
while hatchery programs can benefit natural  
populations, any natural population that is sustained  
by hatchery fish is not self-sustaining. APEW Report,  
AR 1458 at 11. The importance of natural populations  
was further developed:

[A]n important component of the ESU concept  
is that the ESU is subject to natural  
biological processes, including the dynamics  
of natural selection that define the ESU's  
evolutionary legacy and trajectory. The  
importance of an ESU's evolutionary legacy  
forged by natural selective processes is  
captured by the diversity VSP criterion. An  
ESU that resides completely, or largely, in  
artificial hatchery environments would face

1 extreme risks to its diversity, providing a  
2 strong indication of extinction risk. The  
3 longer an ESU resides in hatcheries, the more  
4 it will genetically adapt to these artificial  
5 environments, selecting for traits that are  
6 beneficial to survival in the hatchery. It is  
7 reasonable to infer that as an ESU adapts to  
8 the hatchery environment, it will lose  
9 fitness in the wild. This inference is  
10 consistent with observations that hatchery  
11 fish in the wild often reproduce and survive  
12 at lower rates than wild fish do, and that  
13 these differences are often genetically  
14 based. At some point, an ESU dependent upon  
15 artificial propagation becomes so different  
16 from its locally adapted evolutionary legacy  
17 that it is likely to go extinct.  
18 Additionally, ESUs dependent upon the  
19 indefinite operation of hatcheries are  
20 subject to significant risks and  
21 uncertainties that natural populations do not  
22 face (e.g., funding cuts, changing societal  
23 priorities, etc.). Artificial propagation is  
24 inherently unstable, requiring continual and  
25 active input that if relaxed results in the  
26 extirpation of the propagated stock(s). This  
27 situation is intrinsically of higher risk  
28 than a situation where there are healthy  
natural populations, in productive habitat,  
independent of continued human intervention.  
There was agreement among workshop  
participants that hatchery programs can play  
an important role in the recovery and  
conservation of salmonid ESUs, but that there  
is great risk if an entire ESU consists of  
only hatchery-produced fish.

APEW Report, AR 1458 at 26-27. Because there is  
considerable uncertainty regarding the relative  
likelihood and magnitude of risks and benefits from  
hatcheries:

[T]he clear and unavoidable conclusion from  
the various scientific panels is that in  
order to assure the long-term persistence of  
salmon, it will be necessary to institute  
habitat, hydrosystem management, and harvest  
reforms to create or conserve ecosystem  
conditions that allow for viable naturally  
spawning salmonid populations.

APEW Report, AR 1458 at 23.

(Grange Doc. 45 at 18-20.)

1 Grange does not dispute the substance of this science, nor  
2 do they dispute whether it is the "best available" science.  
3 Rather, Grange argues that once NMFS determined that hatchery  
4 fish should be part of the DPSs along with naturally-spawned  
5 fish, the agency should be prohibited from evaluating and using  
6 the best available science when determining whether the DPS  
7 should be listed as endangered or threatened because the agency  
8 may not "base its listing decision on only a portion of the DPS."  
9 But, NMFS did not base its listing decision on only a portion of  
10 the DPS. Rather, NMFS employed a process, set forth in the HLP,  
11 that gave weight to the natural component of the DPS (as the  
12 science required), but also considered all portions of the DPS.

13 First, applying the Joint DPS, NMFS determined which  
14 populations of fish it should include in a DPS. After defining  
15 each DPS, NMFS, relying on the BRT, conducted a status review  
16 based on the best available science, which resulted in a risk  
17 assessment for the natural populations which made up the DPSs.  
18 The BRT's findings were treated only as "a partial assessment of  
19 the ESU's extinction risk." AR 1458 at 15. Next, NMFS examined  
20 how the hatchery populations included in three of these DPSs  
21 affected the BRT's risk assessments. See AR 1459 at 534, 536  
22 [29-4, 29-6] (applying VSP factors to hatchery populations in  
23 Central Valley steelhead DPS); AR 1458 at 25-28 (describing  
24 application of VSP factors to hatcheries in a DPS); 71 Fed. Reg.  
25 at 852-853 (final listing notice applying VSP factors to  
26 hatcheries in three DPSs that include hatchery fish). From this  
27 assessment, for each of the DPSs that include hatchery fish, NMFS  
28 concluded that while hatcheries decrease "risk to some degree by

1 contributing to increased abundance, of the DPS, [they] have a  
2 neutral or uncertain effect on productivity, spatial structure  
3 and diversity of the DPS." *Id.* at 852 (findings for Central  
4 Valley DPS). Finally, NMFS utilized these analyses to examine  
5 the five listing factors set forth in 16 U.S.C. §  
6 1533(a)(1)(A)-(E), in order to determine whether a given  
7 steelhead DPS was threatened or endangered. *Id.* at 855-857.

8 Federal Defendants provide an overview of how this general  
9 process was utilized in the listing decision for the Central  
10 Valley steelhead DPS.

11 The BRT found high risks to the abundance, productivity  
12 and spatial structure of the DPS, and moderately high  
13 risk for the DPS's diversity. 71 Fed. Reg. at 852; AR  
14 1461 at B.2.10. Accordingly, the majority opinion of  
15 the BRT was that the naturally-spawned component of  
16 this DPS was "in danger of extinction." *Id.* NMFS then  
17 assessed the effect of the two hatchery programs  
18 considered to be part of this DPS on the viability of  
19 the DPS in total. NMFS concluded that the hatchery  
20 stocks decrease risk of extinction by contributing to  
21 increased abundance, but have a neutral or uncertain  
22 effect on the productivity, spatial structure, and  
23 diversity of the DPS. 71 Fed. Reg. at 852; AR 1459 at  
24 29-1 to 29-7. Evaluating the BRT's findings with the  
25 effects of the hatchery programs, NMFS concluded that  
26 the presence of hatchery programs did not alter the  
27 BRT's conclusion that this DPS was "in danger of  
28 extinction." 71 Fed. Reg. at 852; AR 1458 at 49-51.  
However, this was not the final listing determination,  
but merely NMFS' assessment of risk to the DPS as a  
whole. As required by the ESA, NMFS then evaluated the  
existing efforts being made to protect the species to  
determine if those measures ameliorated the risks faced  
by the DPS. For the California Central Valley DPS,  
NMFS concluded that the habitat restoration efforts  
associated with the California Bay-Delta Authority  
Program and the Central Valley Project Improvement Act  
provided sufficient certainty of implementation and  
effectiveness to conclude that this DPS should be  
listed as threatened instead of endangered. 71 Fed.  
Reg. at 855; see also 71 Fed. Reg. at 845-846; 69 Fed.  
Reg. at 33,144, and 33,163.

(Grange Doc. 45 at 18.)

1 The ESA requires the agency to employ the best available  
2 science in the listing process. Here, the best science available  
3 to the NMFS, the conclusions of which are undisputed, strongly  
4 indicated that naturally-spawned and hatchery-born *O. mykiss* are  
5 different and that hatchery fish can have a wide range of effects  
6 on the long term viability of *O. mykiss* populations. Sometimes,  
7 hatchery stocks can be beneficial, while also being detrimental  
8 in other respects. In the final analysis for the DPSs at issue  
9 in this case, NMFS evaluated the contribution that the hatchery  
10 programs made to the overall extinction risk of these DPSs and  
11 concluded that the hatchery fish decrease the risk of extinction  
12 by contributing to increased abundance, but have a neutral or  
13 uncertain effect on the productivity, spatial structure, and  
14 diversity of the DPSs. *Id.* at 852-53. There is no dispute that  
15 this conclusion is supported by the scientific record. NMFS  
16 lawfully considered the potential inputs and impacts of hatchery  
17 stocks on the natural population by carefully evaluating whether  
18 and to what extent those stocks that were included within the DPS  
19 helped and/or hindered the potential for the natural population  
20 to become self-sustaining in the long term. The conclusion that  
21 they will not is not arbitrary, capricious, or unlawful.

22 Grange's motion for summary judgment on this issue is  
23 DENIED. Federal Defendants and Defendant-Intervenors' cross-  
24 motion for summary judgment is GRANTED.

25  
26 C. Anadromous v. Resident: Challenges to NMFS' Treatment  
27 of Resident *O. mykiss* During the Listing Process.

28 Next, both Grange and MID challenge NMFS's decision to apply

1 the DPS policy to *O. mykiss*, which resulted in the exclusion of  
2 all resident *O. mykiss* from the five challenged DPSs, leaving  
3 only steelhead in those DPSs. Plaintiffs first argue that NMFS  
4 did not sufficiently justify applying the DPS policy to *O.*  
5 *mykiss*, a departure from its prior practice of applying its own  
6 ESU Policy. Second, although the DPS Policy has been previously  
7 upheld as a valid interpretation of the ESA, Plaintiffs argue  
8 that drawing any distinction between migratory and resident *O.*  
9 *mykiss* is contrary to the ESA's intent. Finally, Plaintiffs  
10 argue that the listing of the anadromous only DPSs is not  
11 supported by the best available science. Federal Defendants and  
12 Defendant-Intervenors in both cases cross-move for summary  
13 judgment on these claims, asserting that NMFS justifiably applied  
14 the DPS Policy, that the DPS Policy was lawful, and that NMFS  
15 properly applied the best available science in light of the DPS  
16 Policy to define the challenged DPSs.

17 1. Did NMFS Sufficiently Justify Departing from its  
18 Past Practice of Applying its Own ESU Policy to  
Instead Apply the Joint DPS Policy?

19 Plaintiffs argue that NMFS's decision to apply the DPS  
20 policy, instead of its ESU Policy, was not sufficiently  
21 justified, particularly in light of the fact that application of  
22 the DPS Policy resulted in a markedly different outcome than did  
23 application of the ESU Policy. Plaintiffs emphasize that NMFS  
24 previously concluded under the ESU Policy that where resident and  
25 migratory *O. mykiss* occur in the same stream, they are not  
26 "substantially reproductively isolated from one another and are  
27 therefore part of the same ESU," 71 Fed. Reg. at 838, in part  
28 because "available data suggest that resident [*O. mykiss*] and

1 migratory *O. mykiss*' in the same area generally share a common  
2 gene pool," 69 Fed. Reg. at 33,113. Plaintiffs insist that NMFS  
3 did not properly justify setting aside these conclusions in favor  
4 of a decision that excludes resident *O. mykiss* from the DPSs.

5 An administrative agency is entitled to change its position  
6 to "adapt their rules and policies to the demand of changing  
7 circumstances," but it must provide a rational explanation for  
8 doing so. See *Motor Vehicle Mfrs. Ass'n v. State Farm Mutual*  
9 *Auto. Ins. Co.*, 463 U.S. 29, 41-42.<sup>20</sup> Here, the Federal

10 \_\_\_\_\_  
11 <sup>20</sup> There is no dispute that the outcome of the listing  
12 analysis applying the DPS Policy differed from the previous  
13 outcome applying the ESU Policy. Plaintiffs suggest that little  
14 deference is owed to an agency when the challenged policy  
15 contradicts another interpretation of the same statutory  
16 language. In support of this proposition, Plaintiffs cite  
17 *Bonnichsen v. United States Department of the Army*, 969 F. Supp.  
18 628, 644 (D. Or. 1997), quoting a parenthetical appended to  
19 *Bonnichsen's* citation of a Second Circuit Case, *1185 Ave. of*  
20 *Americas Associates v. Resolution Trust Corp.*, 22 F.3d 494, 497:  
21 "(where Congress has entrusted more than one federal agency with  
22 the administration of a statute, a reviewing court does not owe  
23 as much deference as it might otherwise give if the  
24 interpretation were made by a single agency similarly entrusted  
25 with powers of interpretation)". But, *Bonnichsen* itself was  
26 concerned with conflicts between one agency's interpretation of a  
27 statute and interpretations promulgated by an advisory review  
28 committee specially established by Congress for the purpose of  
administering implementation of the statute in question in that  
case. Accordingly, the *Bonnichsen* court indicated that it was  
"inclined to pay particular attention to the comments" of that  
advisory committee, and "to be less deferential than usual to the  
Corps' interpretation of the statute and regulations." *Id.* at  
643. Moreover, although *Bonnichsen* does rely upon several cases  
from other circuits which have declined to afford *Chevron*  
deference where multiple agencies are charged with implementation  
of a statutory scheme, no case has ever applied this doctrine to  
the ESA, over which NMFS and FWS share jurisdiction and whose  
jurisdictions overlap under certain circumstances.

1 Defendants maintain that NMFS "fully explained the reasons for  
2 its change in policy." (Doc. 45 at 22.)

3 In support of its assertion that NMFS's decision to switch  
4 policies was arbitrary and capricious, MID cites *Friends of the*  
5 *Wild Swan v. U.S. Fish & Wildlife Service*, 12 F. Supp. 2d 1121  
6 (D. Or. 1997). In that case, FWS previously concluded that the  
7 entire population of bull trout in the contiguous United States  
8 warranted ESA protection but that its listing was precluded by  
9 other, higher-priority, pending listing petitions. See *Id.* at  
10 1123. The district court found that the FWS acted arbitrarily in  
11 making this determination and remanded the matter to the agency.  
12 *Id.* On remand, relying on the original administrative record  
13 that caused it to find listing was warranted for the entire  
14 population, FWS instead divided the population into five  
15 component DPSs and determined only two warranted protection. *Id.*  
16 at 1133.

17 The *Wild Swan* plaintiffs challenged FWS's determination that  
18 protection was not needed for the three remaining bull trout  
19 DPSs. With respect to the Coastal/Puget Sound DPS, the  
20 plaintiffs argued that FWS reached the opposite conclusion  
21 regarding that population in its original, pre-remand decision.  
22 *Id.* at 1133. The district court noted that the analyses FWS  
23 performed with respect to this DPS were similar in many ways:  
24 "Both findings, for instance, recognize that populations of bull  
25 trout in the northern regions are better off than populations in  
26 southern regions; that populations in some drainages are stable  
27 while others face a high risk of extinction; and that information  
28 on long-term population trends is limited." *Id.* at 1134.

1 However, "the two findings [] reach radically different  
2 conclusions, largely because of how [FWS] extrapolated from what  
3 was known to what was unknown." *Id.*

4 The *Wild Swan* court applied the general rule that "[a]n  
5 agency acts arbitrarily when it departs from its precedent  
6 without giving good reason." *Id.* at 1135 (citing *N. Cal. Power*  
7 *Agency v. FERC*, 37 F.3d 1517, 1522 (9th Cir.1994)). In the  
8 original decision, FWS accepted "that salmonids are generally in  
9 decline throughout the Coastal/Puget Sound region and that bull  
10 trout are more sensitive to habitat changes than are salmonids  
11 generally." *Id.* In contrast, in the revised decision, FWS chose  
12 to "extrapolate from 'trends' of bull trout populations in  
13 habitat that it had previously considered atypical and to rely on  
14 data [] that it previously considered to 'underestimate' the risk  
15 to bull trout populations." *Id.* The *Wild Swan* court found this  
16 to be arbitrary and capricious. *Id.*

17 The situation here is distinguishable. There is no  
18 evidence that NMFS's final decision disregarded information it  
19 previously considered controlling or that the final decision  
20 relied upon information it previously considered of questionable  
21 value. Rather, NMFS applied a different policy, emphasizing  
22 different factors, to the same body of evidence and in the  
23 process came up with a different result.<sup>21</sup> MID's reliance upon  
24

---

25  
26 <sup>21</sup> *Wild Swan* also found FWS's listing to be arbitrary and  
27 capricious because it applied a different policy on remand than  
28 it did in its original decision. *Id.* at 1133. But, the *Wild*  
*Swan* court offers essentially no reasoning to support this  
holding and provides little of value to the current inquiry.

1 *Friends of the Wild Swan* is not persuasive.

2 a. Scientific Dispute.

3 Plaintiffs place great weight on NMFS's statement in the  
4 first Federal Register Notices proposing a possible shift from  
5 the ESU Policy to the DPS policy that the switch might be  
6 justified, at least in part, on the existence of "scientific  
7 dispute" over the relationship between the resident and  
8 anadromous forms of *O. mykiss*. Plaintiffs maintain that the  
9 evidence does not support such a conclusion, making the policy  
10 shift unjustified. Federal Defendants rejoin by conceding that  
11 there is no scientific dispute between the agencies as to the  
12 outcome that would result if the ESU Policy were applied.  
13 Rather, Federal Defendants maintain that the policy shift was  
14 made because "NMFS concluded that the application of the DPS  
15 policy to delineate the species was a better [scientific] fit  
16 [because] it allowed for the consideration of factors that had  
17 relevance in the context of steelhead and rainbow trout, that  
18 were not relevant in the context of salmon, which informed  
19 development and original application of the ESU policy." (*MID II*  
20 *Doc. 95 at 26.*)

21 It is easy to understand why Plaintiffs assumed that NMFS  
22 was relying, at least in part, on the existence of a fundamental  
23 scientific dispute, rather than the "fit" of the science to the  
24 policies. NMFS's own notice that it would be invoking the 6-  
25 month extension explicitly suggests that scientific dispute  
26 motivated the agency to reconsider its approach to the listings.

27 On June 7, 2005, FWS wrote to NMFS (FWS, 2005), stating  
28 its concerns about the factual and legal bases for our  
final listing determinations for the ten proposed *O.*

1 *mykiss* ESU listings. FWS suggested that we invoke the  
2 ESA 4(b)(6)(B)(i) provision for extending the final *O.*  
3 *mykiss* listing determinations "to allow for further  
4 scientific evaluation, data gathering, and debate among  
5 the scientific experts within FWS and NMFS ...."

6 The specific areas that FWS identified where there is  
7 substantial disagreement regarding the sufficiency or  
8 accuracy of available data on which to make final  
9 listing decisions are: (1) the determination of the *O.*  
10 *mykiss* ESUs, in particular whether resident and  
11 anadromous fish in a region are in a single ESU; (2)  
12 the relatedness of cooccurring resident and anadromous  
13 *O. mykiss*, including whether they form single,  
14 routinely interbreeding populations, and whether  
15 resident *O. mykiss* produce the anadromous life form and  
16 vice versa; and (3) assessment of the risk of  
17 extinction of ESUs containing both resident and  
18 anadromous *O. mykiss*, including the contributions of  
19 both types of populations to the stability of the ESU.

20 In the last two months, we have received three reports  
21 from independent scientific panels that bear directly  
22 on these areas of disagreement raised by FWS. (1) On  
23 April 8, 2005, the Independent Scientific Advisory  
24 Board hosted by the Northwest Power Planning Council  
25 issued a report, in response to five questions from  
26 NMFS' Northwest Fisheries Science Center, entitled  
27 "Viability of ESUs Containing Multiple Types of  
28 Populations" (ISAB, 2005). [] (2) On May 5, 2005, the  
Recovery Science Review Panel hosted by the Northwest  
Fisheries Science Center issued a report on its  
December 2004 meeting on the relation between  
anadromous and resident forms of *O. mykiss* and how life  
form diversity affects the viability of *O. mykiss* ESUs  
(RSRP, 2005). [] (3) On May 16, 2005, an independent  
scientific panel convened by the Northwest and  
Southwest Fisheries Science Centers issued a report  
entitled "Considering Life History, Behavioral, and  
Ecological Complexity in Defining Conservation Units  
for Pacific Salmon" (Hey et al., 2005). We are  
considering the concepts and the scientific information  
presented in these reports, both of which bear on the  
relationship of anadromous and resident *O. mykiss*.

In addition, we are aware of ongoing genetic *O. mykiss*  
research by NMFS and state wildlife agencies in  
Washington, Oregon, California, and Alaska on the  
ability of resident fish to adopt an anadromous life  
history and the degree of reproductive isolation  
between resident and anadromous populations. This  
research specifically includes studies of the Snake  
River Basin and Middle Columbia River *O. mykiss* ESUs,  
and pertains generally to the issues of concern to FWS  
for all ten of the *O. mykiss* ESUs proposed for listing.

1 70 Fed. Reg. 37,219, 37,220 (June 28, 2005).

2 Yet, NMFS did not actually base its decision to shift  
3 policies on the existence of any scientific dispute. Rather, in  
4 its November 4, 2005 request for comments on shifting from the  
5 ESU to the DPS policy, NMFS indicated, simply, that it "agree[d]  
6 ... that it is appropriate that [it] consider departing from  
7 [its] past practice of applying the ESU policy to *O. mykiss*  
8 *stocks*, and instead apply the DPS policy" when determining what  
9 populations of *O. mykiss* warranted listing. 70 Fed. Reg. 67,130,  
10 67,131. NMFS noted that applying the DPS policy would be  
11 consistent with the past application, by both agencies, in  
12 defining DPSs of Atlantic Salmon, another species over which the  
13 two agencies share jurisdiction. *Id.*

14 NMFS further explained how application of the DPS policy  
15 would likely affect the proposed listings. *Id.* The primary  
16 distinction between the policies is that the discreteness  
17 criteria in the DPS policy does not rely on reproductive  
18 isolation, but rather on "marked separation of population groups  
19 as a consequence of biological factors." *Id.* at 67,132.  
20 Although there is some reproductive exchange between rainbow  
21 trout and steelhead, the two life forms "remain markedly  
22 separated physically, physiologically, ecologically, and  
23 behaviorally," so that a steelhead-only grouping would satisfy  
24 the discreteness criterion of the DPS policy. *Id.* With respect  
25 to significance, NMFS referred to prior status reviews which had  
26 concluded "that the steelhead population groups respectively  
27 represent an important component in the evolutionary legacy of  
28 the species based on unique or unusual life-history, genetic, and

1 ecological characteristics and occupied ecoregion(s) (i.e.,  
2 unique geographic regions defined by climatic, geologic,  
3 hydrologic, and floral composition characteristics," thereby  
4 satisfying the significance criterion. *Id.* NMFS then reopened  
5 the comment period a final time to gather input on whether it  
6 should apply the joint DPS policy to delineate ten steelhead-only  
7 DPSs. *Id.* at 67,131.

8 After receiving public comment, NMFS determined that it  
9 would be appropriate to apply the DPS Policy to *O. mykiss* and did  
10 so in the final listing decision, issued January 5, 2006. 71  
11 Fed. Reg. 834. The boundaries of the previously defined *O.*  
12 *mykiss* ESUs were unchanged, but, applying the Joint DPS Policy,  
13 all resident *O. mykiss* were excluded and the groupings were  
14 referred to as "DPSs" rather than "ESUs." *Id.* NMFS provided the  
15 following explanation of its rationale:

16 In 1991 we issued a policy for delineating distinct  
17 population segments of Pacific salmon (56 FR 58612;  
18 November 20, 1991). Under this policy a group of  
19 Pacific salmon populations is considered an  
20 "evolutionarily significant unit" (ESU) if it is  
21 substantially reproductively isolated from other  
22 conspecific populations, and it represents an important  
23 component in the evolutionary legacy of the biological  
24 species. Further, an ESU is considered to be a  
25 "distinct population segment" (and thus a "species")  
26 under the ESA. In 1996, we and FWS adopted a joint  
27 policy for recognizing DPSs under the ESA (DPS Policy;  
28 61 FR 4722; February 7, 1996). The DPS Policy adopts  
criteria similar to, but somewhat different from, those  
in the ESU Policy for determining when a group of  
vertebrates constitutes a DPS: The group must be  
discrete from other populations, and it must be  
significant to its taxon. A group of organisms is  
discrete if it is "markedly separated from other  
populations of the same taxon as a consequence of  
physical, physiological, ecological, and behavioral  
factors." Significance is measured with respect to the  
taxon (species or subspecies) as opposed to the full  
species. Although the ESU Policy did not by its terms  
apply to steelhead, the DPS Policy states that NMFS

1 will continue to implement the ESU Policy with respect  
2 to "Pacific salmonids" (which include *O. mykiss*). FWS,  
3 however, does not use our ESU policy in any of its ESA  
4 listing decisions. In a previous instance of shared  
5 jurisdiction over a species (Atlantic salmon), we and  
6 FWS used the DPS policy in our determination to list  
7 the Gulf of Maine DPS of Atlantic salmon as endangered  
8 (65 FR 69459; November 17, 2000). Given our shared  
9 jurisdiction over *O. mykiss*, and consistent with our  
10 approach for Atlantic salmon, we believe application of  
11 the joint DPS policy here is logical, reasonable, and  
12 appropriate for identifying DPSs of *O. mykiss*.  
13 Moreover, use of the ESU policy--originally intended  
14 for Pacific salmon--should not continue to be extended  
15 to *O. mykiss*, a type of salmonid with characteristics  
16 not typically exhibited by Pacific salmon. NMFS and FWS  
17 also intend to continue to evaluate application of the  
18 statutory term "distinct population segment" in a  
19 process outside the context of a species-specific  
20 listing.

21 *Id.* at 834.

22 Then, NMFS touched on similar justifications in response to  
23 relevant comments.

24 Comment 2: Several commenters felt we failed to provide  
25 a rationale for departing from our long-standing  
26 practice of applying the ESU policy. The commenters  
27 felt that the choice to use the DPS policy appeared to  
28 be based on an arbitrary jurisdictional division  
between NMFS and FWS, rather than new scientific  
information supporting an alternative approach. The  
commenters felt that it is not appropriate to base  
species delineations on arbitrary divisions between  
government agencies and the apparent desire to preserve  
jurisdictional authorities. These commenters stressed  
that such determinations must be made based on the best  
available scientific information.

Other commenters supported the use of the DPS  
policy in delineating species of *O. mykiss*. They felt  
that consistency between NMFS and FWS would improve the  
public understanding of the listing process. They also  
felt that the DPS policy provides flexibility,  
affording a more practical consideration of resident  
populations, particularly above impassable dams, that  
do not warrant ESA protections.

Response: In our previous status reviews for West Coast  
*O. mykiss* we applied our ESU policy and concluded that,  
where they co-occur and have the opportunity to  
interbreed, the resident and anadromous life-history  
forms are part of a single ESU. FWS disagreed that  
resident *O. mykiss* should be included in the steelhead

1 ESUs and recommended that only the anadromous fish be  
2 listed (FWS, 1997). Accordingly, we listed only the  
3 steelhead portion of the ESUs. The Alsea ruling  
4 informed us that this approach to implementing our  
5 jurisdiction over *O. mykiss* was invalid; once we have  
6 equated an ESU with a DPS, delineated an ESU, and  
7 determined that it warrants listing, we must include  
8 all components of the DPS (ESU) in the listing. In our  
9 June 2004 proposed listing determinations (69 FR 33102;  
10 June 14, 2004), we proposed to continue applying our  
11 ESU policy in delineating species of *O. mykiss* for  
12 listing consideration, consistent with our previous  
13 practice. Informed by the Alsea ruling, we proposed to  
14 list entire *O. mykiss* ESUs, including both the  
15 anadromous and resident components. FWS disagreed with  
16 our DPS delineations under the ESU policy, and  
17 questioned whether the proposed delineations are  
18 consistent with the DPS policy (FWS, 2005).

19 The preamble to the joint DPS policy acknowledged that  
20 "the NMFS [ESU] policy is a detailed extension of this  
21 joint policy. Consequently, NMFS will continue to  
22 exercise its policy with respect to Pacific salmonids"  
23 (61 FR 4722; February 7, 1996). FWS, however, does not  
24 use our ESU policy in any of its ESA listing decisions.  
25 In a previous instance of shared jurisdiction over a  
26 species (Atlantic salmon), we and FWS used the DPS  
27 policy in our determination to list the Gulf of Maine  
28 DPS of Atlantic salmon as endangered (65 FR 69459;  
November 17, 2000). Given our shared jurisdiction over  
*O. mykiss*, and consistent with our approach for  
Atlantic salmon, we believe application of the joint  
DPS policy here is logical, reasonable, and appropriate  
for identifying DPSs of *O. mykiss*. Moreover, use of the  
ESU policy--originally intended for Pacific  
salmon--should not continue to be extended to *O.*  
*mykiss*, a type of salmonid with characteristics not  
typically exhibited by Pacific salmon.

*Id.* at 837 (emphasis added).

Despite suggestions of a scientific dispute in early notices,  
NMFS did not base its decision on the existence of a scientific  
dispute. Plaintiffs' objections to the policy shift on this  
ground are unfounded.

b. Atlantic Salmon.

NMFS did not base its decision to shift from the ESU Policy

1 to the DPS Policy on bureaucratic considerations<sup>22</sup> alone. NMFS  
2 justified the policy shift in part on the fact that the DPS  
3 Policy was used to evaluate the status of another species,  
4 Atlantic salmon, over which the two agencies, NMFS and FWS,  
5 shared jurisdiction.

6 In a previous instance of shared jurisdiction over a  
7 species (Atlantic salmon), we and FWS used the DPS  
8 policy in our determination to list the Gulf of Maine  
9 DPS of Atlantic salmon as endangered (65 FR 69459;  
10 November 17, 2000). Given our shared jurisdiction over  
11 *O. mykiss*, and consistent with our approach for  
12 Atlantic salmon, we believe application of the joint  
13 DPS policy here is logical, reasonable, and appropriate  
14 for identifying DPSs of *O. mykiss*.

15 71 Fed. Reg. 834 (January 5, 2006).

16 MID maintains that the Atlantic salmon listing is not  
17 "precedential" or otherwise relevant to whether or not the DPS  
18 Policy should apply to West Coast *O. mykiss*. MID correctly  
19 points out that the DPS Policy applied to all vertebrate fish and  
20 wildlife except for "species of salmonids native to the Pacific."  
21 61 Fed. Reg. at 4,722. NMFS and FWS expressly noted that NMFS's  
22

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23 <sup>22</sup> Grange argues that NMFS's justification is insufficient  
24 because it is based on "bureaucratic considerations" rather than  
25 the best available science. However, Grange cites no authority  
26 for the proposition that NMFS's policy change could not be  
27 justified by bureaucratic concerns alone. The ESA requires that  
28 listing decisions be based on the "best available science," but  
does not separately require that NMFS utilize only the "best  
available science" to choose between two lawful policy approaches  
to a problem. Nevertheless, NMFS did not offer a bureaucratic  
rationale for the shift; their decision to switch policies must  
stand on the justification provided. *Arrington v. Daniels*, 516  
F.3d 1106, 1112 (9th Cir. 2008) ("Although we may uphold a  
decision of less than ideal clarity if the agency's path may  
reasonably be discerned, we may not infer an agency's reasoning  
from mere silence.") (internal citations and quotations omitted).

1 existing ESU Policy is "consistent" with the DPS Policy, and as  
2 such "NMFS will continue to exercise its [ESU] policy with  
3 respect to Pacific salmonids." *Id.*; see also 2278R ("We chose to  
4 use the DPS policy for Atlantic salmon because FWS and NMFS  
5 developed the policy together for all other vertebrates except  
6 Pacific salmonids. The ESU policy was only meant for Pacific  
7 salmon."). But the fact that both the ESU Policy and the DPS  
8 Policy previously indicated that Pacific salmonids would be  
9 subject to the ESU Policy begs the question of whether NMFS  
10 properly concluded that it was appropriate to switch which of  
11 these policies applies to *O. mykiss*.

12 MID next argues that NMFS's application of the DPS Policy to  
13 *O. mykiss* was not consistent with how the DPS Policy was applied  
14 in the Atlantic salmon listing. In the Atlantic salmon listing,  
15 FWS and NMFS recognized that due to the Atlantic salmon's  
16 migratory life cycle, and the amount of time members of that  
17 species spend in both freshwater and ocean environments, neither  
18 FWS nor NMFS had clear jurisdiction under the 1974 MOU. AR 2381  
19 at 1; see also *supra* note 1 for a summary of the 1974 MOU. As a  
20 result, FWS and NMFS had joint jurisdiction over the Atlantic  
21 salmon under the 1974 MOU. AR 2381 at 1; see AR 2380 at 6 In  
22 1994, FWS and NMFS signed a Memorandum of Agreement specifically  
23 concerning Atlantic Salmon ("the 1994 MOA"). AR 2381 at 2. The  
24 1994 MOA provided that both agencies would appoint a team to  
25 conduct all ESA actions related to the Atlantic salmon; that  
26 official ESA actions would be taken with the concurrence of the  
27 directors of both NMFS and FWS; and that NMFS and FWS would  
28 jointly develop and circulate a draft rehabilitation strategy.

1 *Id.* In addition, both NMFS and FWS agreed to continued agency  
2 cooperation with respect to Atlantic salmon and similar  
3 anadromous fishes as appropriate. *Id.* at 3. NMFS and FWS then  
4 jointly listed as endangered the Atlantic salmon DPS. 65 Fed.  
5 Reg. 69,459 (Nov. 17, 2000); AR 2380 at 6-7.

6 MID correctly notes that no such joint actions were taken in  
7 regards to *O. mykiss*. However, Federal Defendants point out that  
8 the 1994 MOU is an agreement between the two Northeast regional  
9 offices of FWS and NMFS concerning one specific species and is  
10 not binding upon NMFS as a whole. Therefore, NMFS was under no  
11 obligation to take any of the joint actions set forth in the 1994  
12 MOU with respect to the 2006 final listings for *O. mykiss*. MID's  
13 argument is a complete *non sequitur*.

14 Finally, MID suggests that NMFS improperly "decided to  
15 unilaterally switch policies to maintain sole jurisdiction and  
16 avoid having to work together with FWS at all." (*MID II* Doc. 79  
17 at 38.) To support this assertion, Plaintiffs cite AR 2343R and  
18 899. The first is the statement of a NMFS regional employee  
19 expressing her opinion that shared jurisdiction might be  
20 unworkable due to FWS' refusal to cooperate in joint efforts over  
21 the past six years. AR 899 is a reference to different NMFS  
22 employee's phone log of a conversation held with a regional FWS  
23 employee, paraphrasing the FWS' employee's opinion about the  
24 proposed application of the DPS Policy. Federal Defendants  
25 correctly point out that opinions expressed by lower level  
26 employees cannot be ascribed to the agency itself.

27 None of MID's arguments regarding the Atlantic salmon  
28 listing call into question NMFS's listing in this case.

1  
2 c. Pacific Salmon.

3 NMFS's primary justification for switching policies is that  
4 the "use of the ESU policy -- originally intended for Pacific  
5 salmon -- should not continue to be extended to *O. mykiss*, a type  
6 of salmonid with characteristics not typically exhibited by  
7 Pacific salmon." 71 Fed. Reg. at 835. In response to a related  
8 comment, NMFS listed *O. mykiss* characteristics "not typically  
9 exhibited by Pacific salmon." *Id.* at 837.

10 Despite the apparent reproductive exchange between  
11 resident and anadromous *O. mykiss*, the two life forms  
12 remain markedly separated physically, physiologically,  
13 ecologically, and behaviorally. Steelhead differ from  
14 resident rainbow trout physically in adult size and  
15 fecundity, physiologically by undergoing  
16 smoltification, ecologically in their preferred prey  
17 and principal predators, and behaviorally in their  
18 migratory strategy. Where the two life forms co-occur,  
19 adult steelhead typically range in size from 40-72 cm  
20 in length and 2-5 kg body mass, while adult rainbow  
21 trout typically range in size from 25-46 cm in length  
22 and 0.5-2 kg body mass (Shapovalov and Taft, 1954;  
23 Wydoski and Whitney, 1979; Jones, 1984). Steelhead  
24 females produce approximately 2,500 to 10,000 eggs, and  
25 rainbow trout fecundity ranges from 700 to 4,000 eggs  
26 per female (Shapovalov and Taft, 1954; Buckley, 1967;  
27 Moyle, 1976; McGregor, 1986; Pauley et al., 1986), with  
28 steelhead eggs being approximately twice the diameter  
of rainbow trout eggs or larger (Scott and Crossman,  
1973; Wang, 1986; Tyler et al., 1996). Steelhead  
undergo a complex physiological change that enables  
them to make the transition from freshwater to  
saltwater (smoltification), while rainbow trout reside  
in freshwater throughout their entire life cycle. While  
juvenile and adult steelhead prey on euphausiid  
crustaceans, squid, herring, and other small fishes  
available in the marine environment, the diet of adult  
rainbow trout is primarily aquatic and terrestrial  
insects and their larvae, mollusks, amphipod  
crustaceans, fish eggs, and minnows (LeBrasseur, 1966;  
Scott and Crossman, 1973; Wydoski and Whitney, 1979).  
These differences in diet are a function of migratory  
behavior and the prey communities available to resident  
and anadromous *O. mykiss* in their respective  
environments. Finally, steelhead migrate several to  
hundreds of miles from their natal streams to the  
ocean, and spend up to 3 years in the ocean migrating

1 thousands of miles before returning to freshwater to  
2 spawn (Busby et al., 1996). Some fluvial populations of  
3 rainbow trout may exhibit seasonal migrations of tens  
4 of kilometers outside of their natal watersheds, but  
5 rainbow trout generally remain associated with their  
6 natal drainages (Meka et al., 1999). Given the marked  
7 separation between the anadromous and resident  
8 life-history forms in physical, physiological,  
9 ecological, and behavioral factors, we conclude that  
10 the anadromous steelhead populations are discrete from  
11 the resident rainbow trout populations within the  
12 ranges of the DPSs under consideration.

13 *Id.* at 838.

14 Plaintiffs argue that this rationale is not scientifically  
15 justified. MID specifically complains that, although the quoted  
16 listing decision does list *O. mykiss*' characteristics, it does  
17 not explain or document: (1) how these characteristics differ  
18 from those of Pacific salmon; (2) how the existence of  
19 distinguishing characteristics justifies its decision to no  
20 longer use the ESU Policy for evaluating distinct population  
21 segments of *O. mykiss*; or (3) why these distinctive  
22 characteristics suddenly caused NMFS to differentiate Pacific *O.*  
23 *mykiss* from Pacific salmon.<sup>23</sup>

24 In both cases, NMFS believes its conclusion that the  
25 steelhead's characteristics differ from those of Pacific salmon  
26 is "amply supported by numerous studies in the Record." (*MID II*  
27 Doc. 60 at 10-11; see *Grange Doc.* 64 at 12 (arguing that the  
28 different "biological characteristics were explained at length in

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29 <sup>23</sup> MID points out that NMFS's assertion that *O. mykiss*  
30 have characteristics that differ from Pacific salmon is not  
31 contained in the November 2005 notice in which NMFS announced its  
32 proposal to switch from the ESU Policy to the DPS Policy, see AR  
33 804, nor is it part of the draft final listing decisions prepared  
34 on December 13, 2005, AR 2272-01R, December 14, 2005, AR 803, or  
35 on December 19, 2005, AR 2284R.

1 the proposal to apply the DPS Policy ... the final rule ... and  
2 in NMFS' [s] opening memorandum").) NMFS cites "AR 1474, 1481,  
3 1474, 1430, 1450, 1448, 1468, 1473, 1479, 1478, 1445, 1473, 1481,  
4 1432 and 1449," a series of books and studies concerning West  
5 coast salmonids. (*MID II* Doc. 60 at 10-11; *Grange* Doc. 45 at  
6 28-29 & fn. 9.)

7 MID's first argument is that NMFS referenced these studies  
8 in its opening brief in *Grange* not to show that *O. mykiss* differ  
9 from Pacific salmon, but to show that "rainbow trout and  
10 steelhead remain markedly separate physically, physiologically,  
11 ecologically, and behaviorally." (See *Grange* Doc. 45 at 28-29 &  
12 n.9.) Federal Defendants rejoin that the cited studies contain  
13 both the assertion that rainbow trout and steelhead are markedly  
14 separate and the assertion that the entire *O. mykiss* species is  
15 generally distinguishable from Pacific salmon. Federal  
16 Defendants argue:

17 [I]t is precisely the fact that no other Pacific  
18 salmonid exhibits such a wide ranging variety of  
19 morphological, behavioral, physical, and ecological  
20 differences within one species that sets *O. mykiss*  
21 apart. These studies indicate that *O. mykiss* as a  
22 whole, including rainbow trout and steelhead, exhibit  
characteristics not typically exhibited by Pacific  
salmon. Because Pacific salmon do not exhibit  
different resident and anadromous life forms, a  
consideration of other criteria adds little to the  
listing process.

23 (*MID II* Doc. 95 at 32-33.)

24 MID protests that this line of reasoning is insufficient  
25 because it "cannot be found anywhere in the record, [and]  
26 represents the post-hoc rationalization of counsel...." (*MID II*  
27 Doc. 100 at 20.) When reviewing an agency decision, the court  
28 must evaluate only the reasoning provided by the agency, and not

1 the post-hoc rationalizations of the agency's counsel. *Motor*  
2 *Vehicle Mfrs. Assn.*, 463 U.S. at 50. MID over-reaches by  
3 asserting that this reasoning is a post hoc rationalization,  
4 because NMFS took the same position in the listing decision  
5 itself -- that steelhead exhibit characteristics not seen in  
6 other Pacific salmonids. The question remains whether the record  
7 otherwise supports the agency's conclusion.

8 MID next argues that NMFS is factually incorrect in  
9 asserting that *O. mykiss* are unique from other Pacific salmon  
10 because they have resident and anadromous forms. MID points out  
11 that, of the seven species of Pacific salmonids (which includes  
12 *O. mykiss*), at least three -- *O. mykiss*, *O. nerka* (sockeye  
13 salmon) and *O. clarki clarki* (cutthroat trout) - have both  
14 anadromous and resident forms.<sup>24</sup>

15 MID also argues that NMFS is incorrect in asserting that *O.*  
16 *mykiss* has characteristics that are not shared by other Pacific  
17 salmon. MID cites portions of the administrative record that  
18 describe the differences used by NMFS to distinguish between the  
19

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20 <sup>24</sup> For *O. nerka*, MID cites AR 1480 at 7; AR 2332 at 1; AR  
21 2338 at 1; AR 2117; AR 2118 at 8, 42-45; AR 353-25 at 12 of 18;  
22 AR 522 at 7-10; AR 1522 at 1, 61; AR 1578 at 6; AR 1630; AR 1727  
23 at 1-2; AR 1810; AR 1890; AR 2105 at 5, 7; AR 0581 at 37; AR 1441  
24 at 43; AR 1586; AR 1602 at 26, 30-35; AR 2159; AR 1737. For *O.*  
25 *clarki clarki*, MID cites AR 1575; AR 1886 at 14, 35 and 66-68;  
26 For both, see AR 2314-22 at 4; AR 1628 at 2, 4; AR 1723 at 22,  
27 43, 45 and 49; AR 477 at 62; AR 1441 at 43, 211; AR 1838 at 8, 9;  
28 AR 353-37 at 8.

26 There is also evidence in the administrative record that  
27 Chinook salmon (*O. tshawytscha*) also has both resident and  
28 anadromous forms in some instances. AR 1927 at 52; AR 1441 at  
43.

1 resident and anadromous forms of *O. mykiss* (adult size,  
2 fecundity, egg size, smoltification, diet and migration), noting  
3 that these distinctions also exist between the resident and  
4 anadromous forms of *O. nerka* and *O. clarki clarki*. For example,  
5 *O. nerka* includes three types of fish -- the anadromous  
6 (sockeye), the resident (kokanee), and a third form known as the  
7 residual. AR 1522 at 61. The anadromous form of *O. nerka*  
8 migrates to the ocean and undergoes smoltification, just as the  
9 anadromous form of *O. mykiss* does, *id.* at 62-66; it is larger in  
10 size than either the residual, AR 1630 at 10, or kokanee, AR 1522  
11 at 61; has greater fecundity than either the residual, AR 1522 at  
12 61, or the kokanee, AR 1522 at 24; has larger eggs than either  
13 the residual, AR 1522 at 61, or kokanee, AR 1522 at 28; and has a  
14 different diet than either the residual or kokanee, AR 1522 at  
15 62, 85. MID maintains that the anadromous and resident forms of  
16 *O. nerka* are different in the same manner that the resident and  
17 anadromous forms of *O. mykiss* differ.

18 MID points to similar evidence of the differences between  
19 the anadromous and resident forms of *O. clarki clarki*. The  
20 anadromous form migrates to the ocean and undergoes  
21 smoltification, AR 1886 at 68, 81. The anadromous form is also  
22 larger, AR 1886 at 72, more fecund, AR 1886 at 172, 173, has  
23 larger eggs, AR 1886 at 79, and eats different prey, AR 1886 at  
24 72, than does the resident form. Again, MID asserts that the  
25 very same differences that NMFS claims "sets *O. mykiss* apart"  
26 from other Pacific salmon can be found in *O. clarki clarki*.

27 Finally, MID references evidence that both *O. nerka* and *O.*  
28 *clarki clarki* can produce offspring that express the alternative

1 life history, as *O. mykiss* does. See AR 2338 at 1 and AR 1602 at  
2 93-94 for *O. nerka*; see AR 1441 at 211 for both. *O. clarki*  
3 *clarki* can spawn more than once, just like *O. mykiss*, perhaps  
4 even at a higher frequency. AR 1886 at 78.

5 Defendant-Intervenors respond that MID's "extensive  
6 discussion of these other species is much ado about nothing,"  
7 because "whether *O. mykiss* share a common trait with other salmon  
8 and trout does not dictate which policy applies, or what the  
9 result must be." (Doc. 103 at 14.) Defendant-Intervenors note  
10 that while MID highlights that coastal cutthroat trout (*O. clarki*  
11 *clarki*) also have resident and anadromous life forms, MID ignores  
12 that when FWS evaluated coastal cutthroat trout for listing, it  
13 applied the DPS Policy. *Id.* (citing 67 Fed. Reg. 44,934, 44,941  
14 (July 5, 2002)). Similarly, with respect to sockeye salmon, NMFS  
15 applied the ESU Policy to that species and determined that the  
16 freshwater form (kokanee) were not part of the ESU for either  
17 population it evaluated. For example, when the BRT evaluated the  
18 sockeye, it relied initially on differences in spawning timing  
19 and location to determine that Snake River sockeye salmon and  
20 resident kokanee were not part of same ESU. AR 2185 at 446-47.

21 Defendant-Intervenors insist that MID's discussion of other  
22 fish that may share some common characteristics with *O. mykiss*  
23 only highlights the complex biology of each of these species and  
24 the importance of individual determinations based on the best  
25 available science. "[T]he simple fact that FWS and NMFS have  
26 applied different policies (or even reached different results)  
27 for these other species does not demonstrate that NMFS's decision  
28 to apply the DPS Policy to Central Valley steelhead was

1 arbitrary and capricious." (Doc. 103 at 15.)

2 Overall, Federal Defendants maintain that MID's argument  
3 "suffers from the same flaws as its similar argument concerning  
4 consistency with past listing actions -- oversimplification of  
5 important biological characteristics and differences between the  
6 species." (Doc. 104 at 15.) Federal Defendants assert that:

7 While there may be general similarities in migratory  
8 behavior, resulting physiological and behavioral  
9 differences, and interbreeding between the two  
10 life-history forms, *O. mykiss* demonstrate clear  
11 bifurcation between the resident and anadromous  
individuals not demonstrated in coastal cutthroat trout  
and sockeye salmon. Compared with the clear bifurcation  
of *O. mykiss*, coastal cutthroat trout exhibit a  
continuum of life histories.

12 (*Id.*) Federal Defendants point to evidence in the record  
13 supporting the assertion that coastal cutthroat express a wide  
14 spectrum of life history patterns. See AR 1886 at 14 ("Coastal  
15 cutthroat trout express a wide diversity of life-history  
16 attributes. This diversity includes several migratory pathways  
17 ... or they may follow migratory pathways that combine these  
18 behaviors."); *id.* at 39 ("Their populations show a bewildering  
19 diversity in size and age at migration, timing of migrations, age  
20 at maturity, and frequency of repeat spawning."); *id.* at 68-78.  
21 With respect to sockeye salmon, the two listed populations do  
22 contain resident and anadromous populations, AR 1441 at 443-444,  
23 but the co-occurring resident populations of kokanee have been  
24 found to be reproductively isolated and genetically distinct from  
25 the anadromous sockeye salmon. *Id.* Within the anadromous  
26 sockeye salmon there is a cooccurring residual form that does not  
27 migrate to the ocean, but it is believed to be a minor component  
28 of the ESU. *Id.* at 442; 70 Fed. Reg. at 37,161.

1 The critical inquiry is whether NMFS provided a reasonable  
2 justification for switching from the ESU Policy to the DPS  
3 policy. Despite the existence of somewhat similar life history  
4 patterns within all three of the species discussed above, the  
5 record supports NMFS' conclusion that the more significant  
6 separation between resident and anadromous *O. mykiss* sets them  
7 apart from other types of Pacific salmon so that the DPS Policy  
8 is the best fit for evaluating *O. mykiss*. MID has pointed to  
9 evidence in the record that tends to demonstrate that *O. mykiss*  
10 shares characteristics with two species of the Pacific salmon,  
11 but there is no clear evidence in the record that undermines  
12 NMFS's interpretation of the degree of difference between these  
13 species. NMFS has articulated a rational explanation for the  
14 policy shift. When reviewing agency action involving complex  
15 issues of fact and a high level of technical expertise, the court  
16 must defer to the informed discretion of the responsible federal  
17 agency, unless the agency offers an explanation that runs counter  
18 to the evidence before it or is so implausible that it could not  
19 be ascribed to a difference in view or the product of agency  
20 expertise. See *Sierra Club v. E.P.A.*, 346 F.3d 955, 961 (9th  
21 Cir. 2003). Here, no such error has been demonstrated.

22 Plaintiffs' motions for summary judgment on this issue are  
23 DENIED; Federal Defendants' and Defendant-Intervenors' cross-  
24 motions are GRANTED.

25  
26 2. Is the Designation of a Steelhead Only (i.e.,  
27 Anadromous Only) DPS Contrary to Statutory Intent?

28 Both the *Grange* and *MID II* Plaintiffs contends that the

1 designation of a steelhead only DPS (as opposed to a DPS  
2 containing both steelhead and rainbow trout) is contrary to  
3 Congressional intent embodied in the ESA.

4 a. Alsea Does Not Control the Outcome of This  
5 Claim.

6 Grange again attempts to invoke *Alsea's* holding that NMFS  
7 may not make "[l]isting distinctions below that of subspecies or  
8 a DPS of a species [which] are not allowed under the ESA." 161  
9 F. Supp. 2d at 1162. *Alsea* did suggest in dicta that hatchery-  
10 born and naturally-spawned coho salmon are "likely not  
11 'substantially reproductively isolated' from naturally-spawned  
12 coho" because:

13 [O]nce released from the hatchery, it is undisputed  
14 that "hatchery spawned" coho and "naturally-spawned"  
15 coho within the Oregon Coast ESU share the same rivers,  
16 habitat and seasonal runs. It is undisputed that  
17 "hatchery spawned" coho may account for as much as 87%  
18 of the naturally spawning coho in the Oregon coast ESU.  
19 In addition, hatchery spawned and natural coho are the  
20 same species, and interbreed when mature. Finally, the  
21 NMFS considers progeny of hatchery fish that are born  
22 in the wild as "naturally-spawned" coho that deserve  
23 listing protection.

18 *Id.* at 1163-64 (internal citations omitted) (emphasis added).

19 Plaintiffs suggest that this reference to "interbreed[ing] when  
20 mature" equates to a prohibition against excluding from a DPSs  
21 individuals or populations that are capable of interbreeding when  
22 mature with those individuals or populations included in the Dps.  
23 It is undisputed that rainbow trout interbreed with steelhead  
24 where they coexist, although the frequency of such interbreeding  
25 is unknown. AR 2241R.

26 But, the fact that coho interbreed when mature is just one  
27 of many factors the *Alsea* court suggested were relevant to the  
28

1 question of whether the hatchery-born population was  
2 substantially reproductively isolated from the natural  
3 population. Moreover, as previously decided here, the exclusion  
4 of resident *O. mykiss* from a DPS was not before the *Alsea* court.  
5 See *MID Summary Judgment Decision*, 1:02-cv-06553, Doc. 79 at 43.  
6 As a district court decision from another district, *Alsea* has no  
7 binding effect, except as persuasive authority. See *Hart v.*  
8 *Massanari*, 266 F.3d 1155, 1174 (9th Cir. 2001).

9 b. Grange's "Sparingly" Argument.

10 Grange argues that "Congress did not intend the ESA to allow  
11 NMFS officials to wade into a river and pick and choose among  
12 members of an *O. mykiss* population, as NMFS has done here,  
13 treating members differently when they all meet NMFS population  
14 criteria." (*Grange* Doc. 29 at 23-24.) Specifically, Plaintiffs  
15 argue that the steelhead DPSs are invalid because they draw  
16 distinctions between populations based on factors other than  
17 geography, a practice Grange argues is contrary to Congressional  
18 intent. In support of this argument, Grange emphasizes comments  
19 made by Congress in response to NMFS and FWS's request to retain  
20 the "DPS of a species" language in the ESA's definition of  
21 "species." The agencies argued that the language should remain  
22 because, otherwise, the agencies would be required to provide the  
23 same amount of protection for the bald eagle population in  
24 Alaska, which is healthy, as it would be required to provide for  
25 bald eagles in other regions, where populations may be threatened  
26 with extinction. Congress responded by retaining the "DPS of a  
27 species" language, but warned that it was "aware of the great  
28 potential for abuse of this authority and expects the [wildlife]

1 agencies to list populations sparingly." S. Rep. No. 96-151 at  
2 6. Grange argues that this warning bars NMFS from delineating  
3 the DPSs as it has in this case.

4 At least one other district court has rejected a very  
5 similar argument based on this "sparingly" language. *Center for*  
6 *Biological Diversity v. Lohn*, 296 F. Supp. 2d 1223, 1235 (W.D.  
7 Wash. 2003), explained:

8 Defendants also contend that the significance factor  
9 serves to further congressional intent that the DPS  
10 authority be exercised "sparingly." (Defendants' Motion  
11 at 16 (citing 61 Fed.Reg. at 4723)). In 1979 testimony  
12 before a Senate committee, General Accounting Office  
13 ("GAO") officials recommended that the "distinct  
14 population segment" language be amended to prevent the  
15 Services from listing "geographically limited  
16 populations." S. Rep. No. 96-151, at 6 (1979) (DPS AR  
17 6). Congress did not narrow the "species" definition as  
18 recommended by GAO. However, the Senate committee noted  
19 that it "is aware of the great potential for abuse of  
20 the ability to list populations sparingly and only when the  
21 biological evidence indicates that such action is  
22 warranted." *Id.* at 7. Because this report was issued by  
23 Congress after the 1978 amendment that added the  
24 "distinct population segment" element to the species  
25 definition, it is subsequent legislative history and  
26 therefore "is less illuminating than contemporaneous  
27 evidence." *Hagen v. Utah*, 510 U.S. 399, 420 (1994); see  
28 also *United States v. Price*, 361 U.S. 304, 313 (1960)  
("views of a subsequent Congress form a hazardous basis  
for inferring the intent of an earlier one").

Because the "views of a subsequent Congress form a  
hazardous basis for inferring the intent of an earlier  
one," the Court does not find that one Senate  
committee's expectation that the Services only  
"sparingly" employ their ability to list populations  
supports the argument that a prior Congress intended  
the Services to use the DPS authority "sparingly."  
However, the Court finds that it is not contrary to  
clear congressional intent for the Services to consider  
the significance of a distinct population segment when  
determining whether that population is entitled to ESA  
listing. As noted, *supra*, the term "distinct population  
segment" is ambiguous. As the Services concluded when  
promulgating the DPS Policy, a DPS must be both  
discrete and significant because "[t]he interests of  
conserving genetic diversity would not be well served

1 by efforts directed at either well-defined but  
2 insignificant units or entities believed to be  
3 significant but around which boundaries cannot be  
4 recognized." 61 Fed. Reg. at 4725. The Court therefore  
5 finds that the DPS Policy is not contrary to  
6 congressional intent regarding the ESA and that it is a  
7 reasonable interpretation of an ambiguous term.

8 *Id.* (separate portion of opinion vacated as moot by *Ctr. for*  
9 *Biological Diversity v. Lohn*, 511 F.3d 960 (9th Cir.  
10 2007) (parallel citations omitted) (emphasis added). This  
11 reasoning from *Center for Biological Diversity* is sound and will  
12 be followed. The fact that a subsequent Congress warned that  
13 NMFS should use its DPS authority "sparingly" does not preclude  
14 the agency from applying the best available science, which, here,  
15 justifies the distinctions found between resident and migratory  
16 *O. mykiss*.

17 c. Does Designation of an Anadromous Only DPS  
18 Conflict with the Statutory Language "Which  
19 Interbreeds When Mature"?

20 Both Grange and MID focus on the ESA's definition of  
21 "species," which includes "any subspecies of fish or wildlife or  
22 plants, and any distinct population segment of any species of  
23 vertebrate fish or wildlife which interbreeds when mature." 16  
24 U.S.C. § 1532(16) (emphasis added). Plaintiffs argue that NMFS  
25 acted unlawfully by separating resident and migratory *O. mykiss*  
26 because they do "interbreeds when mature." Federal Defendants'  
27 disagree on both legal and factual grounds.

28 (1) Legal analysis under Chevron.

The key legal question is whether the statutory language  
"interbreeds when mature" requires inclusion in a DPS of every  
member of a population that has the capacity to interbreed when  
mature with any other individual already included in the DPS.

1 Federal Defendants maintain that the "ESA requirement that a  
2 group of organisms defined as a DPS must 'interbreed when mature'  
3 is a necessary but not exclusive condition," and argue:

4           Although all organisms in the DPS must interbreed when  
5 mature, on some time scale, this differs from a  
6 statutory requirement to include in the DPS all  
7 organisms that share some reproductive exchange. 71  
8 Fed. Reg. at 838. Indeed, even among well-defined  
9 taxonomic groupings, such as subspecies, there may be  
10 reproductive exchange, *id.* at 839, yet this does not  
11 invalidate the subspecies.

12           (*Grange Doc. 45 at 25.*) When adopting the DPS policy, FWS and  
13 NMFS concluded that it was "inappropriate to require absolute  
14 reproductive isolation as a prerequisite to recognizing a  
15 [DPS.]"<sup>25</sup>

16           The Services do not consider it appropriate to require  
17 absolute reproductive isolation as a prerequisite to  
18 recognizing a distinct population segment. This would  
19 be an impracticably stringent standard, and one that  
20 would not be satisfied even by some recognized species  
21 that are known to sustain a low frequency of  
22 interbreeding with related species ... the standard  
23 adopted does not require absolute separation of a DPS  
24 from other members of its species, because this can  
25 rarely be demonstrated in nature for any population of  
26 organisms. The standard adopted is believed to allow  
27 entities recognized under the Act to be identified  
28 without requiring an unreasonably rigid test for  
distinctness.

61 Fed. Reg. at 4,724.

          As discussed, the DPS policy has previously been found to be  
a valid agency interpretation of the ESA under *Chevron*. See *Nw.  
Ecosystem Alliance*, 475 F.3d at 1143. But the Ninth Circuit was

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<sup>25</sup> This statement was a response to a suggestion that  
"complete reproductive isolation should be required as a pre-  
requisite to recognition of a [DPS]." Contrary to MID's  
assertion that the DPS Policy is silent about the issue of  
interbreeding, and, therefore, that *Chevron* does not apply, the  
DPS policy directly addresses the issue here.

1 not interpreting the "interbreeds when mature" language in that  
2 case. Therefore, *NW Ecosystem Alliance* stands only for the  
3 proposition that *Chevron* applies to the DPS Policy; a separate  
4 *Chevron* analysis is here required.

5 (2) Does the ESA Unambiguously Preclude  
6 Excluding Some Interbreeding Members of  
a Population from a DPS?

7 As mentioned above, under *Chevron* step one, a court "must  
8 give effect to the unambiguously expressed intent of Congress."  
9 *Hemp Indus.*, 357 F.3d at 1015. The initial inquiry is whether  
10 the statutory text is ambiguous.<sup>26</sup> The relevant language is found  
11 in the definition of "species":

12 The term "species" includes any subspecies of fish or  
13 wildlife or plants, and any distinct population segment  
14 of any species of vertebrate fish or wildlife which  
interbreeds when mature.

15 16 U.S.C. § 1532.

16 MID argues that the words are unambiguous, because the  
17 "which" in "which interbreeds when mature" makes the clause  
18 mandatory. But, the term "which" can be used to indicate both  
19 restrictive/defining and nonrestrictive/nondefining clauses.

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20  
21 <sup>26</sup> A similar issue arose in a follow-up case to *Alsea*, in  
22 which the plaintiffs argued that several listed ESUs of salmon  
23 were unlawful because they included salmon populations that do  
not interbreed when mature. *Alsea Valley Alliance v.*  
24 *Lautenbacher*, 2007 WL 2344927, \*6 (August 14, 2007). Plaintiffs  
25 in that case argued that populations within the same ESU do not  
interbreed because they spawn at different times in different  
26 locations. *Id.* The federal defendants responded that the words  
"interbreeds when mature" merely reflect Congress's intent that  
27 members of the same species or DPS be capable of interbreeding  
when mature. *Id.* at \*7. Judge Hogan ruled in an unpublished  
28 decision that the words "distinct population segment... which  
interbreeds when mature" are ambiguous. *Id.*

1 Strunk & White, *The Elements of Style* 63-64 (Penguin Press 2005);  
2 *The Chicago Manual of Style* 5.42 (14th ed. University of Chicago  
3 Press 1993). Technically, the preferred use of "which" is as a  
4 nonrestrictive pronoun, meaning that it is commonly used only to  
5 further describe preceding language, not to narrow its  
6 definition. *Id.*<sup>27</sup> At best, the phrase is grammatically  
7 ambiguous.

8 If the proper interpretation is not clear from the plain  
9 meaning, a court must look to the legislative history.<sup>28</sup> The

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11 <sup>27</sup> The Chicago Manual gives a relevant example, labeling  
12 "ambiguous" the phrase, "The report which Marshall had tried to  
13 suppress was greeted with hilarity," because it could mean either  
14 "The report, which Marshall had tried to suppress, was greeted  
15 with hilarity," or "The Report that Marshall had tried to  
16 suppress was greeted with hilarity."

17 <sup>28</sup> To determine whether Congress has directly spoken to  
18 the issue, we "employ the traditional tools of statutory  
19 construction." *Student Loan Fund of Idaho, Inc. v. U.S. Dep't of*  
20 *Educ.*, 272 F.3d 1155, 1165(9th Cir.2001) (internal quotation  
21 omitted). These tools of construction require us:

22 first to engage in a textual analysis of the relevant  
23 statutory provisions and to read the words of a statute  
24 in their context and with a view to their place in the  
25 overall statutory scheme. If the proper interpretation  
26 is not clear from this textual analysis, the  
27 legislative history offers valuable guidance and  
28 insight into [c]ongressional intent. However, it is  
well established that legislative history which does  
not demonstrate a clear and certain congressional  
intent cannot form the basis for enjoining regulations.

*Id.* (citations and quotation marks omitted). In  
conducting this analysis, we are not vested with the  
power to rewrite the statutes, but rather must  
"construe what Congress has written...It is for us to  
ascertain-neither to add nor to subtract, neither to

1 "interbreeds when mature" language is traceable back to the 1973  
2 version of the ESA, which did not include a provision for listing  
3 DPSs. The 1973 Act defined species to include "any subspecies of  
4 fish or wildlife or plants and any other group of fish or  
5 wildlife of the same species or smaller taxa in common spatial  
6 arrangement that interbreed when mature." Pub. L. No. 93-205, §  
7 3(11), 87 Stat. 884 (1973). Environmental intervenors suggest  
8 that Congress's inclusion of the phrase "interbreeds when mature"  
9 in the statute at that time is best interpreted as an attempt to  
10 embody the biological definition of a species as being confined  
11 to individuals who are capable of breeding to produce fertile  
12 offspring. H.R. Rep. No. 1804, at 38154 (1978) (Conf. Rep.)  
13 (referring to the "generally biologically accepted" definition of  
14 "species," Rep. Duncan used the words "capable of  
15 interbreeding"). But, it is not appropriate to read meaning into  
16 "legislative history which does not demonstrate a clear and  
17 certain congressional intent." *Resident Councils of Wash. v.*  
18 *Leavitt*, 500 F.3d 1025, 1031 (9th Cir. 2007). There is no  
19 indication in the ESA's legislative history that Congress  
20 believed that sub-populations or individuals needed to actually

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21  
22 delete nor to distort." *62 Cases, More or Less, Each*  
23 *Containing Six Jars of Jam v. United States*, 340 U.S.  
24 593, 596 (1951); *Xi v. INS*, 298 F.3d 832, 839 (9th  
25 Cir.2002) ("[A] decision to rearrange or rewrite [a]  
statute falls within the legislative, not the judicial,  
prerogative.").

26 *Arizona State Bd. For Charter Schools v. United States Dept. of*  
27 *Educ.*, 464 F.3d 1003, 1007 (9th Cir. 2006) (parallel citations  
28 omitted).

1 interbreed in any regular way to be considered a single species,  
2 nor that every individual that did interbreed must be included  
3 within a given species or population.

4 Congress added the phrase "distinct population segment" in  
5 1978 to give the agencies greater flexibility to protect parts of  
6 populations that were at risk of extinction without  
7 having to protect other parts that were not. See Sen. Rep. No.  
8 96-151 (1979), reprinted in Comm. on Env't. & Public Works, 97th  
9 Cong., A Legislative History of the Endangered Species Act of  
10 1973, at 1397 (1982) ("the U.S. population of an animal should  
11 not be permitted to become extinct simply because the animal is  
12 more abundant elsewhere in the world"). This provision allowed  
13 the wildlife agencies to list populations that were not  
14 recognized in formal taxonomic terms. See 61 Fed. Reg. at 4,722.  
15 In amending the definition of species to include DPSs, Congress  
16 retained the "interbreeds" language from the original definition,  
17 which once applied only to species. There is no discussion in  
18 the 1978 amendments suggesting that Congress believed this  
19 language to operate as any kind of restriction on the Service's  
20 ability to designate DPSs. Again, absent any clear statement of  
21 Congressional intent in the legislative history, it is not  
22 appropriate for a court to assign meaning to legislative silence.

23

24 The phrase "which interbreeds when mature" is ambiguous.

25 (3) Is the Agency's Interpretation of the  
26 Statutory Language Reasonable?

27 If "the statute is silent or ambiguous with respect to the  
28 specific issue," at step two a court must sustain the Agency's

1 interpretation if it is based on a "permissible construction" of  
2 a statute. *Nat'l Ass'n of Home Builders v. Defenders of*  
3 *Wildlife*, 127 S. Ct. 2518, 2534 (2007). The key question is  
4 whether the agency's construction of the statutory provision is a  
5 "reasonable" one in light of the statute's text and overall  
6 scheme. *Id.*

7 The legislative history is silent as to the consequences of  
8 interbreeding between members of a DPS and other populations  
9 outside the DPS. The parties' arguments on this issue are  
10 limited. Grange argues that NMFS's interpretation would lead to  
11 absurd results because "if the ESA allowed NMFS to focus solely  
12 on mere portions of the same species in such geographic  
13 proximity, federal agencies could list a spotted owl in one nest  
14 but not a spotted owl in another nest -- in the same old growth  
15 tree." (*Grange Doc. 29 at 23-24.*) But, as Federal Defendants  
16 point out, the same is true for the converse. If NMFS was  
17 required to include in a DPS every individual capable of  
18 interbreeding with any other individual, this would also generate  
19 absurd results. As NMFS explained in a response to comments  
20 about the proposed listing, such a stringent standard would not  
21 be satisfied "even by some recognized species that are known to  
22 sustain a low frequency of interbreeding with members of related  
23 species." 61 Fed. Reg. 4,721, 4,724.<sup>29</sup> Other provisions within

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24  
25 <sup>29</sup> Environmental Intervenors in *MID II* add that under any  
26 reading of the statute NMFS is "precluded from designating a DPS  
27 that included two different species of trout that could not  
28 interbreed and/or produce fertile offspring. But the converse is  
not true. An otherwise valid DPS is not so fragile as to be  
destroyed when a member, or even many members, of the DPS breed

1 the definition of "species," namely the requirement that distinct  
2 population segments be "distinct," preclude the single-tree,  
3 single-species, but dual-DPS scenario feared by Plaintiffs.

4 The reading offered by Plaintiffs is unworkably severe in  
5 light of biological reality. It would prevent, for example, a  
6 dwindling population of wolves from being listed simply because  
7 they co-existed with a large population of coyotes, with which  
8 they can and do interbreed. 50 Fed. Reg. 28,821, 28,823 (July  
9 16, 1985) (describing in the listing of the Dismal Swamp  
10 Southeastern Shrew how the red wolf (*Canis rufus*), which is  
11 listed as endangered, was nearly destroyed by hybridization with  
12 the coyote (*Canis latrans*)). In light of the potentially absurd  
13 results that would flow from adopting Plaintiffs' interpretation  
14 of the act, the alternative interpretation advanced by Federal  
15 Defendants represents a reasonable construction by an expert  
16 agency.

17 (4) Factual Analysis.

18 Federal Defendants argue in the alternative that Plaintiffs  
19 "oversimplify the biology by implying that the two life forms  
20 always interbreed." (*Grange Doc. 45 at 25.*) NMFS concedes that  
21 steelhead and rainbow trout that co-exist below natural barriers  
22 may interbreed, but insists that the frequency with which this  
23 occurs is unknown and unpredictable, see AR 2185 at 174-75, and  
24 likely influenced by local habitat conditions and variability in  
25 their environment, see AR 2185 at 174.

26 Because it is lawful for NMFS to separate populations into  
27 \_\_\_\_\_  
28 with individuals outside the DPS." (*MID II Doc. 103 at 9-10.*)

1 multiple DPSs even though they may interbreed when mature, it is  
2 not necessary to further inquire into the extent of interbreeding  
3 for the purposes of determining whether NMFS's interpretation of  
4 the "interbreeds when mature" language is permissible as a matter  
5 of law.

6 3. Grange's Abandoned Third Claim For Relief Re:  
7 "Illegal Construction of Distinct Population  
8 Segments".

8 Grange's Third Claim for Relief arises from the ESA's  
9 definition of a "species" to include "any subspecies of fish or  
10 wildlife or plants, and any distinct population segment of any  
11 species of vertebrate fish or wildlife which interbreeds when  
12 mature." 16 U.S.C. § 1532(16) (emphasis added). Grange alleges  
13 that each of the challenged California DPSs consist of numerous  
14 sub-populations spread across large areas and that, for example,  
15 "[s]ome *O. mykiss* return to spawn in Redwood Creek in Humboldt  
16 County, in the far north portion of the DPS, while others return  
17 to spawn in the Gualala River in Mendocino County, in the far  
18 south portion of the DPS -- over 200 miles away." (Grange Doc. 1  
19 at ¶95.) This, Grange contends, conflicts with the ESA's plain  
20 language requiring DPSs to "interbreed when mature."

21 Grange raises this claim for the first time in its reply  
22 brief and attempts to mask this untimeliness by characterizing  
23 its arguments on this claim as a response to an argument made by  
24 the Defendants in the context of a separate claim. In their  
25 cross motion for summary judgment, Federal Defendants responded  
26 to Grange's argument that any DPS of *O. mykiss* must include both  
27 resident and anadromous fish because they "interbreed when  
28 mature," by contending that "[t]he ESA requirement that a group

1 of organisms defined as a DPS must 'interbreed when mature' is a  
2 necessary but not exclusive condition." (*Grange Doc. 45 at 25.*)  
3 Federal Defendants discussed this statutory language in the  
4 context of Plaintiffs' First and Fourth Claims for relief (which  
5 challenge the distinction between resident and migratory *O.*  
6 *mykiss*). *Grange* cannot now resurrect into its broader Third  
7 Claim for Relief.

8 Even if *Grange* had not waived this claim, it is without  
9 merit. Its position implies that the ESA requires that every  
10 individual member of a DPS must have the opportunity to  
11 "interbreed when mature" with all other members of that  
12 population in every generation. In addition to the absence of  
13 supporting authority for this assertion, the argument is premised  
14 on a misunderstanding of the scientific record. Plaintiffs  
15 assert that "*O. mykiss* from different rivers do not interbreed."  
16 (*Grange Doc. 53 at 15.*) Although most steelhead return to their  
17 natal streams to spawn, every year a small number stray into  
18 different watersheds and spawn there. AR 1627 at 1-2. This  
19 behavior is thought to enable steelhead to recolonize empty  
20 habitat; permit them the option of not returning to unsuitable  
21 habitat; and provide some genetic interchange between  
22 populations. *Id.* See also AR 2185 at 14 (BRT finding that  
23 salmon and steelhead DPSs "are typically metapopulations; that  
24 is, they are usually composed of multiple populations with some  
25 degree of interconnection, at least over evolutionary time  
26 periods.").

27 Federal Defendants persuasively argue that Plaintiffs'  
28 "narrow reading of the statute would absurdly narrow the concept

1 of a distinct population segment." (Grange Doc. 64 at 11.)

2 Indeed, following Plaintiffs' argument to its logical  
3 conclusion would create steelhead DPSs for each natal  
4 stream, which would be contrary to Plaintiffs'  
5 arguments regarding the GAO's concern that the DPS  
6 authority would be used to designate one population of  
7 squirrels in a city park. Instead, NMFS reasonably  
8 delineated steelhead populations that share a degree of  
9 reproductive exchange, or interbreed when mature, that  
10 is greater than the degree of reproductive exchange  
11 shared with neighboring populations. NMFS did not  
12 delineate even smaller populations, which would have  
13 even higher degrees of reproductive exchange, in  
14 observance of the Congressional intent that the DPS  
15 authority be used "sparingly."

16 (Id. (internal citations omitted).)

17 Grange's argument finds no support in the record, logic, or  
18 the law. Their motion for summary judgment on the Third Claim  
19 for Relief is DENIED and Defendant and Defendant-Intervenors'  
20 motions are GRANTED.

21 4. MID's Argument That NMFS's Decision to Separate  
22 Anadromous and Resident Forms of *O. mykiss* is  
23 Inexplicably Inconsistent With Prior Treatment of  
24 Other Fish Species With Resident and Anadromous  
25 Life Histories.

26 MID maintains that the current listing of only anadromous *O.*  
27 *mykiss* in the Central Valley steelhead ESU is inconsistent with  
28 FWS's past listings of bull trout (*Salvelinus confluentus*) and  
NMFS's past delineation of cutthroat trout (*O. clarki clarki*),  
which include both resident and anadromous forms. While an  
agency is not bound to adhere to its prior policies, an agency  
acts arbitrarily when it departs from its prior precedents in the  
absence of reasoned decision making. *N. Cal. Power Agency v.*  
*F.E.R.C.*, 37 F.3d 1517, 1522 (D.C. Cir. 1994); see *Nw. Envt'l*  
*Defense Ctr. v. Bonneville Power Admin.*, 477 F.3d 668, 687-688  
(9th Cir. 2007) ("[A]n agency changing its course must supply a

1 reasoned analysis indicating that prior policies and standards  
2 are being deliberately changed, not casually ignored, and if an  
3 agency glosses over or swerves from prior precedents without  
4 discussion it may cross the line from the tolerably terse to the  
5 intolerably mute.”).<sup>30</sup>

6 NMFS explained its decision to treat steelhead differently  
7 than bull trout and cutthroat trout as follows:

8 With respect to the Atlantic salmon, bull trout, and  
9 coastal cutthroat trout determinations, we acknowledge  
10 that their expression of a range of lifehistories may  
11 raise some of the same issues we confronted in  
12 delineating an anadromous-only DPS of *O. mykiss*. We  
13 conclude, however, that there are important differences  
14 between *O. mykiss* and these species that warrant  
15 different treatment. In addition to expressing anadromy  
16 (the life-history pattern in which fish spend a large  
17 portion of their life cycle in the ocean and return to  
18 freshwater to breed), bull trout and coastal cutthroat  
19 trout express amphidromy (migration between fresh and  
20 salt water that is for feeding and overwintering, as  
21 well as breeding). While the anadromous and resident  
22 forms of *O. mykiss* differ clearly in ocean-migratory  
23 behavior and associated biological factors...  
24 ocean-going migratory behavior and associated physical,  
25 physiological, and ecological factors are comparatively  
26 more variable among the life-history forms and life  
27 stages of bull trout and coastal cutthroat trout given

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19 <sup>30</sup> MID suggests that NMFS should be compelled to provide a  
20 particularly strong rationale for its divergence the from prior  
21 precedent of the bull and cutthroat trout listings because  
22 changes to or inconsistent applications of a policy can suggest  
23 or provide evidence of pretext, citing *Coszalter v. City of*  
24 *Salem*, 320 F.3d 968, 977-78 (9th Cir. 2003) and *Russell v. TG Mo.*  
25 *Corp.*, 340 F.3d 735, 746 (8th Cir. 2003). But *Coszalter* and  
26 *Russell* concerned civil rights claims, for which there is an  
27 entire body of jurisprudence regarding the types of evidence that  
28 give rise to a showing of pretext. The only APA case cited by  
Plaintiffs in which pretext was mentioned does not apply a  
heightened burden. See *Bicycle Trails Council of Marin v.*  
*Babbitt*, 82 F.3d 1445, 1464-65 (finding National Park Service  
rationale regarding rule change restricting mountain bike use was  
not pretextual)). This invitation is declined.

1 their expression of amphidromy.

2 71 Fed. Reg. at 840 (emphasis added).

3 In this passage, NMFS distinguishes *O. mykiss* from the bull  
4 and cutthroat trout on the ground that a host of factors,  
5 including a more diverse set of migratory behaviors, blurs any  
6 divisions that could be drawn between and among the various life  
7 forms of bull and cutthroat trout. NMFS concluded that the  
8 life-history forms of bull trout and coastal cutthroat trout are  
9 not as "markedly separate" as the resident rainbow trout and  
10 steelhead.

11 MID rejoins that NMFS' explanation is not credible because  
12 the ostensibly unique migratory behavior of amphidromy was not  
13 mentioned in prior actions for these two species. When the bull  
14 trout was first listed as threatened in 1999, FWS explained that  
15 bull trout "exhibit both resident and migratory life history  
16 strategies[,]. . . . [r]esident and migratory forms may be found  
17 together, and bull trout may produce offspring exhibiting either  
18 resident or migratory behavior." 64 Fed. Reg. 58,910, 58,911  
19 (Nov. 1, 1999). The listed bull trout population included both  
20 the resident and migratory life histories. *Id.* FWS did not  
21 mention the term "amphidromy" in this listing, nor mention that  
22 bull trout migrate for feeding and overwintering purposes in  
23 addition to migrating for spawning purposes.

24 Applying the ESU Policy, NMFS listed several DPSs of coastal  
25 cutthroat trout as threatened in 1996 (for the Umpqua River  
26 cutthroat trout), 61 Fed. Reg. 41,514 (Aug. 9, 1996), and again  
27 in 1999 (for the Southwestern Washington/Columbia River coastal  
28 cutthroat trout), 64 Fed. Reg. 16,397 (Apr. 5 1999). In the 1996

1 action, NMFS found that coastal cutthroat trout had three life  
2 history forms: resident, anadromous and potamodromous<sup>31</sup>. 61 Fed.  
3 Reg. at 41,515. NMFS did not use the term "amphidromy" in the  
4 listing, nor discuss this life history in any way. In the 1999  
5 listing, NMFS examined the relationship between the resident,  
6 anadromous, and potamadromous life history forms of cutthroat  
7 cohabitating in the same location. NMFS found that "these  
8 different life-history forms are generally more closely related  
9 within a drainage than are populations from different drainages."  
10 64 Fed. Reg. at 16,399. As a result, NMFS found the migratory  
11 "and non-migratory populations of the cutthroat trout represent a  
12 single evolutionary lineage," 64 Fed. Reg. at 16,399, and defined  
13 the cutthroat trout DPS to include both the migratory and  
14 resident forms located below long-term natural barriers, 64 Fed.  
15 Reg. at 16,409.<sup>32</sup>

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17 <sup>31</sup> Potamodromous refers to migration within rivers. See  
18 61 Fed. Reg. at 41,515. NMFS admits that Central Valley O.  
19 mykiss exhibit this behavior. (See MID II Doc. 23 at ¶23.)

20 <sup>32</sup> MID attempts to support its argument from positions  
21 FWS has taken in prior litigation. In 2000, FWS and NMFS agreed  
22 to resolve their dispute over which agency had jurisdiction over  
23 coastal cutthroat trout, a species that had both resident members  
24 and members that migrated between fresh and salt water  
25 environments, by ceding jurisdiction to FWS. 65 Fed. Reg. 21,376  
26 (Apr. 21, 2000). Thereafter, FWS de-listed the Southwestern  
27 Washington/Columbia River DPS of the coastal cutthroat trout and  
28 was sued on that decision. See *Ctr. for Biological Diversity v.*  
*FWS*, 402 F. Supp. 2d 1198 (D. Or. 2005). In that lawsuit, FWS  
recognized that coastal cutthroat trout had resident, anadromous,  
and freshwater migratory life histories, but made no mention of  
amphidromy. The plaintiffs in that case did not challenge FWS's  
definition of the ESU (i.e., they did not argue that FWS was  
required to treat the anadromous population as a separate ESU).

1 MID emphasizes that the most important issue for NMFS in the  
2 cutthroat actions was not the migration pattern or the reason for  
3 the migration, but rather the fact that the migratory forms and  
4 the resident forms interbred where they co-occurred and that  
5 offspring of one life history form could express the alternate  
6 life history form. This appears to be the case, but this is  
7 entirely consistent with the fact that these species were  
8 evaluated under the ESU Policy, with its emphasis on reproductive  
9 isolation. It was proper for NMFS to switch to the DPS policy  
10 for its action on *O. mykiss*, with its focus on marked separation  
11 as measured by a host of factors. MID compares apples to  
12 oranges. The relevant question is whether, under the factors of  
13 the DPS Policy, the populations can be judged to be markedly  
14 separate from one another. Federal Defendants maintain that the  
15 a preponderance of record evidence establishes that the  
16 anadromous and resident behaviors of *O. mykiss* are more clearly  
17 defined than the migratory behaviors in bull trout and coastal  
18 cutthroat trout.

19 a. Cutthroat Trout.

20 Federal Defendants maintain that, compared with the clear  
21 bifurcation between resident and anadromous life forms of *O.*  
22 *mykiss*, coastal cutthroat trout exhibit a continuum of life  
23 histories. See, e.g., AR 1886 at 14 ("Coastal cutthroat trout  
24

25  
26 Rather, the plaintiffs argued that the anadromous and resident  
27 life form are not interchangeable and that FWS should have  
28 considered the declines within and threats to the anadromous  
population when determining whether the entire ESU warranted  
listing. *Id.* at 1206-07. This is not analogous.

1 express a wide diversity of life-history attributes. This  
2 diversity includes several migratory pathways ... or they may  
3 follow migratory pathways that combine these behaviors."); *id.* at  
4 39 ("Their populations show a bewildering diversity in size and  
5 age at migration, timing of migrations, age at maturity, and  
6 frequency of repeat spawning."); *id.* at 68-78.

7 MID correctly observes that *O. mykiss* also exhibit a large  
8 overlap in sizes of resident and anadromous fish, i.e., small  
9 steelhead and large resident rainbow trout are common in Central  
10 Valley rivers. AR 1269-07 at 1-2. However, MID has not cited  
11 any record evidence that undermines NMFS's conclusion that the  
12 cutthroat anadromous and resident life forms are more difficult  
13 to distinguish than are the anadromous and resident forms of *O.*  
14 *mykiss*.

15 b. Bull Trout.

16 NMFS draws similar distinctions between *O. mykiss* and bull  
17 trout. For example, FWS's 1999 listing acknowledges that some  
18 biologists believe the existence of true anadromy in bull trout  
19 is still uncertain. 64 Fed. Reg. 58,910. In fact, only one  
20 population of bull trout even has an anadromous form. *Id.* at  
21 58,912 (indicating that the Coastal-Puget Sound population is  
22 thought to contain the only anadromous forms of bull trout in the  
23 coterminous United States).

24 MID challenges NMFS's delineation of the Central Valley *O.*  
25 *mykiss* DPS by suggesting that, like *O. mykiss*, resident bull  
26 trout are smaller in size than their anadromous counterparts, are  
27 less fecund, and have a different diet, referencing 64 Fed. Reg.  
28 58,911. MID overstates the record. That citation actually

1 provides that "migratory" bull trout were found to be larger,  
2 more fecund, etc., than their resident counterparts. In the  
3 context of the bull trout listing, "migratory" is used to refer  
4 to life forms that migrate "to either a lake (adfluvial), river  
5 (fluvial), or in certain coastal areas, saltwater (anadromous)."  
6 *Id.* at 58,910. This supports, rather than undercuts, NMFS's  
7 assertion that there is a greater diversity of bull trout life  
8 forms, as compared to *O. mykiss*.

9 Whether NMFS' listing of the CV steelhead DPS is rational  
10 and reasonably supported by the final rule and the administrative  
11 record is determined by the rationality of its explanation for  
12 distinguishing between *O. mykiss* and the other trout species.  
13 The agency's expert opinions concerning the differences between  
14 *O. mykiss* and amphidromy are entitled to deference. *Baltimore*  
15 *Gas & Elec. Co.*, 462 U.S. at 103 ("a reviewing court must  
16 generally be at its most deferential" when the agency is "making  
17 predictions, within its area of special expertise, at the  
18 frontiers of science"). A court cannot substitute its judgment  
19 for that of the expert decision-maker.

20  
21 5. Is NMFS's Decision to List Steelhead-Only DPSs  
Supported by the Best Available Science?

22 Plaintiffs in both *Grange* and *MID II* argue that NMFS applied  
23 the DPS Policy improperly (i.e., that the conclusion reached by  
24 NMFS under the DPS policy was not justified by the record).<sup>33</sup>

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25  
26 <sup>33</sup> *Grange* raises this argument to challenge all five  
27 California steelhead DPSs in California, but provides little or  
28 no scientific argument. The *MID* Plaintiffs challenge only the  
Central Valley steelhead DPS and provide considerable scientific

1 Federal Defendants and Defendant-Intervenors' cross-motion for  
2 summary judgment argues that NMFS properly found that the  
3 steelhead-only populations met the standards set forth in the DPS  
4 Policy.

5 Under the Joint DPS Policy, three factors must be considered  
6 when determining whether a population may be considered a DPS:

- 7 (1) Discreteness of the population segment in relation  
8 to the remainder of the species to which it  
9 belongs;
- 10 (2) The significance of the population segment to the  
11 species to which it belongs; and
- 12 (3) The population segment's conservation status in  
13 relation to the Act's standards for listing (i.e.,  
14 is the population segment, when treated as if it  
15 were a species, endangered or threatened?).

16 61 Fed. Reg. at 4,725 (emphasis added).

17 A population segment of a species may be considered  
18 "discrete" if it satisfies either one of the following  
19 conditions:

- 20 (1) It is markedly separated from other populations of  
21 the same taxon as a consequence of physical,  
22 physiological, ecological, or behavioral factors.  
23 Quantitative measures of genetic or morphological  
24 discontinuity may provide evidence of this  
25 separation.
- 26 (2) It is delimited by international governmental  
27 boundaries within which differences in control of  
28 exploitation, management of habitat, conservation  
29 status, or regulatory mechanisms exist that are  
30 significant in light of section 4(a)(1)(D) of the  
31 Act.

32 *Id.* (emphasis added).

33 If a population segment is found to be discrete, its  
34 biological and ecological "significance" is evaluated, "in light

35 \_\_\_\_\_

36 argument.

1 of Congressional guidance...that the authority to list [DPSs] is  
2 to be used '...sparingly' while encouraging the conservation of  
3 genetic diversity." *Id.* The significance analysis may include,  
4 but is not limited to, an evaluation of:

- 5 (1) persistence of the DPS in an ecological setting  
6 unusual or unique for the taxon;
- 7 (2) evidence that loss of the DPS would result in a  
8 significant gap in the range of the taxon;
- 9 (3) evidence that the DPS represents the only  
10 surviving natural occurrence of a taxon that may  
11 be more abundant elsewhere as an introduced  
12 population outside its historic range; or
- 13 (4) evidence that the DPS differs markedly from other  
14 populations of the species in its genetic  
15 characteristics.

16 *Id.* If a population is found to be both "discrete" and  
17 "significant," it is evaluated against the five factors set forth  
18 in ESA § 4(a) in order to determine whether listing the  
19 population as endangered or threatened is warranted. *Id.*

20 a. Discreteness.

21 NMFS concluded that the steelhead-only populations met the  
22 discreteness requirement because resident rainbow trout and  
23 steelhead remain "markedly separate[] physically,  
24 physiologically, ecologically, and behaviorally." 71 Fed. Reg.  
25 at 838.

26 Steelhead differ from resident rainbow trout physically  
27 in adult size and fecundity, physiologically by  
28 undergoing smoltification, ecologically in their  
preferred prey and principal predators, and  
behaviorally in their migratory strategy. Where the two  
life forms co-occur, adult steelhead typically range in  
size from 40-72 cm in length and 2-5 kg body mass,  
while adult rainbow trout typically range in size from  
25-46 cm in length and 0.5-2 kg body mass (Shapovalov  
and Taft, 1954; Wydoski and Whitney, 1979; Jones,  
1984). Steelhead females produce approximately 2,500 to  
10,000 eggs, and rainbow trout fecundity ranges from

1 700 to 4,000 eggs per female (Shapovalov and Taft,  
2 1954; Buckley, 1967; Moyle, 1976; McGregor, 1986;  
3 Pauley et al., 1986), with steelhead eggs being  
4 approximately twice the diameter of rainbow trout eggs  
5 or larger (Scott and Crossman, 1973; Wang, 1986; Tyler  
6 et al., 1996). Steelhead undergo a complex  
7 physiological change that enables them to make the  
8 transition from freshwater to saltwater  
9 (smoltification), while rainbow trout reside in  
10 freshwater throughout their entire life cycle. While  
11 juvenile and adult steelhead prey on euphausiid  
12 crustaceans, squid, herring, and other small fishes  
13 available in the marine environment, the diet of adult  
14 rainbow trout is primarily aquatic and terrestrial  
15 insects and their larvae, mollusks, amphipod  
16 crustaceans, fish eggs, and minnows (LeBrasseur, 1966;  
17 Scott and Crossman, 1973; Wydoski and Whitney, 1979).  
18 These differences in diet are a function of migratory  
19 behavior and the prey communities available to resident  
20 and anadromous *O. mykiss* in their respective  
21 environments. Finally, steelhead migrate several to  
22 hundreds of miles from their natal streams to the  
23 ocean, and spend up to 3 years in the ocean migrating  
24 thousands of miles before returning to freshwater to  
25 spawn (Busby et al., 1996). Some fluvial populations of  
26 rainbow trout may exhibit seasonal migrations of tens  
27 of kilometers outside of their natal watersheds, but  
28 rainbow trout generally remain associated with their  
natal drainages (Meka et al., 1999). Given the marked  
separation between the anadromous and resident  
life-history forms in physical, physiological,  
ecological, and behavioral factors, we conclude that  
the anadromous steelhead populations are discrete from  
the resident rainbow trout populations within the  
ranges of the DPSs under consideration.

19 *Id.* at 838. NMFS concluded, based on the steelhead's differences  
20 from rainbow trout -- in adult size and fecundity,  
21 physiologically in terms of smoltification, ecologically in terms  
22 of preferred prey, and behaviorally in terms of migratory  
23 strategy -- that steelhead are discrete from rainbow trout as a  
24 result of application of the four factor test prescribed by the  
25 DPS policy. *Id.*

26 All Plaintiffs argue that this conclusion is not supported  
27 by the record.

1 (1) MID's Argument That the Data Has Not  
2 Changed.

3 The MID Plaintiffs first suggest that NFMS's decision cannot  
4 withstand scrutiny because the data cited in the final rule is  
5 "not new" and predates prior steelhead listings under the ESU  
6 Policy. (*MID II* Doc. 79 at 41.) This argument does not account  
7 for the history of these listings. In the initial steelhead  
8 listings, made under the ESU policy, NMFS examined the best  
9 available science and concluded that the resident rainbow trout  
10 were part of the same ESU as the steelhead, but listed only the  
11 steelhead. After *Alsea* was decided in 2001, NMFS reassessed the  
12 way it evaluated the species in light of comments from the public  
13 and FWS, and concluded that the DPS Policy was the best policy to  
14 apply because it allowed the agency to take into consideration a  
15 broader range of criteria that acknowledged the behavioral,  
16 morphological, and ecological differences between the life forms.  
17 (*MID II* Doc. 95 at 33-34.) The agency's decision to change  
18 policies has been found lawful. It is entitled to re-apply the  
19 "old" data to the new policy to reach a different result.  
20 Whether the record supports the conclusion reached must be  
21 determined.

22 (2) Lack of Consistently Distinguishable  
23 Characteristics Between Life History  
24 Forms.

25 The *MID II* Plaintiffs next argue that NMFS found "no suite  
26 of morphological or genetic characteristics has been found that  
27 consistently distinguishes between the two life history forms."  
28 (*MID II* Doc. 79 at 41 (*citing* 69 Fed. Reg. at 33,113 (the  
proposed listing applying the ESU Policy)). But the DPS policy



1 considerations." 56 Fed. Reg. at 58,618. Many of the  
2 differences between the anadromous and resident forms cited by  
3 NMFS are consequences of the fact that the anadromous form lives  
4 for a time in the ocean, while the resident form does not. Thus,  
5 the differences in diet, prey, smoltification, and migration all  
6 result from the fact that the anadromous form goes to the ocean  
7 while the resident form does not. AR 864-01 at 5; AR 1269-07 at  
8 1-3; AR 1276 at 3. However, the MID Plaintiffs assert it is not  
9 necessarily the case that these differences are caused by the  
10 fact that the anadromous and resident forms are different, citing  
11 comments by Drs. Moyle and Yoshiyama in response to NMFS's plans  
12 to apply the DPS Policy:

13 [I]t is not necessarily true that those differences are  
14 intrinsically pre-set and unalterable characteristics.  
15 If such differences can be shown to be pre-set - e.g.,  
16 genetically determined so that the anadromous part of  
the population is inherently different from the  
resident part - then the proposed DPS Policy would be  
compelling.

17 In contrast, if the differences between steelhead are  
18 not interchangeable such that any individuals could  
19 become either anadromous or resident under suitable  
20 conditions, then the perceived "marked separation of  
21 population groups" would be artificial and would not  
22 delineate intrinsically distinct population entities.  
23 In such case, the proposed DPS Policy would not be  
24 meaningful.

25 Presently, it is not clear how much pre-determination  
26 (i.e., genetic basis) is involved in the expression of  
27 anadromy versus freshwater residency in Central Valley  
28 *O. mykiss* populations. Such information is needed to  
justify the DPS Policy approach that has been proposed  
by NMFS.

AR 864-01 at 5.

Scientists at NMFS and FWS shared the concerns that it might  
be interpreted as an artificial construction if NMFS concluded  
that anadromous and resident *O. mykiss* were "markedly separate."

1 Jim Myers, a research fishery biologist with NMFS, reviewed one  
2 of the drafts of the final listing decision in December 2005 and  
3 noted that the size and diet distinctions were not very  
4 compelling. He commented that "one can take a 25 g rainbow and  
5 rear it in saltwater" and "diet here is not a preference but  
6 simply what is available. If there was a squid in fresh water,  
7 rainbows might eat them." AR 2272-01R at 16.

8 FWS's Dr. Campton, in a November 28, 2005 telephone call  
9 with Dr. Scott Rumsey of NMFS, noted that it could be argued that  
10 the best scientific information available did not support a  
11 conclusion that anadromous and resident *O. mykiss* were markedly  
12 separate. AR 899 at 1. Specifically, he noted that the decision  
13 to express anadromy or residency by *O. mykiss* was not necessarily  
14 pre-determined, citing evidence suggesting that the two life  
15 forms interbreed, an individual fish could express both life  
16 history types during its life, and that individuals expressing  
17 one life history form could produce offspring that expressed the  
18 alternate life history form. *Id.* Evidence also suggested that  
19 the relative proportion of anadromy/residency is largely due to  
20 extrinsic environmental factors like temperature, water flow and  
21 passage, etc. *Id.* Dr. Campton expressed concern that NMFS'  
22 attempted use of the DPS Policy could be construed as a "clever,  
23 legalistic approach" designed to avoid listing the resident form  
24 of *O. mykiss*. *Id.*<sup>34</sup>

25  
26 <sup>34</sup> MID also suggests that the proposed means to protect  
27 listed anadromous *O. mykiss* "explicitly contradicts" the notion  
28 that anadromous and resident *O. mykiss* are markedly separate.  
Specifically, the final listing decision provides that NMFS will

1           These anecdotal opinions tend to support MID's assertion  
2 that "nurture" rather than genetic makeup is the driving force  
3 behind any physiological, morphological, and behavioral  
4 distinctions that can be observed in the two life forms of *O.*  
5 *mykiss*. The weakest element of NMFS's rationale concerns diet.  
6 As Mr. Myers points out, only fish that migrate to the ocean have  
7 the opportunity to eat prey that live in the ocean. However,  
8 nothing in the ESA or the DPS Policy requires NMFS to give this  
9 or the related critiques controlling weight.<sup>35</sup>

10           Federal Defendants correctly point out that the DPS Policy  
11 gives NMFS the flexibility to look beyond only genetics "at a  
12 broader array of differences to determine whether a population is  
13

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14 apply the "similarity of appearance" standard under Section 4(e)  
15 of the ESA [16 U.S.C. § 1533(e)] to protect all juvenile *O.*  
16 *mykiss* from unauthorized take. AR 795 at 9. According to NMFS,  
17 because "juvenile steelhead can be difficult to distinguish from  
18 resident rainbow trout," NMFS will presume that all juvenile *O.*  
19 *mykiss* are juvenile anadromous *O. mykiss* where the anadromous and  
20 resident forms co-occur. *Id.* (emphasis added). MID asserts that  
21 NMFS's presumption represents an "express admission" that *O.*  
22 *mykiss* life forms are not "markedly separate ... If they were,  
23 there would be no need to provide protection to all *O. mykiss*  
24 since the anadromous and resident forms would be readily  
25 distinguishable." This overstates the relevance of NMFS's  
26 protective regulations to the lawfulness of the listing decision.  
27 Among other things, the protective regulations on their face only  
28 apply to juvenile *O. mykiss* and indicate nothing about the  
separation (or lack thereof) between adult steelhead and rainbow  
trout.

35           The two most substantial critiques, from Drs. Moyle and  
Yoshiyama and from Dr. Compton, are not definitive. Drs. Moyle  
and Yoshiyama pose alternative scenarios and call for the  
collection of additional data so it can be determined whether  
environmental factors explain the distinctions. Dr. Compton  
repeatedly qualifies his opinions.

1 'distinct.'" (MID II Doc. 95 at 35.) Federal Defendants  
2 maintain that "[w]hether or not the morphological, behavioral,  
3 physical, and physiological differences are caused by an inherent  
4 genetic difference or by environmental factors, the fact remains  
5 that steelhead and rainbow trout are markedly separate enough to  
6 be considered discrete...." (Id. (emphasis added).) NMFS  
7 reasoned in the final listing determination:

8 With respect to the comment that resident and  
9 anadromous *O. mykiss* are genetically indistinguishable,  
10 we explained in adopting the DPS policy why we did not  
11 adopt genetic distinctness as the test of discreteness:  
12 "The Services understand the Act to support  
13 interrelated goals of conserving genetic resources and  
14 maintaining natural systems and biodiversity over a  
15 representative portion of their historic occurrence.  
16 The draft policy was intended to recognize both these  
17 intentions, but without focusing on either to the  
18 exclusion of the other. Thus, evidence of genetic  
19 distinctness or of the presence of genetically  
20 determined traits may be important in recognizing some  
21 DPS's, but the draft policy was not intended to always  
22 specifically require this kind of evidence in order for  
23 a DPS to be recognized" (61 FR 4721, at 4723; February  
24 7, 1996).

25 71 Fed. Reg. at 839.

26 The ESA and the DPS Policy afford NMFS the flexibility to  
27 delineate DPSs based on characteristics unrelated to genetics.  
28 For some reason, and it is undisputed that no one knows why,  
certain populations of juvenile *O. mykiss* become steelhead, while  
other, genetically similar juveniles become rainbow trout. The  
triggers that cause individuals from one life form to create  
offspring that exhibit the alternative life form are also  
unknown, as is the frequency of any such intergenerational shift.  
NMFS is not required to solve these mysteries before it takes  
action under the ESA. The agency is only required to make a  
rational decision based on the best information available to it.

1 Here, the agency science presented a choice. On the one  
2 hand, NMFS could have concluded that it was not appropriate to  
3 separate resident and anadromous *O. mykiss* because environmental  
4 factors might be responsible for any distinctions between the two  
5 life forms. Alternatively, NMFS could, and did, conclude that,  
6 despite the possibility that environmental factors might drive  
7 the physiological distinctions between anadromous and resident *O.*  
8 *mykiss*, the very fact that these two populations end up in  
9 different environments for portions of their lives supports  
10 dividing them into separate DPSs. MID may disagree with NMFS's  
11 conclusion, but the evidence MID has presented does not establish  
12 the agency acted unlawfully.

13 The issue of what causes the distinction between the life  
14 forms cannot be viewed in a vacuum. A court must review the  
15 agency's rationale holistically. See 5 U.S.C. § 706 (In deciding  
16 whether an agency has acted arbitrarily and/or capriciously, "the  
17 court shall review the whole record or those parts of it cited by  
18 a party, and due account shall be taken of the rule of  
19 prejudicial error."). Here, notably, the agency has other  
20 reasons to draw the lines it did, and no reasons to draw the  
21 lines in the manner suggested by MID. It is undisputed that the  
22 steelhead life form is indispensable to the species as a whole.  
23 It would have been arbitrary for the agency to ignore to that  
24 reality.

25  
26 (4) The Three Independent Scientific Reports.

27 The MID Plaintiffs point out that in 2005, NMFS received  
28 three independent scientific reports that it claimed "bear

1 directly" on the relationship between the anadromous and resident  
2 forms of *O. mykiss*. 70 Fed. Reg. 37,220. MID maintains that  
3 each of the reports concluded that, at least where the resident  
4 and anadromous forms of *O. mykiss* co-occur below long-standing  
5 natural barriers, there was no justification for distinguishing  
6 between the two forms. But, MID's citations to the three reports  
7 reveal more ambiguity than MID admits. For example, MID quotes  
8 page 14 of the Hey Panel Report, AR 1442, to assert: "there is  
9 little justification for putting the resident and anadromous life  
10 history types into different conservation units." In context,  
11 the Hey Panel was asked to evaluate the relationship between  
12 resident populations and related anadromous populations of *O.*  
13 *mykiss* under a series of hypothetical conditions. In evaluating  
14 resident and anadromous populations that inhabit the same  
15 spawning and rearing habitats, the Hey Panel Concluded:

16 For...populations in which anadromous and resident fish  
17 appear to be exchanging genes and in which some parents  
18 produce progeny exhibiting both life history paths, the  
19 two life history alternatives occur as a kind of  
20 polymorphism. In these cases there is little  
21 justification for putting the resident and anadromous  
22 life history types into different conservation units.  
23 The situation is more complex for 'pure' resident  
24 populations that have no genetic exchange with  
25 anadromous fish that sometimes occupy the same river,  
26 because in these cases it may be best to consider them  
27 as two separate wild populations. Regardless of how the  
28 conservation unit is defined, however, it is important  
to conserve the evolutionary potential of the  
anadromous component of the conservation unit because  
of the highly asymmetrical transition rate between the  
two life-history types.

25 *Id.* at 14 (emphasis added). These are hypothetical conditions  
26 that may not reflect reality.

27 MID next cites the RSRP Report, AR 1471 at 6-8, although it  
28 is unclear what conclusion it draws from this citation. The

1 conclusion of the entire cited section on "Anadromy and Residency  
2 as a Polymorphism<sup>36</sup>," is that a number of conditions would have to  
3 be met before resident and anadromous populations should be  
4 listed as part of the same ESU:

5 Taken together, [the] observations [described in this  
6 section] lead to the conclusion that resident and  
7 anadromous (or polymorphic) populations can be  
8 considered part of the same ESU if it can be  
9 demonstrated, through careful experimentation, that (i)  
10 resident fish still have the genetic capability to  
11 develop anadromy when faced with poor growth  
12 opportunity (see Thrower et al. 2004b), (ii) anadromous  
13 offspring of resident parents have the ability to  
14 complete seaward migration successfully and return for  
15 reproduction and (iii) that the fitness of anadromous  
16 fish derived from resident parents is sufficiently high  
17 to make a positive contribution to the overall  
18 viability of the population in a fluctuating  
19 environment, rather than acting as a demographic drain  
20 on the population.

21 AR 1471 at 8-9. MID identifies no experimental evidence in the  
22 record that suggests such conditions have been met in the case of  
23 Central Valley *O. mykiss*.

24 MID cites the ISAB Report, AR 1443, at pages 27, 31-32 [pdf.  
25 pages 39, 42-43].<sup>37</sup> Page 27 contains the following finding:

26 Although the genetic similarity of sympatric resident  
27 and anadromous life histories of rainbow trout does  
28 suggest that interbreeding occurs at some level, there  
is little information for specific populations on the

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29 <sup>36</sup> Polymorphism is not defined in the RSRP. The American  
30 Heritage Dictionary of the English Language (4th ed., Houton  
31 Mifflin Co., 2004), defines polymorphism as "[t]he occurrence of  
32 different forms, stages, or types in individual organisms or in  
33 organisms of the same species, independent of sexual variations."

34 <sup>37</sup> MID also points to internal agency communications, in  
35 which Scott Rumsey stated that these three reports "strongly  
36 confirm the approach taken in the May 17 recommended *O. mykiss*  
37 listing," (i.e., the listing that kept resident and migratory *O.*  
38 *mykiss* within the same DPS).

1 extent to which resident rainbow trout contribute to  
2 the abundance of the anadromous life history component.  
3 That is, evidence is not universally conclusive that  
4 resident populations play a key role in supporting the  
5 productivity or abundance of any steelhead population  
6 (or the reverse). On the other hand, the resident life  
7 histories may positively influence viability of an ESU  
8 that contains sympatric resident and anadromous forms  
9 by contributing to the overall abundance and diversity  
10 (because residency is an important life history  
11 strategy in some circumstances). The role of the  
12 resident life history in maintaining population  
13 connectivity and spatial structure is unclear, but it  
14 undoubtedly differs in timing and extent from the  
15 anadromous life history. As a result, the presence of  
16 both resident and anadromous life-history forms is  
17 critical for conserving the diversity of  
18 steelhead/rainbow trout populations and, therefore, the  
19 overall viability of ESUs.

20 Pages 30 and 31 contain, among other things, findings that  
21 undermine MID's assertions. The Report concludes that "it seems  
22 unlikely that a population of resident trout can consistently  
23 reestablish a steelhead population." The Report continues:

24 The only clear evidence of a resident population giving  
25 rise to an anadromous component is the example from  
26 Argentina (Pascual et al. 2001). In this case, however,  
27 the anadromous population that arose from the resident  
28 fish did not reestablish an extirpated population but  
expanded into an unoccupied niche. If shifts in life  
history are common in steelhead generated by resident  
parents, reestablishment of a self-sustaining anadromous  
component of a population or ESU could be very  
difficult. The work of Thrower et al. (2005) suggests  
that the capacity to express anadromy is retained in a  
population of resident trout for many generations. In  
this study, the smolting rate and marine survival of  
the smolts produced by the resident fish were lower  
than that of the offspring of steelhead. In addition,  
it remains uncertain whether or not the smolting and  
survival rates exhibited by the resident fish would be  
sufficient to enable reestablishment of a viable  
steelhead life history type. Based on the various  
empirical observations of *O. mykiss* life-history  
variations and on principles from theory, we conclude  
that once anadromy is lost from an ESU, resident  
populations are not likely to regenerate  
self-sustaining anadromous populations in the short or  
intermediate term, and that the ESU viability would be  
largely compromised.

1 AR 1443 at 30; see also AR 1471 at 5 ("We conclude that  
2 anadromous fish ... represent a complex life history that cannot  
3 be easily reconstituted from a purely resident stock."); AR 1442  
4 at 14 (noting only one case of anadromy developing from resident  
5 stock, and even then, there is question whether the resident  
6 stock was purely resident or not).

7 Here, the evidence goes both ways. The reports, indicate  
8 that in a hypothetical circumstance that may or may not reflect  
9 reality, there may be little genetic justification for separating  
10 the life history forms into separate conservation units.  
11 However, they also reiterate the importance of the steelhead and  
12 its contribution to the species as a whole. The DPS policy  
13 affords NMFS the flexibility to look beyond the narrow, genetic  
14 focus of the ESU Policy. The studies cited by MID, which all  
15 reflect the perspective of the ESU Policy, do not dictate the  
16 same outcome under the DPS Policy.

17 (5) The Role of Genetics and Reproductive  
18 Isolation in the DPS Policy.

19 It is undisputed that while NMFS was still applying the ESU  
20 policy, the agency concluded that "available data suggest that  
21 resident [*O. mykiss*] and [migratory *O. mykiss*] in the same area  
22 generally share a common gene pool." 69 Fed. Reg. at 33,113.  
23 MID maintains that the DPS Policy, as written and interpreted by  
24 NMFS and FWS, relies heavily on genetics and reproductive  
25 isolation as evidence of discreteness. (*MID II* Doc. 100 at 11.)  
26 MID argues that in light of the evidence of the genetic and  
27 reproductive relationship between resident and anadromous *O.*  
28 *mykiss*, NMFS's decision to exclude the resident form from the

1 Central Valley DPS under the DPS policy is arbitrary and  
2 capricious.

3 MID concedes that genetic evidence "is not required to  
4 determine if a population segment is discrete for purposes of the  
5 DPS Policy because in many instances genetic evidence is not  
6 available..." (MID II Doc. 100 at 12.) MID maintains, however,  
7 that "if such [genetic] evidence does exist, such as in this  
8 case, it trumps the more general phenotypic type differences that  
9 NMFS could rely upon in the absence of any genetic data." (Id.)  
10 The DPS Policy contains no language suggesting that genetic  
11 evidence should be given priority. Nor does any other formal  
12 policy document authored by either NMFS or FWS. Instead, to  
13 support this assertion, MID cites a December 2, 2005 Memorandum  
14 from the Assistant Director for Renewable Resources and Planning  
15 at the Bureau of Land Management to D. Allen at FWS "RE: BLM's  
16 Comments on the [NMFS] Proposed Rule on the Alternative Approach  
17 to Delineating Ten Evolutionary Significant Units (ESUs) of West  
18 Coast *Onchorhynchus mykiss*." AR 900 at 1. BLM's Assistant  
19 Director asserted in that memo that although "physical,  
20 physiological, ecological and behavioral factors can be  
21 considered secondarily when designating a DPS...the primary  
22 consideration in designating the DPS must be reproduction and the  
23 DPS must include that segment of the species that 'interbreeds  
24 when mature.'" Id. at 2.<sup>38</sup> This memo is not supported with any

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26 <sup>38</sup> MID also cites a December 5, 2005 letter sent by  
27 Preston A. Sleeper, Regional Environmental Officer with  
28 Interior's Office of the Secretary to G. Griffin at NMFS "RE:  
Endangered and Threatened Species: Request for Comment on

1 legal or scientific authority. Contrary to MID's assertions,  
2 this statement, made by one branch of Interior to another, cannot  
3 be construed as Interior's official position on the relative  
4 importance of genetic information under the DPS Policy.

5 The DPS Policy lists a number of factors, including  
6 genetics, but does not rank them. See, e.g., *Trout Unlimited v.*  
7 *Lohn*, 2007 WL 1795036 \*8, 65 ERC 1633 (W.D. Wash. June 13, 2007)  
8 at 8 (finding that the "[t]he most salient difference [between  
9 the ESU Policy and the DPS Policy] is the Joint DPS Policy's  
10 decreased focus on genetic differentiation, which results from  
11 measuring discreteness using 'physical, physiological,  
12 ecological, or behavioral factors' instead of simple reproductive  
13 isolation"). When promulgating the final DPS Policy, NMFS and  
14 FWS (the "Services") received a variety of comments addressing  
15 the role to be played by genetic information. 61 Fed. Reg at  
16 4,723. The Services clarified that "evidence of genetic  
17 distinctness or of the presence of genetically determined traits  
18 may be important in recognizing some DPS's" but that the DPS  
19 policy does not "always specifically require this kind of  
20 evidence in order for a DPS to be recognized." *Id.* This means  
21 that in analyzing discreteness the Services consider, but do not  
22 require, genetic evidence. *Id.* The DPS Policy states that a  
23 population may be markedly separate as a consequence of physical,  
24 physiological, ecological, or behavioral factors. *Id.* at 4,725.

25 \_\_\_\_\_  
26 Alternative Approach to Delineating 10 Evolutionarily Significant  
27 Units of West Coast *Oncorhynchus mykiss*" at page 3, but nothing  
28 on that page supports MID's assertion. AR 901

1 The policy does not express a preference for genetic data; it  
2 simply provides that "[q]uantitative measures of genetic or  
3 morphological discontinuity may provide evidence of this  
4 separation." *Id.*

5 Federal Defendants concede that MID would be correct if the  
6 genetic data showed complete reproductive isolation. (*MID II*  
7 Doc. 104 at 5.) However, Federal Defendants argue that the  
8 genetic data here shows some unknown level of reproductive  
9 exchange and is not definitive. *Id.* Low levels of reproductive  
10 exchange over evolutionary time scales may result in genetic  
11 similarity, yet important adaptive morphological, physical,  
12 behavioral, or physiological differences still may exist between  
13 the populations, rendering them markedly separate and therefore  
14 "discrete" under the DPS Policy. *Id.*

15 The record reflects that some scientists caution against  
16 relying solely on genetics to the exclusion of other forms of  
17 evidence because existing "genetic profiling technology examines  
18 only a limited portion of the genome, and there is ample evidence  
19 of important genetic differences existing between stocks that we  
20 cannot identify with current technology." AR 457 at 2 (comments  
21 of Idaho Department of Fish and Game). As the Hey Panel  
22 recognized when discussing hatchery and wild fish, genetic  
23 divergence "may not be detectable with randomly selected or  
24 neutral molecular genetic markers," which are the kind generally  
25 used in genetic profiling. AR 793 at 6. The Hey Panel cautioned  
26 that "[g]enetic relatedness is not a direct determinant of shared  
27 adaptive diversity or ecological exchangeability among  
28 populations.... Therefore evidence of phylogenetic relatedness

1 should not be considered a sufficient condition for supposing  
2 that two groups are ecologically or physiologically exchangeable  
3 or equivalent." *Id.* at 5-6. The panel concluded that while  
4 genetic data were a useful "starting point," "important  
5 biological processes can be overlooked if it is used to the  
6 exclusion of other aspects of the evolutionary process." *Id.* at  
7 7; see also AR 627-01 at 1 (U.S. Fish and Wildlife Service  
8 commenting that "[w]e believe that genetic, ecological and  
9 behavioral diversity should be evaluated in making ESU  
10 determinations") (emphasis added).

11 MID asserts that its interpretation of the importance of  
12 genetic evidence is confirmed by the Services' application of the  
13 DPS Policy to Central Valley *O. mykiss*. Specifically, in  
14 determining that the Central Valley *O. mykiss* population  
15 generally was discrete from other populations of West Coast *O.*  
16 *mykiss*, NMFS did not rely upon any alleged external/physical  
17 differences between *O. mykiss* populations in the Central Valley  
18 and those in Southern California. Instead, MID asserts that NMFS  
19 relied primarily on evidence of reproductive isolation and  
20 genetics. For example, NMFS concluded that evidence of  
21 reproductive isolation, including "available population genetic  
22 data," established that the various West Coast *O. mykiss*  
23 populations were sufficient to support an overall conclusion that  
24 such populations were reproductively isolated from one other  
25 which "satisf[ies] the 'discreteness' criterion of the DPS  
26 Policy." 70 Fed. Reg. at 67,131. NMFS also relied upon a report  
27 by Dr. Nielsen, AR 1465, to conclude that there was very little  
28 genetic variation between steelhead populations in the Sacramento

1 and San Joaquin river drainages and that there was no  
2 reproductive isolation between those two populations, 71 Fed.  
3 Reg. 841.

4 Contrary to MID's assertions, NMFS did not prioritize  
5 genetic information over all other types of data when it found  
6 that the steelhead populations in the Sacramento and San Joaquin  
7 river basins constituted a single DPS. Rather, NMFS relied on  
8 both genetic information and the fact that "ecological conditions  
9 ... are generally similar between the Sacramento and San Joaquin  
10 river basins." *Id.* at 841.

11 MID goes on to argue that NMFS and FWS have regularly relied  
12 on genetics and reproductive isolation to identify "discrete"  
13 populations under the DPS Policy, citing a long list of  
14 determinations of discreteness for other species. *E.g.*, 70 Fed.  
15 Reg. 69,903, 69,907 (Nov. 18, 2005) (relying upon genetics and  
16 reproductive isolation to determine discreteness in Southern  
17 resident killer whales); 71 Fed. Reg. 15,666, 15,669 (finding  
18 that "steelhead in Puget Sound are substantially reproductively  
19 isolated from other such groupings of West Coast *O. mykiss*".)  
20 But, of the many decisions listed, none indicates that the  
21 agencies relied on genetic data alone or discounted other  
22 information simply because they considered genetic data to be  
23 more important. Instead, genetic data was considered alongside  
24 other information. *See, e.g.*, 70 Fed. Reg. at 66,907 (detailing  
25 unique behavioral characteristics of Southern Resident Killer  
26 Whales and concluding "[b]ased on range, demography and behavior,  
27 as well as genetics, the BRT determined that Southern Residents  
28 meet the criterion for 'discreteness' under the DPS policy."); 65

1 Fed. Reg. 20 at 21-22 (Jan 3, 2000) (finding Sierra Nevada DPS of  
2 California Bighorn Sheep discrete based on both morphological  
3 factors, e.g., skull and horn size, and genetic data).<sup>39</sup>

4 MID's reference to the proposed listing of the Puget Sound  
5 steelhead DPS does not support its argument. Although NMFS found  
6 that Puget Sound steelhead are substantially reproductively  
7 isolated from "other such groupings of West Coast *O. mykiss*,"  
8 genetic data was not the final criteria for defining this DPS.  
9 Like CV steelhead here, NMFS found that there is likely  
10 interbreeding between the steelhead and resident fish and that  
11 they were genetically similar. However, residents were not  
12 included in the DPS, as NMFS explained:

13 The discreteness criterion of the DPS Policy, however,  
14 does not rely on reproductive isolation but on the  
15 marked separation of population groups as a consequence  
16 of biological factors. Despite the apparent  
17 reproductive exchange between resident and anadromous  
*O. mykiss*, the two life forms remain markedly separated  
physically, physiologically, ecologically, and  
behaviorally. Steelhead differ from resident rainbow

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18 <sup>39</sup> Some of the other examples cited by Plaintiffs are  
19 simply inapposite. For example, Plaintiffs point to the weight  
20 given to genetic information, as opposed to other factors, in  
21 FWS' delineation of two DPSs of Colombian white tail deer. 68  
22 Fed. Reg. 43,647, 43,649 (July 24, 2003). However, the two DPSs  
23 of deer in that case are geographically isolated from each other,  
24 resulting in genetic difference between the populations.  
25 Similarly, although FWS considered evidence that the Columbia  
26 Basin DPS of pygmy rabbit is genetically and ecologically  
27 discrete, the primary data relied upon in delineating the DPS is  
28 that the population has been physically isolated from other  
populations for "several millennia." 68 Fed. Reg. 10,388, 10,  
395 (March 5, 2003). In contrast, the steelhead and rainbow  
trout populations here considered are not geographically or  
reproductively isolated, so NMFS weighed genetic and reproductive  
exchange data against other factors which counsel in favor of a  
steelhead-only DPS.

1 trout physically in adult size and fecundity,  
2 physiologically by undergoing smoltification,  
3 ecologically in their preferred prey and principal  
4 predators, and behaviorally in their migratory  
5 strategy. We recognize that there may be some overlap  
6 between co-occurring steelhead and rainbow trout in  
7 physical, ecological, behavioral and physiological  
8 traits; however, this apparent overlap does not prevent  
9 the two life forms from satisfying the discreteness  
10 criterion under the DPS policy. While *O. mykiss* display  
11 a continuum of life-history and morphological traits,  
12 at the end of that continuum, steelhead are markedly  
13 separate in their extreme marine migration (leading to,  
14 or resulting from, marked separation in physical,  
15 physiological, and ecological factors). As we stated in  
16 adopting the DPS policy, "the standard adopted [for  
17 discreteness] does not require absolute separation of a  
18 DPS from other members of its species, because this can  
19 rarely be demonstrated in nature for any population of  
20 organisms....[T]he standard adopted allows for some  
21 limited interchange among population segments  
22 considered to be discrete, so that loss of an  
23 interstitial population could well have consequences  
24 for gene flow and demographic stability of a species as  
25 a whole." Given the marked separation between the  
26 anadromous and resident life-history forms in physical,  
27 physiological, ecological, and behavioral factors, we  
28 conclude that the anadromous steelhead populations are  
discrete from the resident rainbow trout populations  
within the DPS under consideration (see previous  
determination of West Coast steelhead DPSs for further  
elaboration of the discreteness between the anadromous  
and resident life-history forms, 71 FR 834; January 5,  
2006).

71 Fed. Reg. at 15,669 (citations omitted).

MID next claims that NMFS acted unlawfully by, on the one  
hand using reproductive isolation and genetic information to  
establish the outer geographic boundaries of the population under  
consideration, while on the other hand examining other (i.e.,  
non-genetic) information to determine whether steelhead meet the  
"marked separation" test of the DPS Policy. (MID II Doc. 100 at  
12-13, 14-15.) This is incorrect. First, NMFS did not rely  
exclusively upon genetic information to determine the boundaries  
of the Central Valley Steelhead DPS. Rather, reproductive

1 isolation was inferred from information about the ecology,  
2 physiology, and behavior of the population groups. See 71 Fed.  
3 Reg. at 848 ("Reproductive isolation was generally not  
4 conclusively demonstrated with genetic data but rather inferred  
5 from information about the ecology, physiology and behavior of  
6 the population groups."). In the November 2005 proposal to apply  
7 the DPS Policy to *O. mykiss*, NMFS specifically explained that the  
8 genetic, ecological, and behavioral data used to define the ESUs  
9 were sufficient to satisfy the criteria for defining a DPS under  
10 the DPS Policy:

11 The discreteness of the 10 West Coast steelhead DPSs  
12 under consideration relative to other population groups  
13 of the *O. mykiss* species is well documented by the  
14 previous NMFS status reviews that delineated steelhead  
15 ESUs. These reviews concluded that the ESUs  
16 respectively are substantially reproductively isolated  
17 based on established phylogenetic groupings, available  
18 population genetic data, differences in migration and  
19 spawn timing, patterns in the duration of freshwater  
20 and marine residence, and geographic separation of  
21 populations. These traits that established the  
22 substantial reproductive isolation of the respective  
23 steelhead ESUs under the ESU Policy also satisfy the  
24 "discreteness" criterion of the DPS Policy.

25 70 Fed. Reg. at 67,131 (citations omitted) (emphasis added).

26 Consistent with the DPS Policy, NMFS did not rely on  
27 reproductive isolation alone to determine "discreteness" in  
28 defining the DPSs. Rather, it focuses on the marked separation  
of population groups as a consequence of biological factors. See  
71 Fed. Reg. at 838. NMFS lawfully utilized genetic and  
reproductive exchange information, but did not rely on it  
exclusively; NMFS also considered physical, physiological,  
ecological, and behavioral information to delineate discrete  
groups.

1                   b.    Significance.

2           NMFS concluded that the steelhead-only populations met the  
3 "significance" factor. NMFS started with the proposition that  
4 the ESUs defined prior to the policy change, which were made up  
5 of resident and migratory fish, were found "significant" at that  
6 time, because they occupied "unique ecological regions." NMFS  
7 determined that "occupation of a unique ecological region  
8 satisfies the DPS criterion for significance." What NMFS did not  
9 discuss in the final listing determination was the significance  
10 of the all-migratory DPSs as related to an ESU that included both  
11 migratory and resident *O. mykiss*. This issue was discussed in  
12 the Request for Comment seeking input on NMFS's proposal to apply  
13 the DPS policy:

14           The significance of the 10 West Coast steelhead DPSs  
15 under consideration to the *O. mykiss* species is well  
16 documented by the previous NMFS status reviews that  
17 delineated steelhead ESUs (e.g., NMFS, 1997; Busby et  
18 al., 1996, 1997, 1999; Adams, 2000; Good et al., 2005).  
19 These reviews concluded that the steelhead population  
20 groups respectively represent an important component in  
21 the evolutionary legacy of the species based on unique  
22 or unusual life-history, genetic, and ecological  
23 characteristics and occupied ecoregion(s) (i.e., unique  
24 geographic regions defined by climatic, geologic,  
25 hydrologic, and floral composition characteristics;  
26 Donley et al., 1979; Jackson, 1993; Omernik, 1987).  
27 These traits that established the evolutionary  
28 importance of the respective steelhead population  
groups under the ESU Policy also satisfy the  
"significance" criterion of the DPS Policy. These  
proposed steelhead DPSs, if lost, would represent: the  
loss of unusual or unique habitats and ecosystems  
occupied by the species; a significant gap in the  
species' range; and/or a significant loss to the  
ecological, life-history, and genetic diversity of the  
taxon. We may conclude, based on our previous ESU  
determinations, that the Southern California,  
South-Central California, Central California Coast,  
California Central Valley, Northern California, Upper  
Willamette River, Lower Columbia River, Middle Columbia  
River, Upper Columbia River, and Snake River Basin  
steelhead DPSs under consideration satisfy the

1 "significance" criterion under the DPS Policy.  
2 70 Fed. Reg. at 67,132. Plaintiffs do not challenge the merits  
3 of the significance finding or any of the scientific data that  
4 supports it.

5 NMFS properly applied the DPS Policy to the challenged  
6 listings using the best available science. The resulting  
7 exclusion of resident *O. mykiss* from these DPSs was not unlawful.  
8 Both the Grange and MID Plaintiffs' motions for summary judgment  
9 on this issue are DENIED. Defendant and Defendant-Intervenor's  
10 Cross-Motions for Summary Judgment are GRANTED.

11

12 D. MID's Argument Concerning Distinctions Drawn Between  
13 Hatchery-Born and Naturally-Spawned *O. mykiss*.

14 The Central Valley DPS includes all naturally-spawned  
15 steelhead in the Sacramento and San Joaquin Rivers and their  
16 tributaries, 71 Fed. Reg. 849, as well as hatchery-spawned  
17 steelhead from the Coleman National Fish Hatchery and the Feather  
18 River Hatchery, *id.*, but excludes all naturally-spawned or  
19 hatchery-born resident trout in the Sacramento and San Joaquin  
20 Rivers and their tributaries, *id.*, and hatchery-born steelhead  
21 from the Nimbus and Mokelumne River Fish Hatcheries (located on  
22 the lower American and Mokelumne Rivers), 69 Fed. Reg. at 33,118.

23

24 MID claims that the Central Valley DPS's treatment of  
25 hatchery stocks is fatally flawed, because, despite NMFS's  
26 refusal to "adopt genetic distinctness as the test of  
27 discreteness" in determining that only anadromous, and not  
28 resident *O. mykiss* should be listed based on non-genetic factors,

1 71 Fed. Reg. at 838, NMFS nevertheless relied exclusively on  
2 genetic information to determine that only two of the four  
3 hatchery stocks within the Central Valley should be included in  
4 the DPS, *id.* at 849, pursuant to the HLP, *see id.* at 848; *see*  
5 *also* 70 Fed. Reg. 37,204.

6 The HLP (adopted several months before NMFS decided to  
7 switch from the ESU policy to the DPS policy to evaluate the *O.*  
8 *mykiss* listing) promulgated a policy to include hatchery stocks  
9 in an ESU "if they exhibit a level of genetic divergence relative  
10 to local natural populations that is no more than what would be  
11 expected between closely related populations within the ESU."  
12 *Id.* at 37,206. It is undisputed that the HLP relies on genetic  
13 distinctness to address concerns about genetic dilution of  
14 natural populations. *Id.* at 37,208. MID argues that "the  
15 scientific evidence in the record illustrates that the use of the  
16 genetically-based [HLP] is actually inconsistent with NMFS'  
17 interpretation of the DPS policy in this listing." (*MID II Doc.*  
18 95 at 46.)

19 The HLP directs NMFS to include hatchery stocks with a  
20 level of genetic divergence relative to the local natural  
21 population(s) that is no more than what occurs within the ESU.  
22 70 Fed. Reg. at 37,215. The June 2004 Central Valley Steelhead  
23 Proposed ESU included two steelhead hatcheries, the Coleman  
24 National Fish Hatchery and the Feather River Hatchery, and  
25 excluded the Nimbus and Mokelumne River hatcheries.<sup>40</sup> After  
26

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27 <sup>40</sup> MID's comments to NMFS state that in the proposed  
28 listing, NMFS correctly distinguished between out-of-ESU  
broodstock and ESU broodstock. AR 1265 at 5.

1 proposing to use the DPS Policy to define the listable  
2 populations in November 2005, NMFS needed to evaluate whether the  
3 hatcheries previously determined to be part of the proposed ESU  
4 would also qualify as part of the DPS. NMFS explained in the  
5 final rule:

6 We conclude that the considerations that informed the  
7 Hatchery Listing Policy for ESUs are equally valid for  
8 the steelhead DPSs we are now delineating under the DPS  
9 policy. The Hatchery Listing Policy is based in part on  
10 the recognition that important components of the  
11 evolutionary legacy of West Coast salmon and steelhead  
12 can be found in hatchery stocks, and that many hatchery  
13 stocks are derived from, and not significantly diverged  
14 from, the naturally spawning stocks. We developed a  
15 test for including hatchery stocks in the ESU based  
16 upon a consideration of "whether a particular hatchery  
17 stock reflects an ESU's 'reproductive isolation' and  
18 'evolutionary legacy'" (70 FR 37204, at 37208; June 28,  
19 2005). We believe those tests are equally applicable to  
20 determining whether hatchery stocks reflect the  
21 discreteness and significance of steelhead DPSs.  
22 Consistent with the June 14, 2004, proposed listing  
23 determinations (69 FR 33102) and the recent final  
24 listing determinations for 16 West Coast salmon ESUs  
25 (70 FR 37160; June 28, 2005), hatchery stocks are  
26 included in a steelhead DPS if they are no more than  
27 moderately diverged from local, native populations in  
28 the watershed(s) in which they are released. The level  
of divergence for hatchery programs associated with the  
steelhead DPSs is reviewed in the 2003 Salmon and  
Steelhead Hatchery Assessment Group Report (NMFS, 2003)  
and the 2004 Salmonid Hatchery Assessment and Inventory  
Report (NMFS, 2004b). The DPS membership of hatchery  
programs included in the steelhead DPS descriptions  
below and summarized in Table 1 are unchanged from that  
proposed for the 10 *O. mykiss* ESUs (69 FR 33102; June  
14, 2004).

71 Fed. Reg. 848.

MID argues that there are four fatal internal contradictions  
in the final listing decision.

1. MID's Argument That NMFS Unlawfully Used Genetic Discreteness as the Sole Reason to Exclude Nimbus and Mokelumne Hatchery-Born Steelhead, but Then Ignored the Close Genetic Relationship of Co-Occurring Resident and Anadromous *O. Mykiss* in

1                    Deciding to Exclude One but Not the Other from the  
2                    Listing.

3                    MID claims that NMFS' listing is arbitrary because it used  
4 genetics as the "sole reason" to exclude Nimbus and Mokelumne  
5 hatchery stocks from the DPS but ignored the genetic similarities  
6 when excluding resident rainbow trout from the DPS. Federal  
7 Defendants reply that NMFS's actions are consistent with the DPS  
8 Policy.

9                    The DPS Policy does not focus exclusively on reproductive  
10 isolation in evaluating "marked separation." Nevertheless NMFS  
11 and FWS concluded that "[q]uantitative measures of genetic or  
12 morphological discontinuity may provide evidence of this  
13 separation." 61 Fed. Reg 4,725. When evaluating the hatchery  
14 stocks for potential inclusion in the Central Valley steelhead  
15 DPS, NMFS found that the Nimbus and Mokelumne stocks were derived  
16 from an out-of-DPS stock of coastal steelhead from the Eel River.  
17 AR 2335 at 295-298. NMFS determined that the stocks from these  
18 hatcheries demonstrated marked separation in genetic  
19 characteristics as well as behavioral characteristics such as  
20 early-run timing. AR 1441 at 333.

21                    MID complains that Federal Defendants' opening brief is the  
22 "first time" that the government claimed its treatment of  
23 hatchery stocks was not just based on genetics, but also on other  
24 behavioral characteristics, such as run timing. MID further  
25 asserts that this "new notion" regarding "behavioral  
26 characteristics" is not mentioned in the listing decision. and  
27 that:

28                    NMFS has failed to point to anything in the  
                     administrative record to illustrate that the run timing

1 of the Nimbus and Mokelumne River hatchery fish differs  
2 from the run timing of any other listed *O. mykiss* in  
3 the American and Mokelumne Rivers, or in the Calaveras  
4 River and Putah Creek. NMFS has also failed to point  
5 to any other evidence of behavioral or physical  
6 characteristic differences between these hatchery  
7 stocks and any naturally-spawned steelhead in these  
8 rivers. In fact, the document relied on by NMFS notes  
9 that there is considerable debate whether or not there  
10 ever was an indigenous steelhead population in the  
11 Mokelumne River prior to the planting of hatchery fish.  
12 (AR 2335 at 296.)

13 (MID II Doc. 100 at 28.) MID's evaluation of the record is  
14 inaccurate. Federal Defendants point to several places in the  
15 record where the relationships between hatchery stocks and the  
16 local, natural populations were evaluated. For example, the 2003  
17 SSHAG Report concluded that "[r]un timing would indicate that the  
18 current Nimbus stock is Eel River derived," AR 2335 at 295, and  
19 that the Mokelumne hatchery relied on external sources of eggs,  
20 primarily from the Nimbus hatchery, *id.* at 297. The 2005 BRT  
21 Report noted that these two hatchery stocks are not included in  
22 the conservation unit due to broodstock source and genetic, as  
23 well as behavioral, and morphological, similarity to the Eel  
24 river stocks. AR 1441 at 333. Finally, the issue is mentioned,  
25 although not extensively discussed, in the final listing:

26 We acknowledge that our review of hatchery programs  
27 (NMFS, 2003, 2004b, 2004c) was conducted in the context  
28 of the ESU policy; however, we disagree that our  
findings and the information we evaluated do not inform  
our considerations of discreteness under the DPS  
policy. In evaluating the "reproductive isolation" of  
individual hatchery stocks in the context of the ESU  
policy, we lacked program-specific genetic data. As  
reasonable indicators of reproductive isolation and  
genetic similarity we relied on information including  
hatchery broodstock origin, hatchery management  
practices (e.g., the timing and location of release),  
and hatchery stock life-history characteristics (e.g.,  
spawn timing, the size and age at maturity) relative to  
the local natural populations. We conclude that this  
information directly informs evaluations of marked

1 separation as a consequence of physical, physiological,  
2 ecological, or behavioral factors.

3 71 Fed. Reg. at 840-41 (emphasis added).

4 NMFS acknowledges that in previously evaluating the  
5 "reproductive isolation" of individual hatchery stocks in the  
6 context of the ESU policy, NMFS sometimes lacked program-specific  
7 genetic data and therefore relied upon information including  
8 hatchery broodstock origin, hatchery management practices (e.g.,  
9 the timing and location of release), and hatchery stock  
10 life-history characteristics (e.g., spawn timing, the size, and  
11 age at maturity) relative to the local natural populations, as  
12 reasonable indicators of reproductive isolation and genetic  
13 similarity. *Id.* at 9. Accordingly, when evaluating these same  
14 stocks for "marked separation" under the DPS Policy, NMFS  
15 concluded that the previously referenced information directly  
16 informs evaluations of marked separation. NMFS' evaluation of  
17 resident rainbow trout was consistent with its evaluation of the  
18 hatchery stocks, as both focused on "marked separation" under the  
19 DPS Policy. NMFS lawfully used genetic information, but not  
20 exclusively, to evaluate whether hatcheries should be included in  
21 the DPS.

22 2. MID's Argument That NMFS Acted Unlawfully by  
23 Excluding the Nimbus and Mokelumne River Hatchery-  
24 Spawned Steelhead Based on Genetics, While  
25 Including in the DPS Their Naturally-Spawned  
26 Progeny.

27 MID argues that NMFS cannot rationally exclude certain  
28 hatchery fish based on genetic dissimilarities, but then include

1 their naturally-spawned progeny by default.<sup>41</sup> MID complains that  
2 this approach arbitrarily protects the naturally-spawned progeny  
3 of the excluded hatchery fish. Federal Defendants first assert  
4 that this argument fails because it assumes without any record  
5 support that a significant amount of hatchery fish spawn  
6 naturally in the river. The only available record evidence  
7 actually suggests that it is unlikely that hatchery fish spawn  
8 naturally in areas below the hatcheries because there is very  
9 little spawning area there. AR 2335 at 295, 297.

10 MID raises the legitimate question why, if this habitat is  
11 insufficient for natural spawning, NMFS included these river  
12 reaches in the Central Valley *O. mykiss* critical habitat? See 70  
13 FR 52,604-06, 52,616, 52,621. This suggests that NMFS's  
14 conclusion that few hatchery fish spawn naturally in the river is  
15 not to be believed. But, the record is devoid of any evidence  
16 indicating the frequency with which hatchery fish spawn in the  
17 river, or if they do so at all. In the absence of such evidence,  
18 MID points out that it is undisputed that large numbers of  
19 hatchery fish do return to the lower American and lower Mokelumne  
20 Rivers and that the lower American River is dominated by Nimbus  
21 hatchery stock (90% of returning adults), while the lower  
22 Mokelumne River is dominated by Mokelumne River hatchery stock  
23 (88% of returning adults). AR 1265 at 5; AR 1262 at 1. It is

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24  
25  
26 <sup>41</sup> Federal Defendants note that this contention suffers  
27 from the same problem as the first MID argument, in that hatchery  
28 stocks were not included or excluded based on genetic factors  
alone, but rather on the basis of marked separation as a  
consequence of multiple factors.

1 also undisputed that these returning hatchery fish can migrate  
2 upstream no further than the hatcheries from which they were  
3 released, because these two hatcheries represent the  
4 end-of-the-line on each river -- they are located at the base of  
5 the impassible Nimbus Dam on the American River and Camanche Dam  
6 on the Mokelumne River. See AR 1265 at 16; see also Location  
7 Maps attached hereto as Exhibits A and B.<sup>42</sup> If there is any  
8 natural spawning to be done, it must occur between the confluence  
9 and the impassible dam, on each river.<sup>43</sup> However, the record does  
10 not reveal whether hatchery fish spawn in the reaches of the  
11 rivers below the hatcheries.

12 Critically, regardless of the number and frequency of  
13 hatchery fish spawning alongside wild steelhead on the American  
14 and Mokelumne Rivers, as a practical matter, NMFS has no choice  
15 but to consider the naturally-spawned progeny of the hatchery  
16 fish to be part of the protected population. As Environmental

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17  
18 <sup>42</sup> MID's request for judicial notice of the geographic  
19 proximity of the two hatcheries to the two dams, is GRANTED.  
20 This is a matter not subject to reasonable dispute that is  
21 "capable of accurate and ready determination by resort to sources  
22 whose accuracy cannot reasonably be questioned" under Federal  
23 Rule of Evidence 201.

24 <sup>43</sup> NMFS indicates that these hatcheries are considered  
25 "terminal" hatcheries, meaning that returning hatchery fish are  
26 collected at a weir or other facility, where they are used for  
27 broodstock or are terminated. (*MID II* Doc. 95 at 42 n.12.) NMFS  
28 also states that "hatchery fish at 'terminal hatcheries' are not  
allowed to pass beyond the hatchery and spawn naturally." (*Id.*)  
NMFS does not cite anything from the record in support of these  
statements. Moreover, as MID points out, the fact that hatchery  
fish are not allowed to pass beyond the hatchery and to upstream  
of the hatchery is irrelevant to the question of whether they  
spawn before they get to the terminal hatchery.

1 Intervenor note "[t]here are wild steelhead residing in the  
2 rivers where these two hatcheries are located, and they need ESA  
3 protection." While hatchery salmon have a clipped adipose fin to  
4 facilitate their identification, AR 1265 at 5, n.5, the progeny  
5 of hatchery fish that stray and spawn naturally would be  
6 indistinguishable from fish with wild parents. In the absence of  
7 any record evidence that NMFS could have, from a practical  
8 standpoint, formulated the rule differently, it was not  
9 "arbitrary" for NMFS to extend ESA protections to the progeny of  
10 excluded hatchery fish.

11  
12 3. NMFS's Exclusion of Nimbus and Mokelumne River  
13 Hatchery-spawned Steelhead While Including  
14 Genetically Similar Naturally-Spawned Populations  
on the Lower American River, the Mokelumne River,  
Putah Creek, and the Calaveras River.

15 MID next argues that NMFS acted unlawfully by excluding from  
16 the DPS, Nimbus and Mokelumne River hatchery-spawned steelhead  
17 based on genetics, while including the naturally-spawned  
18 populations in the lower American River, the Mokelumne River,  
19 Putah Creek, and the Calaveras River, which MID claims are  
20 genetically dominated by these hatchery stocks and are  
21 genetically more similar to the excluded Nimbus hatchery stocks  
22 than they are to the remainder of the natural populations in the  
23 DPS. MID's argument rests upon its reading of a tree diagram in  
24 a 2003 genetic study of Central Valley *O. mykiss* by Dr. Nielsen  
25 and others. See AR 1465 at 29, Figure 4. However, the authors  
26 of the study specifically caution against the use MID has made of  
27 the data:

28 Other population genetic associations depicted by these  
analyses are more difficult to interpret...the

1 associations depicted among Calaveras River, Putah  
2 Creek, lower American River, and Nimbus Hatchery are  
3 curious and difficult to explain...Without a better  
4 understanding of the history of these populations and a  
clearer depiction of the genetic signature on a finer  
scale, we cannot speculate on any meaningful biological  
interpretation of these associations.

5 AR 1465 at 37.<sup>44</sup>

6 MID points to the Nielsen study, arguing that, despite the  
7 fact that its authors "did not want to make any blanket  
8 conclusory statements," the findings illustrate that the lower  
9 American River, the Mokelumne River Hatchery, and the Calaveras  
10 River stocks are all connected genetically to the Nimbus  
11 Hatchery, and more so than to other natural populations in the  
12 Central Valley. See AR 1465. Federal Defendants advance a  
13 different interpretation of the Nielsen study:

14 While the N[ie]lsen study may, at best, indicate some  
15 level of genetic relatedness to the out-of-DPS stock,  
16 it does not demonstrate that these natural populations  
17 are genetically isolated and thus 'discrete' from the  
18 other members of the CV steelhead DPS. Rather, the  
19 genetic data indicates that these natural populations  
20 remain related to other natural populations in the  
Central Valley. Furthermore, there is no evidence  
demonstrating that these natural populations are  
"markedly separated" from other CV natural populations  
within the meaning of the DPS Policy. The best  
available scientific information does not demonstrate

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21 <sup>44</sup> MID complains that NMFS "conveniently ignores its  
22 mandate to collect and use the best scientific and commercial  
23 data available," citing 16 U.S.C. § 1533(b)(1)(A). But, the best  
24 available data requirement simply "prohibits [an agency] from  
25 disregarding available scientific evidence that is in some way  
26 better than the evidence [it] relies on." *Southwest Ctr. for*  
27 *Biological Diversity v. Babbitt*, 215 F.3d 58, 60 (D.C. Cir. 2000)  
28 (citation omitted). An agency is not obliged to conduct  
independent studies to improve upon the best available science or  
to resolve inconclusive aspects of the scientific information.  
*Id.* at 61. MID in fact concedes that it submitted 180 pages of  
information to NMFS, including the Nielsen study.

1 that the Calaveras and American River and Putah Creek  
2 populations are "discrete" from other natural  
populations in this DPS.

3 (*MID II* Doc. 104 at 23.)

4 MID admits that NMFS relied upon the Nielsen study for other  
5 purposes in the listing decision. (*MID II* Doc. 100 at 12.) NMFS  
6 did not fail to consider the "best available data." Rather MID  
7 disagrees with NMFS's scientific assessment and interpretation of  
8 that data. A court must defer to an agency's reasonable factual  
9 determinations, when they are based on the agency's scientific or  
10 technical expertise. *Marsh v. Oregon Natural Res. Council*, 490  
11 U.S. at 377; *United States v. Alpine Land & Reservoir Co.*, 887  
12 F.2d 207, 213 (9th Cir. 1989) ("[d]eference to an agency's  
13 technical expertise and experience is particularly warranted with  
14 respect to questions involving ... scientific matters").

15 MID's motion for summary judgment on these issues is DENIED.  
16 Federal Defendants' and Defendant-Intervenors' motion is GRANTED.

17  
18 E. Grange's Challenge to NMFS's Selective Application of  
19 ESA § 4(d) Protections to Naturally Spawning *O. mykiss*  
20 and Only Those Hatchery *O. mykiss* Which Have an Intact  
Adipose Fins.

21 Grange also challenges the portion of the listing  
22 determination that sets forth a protective regulation,  
23 promulgated by NMFS pursuant to ESA § 4(d), applicable to three  
24 challenged DPSs designated as threatened.<sup>45</sup> The 4(d) regulation

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25  
26 <sup>45</sup> The three DPSs at issue here are the Central California  
27 Coast, California Central Valley, and Northern California  
28 steelhead. The Southern California DPS is listed as endangered  
and accordingly is not subject to the challenged § 4(d)  
regulation. The South-Central California Coast DPS does not

1 extends take protections to only the "naturally-spawned" portion  
2 of the listed populations and those members of the hatchery-born  
3 population with an intact adipose fin. Those hatchery-born fish  
4 that are deemed "surplus to the conservation needs of the  
5 species," will have their adipose fins clipped as a mark for  
6 potential harvesters. Grange maintains that allowing the take of  
7 hatchery-born *O. mykiss* which have been deemed "surplus to the  
8 conservation needs of the species" violates the ESA.

9 Section 9 of the ESA makes it unlawful for any person to  
10 "take" an endangered species, without a permit. 16 U.S.C. §§  
11 1538(a)(1), 1539. Threatened species are not automatically  
12 subject to section 9's protections. Rather, for threatened  
13 species, the ESA provides the agency with more flexibility:

14 Whenever any species is listed as a threatened  
15 species...the Secretary shall issue such regulations as  
16 he deems necessary and advisable to provide for the  
17 conservation of such species. The Secretary may by  
18 regulation prohibit with respect to any threatened  
19 species any act prohibited under [section 9 (take  
20 prohibition)], in the case of fish or wildlife....

21 § 1533.

22 The ESA defines "conservation," in part, as "the use of all  
23 methods and procedures which are necessary to bring any  
24 endangered species or threatened species to the point at which  
25 the measures provided pursuant to this chapter are no longer  
26 necessary." § 1532(3). The definition of conservation also  
27 explains that "[s]uch methods and procedures include, but are not  
28 limited to, all activities associated with scientific resources

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include hatchery fish, so the arguments Grange makes against the  
§ 4(d) regulation are irrelevant to that DPS.

1 management such as research, census, law enforcement, habitat  
2 acquisition and maintenance, propagation, live trapping, and  
3 transplantation, and, in the extraordinary case where population  
4 pressures within a given ecosystem cannot be otherwise relieved,  
5 may include regulated taking." *Id.* (emphasis added). Grange  
6 argues that this "extraordinary case" language operates as a  
7 prohibition against permitting the take of any listed species  
8 except in extraordinary cases. (*Grange Doc. 1 at ¶¶ 103-108.*)  
9 Grange's contention is premature. The option of permitting a  
10 "regulated taking," assumes that take protections have been  
11 previously extended to the population. Section 4(d) gives NMFS  
12 the discretion to extend or not extend take protections as  
13 "deem[ed] necessary for the conservation of such species." An  
14 agency cannot permit a "regulated taking" of species or DPSs that  
15 are not protected by the take prohibition.<sup>46</sup>

16 Here, NMFS concluded that it is advisable to prohibit take  
17

---

18 <sup>46</sup> Even if the § 4(d) regulation were viewed through the  
19 lens of a "regulatory taking," courts have permitted regulatory  
20 takings where internal population pressures may outpace the  
21 capacity of the ecosystem to support those populations. See  
22 *Christy v. Hodel*, 857 F.2d 1324, 1333 (9th Cir. 1988) (permitting  
23 the regulated taking of threatened grizzly bears through  
24 carefully regulated sport hunting where population pressures  
25 could not be relieved in any other way). Here, the science  
26 suggests that hatchery fish threaten the continued viability of  
27 steelhead DPSs because they compete with wild fish and diminish  
28 the fitness of the DPSs. AR 583 at 5-8; AR 793 at 12-13.  
Although it is not entirely clear if this science justifies the  
finding that this is an "extraordinary case" that warrants a  
regulatory taking, Grange points to no contrary scientific  
evidence. It is not necessary to decide this issue here,  
however, because take protections were never extended to the  
hatchery steelhead released with a clipped adipose fin.

1 of wild steelhead in order to promote the recovery of natural  
2 populations, but declined to extend such protection to all  
3 hatchery fish, in part because hatchery fish can reduce the  
4 viability of wild populations by diminishing the fitness of the  
5 wild fish. AR 583 at 5. Therefore, NMFS authorized the take of  
6 hatchery fish which have had their adipose fin clipped.<sup>47</sup> In  
7 response to NMFS's bases for permitting the take of marked  
8 hatchery *O. mykiss*, Grange argues that "to the extent NMFS  
9 determined hatchery *O. mykiss* should be included in the same DPSs  
10 and listed with 'naturally spawning' *O. mykiss*, it is arbitrary  
11 to subsequently determine that those same hatchery *O. mykiss*  
12 might harm naturally-spawned *O. mykiss*." (Grange Doc. 53 at 13.)  
13 But, the science indicates otherwise.

14 Not all hatchery stocks considered to be part of listed  
15 ESUs are of equal value for use in conservation and  
16 recovery. Certain ESU hatchery stocks may comprise a  
17 substantial portion of the genetic diversity remaining  
18 in a threatened ESU, and thus are essential assets for  
19 ongoing and future recovery efforts. If released with  
20 adipose fins intact, hatchery fish in these populations  
21 would be afforded protections under the amended 4(d)  
22 protective regulations. NMFS, however, may need to  
23 approve the take of listed hatchery stocks to manage  
24 the number of naturally spawning hatchery fish to limit  
25 potential adverse effects on the local natural  
26 population(s). Other hatchery stocks, although  
27 considered to be part of a threatened ESU, may be of  
28 limited or uncertain conservation value at the present  
time. Artificial propagation programs producing  
within-ESU hatchery populations could release  
adipose-fin-clipped fish, such that protections under

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<sup>47</sup> Grange asserts that NMFS's use of the "adipose fin" as  
a distinguishing marker is "arbitrary." An adipose fin is a  
small fin on a steelhead's back, close to its tail. Once clipped  
off, it does not grow back and can therefore be used as a marking  
device. This is not an arbitrary distinction, as it is an  
identification means rationally related to identifying a category  
of steelhead. Whether it is a lawful one is a separate question.

1 4(d) would not apply, and these hatchery fish could  
2 fulfill other purposes (e.g., fulfilling Federal trust  
3 and tribal treaty obligations) while preserving all  
4 future recovery options. If it is later determined  
5 through ongoing recovery planning efforts that these  
6 hatchery stocks are essential for recovery, the  
7 relevant hatchery program(s) could discontinue removal  
8 of the adipose fin from all or a sufficient portion of  
9 its production as necessary to meet recovery needs.

6 70 Fed. Reg. at 37,195. Grange points to no factual nor legal  
7 arguments that undermine this reasoning.

8 Grange next argues that nothing in the ESA permits NMFS to  
9 "pick and chose between members of the same species based on  
10 whether NMFS considers them to be 'surplus to the conservation  
11 and recovery needs' of the population it has defined as  
12 'threatened with extinction.'" (Grange Doc. 53 at 11-12.)

13 Neither party cites any cases in which such "picking and  
14 choosing" took place under a § 4(d) regulation. The only  
15 arguably relevant case cited by Grange is *Carson-Truckee Water*  
16 *Conservancy District v. Watt*, 549 F. Supp. 704, 710 (D. Nev.  
17 1982), advanced for the general proposition that NMFS "must bring  
18 [protected] species back from the brink so that they may be  
19 removed from the protective class, and [NMFS] must use all  
20 methods necessary to do so." Although *Carson-Truckee* does so  
21 hold, the language was included in a section discussing whether  
22 the needs of endangered and threatened fish must be given  
23 priority over other uses of water from a particular reservoir.  
24 *Carson-Truckee* does not discuss § 4(d) at all.

25 Defendants and Defendant-Intervenors rely on an unpublished  
26 case which discuss § 4(d), *Washington Environmental Council v.*  
27 *NMFS*, 2002 WL 511479, \*7-8 (W.D. Wash, Feb. 27, 2002), in which a  
28 coalition of environmental and fishery protection groups

1 challenged two exemptions carved out of a take prohibition  
2 applicable to fifteen salmon ESUs. The first challenged  
3 exemption states "take prohibition will not apply to certain  
4 municipal, residential commercial, and industrial [] development  
5 undertaken pursuant to municipal governments' ordinances or plans  
6 that NMFS determines will adequately provide for salmon  
7 conservation." 50 C.F.R. § 223.203(b)(12). The second  
8 challenged provision "creates an exemption from the take  
9 prohibition for non-federal forestry activities [undertaken] in  
10 Washington that are 'in compliance with forest practice  
11 regulations adopted and implemented by the Washington Forest  
12 Practices Board that NMFS has found are at least as protective of  
13 habitat functions as are the regulatory elements of the Forests  
14 and Fish Report.'" 50 C.F.R. § 223.203(b)(13).

15 The plaintiffs in *Washington Environmental Council* claimed  
16 that "NMFS does not have authority to create a limited take  
17 prohibition under ESA § 4(d)." 2002 WL 511479 at \*7.

18 WEC argues, using the canon of statutory construction  
19 *expressio unius est exclusio alterius*, that because ESA  
20 sets forth a detailed mechanism for obtaining an  
21 incidental take permit under § 10 (and, for activities  
22 with a federal nexus, a parallel § 7), NMFS may not  
23 employ any other section of the ESA to promulgate a  
24 take prohibition exemption. WEC argues that allowing  
25 promulgation of take exemption rules under § 4(d) would  
26 render Congress's creation of the §§ 7 and 10  
27 provisions, which the legislative history reveals was a  
28 deliberate and exacting process, an unnecessary  
exercise.

24 *Id.* The *Washington Environmental Council* court rejected this  
25 argument:

26 WEC's *expressio unius* argument only makes sense if one  
27 has an underlying assumption that NMFS should have  
28 applied a blanket take prohibition, without limits and  
with all the protections of § 10, to the ESUs at issue

1 in this case. The court, as discussed supra section  
2 II.B.3. and note 3, finds that this particular question  
3 is not ripe at this time. In any event, WEC's statutory  
4 construction argument does not obviate the starting  
5 point of the court's analysis: that the Secretary,  
6 acting through NMFS, has broad discretion under § 4(d)  
7 to promulgate such rules as he deems necessary and  
8 advisable, which "may" include a take prohibition. To  
9 prevail on this count, WEC must demonstrate that NMFS  
10 acted arbitrarily or capriciously in promulgating a  
11 limited take prohibition under § 4(d).

7 The language of 4(d) makes it clear that NMFS "may"  
8 impose a take prohibition. The unavoidable implication  
9 is that NMFS may, in its discretion, choose not to  
10 impose a take prohibition. NMFS's decision to craft a  
11 limited take prohibition under 4(d) must be, a fortiori  
12 under this analysis, within its discretion. The rule  
13 does not state that NMFS may choose only to apply a  
14 blanket take prohibition, or no take prohibition at  
15 all. It is logically within the agency's discretion,  
16 therefore, that applying any number of different  
17 varieties of (otherwise legal) take prohibitions is  
18 also within NMFS's discretion. The court is not  
19 persuaded that choosing to promulgate a limited take  
20 prohibition under § 4(d) was arbitrary and capricious,  
21 and therefore grants defendant's motion for summary  
22 judgment on Count I, and denies plaintiffs' motion for  
23 the same.

16 *Id.* at \*7-8. Although *Washington Environmental Council* is  
17 unpublished and is not binding authority, its reasoning is valid.  
18 *Grange* does not provide any contradictory authority.

19 *Grange* again invoke *Alsea's* finding as arbitrary the  
20 circumstance of having "two genetically identical [fish] swimming  
21 side-by-side in the same stream, but only one receives ESA  
22 protection while the other does not." 161 F. Supp. 2d at 1163.  
23 Here, however, although the fish swimming side-by-side may be  
24 genetically similar, those *O. mykiss* that will be exempted from  
25 the take protections will be physically distinguishable and have  
26 been delineated for separate treatment based on NMFS's valid (and  
27 undisputed) scientific reasons for making such distinctions.

28 These two factors, the ability to physically mark those

1 individual *O. mykiss* that will be subject to take and NMFS's  
2 well-supported rationale for subjecting these fish to harvest,  
3 distinguish this case from the past listings that have been  
4 invalidated. Grange's argument that "little has actually  
5 changed" since the first set of listings is not meritorious.

6 Grange's motion for summary judgment on that claim is  
7 DENIED; Federal Defendants and Defendant-Intervenors' Cross  
8 motions are GRANTED.

9  
10 VI. CONCLUSION

11 Plaintiffs' attempts to discredit NMFS's listing decision  
12 identify some shortcomings in the agency's rationale. However,  
13 under the totality of the circumstances, in a case riddled with  
14 complex and uncertain scientific information, deference is owed  
15 to the agency's expert knowledge of the subject matter.  
16 Plaintiffs have not established that the agency relied on factors  
17 which Congress has not intended it to consider; entirely failed  
18 to consider an important aspect of the problem; offered an  
19 explanation for its decision that runs counter to the evidence  
20 before the agency; or issued a decision so implausible that it  
21 could not be ascribed to a difference in view or product of  
22 agency expertise. See *United States v. Snoring Relief Labs.,*  
23 *Inc.*, 210 F.3d 1081, 1085 (9th Cir. 2000). Nor does this case  
24 involve a decision that is totally internally inconsistent. See,  
25 *e.g.*, *Natural Resources Defense Council v. Kempthorne*, 506 F.  
26 *Supp. 2d* 322 (E.D. Cal. 2007). NMFS properly exercised its  
27 discretion here.

1 For the reasons set forth above:

2 (1) In *Grange*:

3 (a) Plaintiffs' motion for summary judgment is DENIED.

4 (b) Federal Defendants' motion for summary judgment is  
5 GRANTED.

6 (c) Defendants-Intervenors' motion for summary judgment  
7 is GRANTED.

8 (2) In *MID II*:

9 (a) Plaintiffs' motion for summary judgment is DENIED.

10 (b) Federal Defendants' motion for summary judgment is  
11 GRANTED.

12 (c) Defendants-Intervenors' motion for summary judgment  
13 is GRANTED.

14 (3) Federal Defendants shall submit a form of order  
15 consistent with these rulings within five days of service of this  
16 decision.

17  
18 SO ORDERED

19 DATED: October 27, 2008

20  
21           /s/ Oliver W. Wanger            
22 Oliver W. Wanger  
23 United States District Judge  
24  
25  
26  
27  
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