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UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF IDAHO

WESTERN WATERSHEDS PROJECT, Plaintiff, v. U.S. FISH AND WILDLIFE SERVICE, NOAA FISHERIES, U.S. FOREST SERVICE, JACK WHITWORTH, and WHITWORTH RANCHES, INC., Defendants.	No. 4:12-cv-197-BLW **PLAINTIFF'S BRIEF IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT**

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INTRODUCTION

Plaintiff Western Watersheds Project ("WWP") brings this action to challenge two biological opinions addressing the impacts of livestock grazing on the Camas Creek allotment on threatened Chinook salmon, steelhead, and bull trout, as well as to challenge the ongoing livestock grazing on the allotment that is authorized by the Forest Service and conducted by Whitworth Ranches in violation of the Endangered Species Act ("ESA"). All three listed species of fish spawn in Camas Creek and its tributaries, and the Camas Creek allotment has a history of livestock conflicts with these fish and their spawning habitat. Despite requirements to keep livestock out of the streams on the allotment, cattle have routinely trespassed in riparian areas and creeks, including within an exclosure created to keep cattle out of a critical stretch of spawning habitat on Camas Creek. Cattle have even been documented directly trampling a Chinook salmon redd. Efforts by the Forest Service to reduce trespass by cattle into creeks have not been successful, and cattle continue to access spawning habitat for Chinook, steelhead, and bull trout, up to and including this year.

Yet the Forest Service continues to authorize grazing on the Camas Creek allotment, and U.S. Fish and Wildlife Service ("FWS") and NOAA Fisheries have issued biological opinions concluding that grazing will not jeopardize these species or adversely modify their critical habitat. These biological opinions also included incidental take statements that authorize take of bull trout and steelhead, but not Chinook salmon. For the many reasons discussed below, the FWS and NOAA biological opinions, as well as their incidental take statements, are arbitrary and capricious under the Administrative Procedure Act ("APA") and must be set aside. Furthermore, by relying on those opinions and continuing to authorize grazing, the Forest Service is violating its substantive duty under the ESA to ensure that its actions will not jeopardize a listed species.

Finally, evidence from 2010 and 2012 show that livestock continue to harm these species of fish by accessing their spawning habitat, causing unlawful take of Chinook salmon and steelhead and requiring reinitiation of consultation.

FACTUAL BACKGROUND

Camas Creek Allotment

The 63,375 acre Camas Creek allotment is located northeast of Challis, Idaho on the Salmon-Challis National Forest. Statement of Facts ("SOF") ¶ 1[1]; FS AR 5052-53. Camas Creek, a tributary of the Middle Fork Salmon River, runs through the allotment, as do several tributaries to Camas Creek, such as Silver Creek, West Fork Camas Creek, Castle Creek and Furnace Creek. SOF ¶ 2; FS AR 5062. The Camas Creek allotment is home to three species of fish that are protected as threatened under the ESA: Snake River spring/summer Chinook salmon, Snake River Basin steelhead, and Columbia River bull trout. SOF ¶ 3; FS AR 5064.

Because of the importance of spawning habitat at the confluences of Silver Creek and West Fork Camas Creek with main Camas Creek, an area known as Meyer's Cove, the Forest Service built an exclosure to prevent cattle access. SOF ¶¶ 4-7; FS AR 3492, 5688. More recently, the Forest Service also built drift fences on Castle and Furnace Creeks to prevent cattle access to important spawning reaches in the lower reaches of those streams as well as main Camas Creek. SOF ¶ 8; FS AR 3493.

A rough road runs along Camas Creek from Meyer's Cove several miles upstream to a private inholding called Hidden Valley Ranch, which Whitworth Ranches sometimes leases to graze in conjunction with the Camas Creek allotment. SOF ¶ 9; FS AR 5055, 5062. The Camas Creek road crosses Camas Creek six times and Furnace Creek once at a series of fords, which are

[1] The Factual Background summarizes the facts for the brief, but more details are provided in the Statement of Facts.

used by vehicles as well as cattle. SOF ¶ 10; FS AR 5055. At least a dozen water diversions are also on the allotment, which divert water from Castle Creek and tributaries of Silver Creek. SOF ¶ 11; FS AR 3558, 3646-49, 3699-3704.

ESA-Listed Fish in the Camas Creek Allotment

Snake River spring/summer Chinook salmon occurs on the allotment and has spawning habitat in Camas Creek, West Fork Camas Creek and lower Castle Creek, and designated critical habitat on these streams as well as Silver Creek and Furnace Creek. SOF ¶ 12; FS AR 5064-65, 5072. Spawning is generally assumed to begin around August 15 for this area, but has been documented beginning as early as July 24 on the upper reaches of Camas Creek near Hidden Valley Ranch. SOF ¶ 13; FS AR 5072, NOAA AR 1440.

Snake River spring/summer Chinook have declined significantly from historic numbers, and hatchery fish often make up almost 75% of the adults. SOF ¶ 15; NOAA AR 1426. Snake River spring/summer Chinook salmon are made up of five major population groups ("MPGs"), and the Camas Creek population is one of nine populations within the Middle Fork Salmon River MPG. SOF ¶ 15; NOAA AR 1426. Chinook populations in the Middle Fork Salmon River MPG are unique and very important genetically because they have never received hatchery supplementation, and hatchery-origin Chinook have never been documented spawning in the MPG. SOF ¶ 16; NOAA AR 1426. The Camas Creek population is considered important because it possesses genetic traits that increase the species' likelihood of survival in the wild. SOF ¶ 16; FS AR 5068.

For this MPG to be considered viable, five of its nine populations must meet viability criteria, but currently none do. SOF ¶ 17; NOAA AR 1426. The Chinook salmon population in Camas Creek is well below a viable population level. SOF ¶ 18; NOAA AR 1427. The

minimum abundance threshold for this to be a viable population is 500 adults, and the current population's mean abundance level is 28 adults, representing only 6% of the minimum threshold abundance. *Id.* Thus, the population's abundance/productivity risk is considered high. *Id.* The spawning recruitment numbers from the last twenty years show recruitment at .83, which is less than replacement—i.e. the population is going down—and far less than the 2.21 value required for minimum threshold abundance. *Id.* Redd surveys also show a significant downward trend in redd counts from 2001 to 2009, falling from 94 redds to just 12 redds, and compared to 100-250 redds found in the early 1960's. SOF ¶ 18; FS AR 5138, 5102; NOAA AR 3120. "Substantial improvements in abundance/productivity status are required for the population to be considered viable." SOF ¶ 18; NOAA AR 1427.

Snake River Basin steelhead occur on the Camas Creek allotment, and have spawning habitat as well as designated critical habitat in many of the streams on the allotment, including Camas Creek, West Fork Camas Creek, Castle Creek, and Furnace Creek. SOF ¶ 19; FS AR 5064, 5066, 5072. Steelhead spawn in the Camas Creek drainage from the third week of March to mid-June, with egg incubation generally occurring at least through mid-July but potentially extending through early August. SOF ¶ 20; NOAA AR 1442. NOAA presumes incubation will be complete by August 7. *Id.*

The steelhead in Camas Creek are part of the Salmon River MPG and the Lower Middle Fork population. SOF ¶ 21; NOAA AR 1428. For the Salmon River MPG to be considered viable, six of the 12 populations in the MPG must be viable but currently none is. *Id.* The Lower Middle Fork population's abundance risk is high and NOAA has determined that survival rate increases that lead to increases in abundance and productivity will need to occur before the population can be considered viable. *Id.* Camas Creek's steelhead population is "essentially free

of hatchery influence" and NOAA considers it a "high priority," as it "supports one of only five populations within the ESU that are important strongholds of genetically unique steelhead." SOF ¶ 22; FS AR 5069. The available data indicates that the population is in a "fluctuating downward trend." *Id*.

Finally, Columbia River bull trout have extensive spawning habitat on the allotment. SOF ¶ 23; FS AR 5069, 5067, 5073. Bull trout spawn in the allotment from mid-August through October. SOF ¶ 24; FS AR 5073. The Camas and Silver Creek bull trout local populations inhabit the streams in Camas Creek allotment and are part of the Middle Fork Salmon River (MFSR) core area. SOF ¶ 26; FWS AR 16. Maintaining the Camas and Silver Creek local populations is important to maintaining the productivity and distribution of bull trout within the MFSR core area. *Id.*

Camas Creek Allotment Compliance History

The Camas Creek allotment has a remarkable history of violations that have harmed the listed fish. Whitworth Ranches, Inc., c/o Jack Whitworth, holds a permit for 132 cow/calf pairs to graze the Camas Creek allotment from June 1 to October 15. SOF ¶ 30; FS AR 5054, 2388 (permit modification). The Camas Creek allotment has four units, Upper Silver Creek, Lower Silver Creek, West Fork, and Camas Creek—which is made of the Camas Creek area and the Furnace/Castle area. SOF ¶ 31; FS AR 5054-55, 5062 (map). Until 1997, grazing was not allowed in the Camas Creek unit after August 15 to prevent conflict with Chinook spawning. SOF ¶ 32; FS AR 3492. In 1998, Mr. Whitworth requested longer use of the allotment and NOAA agreed as long as Mr. Whitworth prevented cattle from reaching Camas Creek during this time and used hardened fords for crossing the creek. SOF ¶ 32; FS AR 3303.

Problems began almost immediately with cattle accessing Camas Creek after August 15.

In 1999-2001, among other violations, cattle were grazing along Camas Creek during Chinook spawning numerous times and were also inside Meyer's Cove exclosure, which the Forest Service noted was an annual occurrence. SOF ¶¶ 33-35; FS AR 2323-27, 2333, 2339-40, 5633-35, 5637, 5640.

In 2002-2005, researchers from the Forest Service's Rocky Mountain Research Station conducted redd surveys of Camas Creek, and reported regular occurrences of cattle in Camas Creek during the Chinook spawning season and also during steelhead incubation. SOF ¶¶ 36-53; Ruether Decl. Ex. A. These reports noted cattle loafing and crossing Camas Creek on top of areas with spawning fish or redds and trampling banks that contributed sediment to the stream near redds, particularly in important spawning areas near Hidden Valley Ranch. SOF ¶¶ 37, 41-43, 45-46; Ruether Decl. Ex. A at 7, 9, 15, 17, 35-36, 40, 49, 58. The researchers repeatedly told the Forest Service it was imperative to remove these cattle and noted that "take" of Chinook had occurred "via redd trampling and influx of sediment over redds." SOF ¶ 37; Ruether Decl. Ex. A at 9, 15. Many other violations and instances of trespass occurred in those years as well, including cows inside Meyers Cove during Chinook spawning season each of the three years. SOF ¶¶ 38-39, 43, 45; FS AR 2349-53, 2355; Ruether Decl. Ex. A at 49, 58, Ex. C.

In 2003, the Forest Service installed a fence across Camas Creek above Furnace Creek to prevent cattle access to the Hidden Valley Ranch area, but it was not effective. SOF ¶¶ 40-43; FS AR 5650-51; Ruether Decl. Ex. A at 35-36, 49. In 2004, the Forest Service also installed drift fences across lower Castle Creek and lower Furnace Creek, but they also did not prevent cows from getting onto Camas Creek, and the researchers repeatedly found cows on Camas Creek during Chinook spawning. SOF ¶¶ 44-46; FS AR 2372; Ruether Decl. Ex. A at 58, Ex. B.

In 2005, the researchers again reported trespass cattle in important spawning areas of

Camas Creek. SOF ¶¶ 50-51. The cattle remained there for weeks, and on August 6, the researchers were alarmed to "observe[] approximately 20 cattle cross Camas Cr directly over and trample a newly constructed salmon redd." SOF ¶¶ 50-51, 53; FS AR 2410-13; Ruether Decl. Ex. A at 103, 105-06. The Forest Service took little action against Mr. Whitworth throughout this period, and even defended him with various excuses following the redd trampling incident. SOF ¶¶ 47, 52; FS AR 5656; Ruether Decl. Ex. A at 116.

In 2006, the Forest Service adjusted management again to try and keep cows off of Camas Creek after July 24, relying heavily on the Castle and Furnace drift fences and riders, measures they had used without success in prior years. SOF ¶¶ 54-56; FS AR 3735-36; Ruether Decl. Ex. H at 4. These same measures form the basis of the proposed action analyzed in the FWS and NOAA biological opinions challenged here. FS AR 5057. The researchers did not survey redds after 2005, resulting in much less intensive monitoring of the area. SOF ¶ 57.

Nonetheless, the Forest Service documented trespass cattle numerous times on the allotment, including along Camas Creek and inside Meyer's Cove exclosure, on the following dates: July 1 (inside Meyer's Cove and along Camas Creek outside of exclosure), July 7 and 10 (inside Meyer's Cove), July 12 (three places along Camas Creek above Meyer's Cove), July 19 (along Camas Creek below Furnace Creek), July 25 (20 pairs had gone down Camas Creek from Furnace Creek to Meyer's Cove), July 28 (30 pair inside Meyer's Cove), August 16 (mouth of Furnace Creek below drift fence), August 23 (inside Meyer's Cove), September 12 (various trespass locations), and September 28-October 4 (cattle on allotment past off-date). SOF ¶ 57; FS AR 2419-23. Additionally, the gate in the Castle Creek drift fence was left open several times. SOF ¶ 57; FS AR 2428.

In 2007, the Forest Service conducted even less monitoring than 2006, making only three

visits to upper Camas Creek during the season (August 2, August 22, September 18). SOF ¶ 58; FS AR 2429-31. During those visits, 14 cattle were documented along Camas Creek just above Meyer's Cove on August 2, in trespass in Lower and Upper Silver Creek units on August 22, and again in trespass in Upper Silver Creek on September 18. *Id.* Cattle were also seen in Meyer's Cove on June 19. SOF ¶ 58; FS AR 2429. The Forest Service did not monitor upper Camas Creek in July, but Mr. Whitworth's rider stated that he had trouble keeping cattle at Hidden Valley, as they kept going down Camas Creek to Furnace Creek. SOF ¶ 58; FS AR 2429. Thus, cattle use along upper Camas Creek occurred in July. The Forest Service also found the gate in the Castle Creek drift fence open on August 22. SOF ¶ 58; FS AR 2430.

In 2008, monitoring was extremely sparse, with the Forest Service only recording one trip to upper Camas Creek the entire summer, on August 21. SOF ¶ 59; FS AR 2438-39. However, trespass into Meyer's Cove was reported on August 6-11 and September 10, and a violation of the stubble height requirement occurred in the Lower Silver Creek unit. SOF ¶ 59; FS AR 2438, 2440.

After receiving a notice letter in 2009 from Plaintiff over the lack of ESA consultation for the allotment, the Forest Service rested the allotment that year while the agencies completed consultation. SOF ¶¶ 60-62; FS AR 5750, 2441. Plaintiff also sent a letter and photos showing the Meyer's Cove fence in disrepair. SOF ¶ 63; Ruether Decl. Ex. E. The Forest Service failed to fix the fence before cattle used the allotment in 2010, and the fence was not fully repaired until September 10 of that year. SOF ¶¶ 64, 66-69; FS AR 5701, 5714, 3262; Ruether Decl. Ex. F. Because of the non-functional fence, the Forest Service admitted cattle had entered Meyer's Cove exclosure, and by the time the fence was completed in September, cattle had grazed two units adjacent to Meyer's Cove. SOF ¶¶ 66, 69; FS AR 5714, 3262, 5711. The Forest Service

did not report the problem with Meyer's Cove fence to NOAA in its 2010 End-of-Year report. SOF ¶ 71; FS AR 3278.

The allotment was rested in 2011. SOF ¶ 72. In summer 2012, Plaintiffs' experts visited the Camas Creek allotment numerous times from July 23 to September 19, finding the Meyer's Cove exclosure fence and the Castle Creek and Furnace Creek drift fences in disrepair and not functioning properly. SOF ¶¶ 73-74; Declaration of Alex Brott ¶¶ 5-30; Declaration of Robert House ¶¶ 15-17; Declaration of Laurence Zuckerman ¶¶ 9-17, 23-24, 33-35 (all filed herewith). These visits also documented 33 cattle inside Meyer's Cove exclosure on July 23; pervasive cattle use all along mainstem Camas Creek from Meyer's Cove to Furnace Creek, signs of cattle use above Furnace Creek; and extensive cattle use on lower Castle Creek and lower Furnace Creek below the drift fences. SOF ¶¶ 73-74; Brott Decl. ¶¶ 5-32; House Decl. ¶¶ 15-34; Zuckerman Decl. ¶¶ 18-40. At the same time, Plaintiff's experts documented numerous Chinook salmon redds in Camas Creek from Meyer's Cove to Furnace Creek as well as lower Castle Creek, with signs of cattle use at all but one of the redd sites. House Decl. ¶¶ 15-34; Zuckerman Decl. ¶¶ 20-32.

Camas Creek Allotment Consultation History

The Forest Service began consultation on this allotment, as well as other activities in the Camas Creek watershed, in 2004, issuing a biological assessment that year and an amended version in 2005. SOF ¶ 76; NOAA AR 96; FS AR 3503. However, the agencies removed the Camas Creek allotment (as well as water diversions) from the watershed consultation based on a belief that the allotment might be retired. SOF ¶ 78; FS AR 5683. The water diversions consultation with FWS was completed in 2007, and NOAA issued a draft biological opinion for water diversions that same year but to Plaintiff's knowledge has never issued a final opinion.

SOF ¶ 80; FWS AR 101; Ruether Decl. Ex. G.

The allotment retirement proposal fell through, but the Forest Service continued to authorize grazing, only resuming the allotment consultation in 2009. SOF ¶¶ 79, 81; FS AR 2385-2438, 5672. In March 2010, the Forest Service issued a biological assessment in which it determined that the proposed grazing was "likely to adversely affect" Chinook salmon, steelhead, and bull trout on Camas Creek allotment; but "not likely to adversely affect" their critical habitats. SOF ¶ 82; FS AR 5048. The NOAA and FWS biological opinions were completed on June 3 and June 7, 2010, respectively. NOAA AR 1405, FWS AR 1. The Services concluded that the grazing would not jeopardize the three species and concurred with the Forest Service's critical habitat determinations. FWS AR 1, 33-34; NOAA AR 1405, 1465. For the reasons discussed below, these conclusions were arbitrary and capricious.

ARGUMENT[2]

I. THE FWS AND NOAA FISHERIES CONSULTATIONS ON THE CAMAS CREEK ALLOTMENT VIOLATED THE APA AND ESA.

WWP challenges the biological opinions and incidental take statements issued by FWS and NOAA Fisheries covering impacts to bull trout, Chinook salmon, and steelhead on the Camas Creek allotment, as well as the Letters of Concurrence issued by these agencies agreeing that livestock grazing on that allotment is not likely to adversely affect any critical habitat.

The issuance of a biological opinion and incidental take statement is an agency action that the Court reviews under the APA to determine if it was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. *Bennett v. Spear*, 520 U.S. 154, 177-78 (1997); *Wild Fish Conservancy v. Salazar*, 628 F.3d 513, 521 (9th Cir. 2010); 5 U.S.C.

[2] The relevant provisions of the Endangered Species Act are set forth in detail in the Complaint, Dkt. 1 at ¶¶ 21-38, and are not repeated here for brevity.

§ 706(2)(a). The Court must "engage in a careful, searching review to ensure that the agency has made a rational analysis and decision on the record before it," and "articulated a rational connection between the facts found and the conclusions made." *Wild Fish Conservancy,* 628 F.3d at 521, 525. The issuance of a Letter of Concurrence is reviewed under the same standard. *See Olenec v. NMFS,* 765 F.Supp.2d 1277, 1285-86 (D. Or. 2011); *Ctr. for Biological Diversity v. U.S. Forest Serv.*, 2009 WL 3740732, at *1-3 (D. Ariz. 2009). *aff'd* 408 Fed. Appx. 64, 65-66 (9th Cir. 2011); *Conservation Cong. v. U.S. Forest Serv.*, 2012 WL 2339765 (E.D. Cal. 2012).

The FWS and NOAA Fisheries biological opinions and Letters of Concurrence are arbitrary and capricious because they did not consider necessary information required under the ESA, adequately analyze the effects of livestock grazing on the listed species or their critical habitat, or provide an explanation that rationally connected the facts to their conclusions. For these reasons, they are unlawful and must be set aside under the APA. 5 U.S.C. § 706(2)(a).

A. Common Flaws Occurred in the FWS and NOAA Fisheries Biological Opinions.

1. The Consultations Did Not Include All Relevant Activities in the Environmental Baseline.

The ESA and its regulations require that a biological opinion be based on "the best scientific and commercial data available" and that it contain a summary of the information upon which the opinion is based, a discussion of the effects of the action on the listed species or critical habitat, and the consulting agency's opinion on whether the proposed action is likely to jeopardize the continued existence of a listed species or adversely modify critical habitat. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(h)(3). The "effects of the action" include both direct and indirect effects of an action, which are added to the "environmental baseline." *Id.* § 402.02.

The environmental baseline includes "the past and present impacts of all Federal, State, or private actions and other human activities in the action area." *Id.*

As explained by the Ninth Circuit, this direction requires the consulting agency to "appropriately consider the effects of its actions 'within the context of other existing human activities that impact the listed species.'" *NWF v. NMFS*, 524 F.3d at 930 (quoting *ALCOA v. BPA*, 175 F.3d 1156, 1162 n.6 (9th Cir. 1999)). In other words, the analysis must assess what jeopardy might result from the proposed action "*in the present and future human and natural contexts.*" *Id.* (emphasis in original) (quoting *Pac. Coast Fed'n of Fishermen's Ass'ns v. U.S. Bureau of Reclamation*, 426 F.3d 1082, 1093 (9th Cir. 2005)).

Here, the FWS relied on the Forest Service's biological assessment to describe the activities and habitat conditions that constitute the environmental baseline. FWS AR 0017-18. The Forest Service's environmental baseline discussion, however, did not include important relevant activities in the watershed that impact bull trout—namely, the existence of numerous water diversions in the watershed and the use of fords crossing Camas Creek and Furnace Creek. The assessment simply noted in "Background Information" that, among other activities, roads and water diversions occur in the action area. FS AR 5052. It did not acknowledge the use of the water diversions or the seven road fords in the environmental baseline—much less discuss their environmental effects. FS AR 5070-75. This is despite the fact that water diversions and road fords adversely impact sediment and water temperature, which the assessment admitted are the major limiting factors for the three fish species in the watershed. *Id.*

In contrast, the original biological assessment completed in 2005 admitted that a dozen private or Forest Service permitted water diversions, as well as seven road fords, occur in the Camas Creek watershed. FS AR 3558, 3646-49, 3699-3704 (water diversions), 3540, 3689-92,

3706 (fords). The Forest Service determined in 2005 that several of the Forest Service permitted water diversions would likely adversely affect bull trout in tributaries to Silver Creek as well as in Castle Creek due to entrainment in ditches and dewatering of streams, and that cumulative effects also existed from the private water diversions. FS AR 3670, 3672, 3719-21.[3] It also concluded that, of the three road fords analyzed in the assessment, one was likely to adversely affect all three listed fish because vehicles crossed spawning gravels in Camas Creek.[4] FS AR 3718, *see also* Ruether Decl. Ex. A at 70-88 (agencies summarizing the harmful effects of each of the fords). Impacts that are likely to adversely affect a listed species are "plainly an important aspect of [the] problem" that must be considered in the environmental baseline. *S. Yuba River Citizens League v. NFMS*, 723 F.Supp.2d 1247, 1270 (E.D. Cal. 2010).

In its separate biological opinion assessing the water diversions in the Camas Creek watershed, FWS agreed that these diversions were likely to harm bull trout, and anticipated "take" of 2-10 adult and 50 juvenile bull trout annually due to "various impacts from stranding to entrainment." *See* FWS AR 101. And in the biological opinion at issue here, FWS noted that dewatering of streams, blockage of streams by diversions, and entrainment are threats to bull trout. FWS AR 8. However, FWS did not include any discussion of the water diversions and their impacts in the environmental baseline. FWS AR 15-18.

NOAA had also previously stated that the water diversions in the watershed would reduce stream flows and cause entrainment if not fitted with fish screens, and expected "take" of

[3] The 2005 BA stated that the diversion on Rams Creek (a tributary to Silver Creek) would likely adversely affect bull trout if they were found in that creek, and the 2010 BA stated that bull trout are indeed in the lower reach of Rams Creek. FS AR 5069.

[4] The 2005 assessment stated that there was not enough information to assess the other four fords. FS AR 3716. However, in a 2004 version of the same biological assessment, it stated that an additional ford on Camas Creek was also likely to adversely affect the three species because spawning gravel was located at that ford. NMFS AR 242.

Chinook salmon and steelhead from operation of these diversions. NOAA AR 5050, 5005-06; Ruether Decl. Ex. G at 36-52. Yet, aside from mentioning in the environmental baseline here that two private inholdings in the watershed have water rights and diversions, the biological opinion provided no further details on water diversions or their impacts to salmon and steelhead, despite admitting that reduced stream flow is one of the primary limiting factors for the Camas Creek Chinook salmon and steelhead populations. NOAA AR 1427, 1429, 1433-43.

Furthermore, the NOAA biological opinion failed to discuss impacts from the use of road fords by vehicles in the environmental baseline even though the use of the fords occurs from mid-summer to fall, the same time that bull trout and Chinook salmon are spawning, and will create pulses of sediment that could be detrimental to these fish. *See* NMFS AR 1433 (noting that vehicles use fords mid-summer to October and create periodic sediment inputs), Ruether Decl. Ex. A at 70-88 (agencies summarizing the harmful effects of each of the fords).

Thus, the record shows that the impacts of water diversions and fords are not "so insignificant or discountable" or "slight" that FWS and NOAA Fisheries could entirely ignore them. *S. Yuba River Citizens League*, 723 F.Supp.2d at 1272-75. The water diversions and fords must be included in the environmental baseline to appropriately consider the effects of grazing "within the context of other existing human activities that impact the listed species." *NWF v. NMFS*, 524 F.3d at 930. Because neither the biological assessment nor the biological opinions discussed water diversions or road fords and their specific impacts, FWS and NOAA Fisheries failed to consider and discuss important aspects of the problem in the environmental baseline, rendering their biological opinions arbitrary and capricious. *See S. Yuba River Citizens League*, 723 F.Supp.2d at 1269-76 (holding that biological opinion failed to consider relevant activities in environmental baseline, rendering opinion arbitrary and capricious).

2. The Consultations Did Not Consider the Interdependent Activity of Grazing Hidden Valley Ranch.

In addition to considering effects of the proposed action, a biological opinion must also consider effects of "interrelated and interdependent" actions. 50 C.F.R. § 402.02(d). Interrelated actions are those that are part of a larger action and depend on the larger action for their justification while interdependent actions are those that have no independent utility apart from the action under consideration. *Id.* "The test for interrelatedness or interdependentness is 'but for' causation: but for the federal project, these activities would not occur." *Sierra Club v. Marsh*, 816 F.2d 1376, 1387 (9th Cir. 1987).

The FWS and NOAA Fisheries biological opinions stated that no interrelated or interdependent activities were identified in the consultation. FWS AR 33; NOAA AR 1422. The biological assessment stated the same. FS AR 5060. The assessment acknowledged that grazing on private lands occurs "within the rotation" of the Camas Creek allotment, but claimed that "we believe that these activities would continue to occur in a manner similar to the way they are currently occurring whether or not livestock graze on the Camas Creek Allotment." *Id.* However, this statement is not only unsupported in the record, but contradicted by previous statements of the agencies as well as the facts.

Whitworth Ranches grazes Hidden Valley Ranch approximately once every ten years for a period of about two weeks. FS AR 5055; *see also* FWS 3931. Hidden Valley Ranch is a small parcel of private land (102.54 acres) located about half a mile south of the allotment on White Goat Creek. FS AR 5055, 5062 (map). The record is full of statements that even the Camas Creek allotment itself is very remote and difficult to access. FWS AR 3786, 3831 (noting remote location of Hidden Valley Ranch as well as extreme difficulty getting to Camas Creek allotment), FS AR 4968-69 (noting remoteness and difficult access). And the only route into

Hidden Valley Ranch is to travel **through** the entire Camas Creek allotment, along the rough jeep road from Meyer's Cove, for five further miles. *See id*., FS AR 3554. The record shows that Mr. Whitworth complained that he could not "make adequate use" of the large Camas Creek allotment when forced to leave the Camas Creek unit by August 15. FS AR 3303.

The Forest Service previously acknowledged that it needed to consider grazing on the Hidden Valley Ranch as an interrelated/interdependent activity: "[d]ue to remote location of Hidden Valley and its small size (~200 acres), it is reasonable to assume that Mr. Whitworth would not graze the private lands if he did not already have cattle in the area. Thus, the private lands grazing, including trailing to and from that property, would need to be considered in the BA." FWS AR 3786. It thus included Hidden Valley Ranch as an interrelated activity in the draft biological assessment. *See* NOAA AR 373. After NOAA commented that the assessment needed a more thorough analysis of the effects of this interrelated activity, the Forest Service responded by simply deleting Hidden Valley an interrelated or interdependent activity. *See* NOAA AR 373, 399, 426 (2009 NOAA 2009 comments); FWS AR 3781 (Feb. 2, 2010 meeting notes stating Hidden Valley Ranch no longer interdependent action).

Importantly, the record demonstrates that grazing the Hidden Valley Ranch was highly problematic due to the regular, repeated trespass of cattle off the (largely unfenced) ranch onto Forest Service land and into important spawning grounds in Camas Creek. *See* FS AR 2333, 3495, 2429; Ruether Decl. Ex. A at 7, 9, 35-36, 49, 58, 103, 105-06 (all discussing trespass from Hidden Valley Ranch from 2000-2007). Rather than acknowledge and address these adverse effects, the agencies simply ignored them by absurdly claiming that someone would graze cattle on 102 acres of remote private land for two weeks even if the Camas Creek allotment was not available—where the permittee has complained that even grazing the entire allotment until

August 15 was inadequate. On this record, the exclusion of Hidden Valley Ranch as an interrelated or interdependent activity was arbitrary, capricious and in violation of the ESA.

3. The Biological Opinions Relied on Conservation Measures that Were not Certain to Address the Threats to the Species.

The purpose of a biological opinion is to determine whether an action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat. 16 U.S.C. § 1536(b); 50 C.F.R. § 402.14(h)(3). Numerous courts have held that agencies cannot rely on mitigation or conservation measures to support a no-jeopardy or no adverse modification conclusion if those measures are not certain to sufficiently address impacts to the listed species. Mitigation measures "must be reasonably specific, certain to occur, and capable of implementation; they must be subject to deadlines or otherwise enforceable obligations; and most important, they must address the threats to the species in a way that satisfies the jeopardy and adverse modification standards." *Ctr. for Biological Diversity v. Rumsfeld*, 198 F.Supp.2d 1139, 1152 (D. Ariz. 2002) ("*Rumsfeld*"); *NWF v. NMFS*, 839 F.Supp.2d 1117, 1125 (D. Or. 2011) ("*NWF v. NMFS II*"); *see also NWF v. NMFS*, 524 F.3d 917, 936 (9th Cir. 2008) (holding that mitigation measures may be relied on to support no-jeopardy conclusion only where they involve specific and binding plans and a clear, definite commitment of resources to implement those measures).

Some cases holding that mitigation measures were not adequate to support a no-jeopardy conclusion were based on findings that the measures were not specific enough or reasonably certain to occur and thus could not ensure that the species would be protected. *See NWF v. NMFS*, 524 F.3d at 935-36 (holding that projects planned for future years were not guaranteed to occur and thus could not support conclusion that habitat conditions would improve); *Rumsfeld*, 198 F.Supp.2d at 1153 (laundry list of possible mitigation measures were merely suggestions,

not guaranteed actions, and thus could not support no-jeopardy decision); *Ctr. for Biological Diversity v. Salazar*, 804 F.Supp.2d 987, 1001-04 (D. Ariz. 2011) (biological opinion's no jeopardy conclusion could not be based on conservation measures that were not reasonably specific or certain to occur, and in some cases not even identified). Because the projects in these cases were not certain to occur, there was no reasonable certainty that they would address the threats to the species in a way that satisfied the jeopardy and adverse modification standards.

For the same reason, conservation or mitigation measures that are not proven to be reliable or effective in achieving the promised protections to species cannot be used to justify a no-jeopardy or no adverse modification conclusion. For example, a recent District of Oregon case determined that unidentified mitigation planned for future years could not be the basis of a no-jeopardy conclusion. *NWF v. NMFS II*, 839 F.Supp.2d at 1127. The court noted that many habitat projects that already should have been completed were delayed or cancelled and thus were not providing the full expected benefits to the listed fish. *Id.* at 1127-28. Because the habitat actions were falling behind schedule and benefits to the species were not accruing as promised, it was not rational for NMFS to rely on a plan for similar future actions to avoid jeopardy. *Id.* at 1128 (citing *Sierra Club v. Marsh*, 816 F.2d at 1386 for proposition that "risk that mitigation may not succeed 'must be borne by the project, not by the endangered species'").

In another case challenging biological opinions for livestock grazing in threatened fish habitat, the Court determined that NOAA Fisheries could not rely on compliance with grazing management standards to support its conclusion of "no adverse modification" of critical habitat where "[p]ast compliance with grazing management standards [was] a documented problem." *Ore. Natural Desert Ass'n v. Lohn*, 485 F.Supp.2d 1190, 1201 (D. Or. 2007), *vacated as moot*, 308 Fed. Appx. 102 (9th Cir. 2009) ("*ONDA v. Lohn*"). There, not only had grazing violated

standards and caused adverse impacts to the allotments, but the Forest Service had not made any changes to address the problem, and the new biological opinion did not imply that swift and necessary action would be taken in the future when violations were found. *Id.*

The court concluded that the "history of even some noncompliance with grazing management standards, in combination with vague statements about what, if any administrative corrective action will be taken against noncompliant permittees, make it arbitrary and capricious for NMFS to rely on the grazing management program in concluding no adverse modification of critical habitat." *Id.* at 1202. In sum, the assumption that the proposed grazing management would adequately protect critical habitat was not supported by the record and thus could not justify the no adverse modification conclusion. *See also Ctr. for Biological Diversity v. BLM*, 422 F.Supp.2d 1115, 1133 n. 15 (N.D. Cal. 2006) (assumption that seed bank would ensure recovery of plant was not supported by data or studies and was undercut by other documents in the record, and thus was arbitrary and capricious).

Here, as in *ONDA v. Lohn*, the proposed action included numerous grazing "conservation measures" to avoid and reduce potential impacts to the listed fish species. FS AR 5056-57. Key measures included fences, riders to herd cows away from streams, grazing rotation dates to reduce overlap of cows and spawning periods, and annual grazing use indicators (stubble height, woody browse, and bank alteration). *Id.* But the majority of these measures had already been in place for years; and the *only* changes from existing management were minor changes to some annual use indicators. FS AR 5057 (BA listing changes from existing management).

The biological assessment acknowledged that livestock will overlap with spawning dates for one or more of the three listed fish species on each of the units in the allotment. FS AR 5054-55. In discussing the effects of the proposed grazing, the assessment claimed that: the

rotation schedules will "best avoid direct impact to spawning fish and incubating redds"; the existing exclosure fence at Meyer's Cove "exclude[s]" livestock from that reach of Camas Creek; the fences in Castle and Furnace Creek drainages "prevent" reentry of livestock to mainstem Camas Creek during Chinook spawning; salting is used to "keep livestock off" stream areas; and riders are employed to "keep livestock in upland areas and away from Camas Creek, Castle Creek and Furnace Creek during critical Chinook salmon spawning and incubation periods." FS AR 5082. The assessment further asserted that impacts to spawning and incubation, water temperature, sediment, width/depth ratio, streambank condition, and riparian conservation areas are minimized by the conservation measures. FS AR 5082-91.

FWS also relied on these conservation measures in its analysis of effects. First, rather than including its own analysis evaluating effects of livestock grazing, FWS simply "relied upon the Forest's effects analysis," including its assumptions about the success of the conservation measures to reduce or avoid impacts from livestock grazing. FWS AR 18. Then, when assessing effects to spawning, redds, and incubation, FWS relied upon the fact that riders are expected to actively move cows away from streams to reduce the number of redds that might be impacted by livestock in Camas Creek, Castle Creek, and Furnace Creek. FWS AR 24-25. Yet there was no discussion about how effective riders have been at keeping cows in the authorized areas and away from these creeks, especially when they are only required to ride twice per week when cattle are in the Castle Creek and Furnace Creek drainages. *See id;* FS AR 5056-57. Cattle tend to congregate in riparian areas in late summer, during bull trout spawning, when conditions are hotter and drier and upland vegetation dries out. *See* NOAA AR 1393-94, 4686, 5401.

The NOAA Fisheries biological opinion relied even more heavily on the conservation measures in its effects analysis. In assessing disturbance to adult Chinook salmon and steelhead

and redd trampling of both species, the biological opinion relied extensively on the idea that fences and riders would prevent access to spawning fish and redds. NOAA AR 1448-55. The biological opinion admitted that vegetation and topography do not restrict cattle access at all along Camas Creek. *See* NOAA AR 1046, 1449 (100% of main Camas Creek accessible to livestock when considering landform and vegetation). Instead, the opinion assumed that fences and riders would keep cows out of Camas Creek, including Meyer's Cove, as well as lower Castle Creek.

With regard to steelhead, NOAA Fisheries assumed that the Meyer's Cove exclosure "eliminates potential redd trampling" by cattle in that important stretch of spawning habitat, the Castle Creek drift fence would prevent cattle use of the lower mile of Castle Creek, and that cows would not access mainstem Camas Creek because they were not authorized to forage there and the Castle and Furnace drift fences would prevent unauthorized access. NOAA AR 1-3, 1442, 1450-51 & 1452, Table 10 notes b-e. Because of these fences, NOAA significantly reduced the number of estimated steelhead redds that could be trampled by livestock, which in turn reduced the number of adults expected to be lost each year—the basis for NOAA's conclusion that grazing would not reduce the survival or recovery potential of the population. NOAA AR 1-3, 1452-53, 1455.

For Chinook salmon, NOAA Fisheries again assumed that cattle would be completely excluded from Meyer's Cove and would not access upper mainstem Camas Creek due to the drift fences on Castle and Furnace Creeks. NOAA AR 1440. It went so far as to state that because cattle were not authorized to graze on mainstem Camas Creek past the initiation of spawning, there was *no potential* for interaction with spawning or incubating Chinook salmon, again based on the assumption that the Castle and Furnace drift fences would prevent *any* unauthorized use

while cattle were in the Castle/Furnace area. NOAA AR 1448, 1454. For Castle and Furnace Creeks, the biological opinion stated that cows would not access lower Castle Creek or lower Furnace Creek due to the drift fences, and a part-time rider would reduce presence along other parts of those creeks. *Id.* NOAA Fisheries concluded that the conservation measures made the likelihood of disturbance to adult Chinook salmon and trampling of Chinook salmon redds "discountable." NOAA AR 1449, 1455, 1465. Because of this conclusion, NOAA Fisheries did not exempt (or allow for) *any* take of Chinook salmon in the Incidental Take Statement. NOAA AR 1467-68. The biological opinion also relied on these same conservation measures when assessing effects on critical habitat for salmon and steelhead and determining those effects were insignificant or discountable. NOAA AR 1458-65.

The administrative record, however, does not support this reliance on conservation measures to protect the three species and their critical habitat. Rather, the record abundantly demonstrates that riders and fences could not reliably keep cattle in areas they were supposed to be grazing, the permittee did not always abide by the Forest Service instructions, the Forest Service rarely if ever took action to address the noncompliance, and most importantly, that cattle regularly accessed spawning habitat in Meyer's Cove and along mainstem Camas Creek despite the use of these conservation measures. Thus, the agencies' reliance on these measures to discount impacts to the three species was arbitrary and capricious. *See Hells Canyon Preservation Council v. Connaughton,* No. 3:11-cv-00023-PK, Findings and Recommendations, Dkt. 149 at 52-53 (D. Or., Aug. 10, 2012) (refusing to defer to agency assumption, unsupported by any data, that mere existence of exclusion fences necessarily improves fish habitat).

For example, the record establishes that from 1999-2001, there were repeated problems of noncompliance with Forest Service direction, cattle use along Camas Creek, and cattle

breaching the Meyer's Cove exclosure. SOF ¶¶ 33-35; FS AR 2323-27, 2333, 2399-40, 3493, 5633-41. From 2002-2005, numerous problems were noted on the allotment, many by Forest Service researchers studying the Camas Creek population of Chinook salmon, including: (1) significant, repeated unauthorized grazing along Camas Creek in areas where Chinook salmon and steelhead spawn, adversely impacting riparian areas and salmon and steelhead redds; (2) cattle breaching the Meyer's Cove exclosure numerous times; (3) the permittee and/or rider failing or refusing to follow Forest Service direction regarding placement of cows or prompt removal of trespass cows; and (4) violations of grazing management standards. SOF ¶¶ 36-53; FS AR 2349-55, 2361, 2372, 2410-13, 5650-51, 5655-56 ; Ruether Decl. Ex. A at 7, 9, 35-36, 49, 58, 103, 105-06; Ex. C.[5] The Forest Service never penalized Mr. Whitworth in any way for the noncompliance. *See* SOF ¶¶ 39, 43, 47, 53.

The trespass occurred in those years despite fences that were installed in 2003 and 2004 to prevent access to Camas Creek, and the use of a rider. SOF ¶¶ 40, 44; FS AR 5650-51, 5653. Based on the extensive trespass, the lead Chinook salmon researcher ultimately concluded at the end of 2004 that "the Camas Cr grazing allotment is NOT manageable if the goal is to keep cattle out of the riparian areas of Camas Cr," and "if cattle are allowed in the allotment, they WILL trample ESA listed Chinook salmon and bull trout redds which will (based on [] graduate research) cons[titute] Take." SOF ¶ 46; Ruether Decl. Ex. A at 58. Sure enough, in 2005 the researchers witnessed a cow trample a newly constructed salmon redd. SOF ¶ 50; Ruether Decl. Ex. A at 105-06. The Forest Service made excuses for this lengthy history of trespass, blaming "gates left open, fences cut without reason, new riders, an exclosure needing constant

[5] The Forest Service has a White Paper purporting to describe the problems on the allotment from 2002-2005, but it does not contain many violations documented elsewhere in the record. *See* FS AR 3725 (White Paper).

maintenance attention, and livestock that are missed during gathering in the rugged, forested terrain that characterizes the allotment." SOF ¶ 52; Ruether Decl. Ex. A at 116. These justifications only serve demonstrate the unreasonableness of expecting fences and riders to prevent livestock access to Camas Creek and other spawning areas.

When NOAA Fisheries law enforcement informed the Forest Service it "would proceed with criminal action against the Forest Service and Jack Whitworth" for take of Chinook salmon unless it developed a solution to the problem of Mr. Whitworth's cattle being in the Hidden Valley area during Chinook spawning, the Forest Service was finally spurred into action. SOF ¶ 51; Ruether Decl. Ex. A at 3733. Specifically, the Forest Service adjusted the grazing rotation dates and fences at Castle and Furnace Creeks, and imposed additional rider requirements when cattle were in Hidden Valley and the Castle/Furnace area. FS AR 4966; FWS AR 3783. The Forest Service claimed that no cattle were observed along Camas Creek in 2006-2008 after these changes were put in place. FS AR 4967. Based on that report, the biological assessment stated that the conservation measures were deemed "successful" in avoiding livestock/fish interactions. FS AR 5083-84.

This conclusion is unsupported, however, given that far less monitoring occurred in upper Camas Creek in those years, and trespass cows were still detected numerous times. After 2005, the Rocky Mountain Research Station researchers were no longer studying the Chinook salmon in Camas Creek and thus were not the constant presence along upper Camas Creek that they had been in 2002-2005. Forest Service range staff conducted some monitoring, but the few visits they made per season paled in comparison to the visits conducted every four days by the researchers in 2002-2005. *See* SOF ¶¶ 45, 57-59. The absence of the researchers is the primary

reason the Forest Service claimed to have received no complaints of cattle along Camas Creek in 2006-2008. *See* FS AR 4967. If no one is looking, violations cannot be found.

Additionally, even the Forest Service's own limited monitoring during those years *did* find cows in trespass, including along Camas Creek. For instance, in 2006, cows were found in Meyer's Cove or along parts of Camas Creek below Furnace Creek *eight times* in July and August during steelhead incubation or Chinook spawning, as well as below the Furnace Creek drift fence and in other unauthorized areas. SOF ¶ 57; FS AR 2419-23; NOAA AR 1442 (stating steelhead incubation assumed to last until August 7).

In 2007, the Forest Service conducted even less monitoring than in 2006, making only three visits to upper Camas Creek during the season, and cows were found along Camas Creek just above Meyer's Cove in early August (late steelhead incubation/early Chinook spawning). FS AR 2429-30. Cows were also reported inside the Meyer's Cove exclosure in June (during steelhead incubation). FS AR 2429. Two visits later in the season did not detect cows along Camas Creek, but found the Castle Creek drift fence gate open on one visit and cows in trespass in Lower Silver Creek during the other. FS AR 2430-31. In addition, the permittee's rider admitted he had problems with cattle not staying on the Hidden Valley Ranch and returning along Camas Creek to Furnace Creek during July, but the Forest Service did not conduct any monitoring during that time to witness that trespass. FS AR 2429.

Finally, in 2008 the Forest Service monitored Camas Creek above Meyer's Cove just once, in late August, and did not see any cows. FS AR 2438-39. However, trespass into Meyer's Cove was reported on August 6-11 and again on September 10. FS AR 2438.

Thus, the Forest Service's assertion that the conservation measures were successful because there were fewer instances of trespass than in 2002-2005 is undercut by the fact that

there was far less monitoring conducted in 2006-2008, particularly in upper mainstem Camas Creek; and the monitoring that did occur found some sort of violation on almost every trip. Because there is *no time* when one of the three listed fish is not spawning or has eggs incubating in Camas Creek, any use by cattle along any part of Camas Creek adversely impacts at least one of the three species. Ruether Decl. Ex. A at 20, 65. And considering the importance of Meyer's Cove for spawning habitat and the susceptibility of riparian areas there to livestock damage, the repeated instances of trespass into that "exclosure" virtually *every year* is particularly troublesome. NOAA AR 1412 (noting Meyer's Cove is a "key spawning reach"), 1460 (stating that reaches in Meyer's Cove exclosure are "key spawning areas for both Chinook and steelhead in Camas Creek as well as highly responsive reaches which would be susceptible to grazing impacts without the fence"); FS AR 5635-37, 2349-53, 2372, 2419-23, 2429, 2438; Ruether Decl. Ex. A at 49, 58 (trespass in Meyer's Cove in 2000, 2002, 2003, 2004, 2006, 2007, 2008).

Moreover, nothing in the Forest Service record shows that the monitoring trips in 2006-2008 assessed whether cattle had accessed Camas Creek in between visits by looking for signs such as cow waste, trails, trampling, or grazing along the creek between Meyer's Cove and Hidden Valley. FS AR 2419-23, 2429-31, 2438. Indeed, the Forest Service's monitoring reports indicate that the monitoring of Camas Creek mostly occurred by riding an ATV up the Camas Creek road to Hidden Valley. *See* FS AR 2420, 2429-30, 2438. Because the road is not adjacent to Camas Creek for much of its length, and there are at least five miles of Camas Creek between Meyer's Cove and Hidden Valley, it would be virtually impossible to assess whether or how much cattle use had occurred on Camas Creek by riding an ATV up the road in a single day. The fact that the Forest Service did not happen to see cows along upper Camas Creek during the few visits it made each year does not demonstrate that cows were not accessing the creek at other

times in between visits. *See* House Decl. ¶¶ 15-32; Zuckerman Decl. ¶¶ 18-37 (describing signs of cattle use at numerous areas along Camas Creek, lower Castle Creek, and lower Furnace Creek despite not seeing any live cattle).[6]

Finally, other documents in the record show the questionable nature of concluding that the conservation measures are sufficient to protect the three fish species given the reluctance or refusal of the permittee and/or rider to follow Forest Service direction (FS AR 5633-34, 5640-41, 5650-51, 5655, 2349-53; Ruether Decl. Ex. C); the routine problem of gates being left open or fences in disrepair on the allotment (FS AR 2421-22, 2430, 5655; Ruether Decl. Ex. E); and the difficulty of getting to the allotment to maintain fences and conduct monitoring (FWS AR 3831) ("Camas is an extremely difficult allotment to get to and monitor."). In fact, in 2009 at a meeting with FWS and NOAA, the Forest Service noted that allotment administration is difficult, which has likely contributed to some of the fish/cow problems that have occurred, because:

i. Remote location of allotment and difficult access precludes routine inspection of allotment fences (boundary, drift, and exclusion).
ii. When problems with fences are observed response time is often delayed due to remoteness.
iii. Extensive cottonwood grove within Meyer's Cove exclosure has routinely resulted in broken poles due to falling limbs/trees.
iv. Recreational use in the area likely results in open gates when they should be closed and subsequent cattle use within the exclosure areas.

FWS AR 3784.

[6] Plaintiffs cite these declarations here to show that cattle use may have occurred along Camas Creek even if no cattle were detected during the few monitoring visits. This is a factor the agencies should have considered in their consultations, but did not, and thus these excerpts from the declarations can be considered by the Court as extra-record evidence. *See Sw. Ctr. for Biological Diversity v. U.S. Forest Serv.*, 100 F.3d 1443, 1450 (9th Cir. 1996) (agency may consider extra-record evidence if necessary to determine whether the agency has considered all relevant factors and has explained its decision).

In sum, the record demonstrates that the conservation measures relied on by FWS and NOAA Fisheries were far from certain to effectively avoid livestock-fish interactions or otherwise address the threats of livestock grazing on the three listed fish. In fact, the record demonstrates the opposite. Given the lack of certainty that fences, riders on the allotment twice per week and the other measures would prevent cattle access to Camas Creek, Castle Creek, and Furnace Creek, it was unreasonable for FWS and NOAA Fisheries to rely so heavily on these measures in their effects analyses and for their no-jeopardy conclusions, rendering their biological opinions arbitrary and capricious.

B. Additional Flaws Occurred in the FWS Biological Opinion

1. Effects Analysis

As noted above, the ESA and its regulations require a biological opinion to consider the direct and indirect effects of the proposed action, where indirect effects are those that are caused by or will result from the proposed action and are later in time, but still reasonably certain to occur. 50 C.F.R. § 402.02. Livestock grazing on the Camas Creek Allotment affects bull trout through impacts to the fish and their eggs, as well as impacts to habitat. The FWS's analysis of effects to bull trout and its habitat was flawed for several reasons.

With regard to direct effects to bull trout, the FWS failed to consider important information and failed to explain its analysis and conclusions. First, there is no information in the biological opinion about locations within streams where suitable spawning habitat for bull trout occurs on the allotment, where cattle access streams to water or loaf, and how much overlap there is between the two. The opinion noted the streams on the allotment that have or may have spawning bull trout, and that some streams are so steep and timbered there is little chance of livestock accessing those streams. FWS AR 22-23. The opinion also described general

characteristics of preferred spawning habitat for bull trout (low-gradient stream reaches with loose, clean gravel and cold water, often fed by springs or cold groundwater). FWS AR 12-13. Yet there was no attempt to identify where the suitable spawning habitat occurs within each stream or whether those areas are accessible to cows and used for watering or loafing. FWS AR 22-23. The only water trough on the allotment is in the West Fork unit so cows must water from streams everywhere else on the allotment. FS AR 5057, 5062, 5082.

Indeed, Appendix B to the FWS biological opinion, which described surveys for redds on other streams on the Salmon-Challis National Forest, noted that one of the major observations from the field surveys was that "livestock tracks were not random and were often associated with spawning habitat," but the biological opinion did not acknowledge or consider that in its effects analysis. FWS AR 22-27, 95.

Second, the opinion failed to consider impacts of livestock on juvenile fish, focusing solely on impacts to adults and redds. FWS AR 24-27. Yet in Appendix A to the biological opinion, FWS acknowledged that livestock wading into streams or occupying streamside habitat are likely to displace juvenile bull trout from protective streamside cover or other preferred habitat, increasing their predation risk and decreasing their survival. FWS AR 52, 71-72; *see also* NOAA AR 1379. By failing to consider these admitted impacts on rearing juveniles, the biological opinion failed to consider an important aspect of the problem.

Third, FWS failed to explain how it arrived at its estimated number of redds impacted by livestock. FWS first estimated the maximum number of redds that would likely be in each stream with both spawning habitat and cattle access, based on studies from Oregon. FWS AR 23-27. Then, it estimated how many of those redds it expected to be impacted by livestock. *Id.* But it did not explain how it arrived at the number of impacted redds for each stream, other than

to state that it was based on what part of the spawning season would overlap with livestock use and whether riders were expected to herd cows away from streams. *Id.*

For instance, for Camas Creek within the Camas Creek unit, FWS estimated a maximum of 76 redds along 6.6 miles of stream, but expected only 8-15 redds to be impacted by livestock. FWS AR 24. For the 2.3 miles of Camas Creek within the Lower Silver Creek Pasture, a maximum of 27 redds are likely to occur, and 10-15 redds are likely to be impacted. FWS AR 24-25. For Castle and Furnace Creeks, 12 redds are likely to occur, and 5-7 redds impacted by livestock, while for Lower Silver Creek 8 redds are likely to occur but only 1-2 redds impacted by livestock. FWS AR 25-26. FWS fails to explain how the numbers of impacted redds were derived. Was the number of redds impacted a certain percentage of the total redds? Was there some formula used to calculate the number of impacted redds? Did FWS take into account that livestock access to streams often overlaps with spawning habitat? *See* FWS AR 95. Or that riders are only required to herd cows twice per week and cattle like to congregate in riparian areas in late summer? *See* FS AR 5056; NOAA AR 1393-94, 4686, 5401. There is no explanation as to how FWS arrived at the number of redds impacted for each stream.

While an agency may get deference for its technical expertise, it still must explain its reasoning and support its conclusions with data and analysis. *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1075 (9th Cir. 2011); *see also Western Watersheds Project v. Kraayenbrink*, 632 F.3d 472, 493 (9th Cir. 2011) (court did not defer to agency assertions that were unsupported by data or other corroborating scientific evidence); *Nw. Coalition for Alternatives to Pesticides v. U.S. E.P.A.*, 544 F.3d 1043, 1052 & n.7 (9th Cir. 2008) (where agency's reasoning is irrational, unclear, or not supported by the data it purports to interpret, courts must disapprove the agency's action).

Finally, the effects analysis also fails to explain why livestock disturbance to adult bull trout "is likely to cause only short avoidance movements and will last only a few minutes." FWS AR 24-27. Based on that assertion, FWS concluded that livestock impacts might temporarily disrupt spawning behavior but would not be substantial enough to preclude spawning. *Id.* The biological opinion offers no studies to substantiate this assertion nor any explanation why disturbance would only last a few minutes. As noted above, cattle use along streams is often associated with spawning areas, and thus cattle could be watering or loafing in those areas for extended times, particularly given that riders are only required to move cattle that drift down to lower Castle Creek and Camas Creek twice per week when cows are in the Castle/Furnace area during bull trout spawning. FWS AR 95; FS AR 5055-56.

With respect to indirect effects to habitat, the FWS biological opinion also fails to consider several important factors. First, neither the biological assessment nor biological opinion discussed the impacts of upland grazing on the listed fish species. When assessing habitat variables, the documents discussed only streamside impacts such as riparian vegetation use and streambank trampling. FS AR 5087-91 (effects analysis), 5116 (map showing all monitoring sites on streams); FWS AR 27-32. Yet grazing in uplands can have impacts on streams. As explained in Appendix A to the FWS biological opinion, grazing can lead to soil compaction, reduced ground cover and changes to plant communities, which causes increased surface runoff and erosion that leads to increased sedimentation and channel incision in streams. FWS AR 53-56. In addition, soil compaction and loss of ground cover from grazing in uplands can decrease water infiltration into the soil, which leads to lower water tables and decreased streamflows. *Id.* Excess nutrients from cattle urinating and defecating in uplands can also run-off into streams, adding pollutants to the water. FWS AR 54.

These impacts are heightened in areas with steep slopes and erosive soils. As noted in Appendix A to the biological opinion, "the steepness of the terrain surrounding the stream affects the amount of erosion that can be caused by grazing and thereby the amount of sediment that gets channeled into the stream." FWS AR 66. One study found that "erosion increased as gradient increased for all slopes that were accessible to livestock." *Id.* Therefore, "effective management of salmonid habitats begins at the ridgeline (watershed boundary) and not at the streambank." FWS AR 67. This allotment has steep slopes with erosive soils and thus would be prone to erosion. *See* NOAA AR 1435 ("action area soils are predominantly volcanic which are moderate to highly erosive"), 1449 (noting steep topography of area and that majority of grazing occurs on high elevation sagebrush/grass slopes on southern exposures). In fact, the intent of the proposed grazing is to keep the cows on the high ridges of the allotment and away from streams, but there is no assessment of the impacts of this grazing. *See* FS AR 5056, 5086 (noting cows will be kept on sagebrush/grass ridge when in Castle/Furnace area).

The biological assessment noted that high flow events occur in mainstem Camas Creek and tributary creeks. It also admitted that sediment and high water temperatures are the two major limiting factors for fish, and mainstem Camas Creek and Silver Creek have elevated temperatures and sediment levels. FS AR 5071, 5074-75. Because of elevated sediment, Upper and Lower Camas subwatersheds are considered to be functioning at risk for sediment. FS AR 5075, 5104. Yet there was no discussion in FWS's biological opinion about whether grazing on the steep upland slopes is contributing to the high flow events and sediment levels. FWS AR 28-29. The analysis simply asserted that the riparian vegetation community and streambank stability monitoring show that grazing is not impacting sediment levels, and that high sediment is likely the result of beaver dams and high flow events. FWS AR 28. The failure to include any

discussion about conditions and impacts of grazing in uplands and whether that is influencing high flow events and sediment is another key factor FWS should have considered in its biological opinion but did not.

The FWS habitat effects analysis also makes incorrect assumptions that influence its conclusions. The biological opinion stated that each of the habitat variables is meeting objectives for the affected creeks, but at the same time stated that Silver Creek is not meeting water temperature or sediment objectives, a portion of Camas Creek is not meeting sediment objectives, and "most" streams in the allotment have appropriate width to depth ratios and bank stability. FWS AR 27-31. With regard to bank stability, FWS stated that the only area monitoring showed to be below standards was in Meyer's Cove, where cattle are not grazed. FWS AR 30. But this too is incorrect as cattle have been inside Meyer's Cove almost every year the allotment has been grazed since at least 2000 and thus violations of bank stability could very well be due to cattle. *See* FS AR 5635-37, 2349-53, 2372, 2419-23, 2429, 2438; Ruether Decl. Ex. A at 49, 58 (reported trespass into Meyer's Cove in 2000, 2002, 2003, 2004, 2006, 2007, 2008). Even the biological assessment admitted some streams were functioning at risk and not meeting objectives for water temperature, sediment, and streambank stability. FS AR 5074-77. There is no explanation for why FWS concluded "the affected creeks" currently meet all of these objectives when the data shows otherwise.

Because of these numerous flaws in the FWS's effects analysis, the biological opinion is arbitrary and capricious. *Wild Fish Conservancy*, 628 F.3d at 521 (Court must ensure the agency made a rational analysis and decision); *Pacific Coast Fed'n of Fishermen's Ass'ns*, 426 F.3d at 1090 (agency must consider all effects of an action and articulate a rational connection between the facts found and the conclusions made).

2. No-jeopardy conclusion and Letter of Concurrence

FWS concluded, based on its analysis of the environmental baseline and the effects of the proposed action, including effects of any interrelated and interdependent activities, that the proposed action is "unlikely to be incompatible with sustaining viable populations of bull trout in Camas Creek and Silver Creek." FWS AR 34. The flaws in FWS's biological opinion discussed above—the incomplete environmental baseline, failure to consider effects of grazing Hidden Valley Ranch, unreasonable reliance on conservation measures, and the inadequate effects analysis—necessarily render FWS's no-jeopardy conclusion arbitrary and capricious. These flaws also render its concurrence that the proposed grazing is not likely to adversely affect bull trout critical habitat arbitrary and capricious. FWS AR 1.

Furthermore, FWS's no-jeopardy conclusion is unlawful for additional reasons. First, FWS provided no analysis of the bull trout populations on the allotment and how the expected number of bull trout redds and adults impacted by livestock would affect the survival and recovery of those populations. As explained by the Ninth Circuit, the agency must "know roughly at what point survival and recovery will be placed at risk before it may conclude that no harm will result…." *NWF v. NMFS*, 524 F.3d at 936 (stating that NMFS inappropriately evaluated recovery impacts without knowing the in-river survival levels of fish necessary to support recovery). Furthermore, assessing whether a population will simply survive is not adequate under the ESA; an agency must identify when a population will likely pass the tipping point for *recovery*, and determine whether the proposed action will cause the population to reach that tipping point. *Id.; Wild Fish Conservancy,* 628 F.3d at 527.

The Ninth Circuit and other courts have overturned biological opinions that failed to fully analyze the impacts on populations and explain the connection between the facts and the

agency's no-jeopardy conclusion. *See NWF v. NMFS*, 524 F.3d at 936 (biological opinion unlawful where agency concluded no jeopardy without knowing what population levels were necessary for recovery); *Wild Fish Conservancy*, 628 F.3d at 526-29 (biological opinion failed to provide rational connection between facts and conclusion where it did not explain why adverse impacts to declining bull trout population would not jeopardize the species); *Ctr. for Biological Diversity v. Salazar*, 804 F.Supp.2d at 999-1001 (biological opinion's conclusion that action would not affect species' recovery was unlawful where agency did not provide full analysis of the effect of the action on recovery); *S. Yuba River Citizens League*,723 F.Supp.2d at 1266-67 (conclusion that project would not cause jeopardy to fish population without discussing the magnitude of the impact, the population's ability to tolerate impact, and reason why decline in population would not reduce overall survival or recovery was arbitrary and capricious); *Pacific Coast Fed'n of Fishermen's Ass'ns v. Gutierrez,* 606 F.Supp.2d 1122, 1174-75 (E.D. Cal. 2008) (biological opinion unlawful because it failed to adequately explain and analyze impacts of project on fish life-cycles and population dynamics).

The biological opinion here stated that the action area is within the Camas Creek and Silver Creek local populations of bull trout, which are within the Middle Fork Salmon River Core Area. FWS AR 16. It also stated that maintaining these local populations is important to maintaining the overall population and distribution of bull trout in this core area. *Id.* Yet it did not discuss the size of these two local populations and whether they are above or below viable levels. Thus, there was no baseline information from which to judge the impacts of the action.

Instead, FWS merely stated in its conclusion that because bull trout are currently well distributed in the streams across the allotment and the habitat is in good condition, the adverse effects to spawning fish and redds are unlikely to be incompatible with sustaining viable local

populations in Camas Creek and Silver Creek. FWS AR 34. But how can FWS make such a determination without explaining whether the current populations are viable or not, what the "tipping point" for recovery is, and what the affect on those populations would be if the predicted number of redds are impacted? Simply because bull trout are well-distributed does not mean they are considered viable populations.

The ESA regulations state that jeopardizing a population means reducing the "reproduction, numbers, or distribution" of a species to the extent that it reduces the likelihood of survival and recovery. 50 C.F.R. § 402.02 And the draft Bull Trout Recovery Plan, which the biological opinion stated is the "best available science" regarding survival and recovery needs of the species, explains that when assessing recovery criteria and the status of bull trout, FWS evaluates not only the distribution of bull trout, but also adult abundance, population trend, and genetic connectivity. FWS AR 9, 11, 1474-77, 1731-36. For adult abundance, local populations that contain fewer than 50-100 spawning adults are considered at risk from inbreeding depression. FWS AR 1476, 1731. Thus, FWS must consider more than just distribution; it must consider abundance and productivity (population trend) in its jeopardy analysis. *See S. Yuba Citizens League*, 723 F.Supp.2d at 1266 (holding that considering only abundance of species and ignoring other viability factors of productivity, distribution, and genetic diversity was insufficient to assess survival and recovery).

FWS provided no information in the Camas Creek biological opinion of the current abundance or population trend of the Camas Creek and Silver Creek local populations of bull trout and whether they contain more than 50 spawning adults, and no analysis of whether the livestock impacts on the 29-48 bull trout redds estimated in the biological opinion would reduce abundance and productivity to below a viable level or preclude recovery. FWS AR 34. Indeed,

based on information in the biological assessment that the abundance of bull trout in the Silver Creek population may be reduced due to high water temperatures that limit spawning, this population may not be viable. FS AR 5070, 5074. Yet, without describing the current abundance levels or population level needed for recovery, FWS simply concluded that further impacts and loss of redds in this population was not incompatible with sustaining a viable population. FWS AR 34. Just as in *Wild Fish Conservancy*, FWS failed to provide a link between the facts and its conclusion and failed to consider impacts on recovery, and thus its biological opinion is unlawful. 628 F.3d at 526-29.

Second, FWS noted in its biological opinion that it had authorized take of bull trout for nine water diversions that occur within this same core area. FWS AR 16. This take was authorized in two separate biological opinions, which each concluded that the take authorized was not likely to cause substantial impacts to the core area. *Id.* Yet nowhere did FWS analyze whether the *combined* take from all of these impacts would adversely affect survival and recovery of the core area.

In a separate document, FWS reported that the Middle Fork Salmon River Diversions biological opinion anticipated take of 20-30 bull trout (mostly juveniles) annually, and the Camas Creek Diversions biological opinion estimated take of 2-10 adults and 50 juveniles annually within the Middle Fork Salmon River core area. FWS AR 100-101. In the biological opinion at issue here, FWS estimated that grazing would impact 29-48 redds in this same core area. FWS AR 34. Yet FWS never analyzed the cumulative impact of the take from all three activities on this core area of bull trout.

Moreover, it did not even consider the combined impact of anticipated take from the Camas Creek water diversions with the estimated take caused by grazing on the allotment, each

of which affects the *same local populations of bull trout.* The killing or harming of 2-10 adults and 50 juveniles *plus* 29-48 redds on an annual basis could tip the Silver Creek or Camas Creek bull trout populations below viability or past the tipping point of recovery, but FWS never assessed those combined impacts.

"The impact of an authorized incidental take cannot be determined or analyzed in a vacuum, but must necessarily be addressed in the context of other incidental take authorized by [the agency]." *Defenders of Wildlife v. Babbitt*, 130 F.Supp.2d 121, 127 (D.D.C. 2001). The failure to address the combined anticipated take from all activities that impact the same population or core area renders the analysis of survival and recovery incomplete. "Under such an approach, a listed species could be gradually destroyed, so long as each step on the path to destruction is sufficiently modest. This type of slow slide into oblivion is one of the very ills the ESA seeks to prevent." *NWF v. NMFS,* 524 F.3d at 930. By not including the anticipated impacts from the water diversions in the Environmental Baseline, as discussed above, and not analyzing those impacts in conjunction with the impacts of the proposed action here in its jeopardy analysis, the FWS's no-jeopardy conclusion is arbitrary and capricious.

3. FWS's Incidental Take Statement was Arbitrary and Capricious.

Section 9 of the ESA and its implementing regulations prohibit "take" of these three fish species. 16 U.S.C. § 1538(a)(1)(B); 50 C.F.R. §§ 17.31, 17.44, 223.102. "Take" is defined to include harm or harassment of a member of a listed species that significantly disrupts or impairs essential behavior patterns. 16 U.S.C. § 1532(19); 50 C.F.R. § 17.3. If a biological opinion concludes that the proposed action is not likely to jeopardize the species, but is likely to result in some take, the Service must provide an incidental take statement along with the biological opinion. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i); *Ore. Natural Res. Council v. Allen,* 476

F.3d 1031, 1036 (9th Cir. 2007) ("*ONRC v. Allen*"). The incidental take statement specifies the amount or extent of incidental take on the listed species and contains terms and conditions designed to minimize the impact. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i)(1).

The amount or extent of authorized take should ideally be expressed as a numerical value, but a surrogate may be used if the Service explains why no such numerical value could be practically obtained. *ONRC v. Allen,* 476 F.3d at 1037. Furthermore, if the Service offers a reasonable explanation for why a surrogate is appropriate, it must select a surrogate that performs the function of a numerical limitation and it must articulate a rational connection between the surrogate and the taking of the species. *ONRC v. Allen,* 476 F.3d at 1038; *Arizona Cattle Growers Ass'n v. FWS,* 273 F.3d 1229, 1250-51 (9th Cir. 2001).

To be equivalent to a numeric limitation, the surrogate must set forth a trigger that, when reached, results in an unacceptable level of incidental take, invalidating the safe harbor provision of the ESA, and requiring reinitiation of consultation. *ONRC v. Allen,* 475 F.3d at 1038; *Arizona Cattle Growers,* 273 F.3d at 1249. The trigger cannot be so vague that it does not contain measurable guidelines and fails to provide a clear standard for determining when the authorized level of take has been exceeded, or so broad that it could not adequately trigger reinitiation of consultation. *Wild Fish Conservancy,* 628 F.3d at 531 (citing *Arizona Cattle Growers,* 273 F.3d at 1251 and *ONRC v. Allen,* 475 F.3d at 1038-39); *see also Ctr. for Biological Diversity v. Salazar,* --F.3d--, 2012 WL 3570667, at *14-15 (9th Cir. 2012) (discussing incidental take statement requirements and cases).

Many courts have overturned incidental take statements for having inadequate triggers. A trigger such as "improved ecological conditions" was too vague for the action agency or permittee to gauge their level of compliance, while authorized take of all members of the listed

species associated with the project area was too broad in that the permissible level of take was coextensive with the scope of the project and would never trigger reinitiation of consultation. *Arizona Cattle Growers*, 273 F.3d at 1250; *ONRC v. Allen*, 475 F.3d at 1039; *see also ONDA v. Lohn*, 485 F.Supp.2d at 1205-06 (trigger that limited take to harm or harassment of bull trout after August 15 in the grazing area during the grazing season where impacts to bull trout were expected would only be reached when the project was complete and thus would never trigger reinitiation of consultation); *Ctr. for Biological Diversity v. Provencio*, No. CV 10–330 TUC AWT, 2012 WL 966031, at *15 (D. Ariz. Jan. 23, 2012) ("*Provencio*") (overturning triggers that provided no way of gauging compliance, ceded unfettered discretion to FWS, and provided no meaningful opportunity for revived consultation); *CBD v. BLM*, 422 F.Supp.2d at 1138-40 (trigger was too vague and did not provide meaningful measure of take, and that monitoring and reporting requirements contained in the terms and conditions did not substitute for providing measurable trigger to invalidate safe harbor provision and re-initiate consultation).

The incidental take statement also must include monitoring and reporting requirements to monitor whether the authorized take is exceeded. *Wild Fish Conservancy*, 628 F.3d at 532-33 (citing 50 C.F.R. § 402.14(i)(3)). As stated by the Ninth Circuit, "a numerical cap is useful only insofar as the action agency is capable of quantifying take to determine when the trigger has been met." *Id.* at 533; *ONRC v. Allen*, 476 F.3d at 1039 (incidental take statement must set a clear standard for determining when the authorized level of take has been exceeded). Without appropriate monitoring to detect whether take has been exceeded, an incidental take statement fails to "establish a meaningful trigger for renewed consultation after the take exceeded authorized levels." *Wild Fish Conservancy*, 628 F.3d at 532.

Here, there are several problems with FWS's incidental take statement. First, it authorized take only of bull trout redds and did not authorize any take of juvenile or adult bull trout. As discussed above, FWS never assessed impacts of grazing on juvenile bull trout, and never supported or explained its assertion that harassment of adult bull trout would be so short and cause such small movements that it would not preclude spawning. *Supra* p. 29; FWS AR 24-27. Thus, its conclusion that the proposed action is not likely to result in take of any other form of bull trout was arbitrary and capricious. FWS AR 34; *ONDA v. Lohn*, 485 F.Supp.2d at 1204 (ITS invalid where conclusion that effects of action would not result in take of the species was based on arbitrary and capricious reasoning); *Wild Fish Conservancy*, 628 F.3d at 521 (when reviewing biological opinion and incidental take statement, court must ensure agency has made a rational analysis and decision).

Second, FWS failed to establish an adequate trigger and adequate monitoring and reporting requirements that provided a clear standard for determining when the authorized level of take has been exceeded to trigger reinitiation of consultation. The incidental take statement stated that "the Service anticipates that 29 to 48 bull trout redds . . . are likely to be trampled . . . by livestock on the Camas Creek Allotment." FWS AR 34. Then it asserted that the amount of incidental take of redds resulting from the action will be difficult to measure because surveying all of the streams for take would be too difficult. FWS AR 35. Therefore, the Service imposed a simpler sampling approach consisting of surveying a representative reach of one stream in the allotment that is grazed for at least one week after August 15 to document any impacted bull trout redds. FWS AR 35-36. This stream should be the stream with the highest likelihood of having redds or one known to have had redds in the past and should be surveyed when the

likelihood of observing redds impacted by livestock is the greatest. FWS AR 36. The Forest Service is to record the number of redds encountered and the number impacted by livestock. *Id.*

Based on this description in the incidental take statement, the amount or extent of take *authorized* is the same as the level *anticipated* by the proposed action, and thus is "coextensive with the project's own scope." *ONRC v. Allen,* 476 F.3d at 1039. FWS expected 29-48 bull trout redds to be impacted by livestock from the proposed grazing, and used that same number in the incidental take statement as the amount or extent of take authorized. FWS 24-27, 35. Because the amount or extent of take authorized in the incidental take statement matches the expected amount of take, the authorized level of take would not be reached until the proposed action was complete and therefore would never trigger reinitiation of consultation. This approach is unlawful. *ONRC v. Allen,* 476 F.3d at 1039.

Moreover, FWS's monitoring and reporting requirement failed to establish any trigger for when take was exceeded and reinitiation must occur. Even if 29-48 redds was a valid numerical cap on take, FWS did not provide a rational connection between the results from one survey reach and the total take expected on all seven streams. FWS AR 24-27, 35. FWS simply stated that the sample survey would monitor "the scale" of anticipated incidental take but provided no explanation of what that scale is to establish an adequate trigger. FWS AR 35. Does one redd impacted by livestock trigger reinitiation? Three redds? Five redds? What if no redds are found in that stream reach that year? All FWS required is that the survey count the number of redds encountered and the number of redds impacted in the single survey reach and report those numbers, and thus it did not set forth a clear standard for determining when the authorized level of take has been exceeded and a meaningful opportunity for revived consultation. Accordingly, the incidental take statement was invalid.

C. Additional Flaws Occurred in the NOAA Fisheries Biological Opinion.

1. Effects Analysis

In addition to the flaws discussed in Section A above, the NOAA Fisheries biological opinion contained further flaws in its analysis of effects. With regard to habitat effects, like the FWS biological opinion, the NOAA Fisheries biological opinion did not consider impacts from upland grazing. Rather than assessing whether upland grazing was contributing sediment to streams, NOAA focused solely on riparian impacts to assess grazing effects on sediment levels even though it recognized that much of the grazing would occur on upland slopes with moderate to highly erosive soils and that sediment levels were high in Silver Creek and Camas Creek. NOAA AR 1435-36, 1456-62. In its comments on the draft biological assessment, NOAA expressed concerns about high sediment levels and questioned whether cattle use of uplands was influencing sediment, but then never assessed that in its biological opinion. NOAA AR 425.

NOAA's analysis of direct impacts to Chinook and steelhead was also flawed due to its incorrect assertion that cattle would have little access to spawning and rearing habitat. First, as discussed above, NOAA's heavy reliance on fences and part-time riders in its analysis was unreasonable given the lack of certainty that these measures would prevent livestock-fish interactions and access to Meyer's Cove, Camas Creek, and lower Castle and Furnace Creeks. *See supra* pp. 17-28.

Second, NOAA failed to assess the impacts of the "incidental use" that could occur each year along Camas Creek early in the Chinook spawning period and during steelhead incubation. The Forest Service acknowledged in the biological assessment that up to 24 cows (12 cow/calf pairs) could remain along Camas Creek for up to three weeks after the herd is trailed from the West Fork unit to the Castle/Furnace area in late July. FS AR 5054-55 (admitting "incidental

use of no more than 12 pairs until August 15" would occur). As stated in the assessment, "[i]t is expected, however, that some uncollected stray livestock may still remain along Camas Creek below the mouth of Furnace Creek after July 26 *each year* due to difficulties collecting and moving animals from that area. It is estimated that this potential residual presence would typically number less than ten percent of the permitted livestock number. These individuals would be located collected and moved by the rider to the ridge between Pole Creek and Furnace Creek prior to August 15." FS AR 5083 (emphasis added). Thus, 24 cows could be foraging, watering, and loafing along Camas Creek in late July and early August. Given that cattle use along streams is often associated with spawning areas, and that cattle congregate in riparian areas in summer, this "incidental use" could certainly impact spawning and incubating fish. *See* House Decl. ¶¶ 16-17, 20, 23, 34; FWS AR 95; NOAA AR 1393-94, 4686, 5401.

NOAA should have considered this impact because the incidental use along Camas Creek could overlap with Chinook spawning or steelhead incubation. Although Chinook salmon spawning is generally thought to begin on August 15, researchers documented spawning of Chinook beginning as early as July 24 a few miles upstream in Camas Creek near the Hidden Valley Ranch. NOAA AR 1440. The biological opinion noted that Chinook salmon redd trampling could occur between July 25 and September 20, which means adult Chinook salmon could start spawning as early as July 25. NOAA AR 1450; *see also* NOAA AR 54, 56 (meeting notes where NOAA stated importance of removing cattle before Chinook spawning starts around July 25). Studies also show that steelhead incubation in this area can extend through early August, and NOAA presumed incubation of steelhead in Camas Creek can last until August 7. *Id.* Thus, the "incidental use" of livestock on Camas Creek between July 26 and August 15 could easily overlap with one or both of these critical periods. *See* Ruether Decl. Ex. A at 20

("there is likely no time window that salmonids would not be spawning or eggs would not be incubating in the gravel"). NOAA also stated that juvenile salmon and steelhead are on the allotment year-round, and can be disturbed by cattle. NOAA AR 1448, 1379.

Yet NOAA did not even mention the incidental use when discussing disturbance to spawning adult Chinook salmon and juvenile salmon and steelhead. NOAA AR 1448-49. It assumed that cattle interactions with spawning Chinook salmon would essentially be avoided due to the conservation measures and proposed grazing rotations, ignoring the potential for 24 cows to interact with Chinook for several days to several weeks during the early spawning period. NOAA AR 1448. NOAA also ignored the "incidental use" when discussing impacts to juvenile fish, explaining that disturbance would be infrequent due to the conservation measures and topography. NOAA AR 1448-49. It stated that the majority of cattle use along main Camas Creek occurs only as trailing between pastures, where cattle are actively pushed through the route by riders and do not feed much. NOAA AR 1449. NOAA ignored the fact that each year, up to 24 stray cows may remain along Camas Creek for up to three weeks after trailing is over. *Id.* The impacts of this "incidental use" to adult Chinook salmon and juvenile salmon and steelhead should have been discussed.

When assessing livestock impacts to Chinook salmon redds, NOAA mentioned the incidental use but incorrectly assumed that it occurs only once in ten years, when the permittee grazes the Hidden Valley Ranch. NOAA AR 1454. But as noted above, the Forest Service clearly stated that it could occur *each year*. FS AR 5054, 5083. Furthermore, NOAA stated that the incidental use would be by less than 12 animals, whereas the Forest Service allowed that it would be no more than 12 *cow/calf pairs,* or 24 animals. NOAA AR 1454, FS AR 5054-55. By late July or early August, calves generally weigh 400-600 pounds and can easily trample a

salmon redd, and thus NOAA should have considered the impacts from 24 animals. Due to these incorrect statements, NOAA's analysis significantly underestimated the extent of the impacts the incidental use could have on Chinook redds. *See* NOAA AR 639 (comments on draft BA questioning frequency of incidental use, confirming that "[o]nce every ten years compared to annual use of this area is a large difference").

And when discussing the impacts during the one in ten years Hidden Valley is used, NOAA stated that there was a discountable likelihood the stray cattle would trample redds because spawning typically initiates after August 15. NOAA AR 1454. Yet just four pages earlier in the effects analysis, NOAA stated that Chinook salmon redd trampling could occur starting July 25. NOAA AR 1450; *see also* NOAA AR 54, 56. Even the Forest Service admitted that disturbance to Chinook spawning and redds could not be considered discountable due to potential stray livestock along Camas Creek after July 26, but NOAA ignored this impact. FS AR 5084.

NOAA also incorrectly stated that livestock graze the Castle/Furnace area until approximately August 31, when in fact, livestock are usually in that area an additional two weeks. NOAA AR 1454; FS AR 5055 (noting livestock will be in Castle/Furnace after August 15 for up to four weeks). Thus, cattle presence would extend farther into the Chinook spawning period in the Castle Creek drainage than what NOAA considered.

And when discussing impacts to steelhead redds, NOAA again ignored the incidental use. NOAA incorrectly stated that the potential for steelhead redd trampling occurred between June 1 and July 6 when previously it stated that steelhead eggs could be incubating in the redds until August 7. NOAA AR 1440, 1450. Given that steelhead eggs could be incubating that long, NOAA should have considered the impacts of up to 24 cows foraging along Camas Creek in late

July and early August, but it did not mention this "incidental use" or its impacts at all in the discussion about steelhead redd trampling. NOAA AR 1450-53. Instead, it assumed that cows would have little access to Camas Creek and adjusted its analysis accordingly. NOAA AR 1-3, 1452 Table 10 n.e. NOAA's inaccurate statements, combined with its failure to assess the impacts of the yearly potential for 24 cows to use Camas Creek from July 26 to August 15, renders its effects analysis arbitrary and capricious.

NOAA made additional flaws in its analysis of effects to steelhead redd trampling. It used surveys completed in the 1980s and 1990s as the basis of its estimate of steelhead redd densities on the allotment, but it admitted that the surveys were unreliable to estimate redd counts because they were conducted during high water flows. NOAA AR 1450. Earlier, the biological opinion stated that these surveys were unlikely to reflect the total number of redds that occurred due to difficulties monitoring in high water flows during the late part of the spawning season. NOAA AR 1442. Thus, the surveys almost certainly underestimated the number of steelhead redds in these streams, yet NOAA based it effects analysis entirely on these redd counts. NOAA AR 1450-52.

NOAA also reduced the potential for trampling of steelhead redds because of the assumption that cattle would not be in the streams during high water flows in spring and early summer and thus would not trample redds. NOAA AR 1451. NOAA's assumption, however, did not take into account that it previously stated steelhead incubation could occur until August 7, at which point water flows would be lower, increasing the potential for trampling later in the incubation period. NOAA AR 1442; Brott Decl. ¶¶ 15-17, 26-27 (showing cattle wading in Camas Creek on July 23, 2012).

Nor did NOAA consider in its biological opinion that the stream areas cattle prefer to access for watering or crossing—areas that are flatter, shallower, and have lower water velocities—are also the same type of areas in which steelhead and salmon prefer to spawn. *See* House Decl. ¶¶ 16-17, 20, 23, 34. NOAA even noted in its comments on the draft biological assessment that it was unaware of any support for the proposition that cattle use would be restricted by high water flows, and that "[s]teelhead spawn at pool tails in C channel types which would be the most likely place livestock would enter the stream, due to the more shallow depth." NOAA AR 317, 422. Thus, even during high flows, the areas in streams where cattle water or cross may very well overlap with steelhead redds. The biological opinion admitted that spawning is not distributed equally across all miles of streams but, rather, is concentrated in the highest quality habitat, but did not acknowledge that this high quality habitat is also likely the same type of area cattle will use to access the streams. NOAA AR 1451. NOAA's blanket reduction of trampling rates by 75% did not take these factors into account. *Id.* These flaws make NOAA's estimate of the number of redds trampled, and in turn the number adult steelhead lost due to grazing, unreasonable. NOAA AR 1452-53, 1455.

Because of the inaccurate statements, flawed analysis, and unreasonable reliance on conservation measures, as discussed here and above, NOAA's effects analysis was arbitrary and capricious.

2. No-jeopardy conclusion and LOC

Based on its flawed analysis, NOAA concluded that the likelihood of cattle trampling Chinook salmon redds was discountable and thus the proposed grazing would not jeopardize the continued existence of the species. NOAA AR 1455, 1465. This conclusion is not sufficient to show the agency considered the potential for recovery in its no-jeopardy conclusion for Chinook.

The Chinook salmon population in Camas Creek is already well below a viable population level. NOAA AR 1427. The minimum abundance threshold for this to be a viable population is 500 adults, and the current population's mean abundance level was 28 adults, representing only 6% of the minimum threshold abundance. *Id.* Thus, the population's abundance/productivity risk was considered high. *Id.* The spawning recruitment numbers from the last twenty years showed recruitment at .83, which is less than replacement—i.e. the population is going down—and far less than the 2.21 value required for minimum threshold abundance. *Id.* Redd surveys also showed a significant downward trend in redd counts from 2001 to 2009, falling from 94 redds to just 12 redds, and compared to 100-250 redds found in the early 1960's. FS AR 5138, 5102; NOAA AR 3120. As NOAA stated, "[s]ubstantial improvements in abundance/productivity status are required for the population to be considered viable." NOAA AR 1427.

The Camas Creek Chinook salmon population, along with eight others, make up the Middle Fork Salmon River "major population group" (MPG), but none of the nine populations are viable. NOAA AR 1426. For this MPG, five of these local populations must be viable for the entire MPG to be viable. *Id.* Thus, in order to assess the viability of the Middle Fork Salmon River MPG, NOAA must assess the viability of the nine local populations in this MPG, including the Camas Creek population. *See* NOAA AR 4992, 5004, 5086 (assessing viability of Camas Creek Chinook population).

Here, because the Camas Creek Chinook salmon population is so far below a viable level, not only can it not afford *any* detrimental impacts just to survive, but it must have a drastic improvement in its status to achieve recovery. NOAA never analyzed whether continuing livestock grazing would allow for such an improvement. It explained the various adverse effects

grazing could have on Chinook salmon and its habitat, but then claimed—based on unreasonable or inaccurate assumptions—that these impacts would be "discountable" and were "not likely to jeopardize the continued existence of the affected species." NOAA AR 1447-50, 1453-55, 1465. But even "discountable" impacts could preclude the improvements needed for recovery.

Given that the same livestock grazing would be occurring in the future as had occurred in the past several years, grazing was expected to continue to maintain the same conditions on the allotment. NOAA AR 1445-46. Yet during this same time period, Chinook salmon redds remained at perilously low numbers in Camas Creek, ranging from 7 to 13, and adults were still far below the 500 needed for viable abundance. NOAA AR 1427; FS AR 5138. Clearly, additional spawning is needed for this population to recover, but NOAA did not address whether grazing would impact the potential for this additional spawning to occur.

As explained in *Wild Fish Conservancy*, where a population is at low numbers and on a downward trend, absent some intervention the population will eventually reach zero; and even before that point, it may reach a point at which it is no longer recoverable. 628 F.3d at 527. And as stated recently in *Provencio*, a conclusion that a proposed action will improve the status of the species over time is not enough to demonstrate that the agencies considered the impact on recovery. 2012 WL 966031, at *12. Recovery means more than just improved status; it means improvements to the point where the species may be delisted. *Id*. Because NOAA has not determined when the tipping point precluding recovery of the Camas Creek Chinook population is likely to be reached, nor analyzed whether the proposed grazing will prevent or impair recovery, its no-jeopardy conclusion was unlawful. *Wild Fish Conservancy*, 628 F.3d at 527; *NWF v. NMFS*, 524 F.3d at 936; *Provencio*, 2012 WL 966031, at *12-13; *CBD v Salazar*, 804 F.Supp.2d at 1000-01; *Pac. Coast Fed'n of Fishermen's Ass'ns*, 606 F.Supp.2d at 1171.

For steelhead, NOAA determined that loss of one to five adult steelhead would not reduce the viability or recovery potential of the Lower Middle Fork Salmon River population. NOAA AR 1465. This population is also well below a viable level and rated at high abundance/productivity risk. NOAA AR 1428. "Survival rate increases that lead to increases in abundance and productivity will need to occur before the population can be considered viable." *Id.* It is not clear how a loss of any individuals from this population would be compatible with its survival, let alone its recovery, when its abundance must *increase* to reach a viable level. *See Wild Fish Conservancy*, 628 F.3d at 526-27.

Furthermore, NOAA focused solely on the impact to the abundance of the entire Lower Middle Fork Salmon River population and ignored the impact from the loss of adult steelhead just on the Camas Creek sub-population. NOAA AR 1455, 1465. Yet Camas Creek is the largest of five major spawning areas within the Lower Middle Fork Salmon River, and is considered the "highest priority action area" within the Lower Middle Fork population. NOAA AR 1885, 5051. Thus, loss of the Camas Creek sub-population could substantially impair survival and recovery of the larger Lower Middle Fork Salmon River population. A broad level analysis that masks individual effects is impermissible. *Pac. Coast Fed'n of Fishermen's Ass'ns*, 265 F.3d at 1036-37; *S. Yuba River Citizens League*, 723 F.Supp.2d at 1265. NOAA erred by not considering the impact of the loss of 1-5 adult steelhead from the Camas Creek area alone and only looking at the larger scale of the entire Lower Middle Fork Salmon River. *Wild Fish Conservancy*, 628 F.3d at 529 (holding that biological opinion must adequately consider impact to local fish population where that population was important to core area population); *Nez Perce Tribe v. NOAA Fisheries*, No. CV-07-247-N-BLW, 2008 WL 938430, at *6 (D. Idaho April 7, 2008) (discussing need to assess impacts to subpopulation of steelhead within one drainage

because reductions of fish abundance in small area could significantly affect larger steelhead population). Because of these flaws, NOAA's no-jeopardy conclusions for Chinook salmon and steelhead were arbitrary and capricious.

Finally, NOAA's concurrence that grazing was not likely to adversely affect critical habitat because impacts were insignificant or discountable was also unreasonable due to the problems with its analysis discussed above and the failure to consider recovery. NOAA AR 1465-66; *Gifford Pinchot Task Force v. FWS*, 378 F.3d 1059, 1069-70 (9th Cir. 2004) (holding that agency had to consider recovery when evaluating adverse modification of critical habitat). Given that the same grazing was going to occur and would generally maintain the same conditions on the allotment, it was not reasonable to assume that grazing would allow for recovery when some indicators, such as sediment and water temperature, were functioning at risk and were only expected to improve in some localized areas. NOAA AR 1445.

As NOAA itself stated in its comments on the draft biological assessment, "livestock use of the allotment is more likely to be retarding habitat recovery than it is to be having no influence on it. Not sure we should/would concur with their NLAA determination for habitat. . . . Just because it's better than before does not mean that it's good enough." NOAA AR 373. By failing to assess whether grazing would allow for conditions that were "good enough" for recovery, NOAA's concurrence that grazing would not adversely affect critical habitat was arbitrary and capricious. For all of these reasons, the Court should reverse and remand NOAA's biological opinion and letter of concurrence.

3. NOAA's Incidental Take Statement was Arbitrary and Capricious.

NOAA's incidental take statement is arbitrary and capricious because it failed to authorize take of any form of Chinook salmon as well as juvenile steelhead. NOAA AR 1467-

68. As noted in *ONRC v. Allen*, NOAA "must issue an Incidental Take Statement if the BiOp concludes no jeopardy to listed species or adverse modification of critical habitat will result from the proposed action, but the action is likely to result in incidental takings." 476 F.3d at 1036 (citing 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i); *Arizona Cattle Growers*, 273 F.3d at 1242). NOAA's failure to issue an incidental take statement that covered Chinook salmon and juvenile steelhead was arbitrary and capricious.

NOAA stated that it was not authorizing take of Chinook because the conservation measures of unit rotations, fences, riders, salting, and annual use standards made the likelihood of Chinook salmon redd trampling discountable. NOAA AR 1467-68. NOAA did not mention take of juvenile steelhead in the incidental take statement, but had previously stated that disturbance of juveniles was not expected to result in take in part because of the conservation measures that would keep cattle away from steam channels such as fencing, salting, and use of riders. NOAA AR 1449.

As explained above, NOAA's reliance on these conservation measures to discount impacts to Chinook salmon and steelhead because the measures would *prevent* livestock access to streams and thus *avoid* livestock-fish interactions was unreasonable based on the history of trespass on the allotment (including after the current conservation measures were put in place), the ineffectiveness of fences from keeping cattle off Camas Creek and out of Meyer's Cove, the inability of riders to keep cows in authorized areas, and the general difficulty managing this allotment and maintaining the fences and gates. *See supra* pp. 17-28.

Furthermore, NOAA failed to consider the impacts on these fish from the annual "incidental use" of up to 24 cows along Camas Creek in late July and early August. *Supra* pp. 43-46. Thus, the reasoning behind its conclusion that no take of any Chinook salmon or juvenile

steelhead would occur from the proposed grazing was arbitrary and capricious, invalidating the incidental take statement. *ONDA v. Lohn*, 485 F.Supp.2d at 1204 (holding that reasoning for finding effects of action would not result in take to steelhead was arbitrary and capricious and thus ITS was invalid); *ONRC v. Allen*, 476 F.3d at 1036 (incidental take statement is arbitrary and capricious where there is no rational connection between the facts and the choices made by the agency or where the agency has failed to consider an important aspect of the problem).

II. ONGOING GRAZING ON THE CAMAS CREEK ALLOTMENT VIOLATES ESA §§ 7(a)(2) & 9 AND REQUIRES REINITIATION OF CONSULTATION.

A. The Forest Service is Violating its Substantive Duty to Ensure Its Actions are not Jeopardizing Threatened Species.

The ESA imposes a substantive duty on federal agencies to ensure that their actions are not likely to jeopardize the continued existence of listed species. 16 U.S.C. § 1536(a)(2); *Wild Fish Conservancy*, 628 F.3d at 532. Following issuance of a biological opinion, a Federal agency shall determine whether and in what manner to proceed with the action in light of its Section 7 obligations and the Service's biological opinion. 50 C.F.R. § 402.15(a). Consulting with FWS or NOAA alone does not satisfy an agency's duty under the ESA, because arbitrarily and capriciously relying on a faulty biological opinion violates the action agency's substantive duty under Section 7. *Resources Ltd., Inc. v. Robertson*, 35 F.3d 1300, 1304 (9th Cir. 1994); *Wild Fish Conservancy*, 628 F.3d at 532 (*citing Defenders of Wildlife v. EPA*, 420 F.3d 946, 976 (9th Cir. 2005), *rev'd on other grounds, Nat'l Ass'n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644 (2007)).

Where the biological opinion's flaws are legal in nature, reliance on that opinion violates the ESA. *Wild Fish Conservancy*, 628 F.3d at 532. For instance, where a biological opinion was legally inadequate because it failed to articulate a rational connection between its findings and its

no-jeopardy conclusion, and included an inadequate incidental take statement, an action agency's reliance on that opinion was arbitrary and capricious. *Id.* Therefore, the action agency violated its substantive duty to ensure that its action did not jeopardize the continued existence of the listed species. *Id.; see also CBD v. Salazar,* 804 F.Supp.2d at 1010 (biological opinion had legal flaws by failing to analyze effects of action on recovery, relying on uncertain mitigation measures, and failing to articulate rational connection between its findings and its no jeopardy conclusion and thus agency violated its substantive duty to ensure against jeopardy by relying on flawed opinion).

Here, the Forest Service is relying on legally flawed biological opinions to continue to authorize grazing on the Camas Creek allotment. *See* FS AR 3235 (2010 AOI). As discussed above, these opinions had various legal flaws, including that they did not adequately discuss the environment baseline, did not consider the effects of an interdependent activity, relied on conservation measures that were not certain to address the threats to the species, failed to sufficiently analyze the effects of the action, and failed to articulate a rational connection between their findings and their no-jeopardy conclusions. *See Wild Fish Conservancy,* 628 F.3d at 532; *CBD v. Salazar*, 804 F.Supp.2d at 1010 (noting that similar flaws in biological opinions were legal flaws). Thus, the Forest Service is violating its substantive duty under ESA Section 7 to ensure that authorizing grazing on the Camas Creek allotment does not jeopardize the continued existence of bull trout, Chinook salmon, or steelhead.

B. The Forest Service and Whitworth Defendants are Causing Unlawful Take.

The Forest Service, as well as Whitworth Ranches, Inc. and Jack Whitworth (collectively, "Whitworth Defendants"), are causing unlawful take of Chinook salmon and steelhead by, respectively, authorizing and conducting livestock grazing that harms and harasses these fish.

Because NOAA Fisheries did not authorize take of any Chinook salmon, and because the Forest Service and the Whitworth Defendants have already violated a key term and condition of NOAA's incidental take statement that covered steelhead redds, such take has occurred and is likely to occur in the future. Thus, the Forest Service and the Whitworth Defendants are liable for take under Section 9 of the ESA.

As noted above, the ESA and its regulations prohibit "take" of Chinook salmon and steelhead, where take is defined to include harass, harm, wound, or kill. 16 U.S.C. §§ 1538, 1532(19). Harm is an act which actually kills or injures wildlife, and may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering. 50 C.F.R. § 17.3. Harass is an intentional or negligent act or omission that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. *Id.*

First, the Forest Service and the Whitworth Defendants are liable for take of Chinook salmon because there is *no* authorized take of Chinook salmon from livestock grazing on the Camas Creek allotment under NOAA's incidental take statement, NOAA AR 1467-68, but as explained below, such take is occurring. The Whitworth Defendants are liable because they hold the allotment permit, own the livestock that graze the Camas Creek allotment, and are directly responsible for managing the cattle while on the allotment. FS AR 2388. The Forest Service is liable for take because it authorizes the livestock grazing that occurs on the Camas Creek allotment. *See Ore. Natural Desert Ass'n v. Tidwell*, 716 F.Supp.2d 982, 1004 (D.Or. 2010) ("*ONDA v. Tidwell*") (Forest Service may be held liable for authorizing grazing that results in unlawful take); *Defenders of Wildlife v. Martin*, No. CV-05-248-RHW, 2007 WL 641439, at *8

(E.D. Wash. Feb. 26, 2007) (holding Forest Service liable for authorizing snowmobiling that caused take of woodland caribou); *Strahan v. Coxe*, 127 F.3d 155, 163-64 (1st Cir. 1997) (holding government officials liable for take for authorization of third party actions); *Pacific Rivers Council v. Brown*, No. CV 02–243–BR, 2002 WL 32356431, at *11-12 (D.Or. Dec. 23, 2002) (same).

The Forest Service and the Whitworth Defendants are also liable for take of steelhead redds because one of the key Terms and Conditions of NOAA's incidental take statement authorizing take of steelhead redds was violated. Because NOAA relied heavily in its effects analysis and no-jeopardy conclusion on the assumption that fences would preclude most access to steelhead redds on Camas Creek and lower Castle Creek, it included the following Term and Condition in the incidental take statement: "All exclosures, drift fences, and water developments that reduce cattle use adjacent to streams are properly maintained and functioning as intended." NOAA AR 1452, 1472. Yet, the Meyer's Cove exclosure fence was not functioning appropriately for much of the 2010 grazing season and again in July 2012, nor were the Castle and Furnace Creek drift fences for much of the 2012 grazing season, allowing cattle to access Meyer's Cove, other parts of Camas Creek, and lower Castle and Furnace Creeks. FS AR 5714, 3262; Ruether Decl. Exs. E & F; Brott Decl. ¶¶ 5-34; Zuckerman Decl. ¶¶ 9-17, 23-26, 33-35, 42.

The violation of this key Term and Condition abrogates the safe harbor provision of the incidental take statement, leaving the Forest Service and the Whitworth Defendants liable for violating ESA Section 9. *ONDA v. Tidwell*, 716 F.Supp.2d at 1005; *Arizona Cattle Growers*, 273 F.3d at 1239; *ONRC v. Allen*, 476 F.3d at 1040 (all holding that non-compliance with conditions of incidental take statement leaves actor liable for take). To establish take, Plaintiff

must demonstrate by a preponderance of the evidence that the grazing authorized by the Forest Service and conducted by the Whitworth Defendants resulted in the take of Chinook salmon or steelhead. *Defenders of Wildlife v. Bernal,* 204 F.3d 920, 925 (9th Cir. 2000); *ONDA v. Tidwell,* 716 F.Supp.2d at 1005.

NOAA recognizes that trampling of redds by livestock constitutes take due to likely injury or killing of eggs and embryos in the gravels. NOAA AR 1467-68; *see also* FS AR 5081. The agencies also recognize that grazing can adversely affect streams and riparian areas where cattle have access through bank trampling and overuse of riparian vegetation, which can introduce fine sediment into the streams. NOAA AR 1460, FS AR 5081. Increased fine sediment adversely affects salmon and steelhead and their habitat, as well as reduces survival of eggs and incubation success. NOAA AR 1456; FS AR 5074, 5088. NOAA has stated that Meyer's Cove contains key spawning areas for both Chinook and steelhead and is susceptible to grazing impacts. NOAA 1460. Redd surveys for Chinook salmon show that spawning occurs all along Camas Creek, particularly in the area around Meyer's Cove and upstream to Castle Creek, and near White Goat Creek and Hidden Valley Ranch. NOAA AR 704. Spawning for Chinook in Camas Creek can start as early as July 24, while steelhead incubation may last until August 7. NOAA AR 1440, 1442, 1450. Forest Service researchers have expressed grave concern about cattle impacts to Chinook redds in the Hidden Valley Ranch area and concluded that such impacts constitute take. Ruether Decl. Ex. A at 9, 15, 58, 105-06.

Plaintiff's experts confirm these adverse effects of grazing on salmon and steelhead redds, and conclude that such adverse effects likely occurred in 2012 through direct trampling of redds that killed or injured eggs and embryos and through bank trampling adjacent to redds,

which introduced fine sediment in the area of the redds. House Decl. ¶¶ 15-40; Zuckerman Decl. ¶¶ 39-47.

Observations by Plaintiff's experts and other staff establish the following:

(1) More than thirty cattle were inside Meyer's Cove exclosure on July 23, watering in, loafing in, and crossing Camas Creek during steelhead incubation, and signs of cattle use in Meyer's Cove were observed in August and September, including heavy cattle use that had caused streambank trampling and sediment deposition adjacent to a Chinook salmon redd. Brott Decl. ¶¶ 5-27; House Decl. ¶¶ 15-17; Zuckerman Decl. ¶¶ 18-19;

(2) Cattle use was prevalent all along Camas Creek from Meyer's Cove to Furnace Creek, including cow waste, trails down to and through riparian areas, fresh hoof prints, bank trampling, and heavy grazing and browse of riparian vegetation and shrubs. House Decl. ¶¶ 19-29; Zuckerman Decl. ¶¶ 20, 27, 32.

(3) At least thirteen Chinook salmon redds were observed in Camas Creek between Meyer's Cove and Furnace Creek, all but one of which had signs of cattle use adjacent to the redd site, including bank trampling that contributed sediment to the stream near the redds and one redd with depressions that were likely caused by a cow stepping on the redd. House Decl. ¶¶ 19-29, 34; Zuckerman Decl. ¶¶ 20, 27-32, 44.

(4) New Chinook salmon redds were observed between early August and early September, and new signs of cattle use near the redds occurred during this time. Zuckerman Decl. ¶¶ 27-32, 40.

(5) Cattle use is often associated with spawning habitat because both occur in flatter areas with low gradient streams, low water velocity, and shallow water depths. House Decl. ¶¶ 16-17, 20, 23, 34; Zuckerman Decl. ¶ 44.

(6) Cattle use occurred in lower Castle Creek, below the drift fence, with new signs of use occurring throughout the season. House Decl. ¶¶ 31-32; Zuckerman Decl. ¶¶ 23-26. A salmon redd was observed in lower Castle Creek, and signs of cattle use occurred adjacent to the redd site. House Decl. ¶ 31.

(7) Cattle use occurred on Camas Creek between Furnace Creek and White Goat Creek near Chinook spawning habitat, and three cattle were in White Goat Creek on July 24, even though cattle were not authorized to use the area above Furnace Creek at all in 2012. Brott Decl. ¶ 30; House Decl. ¶ 30; Zuckerman Decl. ¶¶ 36-37. Chinook salmon spawning has been documented beginning as early as July 24 in Camas Creek near White Goat Creek. NOAA AR 1440.

Based on these observations, cattle grazing is causing significant impacts to Chinook salmon and their incubating redds on the allotment due to trampling of redds that kills or injures fish embryos as well as trampling of streambanks that leads to increased deposition of fine sediment on redds, suffocating the eggs. House Decl. ¶¶ 36-40; Zuckerman Decl. ¶¶ 39-47. Grazing also likely harasses adult Chinook salmon, disrupting their spawning and redd development. House Decl. ¶ 39, Zuckerman Decl. ¶ 46. These same impacts are also likely occurring to steelhead redds, which incubate in Camas Creek, lower Castle Creek, and lower Furnace Creek in July and possibly until August 7. Zuckerman Decl. ¶¶ 41, 47. Because these impacts actually kill or injure fish embryos or cause harassment or habitat degradation that significantly disrupts breeding, livestock grazing on the Camas Creek allotment is causing take of Chinook salmon and steelhead.

C. The Forest Service Must Reinitiate Consultation for the Camas Creek Allotment.

Once consultation is completed, the agencies have an ongoing duty to ensure that the consultation remains valid. Reinitiation of consultation is required where the action is ongoing and: (1) if the amount or extent of taking specified in the incidental take statement is exceeded; (2) if new information reveals effects of the action that may affect listed species or designated critical habitat in a manner or to an extent not previously considered; (3) if the identified action is subsequently modified in a manner that has an effect to the listed species or designated critical habitat that was not considered in the opinion; or (4) if a new species is listed or critical habitat is designated that may be affected by the identified action. 50 C.F.R. § 402.16. Here, both (1) and (2) have occurred and thus the Forest Service must reinitiate consultation with FWS and NOAA Fisheries.

The Ninth Circuit has explained that when mitigation measures relied on by agencies for a no-jeopardy conclusion do not occur, that is new information that may affect a listed species, requiring reinitiation of consultation. *Sierra Club v. Marsh*, 816 F.2d 1376, 1387-89 (9th Cir. 1987). The Court stated:

> Translating section 402.16(b) into the language of this case, we conclude that the COE violated the regulation by failing to reinitiate consultation after learning ("new information reveals") that the destruction and modification of marshland by the project ("effects of the action") could harm the clapper rail and the least tern ("may affect the listed species") because the anticipated mitigation efforts have been delayed and may not take place at all ("in a manner or to an extent not previously considered").

Id. at 1388. Likewise, in *Forest Guardians v. Johanns*, the Ninth Circuit held that failure to abide by monitoring requirements and grazing standards that were the basis of the agency's "not likely to adversely affect" conclusion triggered reinitiation of consultation. 450 F.3d 455, 463-66 (9th Cir. 2006). The same reasoning applies here, as the information from 2010 and 2012 showing that the conservation measures were not effective at keeping cattle away from spawning areas and avoiding livestock/fish interactions requires reinitiation of consultation.

As described above, monitoring of the allotment in 2010 and 2012 showed that the Meyer's Cove exclosure had not been maintained, was not functional prior to grazing, and that cattle entered the exclosure in July of both years. FS AR 5714, 3262; Ruether Decl. Exs. E & F; Brott Decl. ¶¶ 5-26.

Plaintiff notified the Forest Service of breaches in the exclosure fence in fall 2009 and several times thereafter. SOF ¶ 63, 68, Ruether Decl. Ex. E, FS AR 5714. The Forest Service failed to fix the problem before 2010 turnout, allowing grazing to occur in two units adjacent to the exclosure. *Id*. Sure enough, cattle entered the exclosure in July when the fence was in

disrepair. FS AR 5714. The Forest Service only contracted to have the fence repaired in July 2010, and it was not completed until September of that year. FS AR 3262 (contract).

The next year that grazing occurred, cattle again entered the exclosure.[7] In late July 2012, at least 33 cattle were observed in Meyer's Cove, several of which were standing in or crossing the creek, and cattle signs were seen throughout the exclosure. Brott Decl. ¶¶ 5-26. Surveys of Meyer's Cove later in the season also showed that the fence was still not fully functional and extensive signs of cows occurred inside the exclosure. Zuckerman Decl. ¶¶ 9-19, House Decl. ¶¶ 15-17. Thus, in both years that grazing occurred on the allotment after the biological opinions were issued, cattle entered Meyer's Cove because the fences were not functional.

In late July 2012, the drift fences in lower Castle Creek and lower Furnace Creek also needed repairs in order to be functional, and the Forest Service was notified of these problems. Brott Decl. ¶¶ 27, 29; Decl. of Jon Marvel, Ex. A. Yet, the fences on Castle and Furnace Creeks remained in disrepair throughout the grazing season, allowing cattle access to downstream areas of Castle and Furnace Creeks. Zuckerman Decl. ¶¶ 23-26, 33-35, 42, House Decl. ¶¶ 31-32. The condition of these fences during the grazing season violated the Term and Condition in the NOAA incidental take statement requiring that all exclosures and drift fences are properly maintained and functioning as intended. NOAA AR 1472.

In 2012, monitoring also showed signs of cattle use all along Camas Creek from Meyer's Cove to one mile beyond Furnace Creek, as well as along lower Castle Creek and lower Furnace Creek downstream of the drift fences. House Decl. ¶¶ 19-32; Zuckerman Decl. ¶¶ 18-37, 40; Brott Decl. ¶¶ 5-26, 30-31. Signs of cattle use consisted of cow waste, hoof prints, trampling of

[7] Grazing did not occur on the allotment in 2011

streambanks, trails down to and through riparian areas and across the streams, and heavy grazing and browse of riparian vegetation and shrubs. *Id.* These signs were prevalent along Camas Creek as well as lower Castle and Furnace Creeks, showing that the conservation measures were not effective at keeping cows out of these streams. The monitoring also showed that cattle were crossing and loafing in Camas Creek in late July, during the steelhead incubation period, and that additional cattle use occurred on Camas Creek and lower Castle Creek after late July, during the Chinook spawning season. Brott Decl. ¶¶ 15-17, 25-26; Zuckerman Decl. ¶¶ 20-32.

Furthermore, the 2012 field monitoring also documented at least 13 Chinook salmon redds in Camas Creek and 1 redd in lower Castle Creek, all but one of which had extensive signs of cattle use near-by. House Decl. ¶¶ 17, 22-23, 27, 31, 34; Zuckerman Decl. ¶¶ 27-32, 40, 44. This cattle use likely caused "take" of Chinook salmon redds. House Decl. ¶¶ 36-40; Zuckerman Decl. ¶¶ 45-47. Yet NOAA did not authorize any incidental take of Chinook salmon in its incidental take statement. NOAA AR 1467-68.

These facts demonstrate that the Forest Service must reinitiate consultation. First, the failure to maintain the Meyer's Cove and the Castle and Furnace Creek drift fences before grazing occurred in 2010 and 2012 violated the terms of NOAA's incidental take statement, requiring reinitiation of consultation. *See S. Yuba River Citizens League*, 629 F.Supp.2d at 1133; *ONDA v. Tidwell*, 716 F.Supp.2d at 1006-07. Second, the likely take of Chinook that occurred in 2012 exceeded the amount of take authorized in the incidental take statement (none), triggering reinitiation of consultation. 50 C.F.R. § 402.16. *See ONRC v. Allen*, 476 F.3d at 1034-35 ("The agency must immediately reinitiate consultation with the FWS if the amount or extent of incidental taking is exceeded.") (citing 50 C.F.R. §§ 402.14(i)(4), 402.16(a)).

Finally, information from the 2012 monitoring confirmed that fences and riders and other conservation measures were not effective at preventing cattle use along Camas Creek, lower Castle Creek, and lower Furnace Creek. The Services had both assumed (wrongly) that these measures would be effective at reducing threats to the species and avoiding livestock-fish interactions, and relied heavily on those assumptions in their no-jeopardy and "not likely to adversely affect critical habitat" conclusions. The information from 2012 showing such assumptions were inaccurate and that cattle were frequently accessing spawning areas in these streams requires reinitiation of consultation. *See Sierra Club v. Marsh,* 816 F.3d at 1388; *Forest Guardians,* 450 F.3d at 466.

CONCLUSION

For the foregoing reasons, Plaintiff Western Watersheds Project respectfully requests the Court grant its Motion for Summary Judgment on its First, Second, Third, and/or Fourth Claims for Relief.

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Respectfully submitted,

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