

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF IDAHO

NEZ PERCE TRIBE, a federally
recognized Indian tribe,

Plaintiff,

V.

NOAA FISHERIES; D. ROBERT LOHN,)
Regional Administrator of NOAA Fisheries;))
U.S. BUREAU OF RECLAMATION; and)
J. WILLIAM MCDONALD, Regional)
Director of U.S. Bureau of Reclamation,)
Pacific Northwest Region,)

Defendants.

Case No. CV-07-247-N-BLW

MEMORANDUM DECISION

INTRODUCTION

The Court has before it cross-motions for summary judgment. The Court heard oral argument on March 14, 2008, and took the motions under advisement. For the reasons expressed below, the Court will grant the motion filed by the Nez Perce Tribe and deny the motion filed by NOAA.

SUMMARY

The Lewiston Orchard Project (LOP) is a series of reservoirs, dams, and canals that provides irrigation water to the Lewiston area. It is owned by the

Bureau of Reclamation (BOR) and operated by the Lewiston Orchards Irrigation District (LOID).

The LOP withdraws water from creeks that are designated as critical habitat for the Snake River Basin steelhead, a threatened species under the Endangered Species Act (ESA). These withdrawals degrade critical habitat by reducing flows during spawning season and drying up creek beds during summer months. The loss of this habitat has caused steelhead mortality to exceed reproduction in the drainages affected by the LOP.

This was of grave concern to the Nez Perce Tribe, as the steelhead play an important role in their culture. All of the drainages affected by the LOP lie within the Tribe's treaty fishing areas.

The BOR proposed a plan to improve the operation of the LOP by maintaining certain minimum flows in these critical streams. The ESA required that the plan be reviewed by the National Oceanic and Atmospheric Administration (NOAA) to determine whether it complied with the ESA.

NOAA issued a Biological Opinion (BO) finding that the plan did comply with the ESA. The Tribe appealed that decision to this Court. In this decision, the Court finds that NOAA's findings are not supported by a reasoned analysis. There is no assurance that the minimum stream flows proposed by the BOR will improve

habitat to promote both the survival and recovery of the steelhead, as required by the ESA. The Court therefore sets aside the Biological Opinion.

STANDARD OF REVIEW

Agency decisions under ESA are governed by the Administrative Procedure Act, which requires an agency action to be upheld unless it is found to be “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A); *Pacific Coast Federation of Fishermen's Ass'n, Inc. v. NMFS*, 265 F.3d 1028, 1034 (9th Cir.2001). This deferential standard is designed to “ensure that the agency considered all of the relevant factors and that its decision contained no ‘clear error of judgment.’ ” *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971). Agency action should be overturned only when the agency has “relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). The Court must ask “whether the agency considered the relevant factors and articulated a rational connection between the facts found and the choice made.” *Pacific Coast*, 265 F.3d at 1034 (quotations omitted). A

biological opinion may also be invalid if it fails to use the best available scientific information as required by 16 U.S.C. § 1536(a)(2). *Id.* The agency's decision need not be a model of clarity so long as "the agency's path may reasonably be discerned." *National Ass'n of Home Builders v. Defenders of Wildlife*, 127 S.Ct. 2518 (2007).

"Deference to an agency's technical expertise and experience is particularly warranted with respect to questions involving . . . scientific matters." *United States v. Alpine Land and Reservoir Co.*, 887 F.2d 207, 213 (9th Cir.1989). Nevertheless, the "presumption of agency expertise may be rebutted if the decisions, even though based on scientific expertise, are not reasoned." *Greenpeace v. NMFS*, 80 F.Supp.2d 1137, 1147 (W.D.Wash.2000). Judicial review under this standard is to be "searching and careful," but remains "narrow," and a court should not substitute its judgment for that of the agency. *Mt. Graham Red Squirrel v. Espy*, 986 F.2d 1568, 1571 (9th Cir.1993).

ENDANGERED SPECIES ACT

The ESA requires federal agencies to insure that their projects are "not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [designated critical] habitat" 15 U.S.C. § 1536(a)(2). The ESA therefore has two prongs that must

each be considered: The LOP cannot (1) jeopardize the continued existence of the Snake River steelhead, nor (2) result in the destruction or adverse modification of its designated critical habitat.

Turning to the first prong, the LOP would cause jeopardy if it “reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.” 50 CFR § 402.02; 16 U.S.C. § 1536(a)(2). Agency action can only “jeopardize” a species' existence “if that agency action causes some deterioration in the species' pre-action condition.” See *National Wildlife Federation v. NMFS*, 481 F.3d 1224 (9th Cir. 2007). An agency may still take action that removes a species from jeopardy entirely, or that lessens the degree of jeopardy. *Id.* “However, an agency may not take action that will tip a species from a state of precarious survival into a state of likely extinction. Likewise, even where baseline conditions already jeopardize a species, an agency may not take action that deepens the jeopardy by causing additional harm.” *Id.* at 1236.

Turning to the second prong, the “purpose of establishing ‘critical habitat’ is for the government to carve out territory that is not only necessary for the species' survival but also essential for the species' recovery.” *Gifford Pinchot Task Force v. U.S. Fish & Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004). Recovery and survival

are distinct, though complementary, goals, and the requirement to preserve critical habitat is designed to promote both: “Congress said that ‘destruction or adverse modification’ [of designated critical habitat] could occur when sufficient critical habitat is lost so as to threaten a species' recovery *even if there remains sufficient critical habitat for the species' survival.*” *Id.* (emphasis added).

Thus, the continued operation of a project that degraded designated critical habitat and threatened recovery of the species cannot be justified merely on the basis that the species will persist or survive during the project's operation.

FACTUAL BACKGROUND

1. Snake River Steelhead

Steelhead begin life in freshwater streams, migrate to the ocean for a few years, and then return to the streams to spawn. *See Biological Opinion* at 15. One species of steelhead – that is, a distinct population segment of steelhead – is the Snake River steelhead. *Id.* This species includes all naturally spawned, anadromous populations of steelhead in streams in the Snake River Basin of southeast Washington, northeast Oregon, and north and central Idaho, as well as fish produced artificially from six hatchery programs. *Id.*

The Snake River steelhead is a threatened species under the Endangered Species Act. *Id.* Steelhead populations experienced a steep decline in the 1970s

with the construction of hydroelectric dams on the Snake River. *Id.* at 17. These fish-passage barriers – along with drought and irrigation withdrawals that drained streams – have caused a significant decline in the freshwater habitat for the Snake River steelhead. *Id.* at 17, 24.

Its range includes 289 watersheds and 26 independent populations. One of those independent populations – the Clearwater-Lower Mainstream (CRLMA) population – is at issue in this case.

The CRLMA population is “widely distributed throughout the accessible streams in the Snake River Basin.” *Id.* at 21. It is composed entirely of “A-run” steelhead. *Id.* The “A-run” designation is a morphological type, distinguished from a “B-run” steelhead. *Id.* at 16. The A-run steelhead’s smaller size allows it to spawn in smaller streams, and it resides in the ocean for a shorter time than its B-run counterpart – just a year as opposed to two years for B-run steelhead. *Id.* A-run steelhead live about 3 to 4 years. *Id.* at 16.

The habitat of the CRLMA population is “largely in poor or non-functioning condition” *Id.* This is troublesome because the CRLMA population is “among the few remaining indigenous stocks of A-run steelhead that are not influenced genetically by hatchery fish.” *Id.* at 46.

2. LOP & Steelhead

The LOP consists of a series of water storage reservoirs, diversion dams, and canals, providing 1,800 million gallons of irrigation water to urban and suburban users in Lewiston, Idaho. The LOP withdraws water from sources located mainly on the Nez Perce Indian Reservation. It is owned by the BOR but operated by the Lewiston Orchard Irrigation District (LOID).

To provide this irrigation, the LOP withdraws water from three creeks: (1) Captain John, (2) Sweetwater, and (3) Webb. These creeks are all interrelated, and their flows also affect a fourth creek, Lapwai Creek.

Captain John Creek is the southernmost, and flows east to west, eventually draining into the Snake River. Its flows are connected to the other three creeks because the LOP diverts waters from its headwaters by a canal that flows into Soldiers Meadow Reservoir, which releases water into Webb Creek. Webb Creek flows into Sweetwater Creek, which flows into Lapwai Creek, which flows into the Clearwater River. The LOP operates diversion dams on both Webb Creek and Sweetwater Creek, as well as the diversion on Captain John Creek.

The “primary effects” of the LOP are felt on the Sweetwater, Webb, and Lapwai Creeks, whose waters form the Lapwai drainage. *Id.* at 48. The LOP’s effect is widespread in the Lapwai drainage: “Surface flows are directly affected by the LOP water withdrawals in approximately 19 or more miles of fish-bearing

streams in the Lapwai Creek drainage (7 miles in Sweetwater Creek, 6 or more miles in Webb Creek, and 6 miles in Lapwai Creek).” *See BO* at 12.

All four of the creeks serve as spawning and rearing habitat for the Snake River steelhead. Each creek’s drainage includes designated critical habitat for the steelhead. *Id.* at 12.

As discussed above, the steelhead was listed as a threatened species due to steep population declines caused by, among other things, impassible hydroelectric dams and streams dried by water withdrawals. In particular, “water withdrawals collectively cause some of the more severe habitat losses in the remaining range of Snake River . . . steelhead in the Snake River Basin.” *See BO* at 18.

Because the LOP’s summer diversions would, at times, dewater this critical habitat of a threatened species, the BOR was required by the ESA to consult with the National Oceanic and Atmospheric Administration Fisheries (NOAA) over the continued operation of the LOP. In those consultations, the BOR proposed to operate the LOP over the next 15 years, committing to provide certain stream flows during that period. The BOR broke that 15-year period into two segments: (1) a short-term operational period lasting ten years; and (2) a long-term operational period for five subsequent years. *Id.* at 8.

For the first five years (2006 to 2010), the BOR will deliver 1 cfs of water at

the Sweetwater diversion dam from June 1 through October 31, with certain exceptions. *Id.* For the second five-year period (2011 to 2015), the BOR will increase that flow (during those same months) to 1.5 cfs. In the long-term period (beginning in 2016 and lasting until 2021), the BOR will increase the flow to 2.5 cfs during those months. *Id.* at 7.

The flows are lower during the first decade “to provide a reasonable amount of time for LOID and BOR to explore, develop, and implement steps to conserve or increase water, while providing minimum flows in Sweetwater Creek, sufficient to maintain connected surface flows.” *Id.* at 8. In addition, the BOR would allocate to instream flows half of any water saved by LOID or BOR through reduced water losses in the canals.

These minimum flows would be waived one out of three years during drought conditions. There must be at least two years between waivers. Drought conditions are triggered when storage volume at Soldiers Meadow Reservoir is less than 1800 acre-feet on May 31. Reservoir levels are determined by the BOR and LOID.

Under this plan, the drought exemption could be used multiple times during the initial ten-year period. If used initially in 2009, it could be used again in 2012, and again in 2015, for a total of three times in the initial ten-year period. The plan also provides that if “a second drought occurs within a 3-year period, NOAA, the Tribe and BOR will determine if less than the minimum flows can be provided.” *Id.* at 8. Thus, the exemption could be used to an even greater extent if there is such a “determination.”

In the long-term stage – beginning at the 10-year mark and continuing for 5 years – the BOR shall allocate a minimum flow of 2.5 cfs at the Sweetwater Creek diversion dam and 1.2 cfs at the mouth of Webb Creek from June 1 through October 31, when the LOP is diverting water during this period. From November through May, BOR shall allocate water to both Sweetwater and Webb Creeks as set forth in Tables 3 and 4 in the Biological Opinion.

This was the BOR proposal that it presented to NOAA in its ESA consultation. NOAA evaluated that proposal in a Biological Opinion (BO) it issued on March 1, 2006.

3. NOAA’s Biological Opinion

NOAA’s BO studied an “action area” that was bounded on the south by the Captain Jack Creek drainage, and on the north by the confluence of Lapwai Creek

and the Clearwater River. It includes (1) Captain John Creek, (2) all portions of the Webb and Sweetwater Creek drainage systems “where flows are altered by the LOP,” and (3) Lapwai Creek from the confluence with Sweetwater Creek downstream to its mouth. *Id.* at 13.

NOAA began its analysis of the LOP with a stark description of its adverse effects on steelhead: “[NOAA] is reasonably certain the LOP harms or kills steelhead in the action area through effects of dewatering stream channels, and is reasonably certain that stream reaches designated as critical habitat are adversely affected by the LOP when they are dried as a result of LOP water diversions.” *LOP BO* at p. 3.

Snake River steelhead numbers have been in a long-term decline. *See LOP BO* at 17. Water withdrawals are a “significant cause of first-year mortality in the Snake River Basin, and likely are a large contributor to the declining trends in population growth of Snake River . . . steelhead.” *Id.* at 19. This is because reduced streamflows “are capable of reducing reproduction and fish abundance in streams where spawning and rearing occur.” *Id.* at 14.

The BO found that LOP water diversions on the Sweetwater and Webb Creeks during the summer “typically cause the stream channels to dry in places, leaving up to 4 miles of dry streambed in Sweetwater Creek, and patches of wetted

stream segments, separated by dry streambeds in both streams.” *Id.* at 38, *see also* at 34. The BO concluded that “the LOP likely caused stream drying and habitat loss in most years [during the summer].” *Id.* at 34.

Reduced flows in the spring months are also detrimental. The LOP “abruptly reduced stream flows” in both Sweetwater and Webb Creeks in the months of April, May, and June, depending on the water year. *Id.* at 40. Flow reductions in April occur when steelhead are likely to be in the midst of spawning; flow reductions in June may occur before steelhead incubation is completed or fry have emerged from the redds; and flow reductions in July likely expose fry to risks of stranding. *Id.*

These low flows cause water temperatures to rise. The BO concludes that “it is likely that elevated temperatures have increased the mortality of juvenile salmonids rearing in the action area” *Id.* at 38. Sweetwater Creek “is largely dewatered in summer with warm water temperatures that approach the upper limit for steelhead.” *Id.*

The BO concluded that the “inadequate stream flows are likely to be a principal cause of low steelhead densities observed in Sweetwater and Webb Creeks below the diversion dams.” *Id.* at 41. In a more sweeping judgment, the BO concluded that the operation of the LOP “has likely precluded or reduced steelhead reproduction in many years.” *Id.*

Sweetwater and Lapwai Creeks have been an important refuge for steelhead populations. The BO recognized that the supply of abundant cold water from a spring into Sweetwater Creek made it, and Lapwai Creek, “an important refuge in times of low flows and hot weather, when other nearby streams would be dry.” *Id.* at 45. While this spring water likely made Sweetwater Creek a population source in past years, the LOP and a prolonged drought had reduced flows, rendering the Creek a population “sink” where mortality exceeds reproductive success. *Id.* This conversion from population source to sink “can have widespread and dramatic adverse effects on the persistence of a subpopulation.” *Id.* And it is the subpopulation, along with its habitat, that is the appropriate spatial unit for affecting a species’ survival and recovery. *Id.* The loss of just a few subpopulations “could have a large effect on phenotypic diversity.” *Id.*

Thus, small changes in critical habitat such as this could have a large impact: “Reductions in fish abundance in a small area could significantly affect the growth rate of larger population units if there are many such actions occurring within a population” *Id.* at 14. As incremental habitat losses accrue, “at some point there is a rapid reversal . . . [and] the extinction risk increases exponentially for each additional increment of habitat loss.” *Id.* at 20.

That very pattern “is evident in the Snake River Basin, where the range of

. . . steelhead is truncated by impassible dams that block access to more than half of the former range, and within the remaining range, numerous streams and watersheds . . . are inaccessible due to impassible diversion dams . . . or unusable due to effects of irrigation withdrawals or other habitat alterations.” *Id.* Thousands of diversions withdraw water at various points in the Snake River Basin, leading NOAA to conclude that “the sheer numbers illustrate the magnitude of water withdrawals in certain parts of the Snake River drainage.” *Id.* at 21.

In other words, incremental harms are accruing at an alarming rate, perhaps to the point where “the extinction risk increases exponentially for each additional increment of habitat loss.” *Id.* at 20. Given this widespread degradation of habitat for the Snake River steelhead, the “incremental” degradation of critical habitat in the Lapwai drainage – marked in the past by abundant cold water – could have significant effects on the broad population of Snake River steelhead.

In this environment, a management plan of “staying the course” would appear to jeopardize the steelhead and degrade critical habitat. Indeed, that is just the conclusion reached by NOAA in the BO in at least three different places:

(1) “[S]teelhead are unlikely to persist under the degraded environmental conditions that presently exist in the action area unless habitat conditions are improved.” *Id.* at 46; (2) “It is unlikely that “long-term population growth rates of

. . . steelhead can become positive in the Snake River Basin if mortality in tributaries caused by federal actions such as water withdrawals is not reduced.” *Id.* at 18; (3) “Federal actions that appreciably prolong . . . the downward trend . . . would likely jeopardize the continued existence of the species.” *Id.* at 19. These conclusions all mean the same thing: Staying the course will not promote the survival and recovery of the threatened Snake River steelhead species.

4. BO’s Analysis of BOR’s Plan to Operate the LOP

NOAA turned first to analyze the first 10-year segment of the BOR’s flow commitment – that is, the BOR’s commitment to provide at least 1 cfs for the first five years in Sweetwater Creek during the summer, increasing to 1.5 cfs for the second five years. NOAA estimated that this flow rate would be “likely to maintain a connected surface flow throughout the summer” in Sweetwater Creek. *Id.* at 51. At the same time, NOAA emphasized that this was an estimate only, because Sweetwater Creek “has not been surveyed to verify that flows would remain continuous at this rate of discharge.” *Id.*

The effects on Webb Creek would be “more severe” during this 10-year period because flows would not be improved at all, and so conditions would remain in their present degraded state. *Id.* at 50. The same would be true for Lapwai Creek. *Id.* at 51. Looking more specifically at juvenile steelhead rearing on Webb

and Lapwai Creeks, NOAA concluded that “the LOP is likely to continue to adversely affect steelhead rearing by increasing the frequency, extent, and duration of inadequate flows and dry streambeds in summer.” *Id.* at 63.

NOAA found that the 1 cfs/1.5 cfs flow commitment in Sweetwater Creek would “offer some opportunity for increased production” because it would lead to a “slight improvement” in habitat there. Reasoning that most steelhead in the Sweetwater/Webb Creek drainage come from Sweetwater Creek, NOAA concluded that an increase in the Sweetwater population will “maintain or increase the pool of fish available to repopulate Webb Creek.” *Id.* at 72-73. NOAA predicted that steelhead densities in Webb Creek were not likely to decline during the initial 10-year period due to “the persistence of the steelhead . . . in the action area under marginal conditions of the previous 60 years of LOP operation.” *Id.* at 73.

Overall, NOAA concluded that during the 10-year initial period “the action area would play a more or less neutral role in the demographics” of the steelhead, and “neither add nor detract” from the steelhead population.” *Id.* at 72. This would mean, according to NOAA, that the action area would no longer be a population sink. *Id.*

But the initial 10-year flows “would not be sufficient to support a viable steelhead population in the action area in the long term.” *Id.* After the first ten

years, the increased flow commitment by the BOR was therefore critical to allow the action area to “function as a population source . . . in some years and have neutral effects in many years.” *Id.* While production would drop below replacement rates in drought years, production in higher-flow years would more than offset the lower rates in drought years, according to NOAA.

Based on these findings, NOAA found that “the LOP is not likely to jeopardize the continued existence of Snake River Basin steelhead or destroy or adversely modify critical habitat.” *Id.* at 72.

ANALYSIS

1. Initial Ten-Year Period

The ESA prohibits federal action likely to result in the destruction of “critical” habitat of a threatened species. *See* 16 U.S.C. § 1536(a)(2). Portions of Sweetwater, Webb, Lapwai, and Captain Jack Creeks are designated critical habitat for the steelhead. The destruction of that critical habitat by the LOP is turning these creeks into population sinks, where mortality exceeds reproduction.

This grim scenario led NOAA to a crucial conclusion: “[S]teelhead are unlikely to persist under the degraded environmental conditions that presently exist in the action area unless habitat conditions are improved.” *Id.* at 46. Under NOAA’s view, even if the hardy steelhead could *survive* for awhile in the

unimproved habitat, they will certainly not *recover* there. And both survival and recovery are essential under the ESA. *Gifford Pinchot Task Force, supra*, 378 F.3d at 1170 (holding that ESA violated when “sufficient critical habitat is lost so as to threaten a species' recovery even if there remains sufficient critical habitat for the species' survival”).

Because critical habitat for the steelhead is being destroyed by the current operation of the LOP, the ESA forbids the BOR from continuing that operation. To put it affirmatively, the BOR must improve LOP operations to stop the destruction of critical habitat.

NOAA concludes that the BOR has proposed such an improvement. That conclusion is entitled to deference by this Court, and can only be overturned if arbitrary and capricious. As discussed above, the Court must ask “whether the agency considered the relevant factors and articulated a rational connection between the facts found and the choice made.” *Pacific Coast*, 265 F.3d at 1034 (quotations omitted).

The Court turns first to the initial ten-year period of the BOR's proposed operation of the LOP. This period is important because “[i]n ten years, a badly degraded habitat will likely result in the total extinction of the [anadromous fish] subspecies that formerly returned to a particular creek for spawning.” *Pacific*

Coast, 265 F.3d at 1037.

During that initial ten-year period, the BOR's plan proposes no improvement whatsoever for Webb and Lapwai Creeks, but does propose an improvement on Sweetwater Creek that NOAA concludes will enhance the entire Lapwai Creek drainage. The keystone of NOAA's reasoning is that the 1cfs/1.5cfs flow regime for Sweetwater Creek "is likely to maintain a connected surface flow throughout the summer." *See Biological Opinion* at 51.

Connectivity is critical. Its absence during the summer is the driving force behind the destruction of critical habitat, as discussed above. Thus, NOAA's conclusion that the 1 cfs/1.5 cfs flow regime is "likely" to establish connectivity is indispensable to its overall finding that the ten-year initial operation of the LOP will not destroy critical habitat.

NOAA bases this conclusion on "indications of gains in surface flows in Sweetwater Creek below the diversion dam," but then admits that "the stream has not been surveyed to verify that flows would remain continuous at this rate of discharge." *Id.* The "indications" NOAA refers to are unspecified observations that even when all flows were captured behind Sweetwater dam, flows were observed below the dam, indicating that the creek "gains surface flows several miles below the dam." *Id.* at 35. In 2004 and 2005, surface flows of about 1cfs were allowed to

pass over the Sweetwater dam from June to September. NOAA notes that “Sweetwater Creek retained surface flows immediately below the dam and at the mouth,” but concedes that no measurements were taken on the six-mile stretch of Sweetwater Creek between these two points to establish if there was a connected flow throughout the creek channel. *Id.* Recent observations show no connectivity on Sweetwater Creek in the summer: “[F]ield reviews by [NOAA] personnel have observed dry streambeds below the diversion dam [during the summer] in recent years.” *Id.* at 34.

In other words, NOAA’s finding that connectivity is “likely” is not based on any scientific data or observational studies. It is more of a guess than a reasoned estimate. This is not necessarily arbitrary and capricious, however, because full data is not always available, and basic assumptions cannot always be nailed down with certainty. Where agencies need to act before all the data is collected, their only option may be to use their expertise to make educated guesses. But because a guess (even if educated) is more often wrong than a reasoned estimate based on solid data, it becomes especially important to have in place a process to quickly detect errors through monitoring, and change flows to ensure connectivity.

The BOR’s plan provides for the former but not the latter. The BOR proposes to monitor the creeks, but there is no provision in its plan for increasing

flows beyond the 1 cfs/1.5 cfs standards if connectivity is not established. Thus, the “guess” that these flow rates will be enough for connectivity will be enshrined, right or wrong, for a decade. Habitat could continue to be degraded and the action area continue to be a population sink, all in violation of the ESA. Having spent much of the BO describing the importance of connectivity, NOAA ignores it as a goal without explanation in its final approval.

Moreover, if the guess is wrong, the resulting degradation could be compounded by the drought exemption. Given that the drought exemption could be used every three years, the BOR could use it multiple times during the initial 10-year period. For any given summer, NOAA concluded that the “production [of steelhead] is likely to drop well below the replacement rate in drought exemption years”. *Id.* at 69. In other words, each time the drought exemption is used, the action area continues to be a population sink.

NOAA brushes this aside by describing droughts as “infrequent”, *id.* at 73, and notes that “[h]istorically, there have been droughts an average of 1 out of 7 years.” *Id.* at 8. NOAA’s approval is thus based on the assumption that the exemption will be used but once in the 10 year initial period.

That assumption is arbitrary. NOAA approved a plan (1) authorizing multiple exemptions during the initial 10-year period, and (2) placing no restriction

on the ability of the BOR and LOID to manipulate the level of the Reservoir to create a “drought.” Thus, even if historic patterns of nature create droughts once every seven years, the exemption could be used multiple times in a decade through manipulation of Reservoir levels. Having authorized such a use of the drought exemption, NOAA has an obligation to discuss the potential impacts of such use. It failed to do so.

NOAA argues that the CRLMA population is so wide-spread, and the action area so small, that the destruction of habitat in the action area will have little impact because much good habitat will remain. However, NOAA’s own findings refute this argument.

In its Biological Opinion, NOAA found that “[h]abitat quality throughout the area occupied by the CRLMA population is largely in poor or non-functioning condition” *Id.* at 22. Thus, good habitat is not abundant elsewhere. This wide-spread degradation of habitat means, according to NOAA, that “each additional increment of habitat loss” could result in an exponential increase in the extinction risk. *Id.* at 20. Given these findings, the Court cannot conclude that the action area is too small to matter.

At the beginning of the Biological Opinion, NOAA recognized the effect of uncertainty on habitat issues: “In the event that the likelihood of . . . adverse

modification or destruction of critical habitat is uncertain, but clearly possible, the benefit of doubt must favor the listed species.” *Id.* at 14. The Biological Opinion then goes on to flag several factors that make degradation of critical habitat “clearly possible,” but fails to address them head-on. In a nutshell, the Biological Opinion shows that it is “clearly possible” that the required flow regime (1) may not establish connectivity, and (2) may be unavailable multiple times in the initial ten-year period due to the drought exemption.

All of this could prolong the degradation of habitat – that has turned the action area into a population sink – for another ten years. As discussed above, operating the LOP to prolong the current habitat degradation would violate the ESA. For all of these reasons, the Court finds that NOAA’s approval of the initial ten-year period of the LOP is arbitrary and capricious.

2. Long-Term LOP Plan

The Tribe asserts that NOAA did not use the best scientific evidence to set the long-term minimum flows. Specifically, the Tribe asserts that NOAA failed to explain why it set minimum flow rates below those recommended by the 2004 Entrix study.

The Entrix study estimated the amount of flows required to support viable steelhead populations in Sweetwater and Webb Creeks. AR at 11609-28. It concluded that to simply sustain existing population numbers, the summer flows (June through November) in Sweetwater Creek should be 3.3 cfs and in Webb Creek should be 1.2 cfs. AR at 11619. During critical spawning months (April and May), sustaining flows in Sweetwater Creek should be 20 cfs and in Webb Creek should be 12 cfs.

NOAA addressed other studies, but concludes that the Entrix study “stands apart as the only method that is directly based on a numeric population response, while the other methods discussed in this appendix provide only a qualitative indicator of subpopulation response.” See BO at B-2. NOAA described the Entrix minimums as “conservative” flows that leave “no room for episodic events with negative effects, such as drought or poor ocean conditions” See BO at B-11. That raises a concern because by the time the long-term plan is underway, the drought exemption could have been used multiple times, as discussed above. Because the “negative effects” – like a drought – could cause a population drop, NOAA concluded that the Entrix minimum flows “do not eliminate the possibility that the local steelhead population will go extinct from combined effects of the LOP and episodic events.” *Id.*

Nevertheless, NOAA approved flows below the Entrix minimums. For example, NOAA approved a minimum flow on Sweetwater Creek during the summer of 2.5 cfs, a figure 25% below the Entrix recommendation. During the spawning months, NOAA approved a minimum flow that is about half of the Entrix recommendation.

Why did NOAA approve flows below the Entrix flows that themselves left no room for events like a drought? NOAA explains that the BOR's proposed flows would "maintain a stable population in the action area, roughly equal to the replacement rate, based primarily on the analysis by Entrix (2004), along with corroborating flow analysis in Appendix B." *Id* at 69.

This is a conclusion, not an analysis. At most, NOAA seems to be saying the BOR's minimum flows are "roughly equal" to Entrix's minimums. But there is nothing in the Entrix study to support the conclusion that a stable steelhead population would result if its recommended flows were reduced by 25% in the dry summer months, and up to 50% in the critical spawning season. While the Entrix study makes no claim to mathematical precision, it does assert that its results "make a compelling argument that is supported by the best scientific data available." *AR* at 11619. NOAA believes this study "stands apart" from the rest yet never explains why flows lower than those recommended by the study were approved.

NOAA argues in its briefing to this Court that it relied on the other studies in approving its minimum flows. But that is by no means clear from the BO. For example, the BO summarizes the Tenant study, which concluded that for Sweetwater Creek, the minimum flow for “poor or minimum” habitat conditions would be 3.1 cfs. *Id.* at B-10. The BO also discussed the Hatfield and Bruce study, which found that the optimal flow for juvenile steelhead was 3.29 cfs. Neither of those studies seems to support a 2.5 cfs minimum flow.

Yet it is NOAA, not this Court, that is the expert on optimal flows. Thus, the Court must defer to any rational explanation by the agency as to how it used the “best science” to reach its result. NOAA clearly summarized the “best science” in Appendix B to the Biological Opinion by discussing each study. But NOAA does not explain how it used those studies to arrive at its approval of the BOR’s minimum flow figures. Without that analysis, the Court cannot determine whether NOAA used the “best science.”

The NOAA analysis is flawed for another reason. All of the studies discuss the flows needed for the species to survive – they do not examine the flows necessary for recovery. Yet the ESA requires NOAA to address both survival and recovery, as discussed earlier. *Gifford Pinchot*, 378 F.3d at 1065 (holding that habitat must be provided that is “not only necessary for the species' survival but

also essential for the species' recovery”).

NOAA did discuss recovery. In the Biological Opinion it found that while these minimum flows would not support recovery, “flows in many years are likely to exceed the minimum rates in at least part of the summer, and create production in excess of the replacement rate.” *See BO* at 69.

This conclusion is arbitrary. There is no data in the Biological Opinion that would support the prediction that summer flows in “many years” in Sweetwater Creek will exceed 2.5 cfs. During recent years, as discussed above, the Creek is frequently dry during the summer. *Id.* at 34. NOAA posits a dramatic increase in flows without explaining where they would come from. Their source cannot be the expected savings from the water conservation measures pursued by the BOR and LOID – NOAA explains that it “understood that any benefits to steelhead and its habitat from the water-savings aspect of BOR’s proposed action are speculative, and [NOAA] appropriately did not consider such benefits in issuing its final determinations.” *See NOAA Brief* at 38. Moreover, any assumption of a large-scale increase in natural flows would be directly at odds with NOAA’s own observations that the water supply is “shrinking . . . due to an apparent shift in climatic conditions toward lower snow packs and hot, dry summers.” *Id.* at 33.

The Court therefore finds that NOAA’s conclusion that the long-term plan

will promote recovery is arbitrary and capricious.

3. Conclusion

For all of the reasons expressed above, the Court finds arbitrary and capricious the decision of NOAA that the operation of the LOP – both in the initial 10-year term and in the long-range term – is not likely to result in the destruction or adverse modification of designated critical habitat for Snake River steelhead. The Court will therefore grant the motion for summary judgment filed by the Tribe and set aside the Biological Opinion.

This does not finally resolve all issues in this case, however. The Tribe also has claims against the BOR that were not addressed in the Tribe's motion, which would be more accurately called a motion for partial summary judgment. Typically, when the Court reverses a decision of an agency, the Court remands the case to the agency for further consideration in light of the Court's decision. However, in this case, the Tribe has claims remaining for resolution, and thus a remand would not be appropriate yet.

To sort out the direction this case must take, the Court will hold a status conference with all counsel. Counsel shall contact the Court's Clerk, LaDonna Garcia, to schedule a status conference for this purpose.

ORDER

In accordance with the Memorandum Decision set forth above,

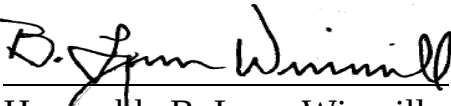
NOW THEREFORE IT IS HEREBY ORDERED, that the motion for summary judgment filed by plaintiff (Docket No. 18), deemed a motion for partial summary judgment, is GRANTED, and the Biological Opinion of NOAA is SET ASIDE.

IT IS FURTHER ORDERED, that the motion for summary judgment filed by defendant NOAA (Docket No. 28) is DENIED.

IT IS FURTHER ORDERED, that counsel shall contact the Court's Clerk LaDonna Garcia at (208) 334-9021 to schedule a status conference to determine how this case should proceed.



DATED: **April 7, 2008**


Honorable B. Lynn Winmill
Chief U. S. District Judge