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14 UNITED STATES DISTRICT COURT
15 FOR THE EASTERN DISTRICT OF CALIFORNIA
16 FRESNO DIVISION
17

18 UNITE THE PARKS; SEQUOIA
19 FORESTKEEPER; and EARTH ISLAND
INSTITUTE,

20 Plaintiffs,

21 v.

22 UNITED STATES FOREST SERVICE, an
23 agency of the U.S. Department of Agriculture;
and UNITED STATES FISH AND
24 WILDLIFE SERVICE, an agency of the U.S.
Department of the Interior,

25 Defendants.
26

Case No. 1:21-CV-00518-DAD-HBK

**PLAINTIFFS' MEMORANDUM OF
POINTS AND AUTHORITIES IN
SUPPORT OF MOTION FOR
PRELIMINARY INJUNCTION**

Date: May 18, 2021
Time: 9:30 am
Courtroom: 5

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I. INTRODUCTION

1
2 The tiny, isolated subpopulation of the Pacific fisher that inhabits the southern Sierra
3 Nevada is teetering on the brink of extinction. With a total size of no more than a few hundred
4 adults – and possibly fewer than 100 breeding females – the southern Sierra Nevada (“SSN”)
5 fisher faces an uphill battle for survival and highly uncertain prospects for recovery. Over the last
6 decade, drought, beetles, wildfire, and logging have dramatically altered the forest landscape
7 where the species resides. For successful reproduction, fishers depend on features like large tree
8 cavities found only in old-growth conifer and hardwood forests. Forests require decades or
9 centuries to reach this mature condition, but they can be destroyed in the blink of eye by logging
10 or other catastrophic events. Today, only a fraction of this habitat remains across the entire Sierra
11 Nevada. And nowhere are these landscape changes more dramatic than on the Sierra, Sequoia,
12 and Stanislaus National Forests, which together account for most of the SSN fisher’s range. In
13 just the last ten years, more than 50 percent of denning and resting habitat on these forests has
14 been lost for fisher reproduction purposes.

15 After nearly three decades of foot-dragging, the U.S. Fish and Wildlife Service (“FWS”)
16 finally listed the SSN fisher as “endangered” under the Endangered Species Act (“ESA”) in May
17 2020. FWS thereby acknowledged that the SSN fisher population is “in danger of extinction
18 throughout all or a significant portion of its range.” 16 U.S.C. § 1532(6). Yet the listing decision
19 did not change the U.S. Forest Service’s plans to continue logging, removing forest vegetation,
20 and building roads across at least 45 projects on the Sierra and Sequoia National Forests. In June,
21 FWS gave a “green light” to all of these projects, even as it acknowledged that its population
22 estimates are woefully outdated and do not account for a decade of changes to the landscape.

23 Then, late last summer, two sprawling wildfires ignited in the heart of SSN fisher habitat.
24 The “Creek Fire” burned roughly 380,000 acres on the Sierra National Forest, while the “SQF
25 Complex Fire” burned another 175,000 acres on the adjacent Sequoia National Forest. The Forest
26 Service concluded that more than 32,000 acres of fisher denning habitat – or roughly 14 percent of
27 what remains – burned at “high severity” in the 2020 fires. Nearly 10,000 acres were “high
28 quality” denning habitat. Yet the Forest Service intends to go forward with dozens of projects this

1 year, and “some operations may begin prior to July 1, 2021” on up to 23 of these projects.

2 Declaration of René Voss, ¶ 34 & Exh. A at 2-3.

3 Once again, FWS capitulated to the Forest Service without evaluating the status of the
4 imperiled SSN fisher population. On March 12, 2021, FWS issued a “Programmatic Biological
5 Opinion” which acknowledged many ongoing threats to the SSN fisher but determined that the
6 Forest Service’s activities are unlikely to jeopardize the continued existence of the species or
7 appreciably reduce the likelihood of its recovery. There is no credible science to support these
8 conclusions, which rely on outdated population estimates and on the Forest Service’s speculative
9 theory that logging in fisher habitat will “benefit” the species “in the long-term.”

10 The Forest Service intends to move forward with dozens of logging projects this summer
11 despite the absence of any evidence-based assessment of the current fisher population or a
12 cumulative impacts evaluation of these projects. Plaintiffs seek a preliminary injunction to
13 prevent these actions from going forward until the agencies comply with their legal obligations.
14 Plaintiffs are likely to prevail on the merits of the two claims briefed in this motion. First, FWS’s
15 biological opinions ignored the best available science and relied on unfounded assumptions and
16 speculative theories in violation of the ESA and the Administrative Procedure Act (“APA”).
17 Second, the Forest Service has failed to evaluate the cumulative impacts of its actions on SSN
18 fishers, when considered together with myriad cascading landscape alterations, in violation of
19 National Environmental Policy Act (“NEPA”). Because it takes decades or centuries to create
20 new fisher denning and resting habitat, allowing these projects to go forward before the agencies
21 conduct credible population and landscape assessments will irreparably harm Plaintiffs’ interests
22 in preserving the long-term integrity of these forests and could doom the SSN fisher to extinction.¹

23
24 _____
25 ¹ Plaintiffs demonstrate standing with the Declarations of Deanna Wulff (Unite the Parks), Ara
26 Marderosian (Sequoia ForestKeeper), and Dr. Chad Hanson (Earth Island Institute). Because
27 Plaintiffs are under threat of injury, which is fairly traceable to implementation of the Forest
28 Service’s vegetation management projects, and a favorable judicial decision will prevent or
redress their injuries, Plaintiffs have standing. See Summers v. Earth Island Institute, 555 U.S.
488, 494 (2009); Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc., 528 U.S. 167, 181
(2000); Lujan v. Defenders of Wildlife, 504 U.S. 555, 562-563 (1992); id. at 573 (where plaintiffs
seek to enforce a procedural right the standard for redressability is relaxed).

II. LEGAL BACKGROUND

A. Endangered Species Act

The ESA, 16 U.S.C. § 1531 *et seq.*, provides a mandate “to halt and reverse the trend towards species extinction, whatever the cost.” Tenn. Valley Auth. v. Hill, 437 U.S. 153, 180 & 184 (1978). The purpose of listing a species under the statute is “to compel those changes needed to save the species from extinction.” Ore. Nat. Res. Council v. Daley, 6 F. Supp. 2d 1139, 1152 (D. Or. 1998). All federal agencies have an affirmative duty to promote the conservation of listed species and to “use . . . all methods and procedures which are necessary” to preserve and recover them to the point that protection is no longer necessary. See 16 U.S.C. §§ 1531(c), 1536(a)(1). Once a species is listed, ESA section 9 imposes “a blanket prohibition” on the “take” of threatened or endangered species. Or. Nat. Res. Council v. Allen, 476 F.3d 1031, 1040 (9th Cir. 2007) (citing 16 U.S.C. § 1538(a)(1)(B)). “Take” includes any action that kills, injures, harasses, or otherwise harms a listed species, with “harm” broadly defined to mean actions that cause “significant habitat modification or degradation” that impairs essential behavioral patterns, including breeding, feeding or sheltering. 50 C.F.R. § 17.3.

ESA section 7 is the main vehicle for conserving and recovering listed species that occupy federal lands, like National Forests. That section embodies “an explicit congressional decision to require agencies to afford first priority to the declared national policy of saving endangered species” and demonstrates “a conscious decision by Congress to give endangered species priority over the ‘primary missions’ of federal agencies.” Tenn. Valley Auth. v. Hill, 437 U.S. at 185. Section 7(a)(1) requires that federal agencies like the Forest Service “utilize their authorities in furtherance of the purposes of [the ESA] by carrying out programs for the conservation of” listed species. 16 U.S.C. § 1536(a)(1). Separately, section 7(a)(2) requires that all federal agencies consult with FWS to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species.” Id. § 1536(a)(2).

During section 7 consultations, FWS must analyze the proposed action, determine and limit its adverse effects on the listed species, review all relevant information, evaluate the current status and condition (the “environmental baseline”), and evaluate the effects of the action on the

1 species' survival and recovery. 50 C.F.R. § 402.14(g). Consultation concludes when FWS issues
2 a "biological opinion" ("BO") that determines whether the proposed action is likely to jeopardize
3 the species' continued existence. 50 C.F.R. § 402.14(h); see Nat'l Wildlife Fed'n v. Nat'l Marine
4 Fisheries Serv., 524 F.3d 917, 933 (9th Cir. 2008) (BO must consider effect of action recovery
5 separately from effect on survival). FWS cannot approve an action that will jeopardize a species.
6 If FWS issues a "no-jeopardy" opinion, but the action will nevertheless harm the species, FWS
7 must limit the harm allowed through an "incidental take statement." See 16 U.S.C. § 1536(b)(4).

8 The agencies must reinitiate consultation when any of several factors is triggered,
9 including when "new information reveals effects of the action that may affect listed species or
10 critical habitat in a manner or to an extent not previously considered" or "the identified action is
11 subsequently modified in a manner that causes an effect to the listed species or critical habitat that
12 was not considered in the biological opinion." 50 C.F.R. § 402.16(a)(2)-(3); see Salmon
13 Spawning & Recovery Alliance v. Gutierrez, 545 F.3d 1220, 1229 (9th Cir. 2008) (making clear
14 that both the action agency and FWS have a legal duty to reinitiate consultation). Section 7(d)
15 forbids "irreversible or irretrievable commitment of resources" during any consultation period. 16
16 U.S.C. § 1536(d); Lane County Audubon Soc'y v. Jamison, 958 F.2d 290, 295 (9th Cir. 1992)
17 (holding that timber sales constitute per se irreversible and irretrievable commitments of resources
18 under § 7(d)); EPIC v. Pacific Lumber Co., 67 F. Supp. 2d 1090, 1112 (N.D. Cal. 1990) (granting
19 preliminary injunction against logging). Thus, when consultation is reinitiated, the action agency
20 must halt the activity until FWS issues a new BO and incidental take statement.

21 **B. National Environmental Policy Act**

22 NEPA, 42 U.S.C. § 4321 et seq., is our basic national charter for protection of the
23 environment. 40 C.F.R. § 1500.1; Ctr. For Biological Diversity v. U.S. Forest Serv., 349 F.3d
24 1157, 1166 (9th Cir. 2001). It requires agencies to carefully consider the environmental impacts
25 of their actions and guarantees that relevant information is available to the public. N. Plains Res.
26 Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1072 (9th Cir. 2011). NEPA's requirements
27 ensure that "the agency will not act on incomplete information, only to regret its decision after it is
28 too late to correct." Marsh v. Oregon Natural Res. Council, 490 U.S. 360, 377 (1989).

1 To satisfy NEPA, an action agency must “provide full and fair discussion of significant
2 environmental impacts,” 40 C.F.R. § 1502.1, and take a “hard look” at a project’s environmental
3 impacts “that does not improperly minimize negative side effects.” Earth Island Inst. v. U.S.
4 Forest Serv., 442 F.3d 1147, 1159 (9th Cir. 2006). This “hard look” takes the form of a detailed
5 statement, known as an “environmental impact statement” or “EIS,” that evaluates the best
6 available data, discloses opposing scientific viewpoints, and follows specified procedures to
7 address gaps in data and scientific uncertainty. 40 C.F.R. §§ 1500.1, 1502.9, 1502.22, 1502.24.
8 In addition to direct and indirect impacts, an EIS must consider cumulative effects – those
9 aggregate effects that result from the incremental impact of an action when added to other past,
10 present, and reasonably foreseeable future actions. Native Ecosystems Council v. Dombeck, 304
11 F.3d 886, 895 (9th Cir. 2002). A cumulative effects analysis is essential to ensure that the agency
12 does not “impermissibly subject the decisionmaking process contemplated by NEPA to the
13 tyranny of small decisions.” Kern v. BLM, 284 F.3d 1062, 1078 (9th Cir. 2002).

14 Agencies must conduct supplemental environmental review if “[t]here are significant new
15 circumstances or information relevant to environmental concerns and bearing on the proposed
16 action or its impacts.” 40 C.F.R. § 1502.9(d)(1)(ii). Agencies must continue to maintain a “hard
17 look” at the impact of agency action when the new circumstances or information differs to a
18 significant extent not already considered. League of Wilderness Defs./Blue Mts. Biodiversity
19 Project v. Connaughton, 752 F.3d 755, 760 (9th Cir. 2014).

20 III. FACTUAL BACKGROUND

21 A. The Pacific Fisher Has Been on the Brink of Extinction for Decades.

22 The Pacific fisher is a medium-size carnivorous mammal – about the size of a house cat –
23 that once roamed the West Coast from British Columbia to Southern California. 85 Fed. Reg.
24 29,532, 29,537 (May 15, 2020). Decimated by historic trapping and logging activities, the species
25 survives today in only two pockets – the small Northern California-South Oregon subpopulation
26 and the tiny, insular southern Sierra Nevada subpopulation at issue in this case. Id.

27 For 30 years, scientists and conservation organizations unsuccessfully sought ESA
28 protection for the Pacific fisher. See, e.g., 56 Fed. Reg. 1159 (Jan. 11, 1991) (denying 1990 listing

1 petition); 61 Fed. Reg. 8016-17 (Mar. 1, 1996) (denying 1994 listing petition but agreeing that
 2 “available information indicates that fishers have experienced declines in the past, and may be
 3 vulnerable to the removal and fragmentation of mature/old-growth habitat and incidental trapping
 4 pressure”); 69 Fed. Reg. 18,770 (Apr. 8, 2004) (finding, in response to court order, that listing was
 5 “warranted” by science, but “precluded” by other agency priorities); 79 Fed. Reg. 60,419, 40,423
 6 (Oct. 7, 2014) (noting FWS’s annual “warranted but precluded” findings from 2004 to 2014).

7 After litigation forced its hand, FWS finally proposed to list the “West Coast” fisher as a
 8 distinct population in 2014. 79 Fed. Reg. at 60,436. In the proposed listing, FWS identified “the
 9 main threats to the West Coast” population as “habitat loss from wildfire and vegetation
 10 management;² toxicants (including anticoagulant rodenticides); and the cumulative and synergist
 11 effects of these and other stressors acting on small populations.” *Id.* at 60,420. The prognosis for
 12 the SSN subpopulation of the fisher was especially grim: “For the habitat-related stressors, the
 13 cumulative and synergist impacts are particularly problematic in the SSN because of the narrow
 14 band of habitat that comprises SSN and its small population size.” *Id.* at 60,435.

15 Instead of finalizing this listing proposal, however, FWS withdrew it, *see* 81 Fed. Reg.
 16 22,710 (Apr. 18, 2016), prompting yet another lawsuit. The court found the agency’s abrupt
 17 reversal to be arbitrary and capricious and ordered FWS to produce a new rule by March 22, 2019.
 18 *Ctr. for Biological Diversity v. U.S. Fish & Wildlife Serv.*, 342 F. Supp. 3d 968, 980 (N.D. Cal.
 19 2018). In late 2019, FWS reinstated its earlier proposal to list the “West Coast Distinct Population
 20 Segment” as a “threatened” species. 84 Fed. Reg. 60,278 (Nov. 7, 2019). Once again, FWS
 21 identified the SSN population as particularly worrisome: FWS noted that studies published in
 22 2000 and 2011 estimated “a low of 100 to a high of 500 individuals,” but cautioned that these
 23 estimates were “based on habitat conditions for fishers in the Sierra Nevada that predate the
 24 ongoing, large-scale tree mortality event in this geographic area that began in approximately
 25 2010.” 84 Fed. Reg. at 60,286. That “tree mortality event,” FWS explained, “is affecting many of
 26 the key components of fisher habitat such as complex forest canopy structure and connected

27
 28 ² As FWS explains, the Forest Service term “vegetation management” means “primarily timber
 harvest,” 85 Fed. Reg. at 29,542 – or, in other words, logging of trees.

1 closed-canopy forest conditions,” meaning that the actual population is likely even smaller. Id.

2 FWS published a final listing rule on May 15, 2020, this time determining that the SSN
3 fisher population should be listed as its own distinct population segment (“DPS”) because it is
4 “markedly separate” from the other subpopulation 130 miles north and remains of “biological and
5 ecological importance to the fisher taxon.” 85 Fed. Reg. at 29,537-38. The SSN fisher DPS is so
6 imperiled that FWS ultimately listed the species as “endangered” rather than “threatened.” 85 Fed.
7 Reg. at 29,532. Of particular significance to this determination were fragmentation of habitat, loss
8 of snags and other large habitat structures on which fishers rely, and significant past tree mortality
9 from drought and disease; FWS also identified cumulative future threats as “wildfire, increased
10 temperatures resulting from climate change, disease and predation, exposure to toxicants,
11 collisions with vehicles, and potential effects associated with small population size. Id.

12 **B. Fishers Need Dense Forest Canopies and Abundant Cavities for Reproduction.**

13 Pacific fisher life cycle functions and behavior dictate their habitat needs. The species is
14 solitary and territorial, with a relatively large home range. Declaration of Deborah Sivas (“Sivas
15 Decl.”) at Exh. A at 9, 12. Individual fishers live, on average, for ten years; females typically
16 begin reproducing at age two, and the breeding season lasts from February to April. Females give
17 birth to litters of one to three kits during the spring, id. at 9-10, and the “average litter size for the
18 SSN [fisher] is the lowest reported for the species, potentially due to diet limitations, smaller body
19 size, and lower genetic diversity compared to other populations.” 85 Fed. Reg. at 29,567.

20 Successful reproduction depends on consistent survival of kits and their dispersal to new
21 home ranges. Fishers use cavities in live trees or in “snags” (standing dead or dying trees, which
22 become “logs” once they fall to the forest floor) to give birth and raise their young. Sivas Decl.,
23 Exh. A at 10. Newborn fisher kits are entirely dependent on their mother, are weaned at about ten
24 weeks, and are mobile enough to travel with their mothers at about four months. Id. Mother
25 fishers may move kits to numerous den locations before weaning them. Once weaned, kits stay
26 with their mother, using multiple structures like tree cavities, hollow logs, and log piles within the
27 home range until they become independent and disperse to find their own home range at about one
28 year of age. Id. at 17. Thus, denning females need multiple trees across their range. Id. Both

1 sexes also need multiple resting sites throughout their range; resting sites are also characterized by
2 “late successional forests: large diameter trees, coarse downed wood, and singular features of large
3 snags, tree cavities, or deformed trees.” Id. at 18; see also 85 Fed. Reg. at 29,538.

4 Although fishers need a high proportion of snags, down wood, and other old-growth
5 features for successful reproduction, see 85 Fed. Reg. at 29,538, they do not excavate their own
6 dens. Rather the “cavities in live trees, snags, and down logs used as reproductive dens (natal and
7 maternal) and rest sites are a result of heartwood decay.” Sivas Decl., Exh. A at 18. These
8 features “may require over 100 years to develop.” Id. It is unsurprising, therefore, that fishers are
9 “consistently associated” with mid- and late-successional coniferous and mixed conifer and
10 hardwood forests with moderate to dense forest canopies, large-diameter trees, coarse downed
11 wood, large snags, tree cavities, and deformed trees. 85 Fed. Reg. at 29,538.

12 After decades of intensive logging, mature forest habitat is “the critical limiting factor” for
13 SSN fishers. Sivas Decl., Exh. A at 90. Logging and fires “can reduce or destroy key biological
14 legacies and other structural habitat elements, like large snags or large downed wood” that may
15 take decades or longer to regrow. Id. at 64. These activities may have persistent effects on the
16 survival and recovery of the species because “the loss of these [structural] elements could render
17 habitat unsuitable as resting or denning habitat for a century or more.” Id. at 57, 64; see also 85
18 Fed Reg. at 29,540 (same).

19 **C. SSN Fisher Population Estimates Are Based on Pre-2011 Habitat Conditions.**

20 More than a decade ago, scientists used then-existing habitat conditions to estimate the
21 SSN fisher population and concluded that, at best, the SSN supported a few hundred adults.
22 Collecting and summarizing this and earlier studies, an interagency task force noted in a January
23 2015 Conservation Assessment that the California fisher now occupies less than 50 percent of its
24 historic range. Sivas Decl., Exh. B at 6. The task force acknowledged that “there has not been a
25 definitive census” of the SSN fisher, but it nevertheless estimated, based on two studies, that the
26 population “almost certainly numbers <500 total individuals (Spencer et al. 2011) and probably <
27 300 adult fishers and has been stable over the past decade based on occupancy estimates from the
28 regional monitoring program (Zielinski et al. 2013a).” Id. at 6-7. The authors also warned that

1 fisher densities can change rapidly, citing a precipitous decline in fisher density in the Hoopa
2 Valley between 1998 and 2005. Id. at 9. “Regardless of the precise size,” the study concluded,
3 “populations of a few hundred individuals are at elevated risk of extirpation.” Id.

4 Notably for this case, the two studies cited in the Conservation Assessment (Spencer et al.
5 2011 and Zielinski et al. 2013a) do not provide current population assessments. The Spencer
6 study applied “a spatially explicit population model coupled with a fisher probability of
7 occurrence model,” using fisher survey and vegetation data collected between 2002 and 2006.
8 Sivas Decl. Exh. D at 1. The authors concluded that the SSN habitat carrying capacity – the
9 population size that the habitat can support – was between 73 and 147 adult females. Using a 1:1
10 adult sex ratio assumption, the researchers estimated a total adult population of 146 to 294
11 individuals, although they acknowledged that this number “probably over-estimates the number of
12 males.” Id. at 13. The authors noted that these estimates were consistent with extrapolations from
13 an earlier fisher marking study of somewhere between 53 and 83 adult females in the SSN
14 population. Id. To provide context for their assessment, the authors concluded:

15 Regardless of the precise number of fishers in the population, wildlife populations this
16 small (i.e., of at most a few hundred individuals) are at risk of extirpation from a variety of
17 causes, including stochastic events (Shaffer, 1981; Traill et al., 2009). Moreover, the
18 effective population size (Wright, 1931) of this isolated population could be quite small,
19 and indeed Wisely et al. (2004) found the southern Sierra Nevada population to be the
most genetically depauperate in the fisher’s Pacific coast distribution. These realities
heighten the urgency of efforts to increase the fisher population and to protect and restore
fisher habitat in the Sierra Nevada.

20 Id. at 15. The study’s simulations “were run on a static habitat map,” but “[i]n reality, vegetation,
21 habitat value, and carrying capacity are dynamic due to succession, fires, and other factors.” Id.

22 The second study cited in the 2015 Assessment, Zielinski et al 2013a, also used pre-2010
23 habitat data; moreover, it was not designed to – and did not – estimate population size. Rather, the
24 researchers annually monitored fisher presence or absence from 2002 through 2009 at 233 sites,
25 visiting on average 139.5 sites per year for 5 of the 8 years. Sivas Decl., Exh. E at 8. While one
26 area showed a downward presence trend between 2002 and 2009, that decline was not statistically
27 significant, and the authors thus concluded that their presence/absence occupancy data “revealed
28 no evidence for a change or trend in fisher occupancy estimates over the 8-y period.” Id. at 10.

1 Importantly, they explained that the study’s “methods to detect presence or absence of fishers . . .
2 do not directly measure abundance or provide estimates of reproduction or survival.” Id. at 2.
3 Any conclusions about fisher population or trends drawn from the study are, therefore, premised
4 on “the key assumption that changes in occupancy reflect changes in population size.” Id.

5 **D. Between 2011 and 2020, Events Drastically Altered SSN Fisher Habitat.**

6 When FWS finally listed the SSN fisher in May 2020, it relied on these same outdated
7 population size and trend estimates, even though it acknowledged their likely inaccuracy due to
8 dramatic intervening habitat changes. FWS conceded that the Spencer study’s “population
9 estimates pre-date the 2012-2015 drought and subsequent habitat loss and fragmentation,” which
10 “may have caused population declines since the population estimates of the early 2000’s.” 85 Fed.
11 Reg. at 29,563. FWS also explained that the Zelinski study’s occupancy patterns “were calculated
12 prior to the 2012-2015 drought and subsequent 39 percent reduction in foraging and denning
13 habitat and associated habitat fragmentation.” Id. Limited monitoring conducted after the
14 Zielinski study likewise did “not take into consideration the extensive tree mortality, habitat loss,
15 and fragmentation that has impacted habitat from 2015 to the present.” Id. As a result, FWS
16 concluded, “[i]t is unknown how occupancy and survival rates across the range for the SSN DPS
17 of fisher have changed in response to these habitat changes.” Id.

18 The listing decision acknowledged that much of the SSN fisher’s critical denning and
19 resting habitat has been radically altered in the last decade. Although fishers use a mosaic of
20 different tree stand types and ages, their successful reproduction depends on mature forests with
21 large trees and abundant “decadent” structures like snags and downed wood. 85 Fed. Reg. at
22 29,542. Between 2011 and 2015, drought killed more than 500 million large trees in California,
23 “with some of the largest impacts to forested areas within the range of the SSN DPS.” Id. at
24 29,565. In particular, “[o]ver half of the potential fisher habitat in the SSN DPS has been
25 significantly impacted by canopy loss from tree mortality, which is disproportionately affecting
26 the largest conifer trees and which are likely to serve as den or rest trees for fishers.” Id.

27 Protecting the remaining denning and resting habitat is crucial to the species’ survival, and
28 Forest Service cooperation is vital to this effort. The federal government owns nearly two-thirds

1 of the land within the fisher’s range, and the Forest Service manages roughly 60 percent of that
2 land. 85 Fed. Reg. at 29,563. Recognizing the Forest Service’s critical role in protecting the
3 fisher, scientists prepared a “Southern Sierra Nevada Fisher Conservation Strategy” in February
4 2016 to guide agency management decisions. That strategy identified seven “core” habitat areas
5 of greater than 200,000 acres each, separated by six key connecting “linkage areas” to facilitate
6 movement and dispersal. Sivas Decl., Exh. C, at 10 & Fig. 1. This conceptual framework was
7 designed to maintain a minimum number of viable female home ranges within each core area and
8 to protect fisher movement between core habitat areas. Id. Yet, recent Forest Service analysis has
9 revealed that the foraging and denning habitat upon which this strategy relies changed
10 dramatically between 2014 and 2016. Of most concern, available denning habitat within the
11 Conservation Strategy boundaries “declined by almost 40 percent,” 85 Fed. Reg. at 29,563, from
12 an estimated 805,000 acres to only 493,000 acres. Sivas Decl., Exh. F at 9. The number of
13 denning habitat patches dropped from 254 to 172, and the average size of these patches dropped
14 from 3,169 acres to 2,868 acres, revealing continued habitat fragmentation. Id.

15 The researchers who crafted the 2016 Conservation Strategy have since concluded that due
16 to the “extreme habitat loss and fragmentation that occurred between 2014 and 2016, the
17 landscape no longer reflects” the pattern of core and linkage area habitat that was central to the
18 strategy. Sivas Decl., Exh. F, at 10. Intervening events have “fragmented and shrunk” core areas,
19 and the six identified linkages “may now represent barriers to movement.” Id. Because earlier
20 models no longer “accurately portray current (post-drought) habitat conditions in the southern
21 Sierra Nevada,” and because fisher persistence “is now at elevated risk due to the recent habitat
22 changes and increased fragmentation,” in February 2020 the scientists suggested new interim
23 recommendations. Id. at 6. For instance, they recommended conserving the largest live trees, and
24 creating or leaving large snags, logs, and other structures on site for both resident and dispersing
25 fishers. Id. at 17-18. They also explained that rest sites may be more important than previously
26 understood and that “[r]ecognizing potential denning habitat, and retaining or promoting it on the
27 landscape, is critical to the species persistence in the southern Sierra Nevada.” Id.

28 Additionally, these Interim Recommendations explained that the “severe fragmentation” of

1 existing closed-canopy forest portends greater use of the area by bobcats and cougars, potentially
2 “resulting in increased predation on fishers.” Sivas Decl., Exh. F at 15. And there is evidence, in
3 the form of elevated SSN fisher cortisol levels, that these dramatic landscape changes “have
4 resulted in increased physiological stress to fishers, which may have consequences for a variety of
5 physiological and behavioral risks.” *Id.* at 14-15. For female fishers, cortisol levels are inversely
6 correlated to annual survival rates, “indicating the increased stress may increase susceptibility to a
7 variety of mortality factors, such as predation or disease.” *Id.* For all of these reasons, “[h]abitat
8 changes in recent years have made it clear that altered disturbance regimes in the Southern Sierra
9 Nevada are a major threat” to fishers. *Id.* at 16.

10 In short, when FWS listed the SSN fisher in May 2020, both FWS and the Forest Service
11 knew well that the already-small, habitat-derived population estimates from a decade earlier
12 almost certainly overestimate the current size and stability of the species. A few months earlier,
13 the scientists called for “a detailed population viability analysis designed to identify critical core
14 areas, corridors, and restoration opportunities,” including “analyses of fisher habitat conditions
15 following the recent massive tree mortality event, as well as an assessment of new fisher data
16 concerning how the population has been responding to these changed habitat conditions.” *Id.* at
17 22, 5. An altered landscape, these experts cautioned, amplifies disturbance effects, often resulting
18 in longer species recovery times and greater probability of local extinction. *Id.* at 16.

19 **E. Despite These Facts, FWS Approved 45 Forest Service Projects in Summer 2020.**

20 Four days after FWS listed the SSN fisher as endangered, the Forest Service sought
21 permission under the ESA to continue operating 40 logging and other projects across the Sierra
22 and Sequoia National Forests. A few weeks later, FWS gave the go-ahead; it issued a
23 “Programmatic Biological Opinion” (“2020 PBO”) and Incidental Take Statement that conferred
24 blanket authorization for the Forest Service to proceed with all 40 projects. *See* Sivas Decl., Exh.
25 H & Exh. I at 8-9. Like the listing decision, the 2020 PBO identified a long list of interrelated,
26 cascading threats to fisher survival. Sivas Decl., Exh. H at 24-28. The PBO repeated the FWS
27 conclusion from the listing decision that SSN fisher population estimates “pre-date the 2012-2015
28 drought and subsequent habitat loss” and that an “updated population estimate has not been

1 completed; therefore, it is unknown if there have been any subsequent changes in the population.”
2 Id. at 29. It acknowledged that of the 2.5 million total acres comprising the Sierra and Sequoia
3 National Forests, only 250,000 acres of “modeled” fisher denning habitat remain. Id. And it
4 noted that, from 2015 to 2020, the Forest Service continued “vegetation management” activities –
5 primarily logging – on more than 43,000 acres of suitable habitat, including 13,664 acres of
6 denning habitat. Id. at 33.

7 FWS recognizes that, as a small, isolated population with limited denning/dispersal habitat,
8 the SSN fisher faces enormous challenges going forward. 85 Fed. Reg. at 29,545 (explaining that
9 small populations “are vulnerable to rapid decline in their numbers and localized extinction”). Yet
10 despite the bleak prognosis for the species’ survival and recovery and the absence of a current
11 population estimate or viability analysis, FWS authorized the take of 12 fishers in a single denning
12 season and gave its blessing to 45 Forest Service projects. Sivas Decl., Exhs. H, I & J.

13 **F. After the 2020 Wildfires, FWS Issued a Revised Opinion Authorizing Continued
14 Forest Service Logging, Again Without Current SSN Fisher Population Information.**

15 Three months later, the Creek Fire burned approximately 380,000 acres, mostly on the
16 Sierra National Forest, and the Sequoia Complex Fire burned another 174,000 acres, mostly on the
17 Sequoia National Forest. Sivas Decl., Exh. K at 1. The Forest Service’s preliminary assessment
18 indicated that these fires burned at “high intensity” in roughly 15 percent of suitable SSN fisher
19 habitat overall and, significantly, in roughly 14 percent of the remaining denning habitat. Id. at 4.
20 According to the Forest Service’s habitat database, the “best available” vegetation estimates now
21 reveal that less than 204,000 acres of denning habitat remain on the Sierra and Sequoia National
22 Forests. Id. at 2, 4. Ominously, the 2020 wildfires burned in five of the “core” habitat areas
23 previously identified in the Conservation Strategy as “occupied” and in at least three of the six
24 identified linkage areas. Declaration of Alison Sheehey, Exh. A (courtesy copy attached hereto).

25 Notwithstanding the alteration of denning habitat and linkage corridors and the absence of
26 a current SSN fisher population estimate, the Forest Service has stated that its 45 previously-
27 approved projects will result in only “minimal change to the proportion of fisher habitat affected
28 by Forest Service management activities” and that overall, the expected efforts “have not changed
from what was previously considered in the [2020 PBO].” Sivas Decl., Exh. K at 5, 8. While the

1 Forest Service contends that no further evaluation is necessary, on February 24, 2021, it requested
2 that FWS reinstate consultation under ESA section 7(a)(2) in “an abundance of caution and so that
3 the [2020 PBO is revised to] reflect the latest information.” Sivas Decl., Exh. L.

4 On March 12, 2021, FWS issued another Programmatic Biological Opinion (“2021 PBO”)
5 in response to this request. The 2021 PBO lacks any new assessment of the SSN fisher
6 population. Instead, like the listing decision and the 2020 PBO, the 2021 PBO references the
7 same outdated Spencer et al. 2011 and Zielinski et al. 2013a studies discussed above and parrots
8 the population estimates from the January 2015 Conservation Assessment. Sivas Decl., Exh. N at
9 32.³ For this reason, FWS included the same caveat as before: “These estimates pre-date the
10 2012-2015 drought and subsequent habitat loss. An updated population estimate has not been
11 completed; therefore, it is unknown if there has been subsequent changes in population.” Id.

12 The 2021 PBO relies on the Forest Service’s vegetation database to conclude that the 2020
13 fires burned at high severity in roughly 14 percent of fisher denning habitat, decreased denning
14 habitat on the Sierra National Forest by approximately 18 percent, and reduced linkage areas. Id.
15 at 35-36. Based on the extensive scientific literature, the 2021 PBO recognizes that removal of
16 large trees and structural elements through logging, hazard logging, logging roads, and other
17 vegetation management activities “decrease[s] the quality of den and rest sites and/or increase[s]
18 travel distances between safe sites . . . even if den or rest structures themselves are not removed,”
19 and may expose fishers to predation from mountain lions, bobcats, and coyotes. Id. at 39-40. But
20 then, with virtually no science to support its statements, the 2021 PBO posits that logging and
21 other vegetation management activities also create “potential positive effects” by increasing
22 habitat heterogeneity and promoting tree clumps and gaps within a stand, thereby increasing the
23 “resilience” of these stands. Id. at 40-41. Based on this unsubstantiated resilience theory, FWS

24
25 ³ The 2021 PBO also cites “Zielinski and Gray 2018.” This study was designed to test the utility
26 of Forest Inventory and Analysis vegetation data for predicting fisher resting (but notably not
27 denning) habitat. Using three data sets with mean assessment years 1998, 2003, and 2010, the
28 study concludes that there was no statistically significant overall change in resting habitat between
1998 and 2010, although there was a decline on the Sierra and Eldorado National Forests. The
study does not include updated population estimates or account for subsequent habitat changes.
Sivas Decl., Exh. M

1 concluded that while Forest Service projects “may result in short-term impacts to fisher (through
2 habitat modification or noise disturbance, for example), . . . many of the proposed projects are
3 intended to reduce fuels and the risk of high-severity fires” and thus “we expect that these short
4 term impacts are outweighed by the long-term benefits of these projects” *Id.* at 47 (concluding
5 that vegetation management program “is not likely to jeopardized the continued existence” of SSN
6 fisher or “appreciably reduce the likelihood” of its recovery).

7 **IV. STANDARD OF REVIEW**

8 An injunction is the “appropriate remedy” for a substantial procedural violation of either
9 the ESA or NEPA. See *Washington Toxics Coal. v. EPA*, 413 F.3d 1024, 1034 (9th Cir. 2005);
10 *Thomas v. Peterson*, 753 F.2d 754, 764 (9th Cir. 1985). To obtain a preliminary injunction, a
11 plaintiff “must establish that he is likely to succeed on the merits, that he is likely to suffer
12 irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor,
13 and that an injunction is in the public interest.” *Winter v. NRDC*, 555 U.S. 7, 20 (2008).

14 The Ninth Circuit has adopted a “sliding scale” test evaluating claims for equitable relief,
15 holding that when the equities and public interest clearly warrant a preliminary injunction, a
16 litigant need only show “serious questions” on the merits, as well as a likelihood of irreparable
17 harm. *All. for the Wild Rockies v. Cottrell*, 632 F.3d 1127, 1135 (9th Cir. 2011). Moreover,
18 where, as here, a plaintiff seeks to enjoin ESA violations, courts apply a modified injunction
19 standard. See *Cottonwood Env'tl. Law Ctr. v. U.S. Forest Service*, 789 F.3d 1075, 1089-90 (9th
20 Cir. 2015). Because Congress “afford[ed] first priority to the declared national policy of saving
21 endangered species,” courts do not balance the equities under the third *Winter* factor. *Id.* at 1089
22 (quoting *Tenn. Valley Auth. v. Hill*, 437 U.S. at 185). And because Congress established an
23 “unparalleled public interest” in the “incalculable” value of preserving endangered species,
24 injunctions against ESA violations are presumptively in the public interest under the fourth *Winter*
25 factor. *Id.* Thus, in an ESA case, the final two factors of the *Winter* standard – public interest and
26 balance of equities – favor issuing an injunction.

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V. ARGUMENT

A. Plaintiffs Are Very Likely to Prevail on the Merits of Their ESA and NEPA Claims.

1. The 2021 PBO Is Arbitrary, Capricious, and Counter to the ESA.

In completing ESA section 7 consultation and preparing a BO, FWS must base its determination of whether a proposed action will jeopardize the continued existence of a listed species or its recovery on the “best scientific and commercial data available.” 16 U.S.C. § 1536(a)(2). “The obvious purpose of [this requirement] is to ensure that the ESA not be implemented haphazardly, on the basis of speculation or surmise.” Bennett v. Spear, 520 U.S. 154, 176 (1997). In an APA challenge like this one, a decision is arbitrary and capricious and must be set aside if the agency “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 its decision “is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” Motor Vehicle Mfr. Ass’n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). Here, FWS’s determination that dozens of vegetation management projects are not likely to jeopardize the survival or recovery of the SSN fisher fails to meet these requirements, for several reasons.

First and foremost, FWS made no attempt to develop a scientifically credible population estimate before granting the Forest Service what amounts to blanket immunity from ESA liability for dozens of present and future projects. FWS acknowledged that the SSN fisher population is precariously small and faces a cascade of natural and human stressors across the landscape, from climate-induced worsening of drought and wildfires risks to increased predation to rodenticide exposure to the logging of rapidly shrinking suitable habitat. FWS acknowledged that female denning and resting habitat is the limiting factor for SSN fisher reproduction, survival, and recovery. And FWS acknowledged that since the most recent habitat-based population estimates in 2011, nearly 55 percent of the remaining denning and resting habitat has been significantly altered and likely lost to fishers for reproduction purposes. Yet FWS never even attempted to develop a current population estimate by, for example, applying the Spencer et al. method – or any other method – to the current vegetation and habitat data. Instead, it rushed to give the Forest

1 Service carte blanche for all kinds of habitat-disruptive activities with a meek confession: “An
2 updated population estimate has not been completed; therefore, it is unknown if there has been
3 subsequent changes in population.” Sivas Decl., Exh. N at 32. That approach does not satisfy
4 FWS’s most important legal duty under the ESA. See Conner v. Burford, 848 F.2d 1441, 1453-54
5 (9th Cir. 1988) (“[I]n light of the ESA requirement that the agencies use the best scientific and
6 commercial data available ... FWS cannot ignore available biological information or fail to
7 develop projections of ... activities which may indicate potential conflicts between development
8 and the preservation of protected species”). For this reason alone, Plaintiffs are likely to prevail
9 on their challenge to the 2021 PBO.

10 **Second**, even assuming, contrary to all evidence, that the decade-old SSN fisher
11 population estimates of Spencer et al. 2011 are still accurate after years of accelerated habitat
12 degradation, FWS utterly failed to consider the best available science on the minimum viable
13 population necessary to avoid a significant risk of extinction. The best science available today is a
14 meta-analysis of 95 scientific studies spanning three decades published by Traill et al. in 2007.
15 Declaration of Chad Hanson (“Hanson Decl.”) ¶ 19 & Exh. D. The Traill study found that the
16 minimum viable population for terrestrial mammals is 3,876 individuals. Id. In sharp contrast, the
17 most recent SSN fisher population modeling from 2011, based on habitat data collected between
18 2002 and 2006, posited somewhere between 73 and 147 adult female SSN fishers and a total
19 population of less than 300 individuals. Sivas Decl., Exh. D. Even the highest theorized
20 population does not exceed 500 individuals. See 85 Fed. Reg. at 29,563 (citing Lamberson
21 2000).⁴ Thus, prior to the last decade of habitat loss, the SSN fisher population was already
22 between 87 and 97 percent lower than the minimum viable population. Hanson Decl. ¶ 19. Given
23 this baseline condition, the loss of even one female, or the loss of a breeding season by a breeding

24 _____
25 ⁴ The Lamberson paper – which applied a “deterministic” population model to SSN fishers using
26 input parameters “derived from literature review, limited field data and expert opinion” –
27 speculated, without supporting citation, that “[a]lthough no population size estimates have been
28 published, the population is likely to be no less than 100 and probably no more than 500
individuals.” Sivas Decl., Exh O at 2. Notably, the paper’s authors concluded that most runs of
their model, regardless of starting population assumptions, went to extinction before 50 years,
except where the adult female survival and litter size parameters were set at high.

1 female, could irreparably harm the SSN fisher’s population viability. Id. ¶ 20.

2 Yet both PBOs issued by FWS in June 2020 and March 2021 fail to incorporate the
3 science on minimum viable populations into the environmental baseline. Nor do these PBOs
4 provide any reasoned explanation for their conclusion that proposed Forest Service vegetation
5 management activities will not jeopardize the survival or appreciably reduce the recovery of a
6 population that is already far below minimum viability levels. This omission is especially
7 troubling where, as here, the 2020 PBO actually authorizes the incidental take of 12 fishers. Sivas
8 Decl., Exh. I at 9. And although the 2021 PBO does not itself quantify or authorize any additional
9 take, it explains that FWS is “reasonably certain that incidental take of the fisher will occur” in
10 connection with future projects authorized under the programmatic opinion. Sivas Decl., Exh. N
11 at 49. FWS failed to articulate any “rational connection” between the best available science on
12 minimum viable populations and its conclusion that Forest Service projects will not adversely
13 affect the survival or recovery of the species. That determination was, therefore, arbitrary and
14 capricious. See Turtle Island Restoration Network v. U.S. Dep’t of Commerce, 878 F.3d 725, 739
15 (9th Cir. 2017) (finding BO “structurally flawed” and arbitrary for failing to incorporate modeled
16 predictions about population decline into environmental baseline); Nat’l Wildlife Fed’n v. Nat’l
17 Marine Fisheries Serv., 524 F.3d 917, 930-31 (9th Cir. 2008) (requiring BO to incorporate
18 degraded species condition in environmental baseline).

19 **Third**, in place of a scientifically defensible population baseline and an actual analysis of
20 aggregate project impacts on that baseline, FWS substituted mere conjecture that the “long-term
21 benefits” of vegetation management on forest resiliency “outweigh the short-term negative effects
22 of vegetation management” on fishers. Sivas Decl., Exh. N at 29, 47. Neither the 2020 nor the
23 2021 PBO provide sound scientific support for this blanket speculation; instead, FWS uncritically
24 accepted the Forest Service’s view that logging projects are intended to – and thus will – increase
25 resilience and reduce fire risk. But the internal reports and papers on which the Forest Service
26 rests this belief are based on anecdotal comparisons and insufficiently granular research to support
27 its position. Hanson Decl. ¶ 26; Declaration of Dr. Joseph Werne (“Werne Decl.”) ¶¶ 19-21. An
28 analysis of the nearby Rim Fire, for example, showed that areas without mechanical thinning

1 actually had less high-severity fire than areas with thinning, and comparative studies showed that
2 mechanically thinned areas burned more intensely than prescribed burn areas. Id. More
3 important, on the Sierra forests at issue here, an evidence-based analysis showed that the more
4 heavily managed land burned with higher severity in the Creek Fire. Hanson Decl. ¶¶ 24-25.

5 Moreover, if FWS is going to base its jeopardy determinations on weighing ostensible
6 long-term “benefits” against short-term adverse impacts, it must consider all relevant aspects of
7 the issue in its analysis. Here, the agencies’ speculative theory ignores an important aspect of the
8 problem. The most recent science, Atchley et al. 2021, demonstrates that modern vegetation
9 management activities can result in increased fire spread, despite being designed to do the
10 opposite, and Banerjee et al. 2020 shows that aggressive ladder-fuels reductions intended to
11 eliminate crown-fire events actually increase them. Werne Decl., ¶¶ 13-16, 22. Forest Service
12 operational models fail to recognize this because they neglect the wind-drag effects explained in
13 Atchley et al. 2021 and Banerjee et al. 2020. Id. Because the 2020 and 2021 PBOs based their
14 “no jeopardy” conclusions on an unsupported and incomplete theory that disregards both an
15 important aspect of the problem and the best-available research, it is arbitrary and capricious. Pac.
16 Coast Fed’n of Fishermen’s Ass’ns v. Gutierrez, 606 F. Supp. 2d 1122, 1193 (E.D. Cal. 2008); see
17 also Nat. Res. Def. Council v. Kempthorne, 506 F. Supp. 2d 322, 364-66 (E.D. Cal. 2007).⁵

18 More fundamentally, even if the agencies could provide credible support for their “long-
19 term benefits” theory, FWS may not simply ignore or dismiss immediate negative impacts on
20 fishers. As discussed above, average fisher lifespan is ten years, and female SSN fishers produce
21 litters of one to three kits – the smallest litter size for the species. In contrast, the habitat lost
22 through logging and other “fuels reduction” activities will not be replaced during a fisher’s
23 lifetime, or indeed for many generations of fishers. In its 2016 SSN fisher Final Species Report,

24 _____
25 ⁵ In BARK v. U.S. Forest Serv., 958 F.3d 865, 870 (9th Cir. 2020), the Ninth Circuit recognized a
26 similar deficiency, where the plaintiff presented scientific evidence, which showed that thinning
27 could “actually exacerbate fire severity in some cases as such projects leave behind combustible
28 slash, open the forest canopy to create more ground-level biomass, and increase solar radiation
which dries out the understory.” The Court found that the analysis failed to engage with the
considerable contrary scientific and expert opinion and instead drew general conclusions that there
were no negative effects from the proposed vegetation management treatments. Id. at 871.

1 FWS explained: “When habitat is lost, it may take many decades to return. Therefore, even
2 though habitat loss has an immediate impact on fisher populations, its effects are also expected to
3 continue in the future, possibly for many decades until trees become large and old enough to
4 generate the structures needed for fisher denning and resting.” Sivas Decl., Exh. A at 57.

5 Precisely for this reason, the Ninth Circuit has given “clear instruction” that agencies
6 ““must consider near-term habitat loss to populations with short life cycles.”” Nat’l Wildlife
7 Fed’n, 524 F.3d at 934 (quoting Pac. Coast Fed’n of Fishermen’s Ass’ns v. United States Bureau
8 of Reclamation, 426 F.3d 1082, 1094 (9th Cir. 2005)). As the court noted in Pac. Coast Fed’n, “it
9 is not enough to provide water for [an endangered fish] to survive in five years, if in the meantime,
10 the population has been weakened or destroyed by inadequate water flows.” 426 F.3d at
11 1095. Likewise here, the agencies’ wishful thinking about idealized future conditions – based on
12 untested speculation – does not discharge FWS’s legal obligation to analyze actual effects on the
13 small, isolated SSN fisher population that exists today.

14 **Fourth**, the 2021 PBO’s final justification for its “no jeopardy” determination – that the
15 acreage on which the Forest Service plans its logging activities each year is “a small amount
16 relative to” the total suitable fisher habitat, Sivas Decl., Exh. N at 46 – cannot survive judicial
17 scrutiny. The Ninth Circuit has held that such an incremental comparative approach to evaluating
18 impacts is “impermissible” under the ESA. Turtle Island Restoration Network, 878 F.3d at 738;
19 see also Pac. Coast Fed’n, 606 F. Supp. 2d at 1178 (holding BO defective where it failed to
20 analyze the overall effects of proposed project operations when added to baseline conditions).
21 Even where the additional incremental threat may seem small, an agency “may not take action that
22 will tip a species from a state of precarious survival into a state of likely extinction.” Nat’l
23 Wildlife Fed’n, 524 F.3d at 930. Here, FWS has not done any analysis by which it could
24 reasonably conclude that disruptive management activities across thousands of acres of fisher
25 habitat each year will have only negligible incremental impacts. Indeed, “one of the very ills the
26 ESA seeks to prevent” is the “slow side into oblivion” that the SSN fisher is likely to suffer if
27 dozens of Forest Service projects go forward without actual science-based analysis. Id. at 930.
28 FWS’s reliance on the “small” comparative effect of each logging project was impermissible.

1 **2. The Forest Service’s Failure to Evaluate Cumulative Impacts in Light of New**
2 **Information and Changed Circumstances Violates NEPA.**

3 Plaintiffs are also likely to prevail on their claim that the Forest Service is violating NEPA.
4 An action agency “shall” conduct supplemental environmental review when “[t]here are
5 significant new circumstances or information relevant to environmental concerns and bearing on
6 the proposed action or its impacts.” 40 C.F.R. § 1502.9(d)(1)(ii). The standard for changed
7 circumstances under NEPA is low, requiring only “substantial questions” that the new
8 circumstance could change a project’s impact in order to trigger further analysis. League of
9 Wilderness Defs./Blue Mts. Biodiversity Project v. Connaughton, 752 F.3d 755, 760 (9th Cir.
10 2014) (citing Klamath Siskiyou Wildlands Ctr. v. Boody, 468 F.3d 549, 562 (9th Cir. 2006). The
11 agency, not the public, carries a “continuing duty” to evaluate new information and update its
12 NEPA analysis. Friends of the Clearwater v. Dombeck, 222 F.3d 552, 559 (9th Cir. 2000);
13 League of Wilderness Defs., 752 F.3d at 761.

14 In this case, much has changed on the landscape since the Forest Service’s abbreviated
15 NEPA reviews were conducted. The listing of the SSN fisher significantly changed the
16 circumstances here by conferring new legal protections on the species. A few months later, two
17 substantial wildfires exploded across the Sierra Nevada landscape, dramatically changing the
18 habitat conditions that directly affect fisher survival and recovery. Despite these changes, the
19 Forest Service has not conducted supplemental review. Courts have required supplemental NEPA
20 review for far less. For example, in Idaho Rivers United v. Probert, No. 3:16-cv-00102-CWD,
21 2016 WL 2757690, at *16 (D. Idaho May 12, 2016), the Forest Service conducted some additional
22 NEPA review after two wildfires partially overlapped with a previously burned area, but the court
23 found the analysis too “general and conclusory” to satisfy the required “hard look” at potential
24 changes in project effects. The Forest Service has not taken even that first basic step here.

25 More significantly, the Forest Service has failed to evaluate the cumulative effects of past,
26 present, and reasonably foreseeable future projects on the SSN fisher, as NEPA requires. See,
27 e.g., Great Basin Mine Watch v. Hankins, 456 F.3d 955, 971 (9th Cir. 2006). Cumulative impacts
28 analysis is critical for NEPA compliance – required even when the agency chooses to prepare a

1 more abbreviated “Environmental Assessment” or “EA” rather than a full EIS. Kern, 284 F.3d at
 2 1076 (explaining that because so many more EAs are prepared than EISs, EAs must also include
 3 adequate consideration of cumulative impacts).⁶ The Ninth Circuit has repeatedly admonished the
 4 Forest Service for failing to take a hard look at the accumulating impacts from its timber sales and
 5 related projects in order to satisfy NEPA.⁷ Where, as here, the Forest Service has planned dozens
 6 of projects that may cumulatively affect the SSN fisher habitat – and thus potentially the species’
 7 very survival – it must assess these aggregate impacts in a single supplemental EIS. Blue Mts.
 8 Biodiversity Project, 161 F.3d at 1215; Neighbors of Cuddy Mountain, 137 F.3d at 1380.

9 In this case, the Forest Service has failed to fulfill its NEPA obligations. The agency
 10 approved the 45 projects covered by the 2020 PBO primarily through “categorical exclusions” or
 11 short EAs. Since the May 2020 SSN fisher listing decision and the subsequent 2020 wildfires, the
 12 Forest Service has not initiated any public NEPA process to prepare a cumulative impacts analysis

14 ⁶ For instance, in Klamath-Siskiyou Wildlands Ctr., the court found that the short analysis in the
 15 EA for each individual timber sale did not satisfy NEPA’s requirement to consider past, present,
 16 and reasonably foreseeable cumulative effects. 387 F.3d at 994 (“Sometimes the total impact from
 17 a set of actions may be greater than the sum of the parts.... [T]he addition of a small amount here,
 18 a small amount there, and still more at another point could add up to something with a much
 greater impact”); see also Lands Council v. Powell, 395 F.3d 1019, 1031 (9th Cir. 2005) (holding
 that the Forest Service must use up-to-date habitat information to prepare an accurate cumulative
 impact assessment on the habitat and population of the key species).

19 ⁷ See, e.g., Native Ecosystems Council v. Dombeck, 304 F.3d 886, 896-97 (9th Cir. 2002) (finding
 20 timber sale EA defective because it failed to consider cumulative impacts from many sales
 proposed to occur within the next two years, all on the same national forest and all of which “will
 effect separate but additive changes to the density of roads within that geographic area”);
 21 Muckleshoot Indian Tribe v. U.S. Forest Serv., 177 F.3d 800, 811 (9th Cir. 1999) (finding the EIS
 22 inadequate because the Forest Service failed to consider cumulative impacts to damaged
 watershed from proposed actions when considered with near-term impacts of old growth logging
 by Weyerhaeuser in same degraded watershed); Blue Mountains Biodiversity Project v.
 23 Blackwood, 161 F.3d 1208, 1214-15 (9th Cir. 1998) (finding EA is inadequate in addressing the
 24 cumulative effects of multiple salvage logging projects in the fire area together and in combination
 with the effects of the fire); Neighbors of Cuddy Mountain v. U.S. Forest Serv., 137 F.3d 1372,
 25 1378-80 (9th Cir. 1998) (holding cumulative impacts analysis for series of timber sales inadequate
 because the Forest Service provided no detail regarding the extent to which the proposed sales
 would cumulatively impact and reduce old growth habitat and its dependent species); City of
 26 Tenakee Springs v. Clough, 915 F.2d 1308, 1313 (9th Cir. 1990) (granting a preliminary injunction
 27 halting logging because the Forest Serv failed to analyze the cumulative impacts of a proposed
 28 timber sale together with four other proposed sales within the Tongass National Forest).

1 that evaluates the effects of these events when considered together with past, present, and
2 foreseeable future projects. Declaration of Deanna Wulff (“Wulff Decl.”) ¶ 28; Declaration of
3 Ara Marderosian (“Marderosian Decl.”) ¶ 8.

4 To be legally adequate, the supplemental NEPA analysis must do two things. First, in the
5 wake of the recent wildfires, it must provide an accurate analysis of the baseline status of the SSN
6 fisher and its habitat so that the Forest Service and FWS can properly evaluate impacts to that
7 affected resource. See, e.g., Great Basin Res. Watch v. BLM, 844 F.3d 1095, 1105-06 (9th Cir.
8 2016) (finding analysis of cumulative air pollution from multiple projects inadequate because
9 agency ignored recent increases in pollution from other sources in its baseline comparison).
10 Second, it must evaluate the landscape cumulative impacts of habitat loss and fragmentation where
11 multiple logging projects and other factors will affect the same fragile forests. See, e.g., BARK v.
12 U. S. Forest Serv., 958 F.3d at 872-73 (requiring the study of cumulative spotted owl habitat
13 fragmentation effects from fire treatments and other planned projects despite the alleged urgency
14 of projects to prevent fires); Ore. Nat. Res. Council v. BLM, 470 F.3d 818, 823 (9th Cir. 2006)
15 (finding agency did not adequately identify how impacts of successive timber projects “might
16 combine or synergistically interact”).

17 As the facts here cry out, the Forest Service has not yet taken the required “hard look” at
18 the landscape cumulative impacts of its 45 ongoing and proposed projects on the SSN fisher (or
19 any other resources, for that matter), when added to all of the other events and threats affecting the
20 species. Accordingly, Plaintiffs are highly likely to prevail on their NEPA claim.

21 **B. The Proposed Actions Will Result in Imminent Irreparable Harm.**

22 Logging and other vegetation management activities in the ecologically critical habitat of the
23 SSN fisher are precisely the kind of irreparable harm that justifies an injunction. “Environmental
24 injury, by its nature, can seldom be adequately remedied by money damages and is often permanent
25 or at least of long duration, i.e., irreparable.” Lands Council v. McNair, 537 F.3d 981, 1004 (9th
26 Cir. 2008) (en banc); see also Earth Island Institute v. U.S. Forest Serv., 351 F.3d 1291 (9th Cir.
27 2003) (holding that logging causes irreparable harm); Sierra Club v. Eubanks, 335 F. Supp. 2d 1070,
28 1083 (E.D. Cal. 2004) (holding that logging “is enough in and of itself to satisfy the irreparable

1 harm component” of an injunction, as “once trees are removed from the landscape, they cannot be
 2 replaced”); see Neighbors of Cuddy Mountain v. U.S. Forest Serv., 137 F.3d 1372, 1382 (9th Cir.
 3 1998) (finding that the old growth forests “if cut, take hundreds of years to reproduce”); Alliance for
 4 the Wild Rockies, 632 F.3d 1127, 1135 (9th Cir. 2011) (finding there is irreparable harm if
 5 plaintiffs’ members’ ability to view, experience, and utilize areas in their undisturbed state is
 6 precluded by logging). Harm to individual members of an endangered species is also irreparable.
 7 FCC v. Rosboro Lumber, 50 F.3d 781, 785 (9th Cir. 1995) (“Once a member of an endangered
 8 species has been injured, the task of preserving that species becomes all the more difficult.”).

9 There can be no dispute that the Forest Service’s proposed vegetation management projects
 10 will cause irreparable harm to SSN fishers. FWS is “reasonably certain that incidental take of the
 11 fisher will occur” in connection with projects authorized under the programmatic opinion. Sivas
 12 Decl., Exh. N at 49. The agency’s continued reliance on the 2021 and 2020 PBOs is likely to result
 13 in the incidental take of 12 fishers. Sivas Decl., Exh. I at 9. As Dr. Hanson explains, given the
 14 extremely small SSN fisher population, “even the loss of a single SSN fisher individual due to
 15 logging would be a highly significant adverse impact,” and “the loss of a female fisher’s ability to
 16 reproduce for one or more seasons would be a serious impact and could harm the viability of the
 17 species and contribute to the SSN fishers’ extinction.” Hanson Decl. ¶¶ 19-20. Moreover, as
 18 Plaintiffs’ experts have explained through evidence-based, post-fire analysis, “fuels reduction”
 19 activities by the Forest Service can actually increase the severity of wildfires, thereby exacerbating
 20 the direct habitat loss from project activities likely to cause additional future harm. See Hanson
 21 Decl. ¶¶ 24-25; Werne Decl. ¶ 18 & Exh. I. All of these losses cause direct, imminent, and
 22 irreparable harm to Plaintiffs. See Marderosian Decl. ¶¶ 5-7 (describing Sequoia ForestKeepers’
 23 harm caused by Forest Service activities and FWS’ failure to adequately protect SSN fishers);
 24 Hanson Decl. ¶¶ 14-15 (describing John Muir Project’s and Earth Island Institute’s harm); Wulff
 25 Decl. ¶ 32 (describing similar harm to Unite the Parks).

26 **C. The Balance of Equities and Public Interest Favor an Injunction.**

27 If the Court finds ESA violations and irreparable harm, it should issue an injunction.

28 Consistent with the policy of “institutionalized caution,” the injunction analysis is altered in ESA

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NATURAL RESOURCES LAW

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