No. 22-35706

IN THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

WESTERN WATERSHEDS PROJECT ET AL.,
Plaintiffs-Appellants,

v.

DOUGLAS C. MCKAY ET AL.,
Federal Defendants-Appellees.

On Appeal from the United States District Court
for the District of Oregon
No. 1:19-cv-00516-MC
Hon. Michael McShane

PLAINTIFFS-APPELLANTS' OPENING BRIEF

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RULE 26.1 DISCLOSURE STATEMENT

Plaintiffs-Appellants Western Watersheds Project et al. are non-profit organizations. They have no public shares and no corporate parents or affiliates with public shares.

Date: April 7, 2023

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INTRODUCTION

The Fremont-Winema National Forest in Oregon's Klamath Basin contains an aquatic oasis that supports extraordinary biodiversity amidst dry pine forests. This oasis includes Jack Creek, which provides critical habitat for an imperiled population of Oregon spotted frogs, as well as the largest concentration of fen habitat on U.S. Forest Service land in the Pacific Northwest. The Forest Service allowed cattle to graze this oasis, which is part of the Antelope Allotment, for more than a decade based on outdated environmental analyses and despite mounting evidence of ecological harm and management problems.

In 2018, the Forest Service completed a long-overdue Environmental Impact Statement (EIS) that analyzed alternative plans for cattle grazing, but in its Record of Decision (ROD) rejected an option to protect these sensitive resources while allowing grazing on other pastures. Instead, the agency adopted a new allotment management plan (AMP) that expanded grazing into Jack Creek and fen habitat by opening pastures that were closed to grazing for more than a decade. This resulted in a *twentyfold* increase in grazing within habitat for Oregon spotted frogs, which are protected under the Endangered Species Act (ESA). According to the U.S. Fish and Wildlife Service's (FWS) Biological Opinion (BiOp), this expanded grazing scheme may kill or harm a substantial number of the frogs in the Jack Creek population each year.

Fens and frogs are threatened by low water conditions and drought, which is an increasing threat in the Klamath Basin due to climate change. Livestock grazing exacerbates this threat by further de-watering and harming riparian habitat, but the Forest Service failed to consider the combined impacts of grazing and climate change on this aquatic oasis.

Instead, the Forest Service relied on mitigation measures that have been ineffective at keeping cattle in authorized pastures for more than a decade. Indeed, the permittee has a long history of noncompliance with permit conditions and has struggled to manage cattle on this rough and remote allotment. Even a federal court injunction failed to stop thirsty cattle from breaching fences to reach Jack Creek during dry summers. But the Forest Service brushed aside such site-specific evidence when crafting an expanded grazing scheme under the new AMP.

As a result of these and other flaws, the Forest Service failed to take a "hard look" at the impacts of grazing in its EIS as required under the National Environmental Policy Act (NEPA), and failed to show that the AMP is consistent with the Winema National Forest Plan, as required by the National Forest Management Act (NFMA). FWS's BiOp fell short of the ESA's requirements for similar reasons. Thus, this Court should reverse the District Court's summary judgment decision with instructions to remand the EIS, AMP, ROD, and BiOp so the agencies can complete valid analyses and issue new lawful decisions.

JURISDICTIONAL STATEMENT

The district court had jurisdiction over this case because Plaintiffs-Appellants' claims "aris[e] under the…laws…of the United States." 28 U.S.C. § 1331.

This Court has jurisdiction over this appeal because the district court entered a "final decision" in this case, resolving all claims as to all parties, on July 5, 2022, and Plaintiffs-Appellants timely appealed. 28 U.S.C. § 1291; Fed. R. App. P. 4(a)(1).

ISSUES PRESENTED

i. Whether the Forest Service complied with NEPA's requirement to take a "hard look" at the impact of expanding grazing under the AMP on Oregon spotted frogs;

ii. Whether the Forest Service's decision to expand grazing in frog and fen habitat was rational and consistent with the Winema Forest Plan's directives, as required under NFMA; and

iii. Whether FWS's failure to consider the effects of climate change and the effectiveness of mitigation measures rendered the BiOp arbitrary and inconsistent with the ESA.

STATEMENT OF THE CASE

I. FACTUAL BACKGROUND

A. The Antelope Allotment's Extraordinary Biodiversity

The roughly 160,000-acre Antelope Allotment on the Fremont-Winema National Forest in the Klamath Basin is dominated by dry pine forests. 4-ER-0724–26. But its western pastures—Chemult and North Sheep—include a few thousand acres with extraordinary plant diversity and an "extensive and complex" network of springs and fens that took millennia to develop.[1] 5-ER-0955 (map); 3-ER-0519–20 (fen map); 4-ER-0632; 5-ER-1040–45. The Chemult Pasture contains the highest concentration of fen habitat on this National Forest and throughout the Forest Service's Pacific Northwest Region. 2-ER-0136. These western pastures also contain the allotment's only perennial stream: Jack Creek.[2] 3-ER-0524.

Jack Creek supports an imperiled population of Oregon spotted frog that FWS listed as threatened under the ESA in 2014. 3-ER-0459, 0467–68. The population, which is particularly important for the conservation of the species, 4-ER-0886, has hovered for years "at critically low numbers." 2-ER-0203.

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[1] Fens are groundwater influenced wetlands with high water tables that create peat and rich plant diversity. 2-ER-135.

[2] The eastern pastures—Tobin Cabin, Antelope Nos. 1-4, Halfway, and North Willow—largely lack these riparian resources and are not at issue. *Compare* 5-ER-0956 (pasture map) *with* 3-ER-0520 (map showing springs and fens are concentrated on the western portion of the allotment).

The Oregon spotted frog is the most aquatic native frog species in the Pacific Northwest and typically inhabits wetlands in forested areas. 3-ER-0462. Frogs require specific water conditions throughout the year to survive: shallow water during the spring and early summer for egg laying and tadpole survival; perennially deep and moderately vegetated pools during the dry, summer season; and perennial water for overwintering during cold, wet winters. 3-ER-0461–62. Accordingly, frogs are highly vulnerable to activities that alter these water conditions and cause fluctuations in water levels. 3-ER-0461, 0469–70.

Plaintiffs and their members treasure this area and have spent nearly two decades working to protect it. 5-ER-1066–1143 (declaring Plaintiffs' members' longstanding interests in the area and its unique natural resources).[3] Scientists are also deeply invested in this area given the scarcity and importance of the resources there. 4-ER-0796–0855, 4-ER-0856–69 (declarations about the importance of fens and frogs from a retired wildlife biologist who worked for the Fremont-Winema National Forest for more than twenty years); 5-ER-1028–54 (declaration from geology expert describing the value of "such a rare confluence of hydrological, geological, and biological factors" on the allotment).

[3] These declarations demonstrate that Plaintiffs have Article III standing to pursue this case. *See W. Watersheds Project v. Kraayenbrink*, 632 F.3d 472, 484–86 (9th Cir. 2011) ("WWP") (finding that Plaintiff Western Watersheds Project had standing to challenge grazing regulations under NEPA and NFMA).

B. Drought Impacts and Climate Change

Drought is a major threat to fragile riparian resources on the Antelope Allotment and has already caused harm there. The Klamath Basin is drought-prone, 5-ER-1051, and "has experienced numerous years of declared drought in the past two decades." 4-ER-0824, 0827, 0846.

Drought conditions exacerbate normal low water conditions in Jack Creek and are one of the most pertinent threats to the Oregon spotted frog population there. 4-ER-0846; 3-ER-0471–72. While its upper reaches flow year-round, Jack Creek becomes intermittent as it flows south into the North Sheep Pasture, particularly during summers when precipitation is low. 3-ER-0517, 0524. In some years, particularly during droughts, Jack Creek becomes intermittent farther upstream in Jack Creek Pastures 1-3. 3-ER-0386; 3-ER-0388 (map). In the intermittent stretches, most of the creek dries up and only some remnant pools retain water until fall rains return. 4-ER-0829. Because of their dependence on water, and limited ability to move to more favorable habitat, frogs rely on these remnant pools to survive. 4-ER-0829–30*;* 3-ER-0422.

Past drought conditions in Jack Creek have lowered water levels, stopped streamflow, and forced frogs into a fraction of their normal habitat, which likely stranded and desiccated frogs. 3-ER-0399, 0415; 4-ER-0866–67. As a result, drought has likely contributed to the overall decline of the population, 3-ER-0418,

and driven it "much closer to extirpation." 4-ER-0866–68. Drought conditions in 2001 restricted breeding to a few small disjunct areas, after which the population rapidly declined to only one percent of historical numbers by 2011. 3-ER-0472. Stochastic events like drought present a high risk of extirpation to the Jack Creek population given its small size and isolation from other populations. 3-ER-0396; *see* 3-ER-0489 (Jack Creek is an isolated population); 3-ER-0404 (Jack Creek has a low population size). This is a vulnerability to the species as a whole. 3-ER-0489.

Drought also threatens groundwater-fed ecosystems that support fens and has caused water tables in fens on the allotment to drop earlier and more drastically than in the past. 4-ER-0817–18; 4-ER-0857–58. A geology expert, Dr. Cummings, opined that, "the supply of groundwater that sustains this system is currently at a precarious tipping point due to a long-term drought." 5-ER-1053. This makes groundwater-dependent ecosystems "even more fragile than usual." *Id.*

Climate change is likely to make drought conditions more common and more severe. The climate in the Pacific Northwest warmed by 1.4 degrees Fahrenheit (°F) in the 20th century and was, as of 2014, projected to warm further by up to 3.4°F in the 2020s, and up to 5.2°F in the 2040s. 3-ER-0492. Within the Klamath Basin, climate change is poised to cause, among other problems, "reduced late summer flow." *Id.* Such "reductions in summer flows may result in summer [spotted frog] habitat going dry, potentially resulting in increased mortality or

forcing frogs to seek shelter in lower quality wetted areas where they are more susceptible to predation." 3-ER-0493. Accordingly, FWS has identified climate change as a specific factor threatening the species in the Williamson sub-basin, 3-ER-0495, which includes Jack Creek. 3-ER-0463.

Indeed, climate change is one of the two "greatest threats to the hydrological regime of Jack Creek." 4-ER-0897. Climate change is poised to cause severe impacts to Jack Creek and the Oregon spotted frogs within, particularly in downstream reaches that are intermittent. 5-ER-1057. This seems likely because "[c]limate change predictions suggest that for surface water dependent systems like Jack [C]reek, low water conditions will come earlier in the year, persist longer, and be more extreme." *Id*. As a result, "the magnitude of stressors to [Oregon spotted frogs] will increase as they interact with water supply." 4-ER-0696.

C. History of Grazing and Impacts on the Antelope Allotment

For almost fifty years, the Forest Service authorized cattle grazing on the Antelope Allotment using "the same grazing strategy" that it adopted in 1975.[4] 2-ER-0056; 5-ER-0958 (map). That strategy allowed season-long grazing of 419

[4] The name and boundaries of this allotment have changed over time. Historically, the 81,133-acre "Antelope Grazing Allotment" included the eastern pastures, while the 68,367-acre "Antelope Cattle and Horse Allotment" encompassed the Chemult Pasture. 2-ER-0054, 0077 (map). The ROD created a new "Antelope Allotment" by combining those allotments with the 19,064-acre North Sheep pasture. 3-ER-0331.

cow/calf pairs on the Chemult Pasture and interspersed private lands from July 1 through September 30 of each year. 2-ER-0076. The Forest Service has not authorized cattle grazing on the North Sheep and Jack Creek pastures since at least 2008. 4-ER-0625; 4-ER-0734; 4-ER-0830 (describing history of Jack Creek).

Within the 62,000+ acre Chemult Pasture, 3-ER-0331, almost all of the available forage is concentrated in the pasture's 2,364 acres of riparian habitat, which supports a "high and disproportionate level of plant species diversity" compared to the uplands on the pasture. 2-ER-0134; *see* 4-ER-0639 (noting that only 2,487 of approximately 84,000 acres on the western pastures are even "capable" of grazing). During the dry and warm summer months of the grazing season, cattle seek out and concentrate in those riparian areas, which provide shade, cooler temperatures, and ample forage. 4-ER-0777.

Once there, cattle can quickly degrade streambanks, wetlands, and groundwater-dependent ecosystems like fens by trampling vegetation, compacting soil, and changing hydrologic or nutrient composition. 3-ER-0546–49; 4-ER-0639-40; 2-ER-0248. A single cow drinks fifteen to twenty gallons of water per day, 3-ER-0412, which can lower water levels in Jack Creek and fens. 3-ER-0415; 4-ER-0861, 0864. As a result, cattle grazing in and near streams harms water quality and quantity and species like spotted frogs and sensitive plants that depend upon healthy aquatic conditions. 3-ER-0547-48.

Indeed, FWS identified cattle grazing as a "specific concern" for the Jack Creek population. 3-ER-0476. In addition to harming habitat conditions, grazing cattle directly harm frogs of all stages by trampling, killing, or disturbing individuals, especially as pools shrink during the dry, summer grazing season. 3-ER-0414–16; 3-ER-0475. Grazing during drought years exacerbates these problems by further lowering water levels and making it more likely that cattle and frogs will use the same remnant pools. 4-ER-0891, 0897. Frogs are at greater risk in late summer, when tadpoles transform into young frogs and have "compromised ability" to flee from danger. 4-ER-0895.

Far from theoretical concerns, cattle have caused these types of problems on the allotment for more than a decade. The Forest Service has documented high levels of soil degradation and poor ecological conditions in fens and wet meadows where grazing occurred. 3-ER-0583–86 (summarizing harm from grazing); 4-ER-0634–35; 4-ER-0857–60 (describing problems with water table and soil conditions in fens); *see also* 4-ER-0870–78 (photos illustrating damage to fens from cattle). Monitoring has showed that most fens in poor condition were grazed by cattle while most fens in ungrazed areas were in good condition. 3-ER-0521–22.

Key scientists have informed the Forest Service of the importance of these fragile resources and the threats that grazing poses to them. Dr. Cummings has discussed the value of the rare groundwater-dependent ecosystems on the Antelope

Allotment and the threats that disruptive management activities pose there. 5-ER-1053. Jay Bowerman—a local scientist knowledgeable about Oregon spotted frog needs—opined that the agency should not allow grazing in Jack Creek to protect the population there. 3-ER-0453–55; 5-ER-0922 (demonstrating Bowerman's credentials as an expert). Even the Forest Service's botany specialist admitted that grazing of wetlands (including fens) "is not desired." 4-ER-0639.

Theresa Simpson, who served as a wildlife biologist for the Fremont-Winema National Forest for more than two decades, has continued to monitor the area in her retirement on a regular basis and documented significant impacts to Jack Creek, fens, and spotted frogs from grazing. 4-ER-0797–0804 (qualifications); *see generally* 4-ER-0797–0855, 0857-78 (describing her observations of extensive adverse impacts to Jack Creek, frogs, and fens). Notably, impacts to Jack Creek and frogs occurred for almost a decade even though cattle were not authorized to graze most of Jack Creek during that time. 4-ER-0834 (attesting to "chronic, widespread, season-long unauthorized grazing" in frog habitat), 0836, 0838–41; 4-ER-0860–62 (describing how trespass harmed frogs).

Unauthorized grazing, particularly within Jack Creek, has been a serious problem. Ms. Simpson documented trespass grazing into the Jack Creek area every year between 2008 and 2013; this included "persistent breaches" of the fences that were supposed to keep cattle out of Jack Creek. 4-ER-0834. In 2013, Ms. Simpson

visited the allotment sixteen times between July 27 and October 5, and on each trip, she "observed trespass cattle in various locations" in Jack Creek. *Id*. The Forest Service recognized this trespass but issued a notice of non-compliance that merely required the permittee to keep cattle in authorized pastures. 5-ER-1021–23.

In 2014, Ms. Simpson documented more unauthorized cattle grazing in frog habitat on the North Sheep and Jack Creek pastures, and found cattle grazing on the allotment more than a month after the Forest Service ordered the permittee to remove cattle early. 4-ER-0861. Although the Forest Service determined that the permittee failed to follow its management instructions and initially suspended part of the permittee's grazing permit, the agency subsequently weakened the penalty to a smaller and shorter suspension. 5-ER-1005.

During 2015, Ms. Simpson again observed "many cattle" on the Chemult Pasture in November, well after the end of the grazing season in mid-September. 4-ER-0861. The Forest Service confirmed these violations. 5-ER-1009. Nevertheless, the agency authorized grazing in 2016, and from August until October, cattle trespassed again in part of Jack Creek that was closed to grazing. 5-ER-1005–06.

In 2017, the District of Oregon, as a result of litigation described below, issued an injunction prohibiting grazing on the Chemult Pasture. *See infra* pp. 14. Despite the court's injunction, cattle again trespassed onto the Chemult Pasture and

caused adverse impacts to Jack Creek and sensitive species, which exacerbated effects from continuing drought. 5-ER-0997.

D. History of Litigation Over Resource Conflicts

These unique riparian resources and resource conflicts have spurred multiple lawsuits. In 2008, in response to the first lawsuit, the Forest Service built a fence to exclude cattle from part of Jack Creek and claimed that it was developing a new AMP to address grazing conflicts there. *Ctr. for Biological Diversity v. Wagner*, No. 08-302-CL, 2009 WL 2176049, at *4 (D. Or. June 29, 2009), *report and recommendation adopted*, 2009 WL 2208023 (D. Or. July 22, 2009). The District of Oregon found those promises mooted the plaintiffs' NFMA claims. *Id*. at *14.

Discovery of many sensitive fen plants on the Chemult Pasture and continuing harm to spotted frogs led to a second lawsuit in 2010. *Or. Nat. Desert Ass'n v. Sabo*, 854 F. Supp. 2d 889 (D. Or. 2012). In that case, the District of Oregon noted that cattle repeatedly breached the Jack Creek fence and were documented weekly "all along the excluded area" of Jack Creek, and also caused damage to fens and sensitive plants. *Id.* at 906. The court found that grazing each year caused "harm to sensitive plant and animal species and their habitat which could be irreversible." *Id*. at 923. The court ultimately held that the Forest Service violated NEPA and NFMA by failing to analyze the impact of cattle grazing on sensitive species. *Id*. at 920, 924–25.

Nevertheless, the Forest Service continued to authorize grazing on the Chemult Pasture each season under virtually the same conditions despite mounting resource conflicts and further trespass along Jack Creek—all without completing a new AMP or NEPA analysis. These escalating problems led to another lawsuit where the District of Oregon found that the agency violated NFMA—again—by authorizing grazing year after year without adequately addressing the impact on sensitive species like spotted frogs. *Concerned Friends of the Winema v. U.S. Forest Serv.*, No. 1:14-cv-737-CL, 2016 WL 10637010, at *2–4, 7–9 (D. Or. Sept. 12, 2016), ("CFOW"), *report and recommendation adopted*, 2017 WL 5957811, at *2 (D. Or. Jan. 18, 2017). The plaintiffs in *CFOW* also challenged FWS's 2015 biological opinion ("2015 BiOp") and the court found the BiOp's analysis of the effects of grazing on Oregon spotted frogs was unlawful under the ESA and ordered FWS to prepare a new BiOp. *CFOW* at *15–16. As a result, the court enjoined the agency from authorizing grazing on the Chemult Pasture unless and until it could show grazing would not contribute to a negative trend in the viability of sensitive species. *CFOW* at *9.

E. The Forest Service's Decision to Expand Grazing in Sensitive and Long-Closed Pastures

To address these long-standing conflicts and litigation losses, the Forest Service finally completed a new NEPA analysis in 2017—the first since 1995. 2-ER-0033, 0056. The EIS analyzed five management alternatives that would: 1)

discontinue grazing; 2) continue the past grazing scheme; 3) expand grazing in riparian areas and shorten the Chemult Pasture's season; 4) close the Chemult Pasture but allow grazing on the eastern pastures; or 5) open even more riparian areas and maintain season-long grazing on the Chemult Pasture. 2-ER-0071–95.

The specialist reports underlying the EIS admitted that the expanded grazing alternatives, Alternatives 3 and 5, threatened to degrade ecological conditions in areas that had been protected from grazing for years. *See, e.g.*, 4-ER-0674–75 (predicting decreasing conditions in areas where grazing would be reintroduced); 3-ER-0553–54, 56–58 (predicting negative impacts in Jack Creek and other areas). In contrast, the EIS found that Alternative 4 would protect sensitive resources on the Chemult, Jack Creek, and the North Sheep pastures, allowing for the greatest improvements in ecological conditions there, while allowing grazing to continue on the eastern pastures. 2-ER-0168–69, 0254, 0286; 3-ER-0366–67.

Despite the superior protections afforded by Alternative 4, the Forest Service adopted a ROD that included elements of both expanded grazing alternatives (three and five) as the new AMP. 3-ER-0350–51. The Forest Service then issued an AMP that expanded the Antelope Allotment to 168,565 acres by re-opening about 20,000 acres within the North Sheep Pasture, several riparian exclosures[5], and most of

[5] Cattle grazing within fenced exclosures defeats their purpose, which is to allow for recovery of natural resources within them by *excluding* cattle. 3-ER-0585.

Jack Creek—areas that had been protected from grazing for more than a decade. 3-ER-0329-31. This resulted in a nearly twentyfold expansion of grazing within habitat for Oregon spotted frogs, from 27 to 525 acres. 2-ER-0106.

The AMP authorized grazing on the Chemult Pasture from July 1 to September 30, which was the same season under the old system. *Compare* 3-ER-0331 (new season) *with* 2-ER-0076 (old season). The AMP required a "deferred rotation" system that would purportedly alternate grazing between the North Sheep and Chemult pastures. 3-ER-0331. But the AMP included no enforceable details about when or how deferred rotation would occur, *id.*, which may not happen for years because roughly fourteen miles of new fences must be built before grazing on the North Sheep pasture can resume. 4-ER-0763; *see* 3-ER-0362 (explaining that the permittee may spread out costs of new management measures like fences over several years); 5-ER-0963, 0969 (fencing may take six years to complete).

The AMP also included scant details about grazing requirements in the new Jack Creek unit, which will be divided into four riparian pastures where grazing's "location and duration may vary over time" but will "likely" be just one month. 3-ER-0332. Jack Creek Pastures 2 and 3 will not be grazed until undefined "resource objectives" are met and after unspecified restoration projects are complete, but Pastures 1 and 4 may be grazed immediately. 3-ER-0332–33. Late season grazing

in occupied frog habitat will somehow be "discouraged" even though the AMP allowed grazing there for the entire season (July to September). 3-ER-0331, 0338.

The ROD relied heavily on the adaptive management plan to implement the new scheme and to reduce impacts of grazing. 3-ER-0351, 0353–57; 3-ER-0343–47. To address water quantity concerns in Jack Creek, the adaptive management plan included a vague annual use standard of maintaining "effective water levels to support" frogs. 3-ER-0344. Monitoring of ecological trends in the Jack Creek pasture will only occur every five to ten years, 3-ER-0344–45, leaving little to no time for adjustments during the permit's ten-year term. 3-ER-0330. Soil alteration in fens and fenced areas and streambank alteration in Jack Creek could reach twenty percent each year. 3-ER-0344. For most standards, multiple years of violations may occur before cattle are excluded from Jack Creek, fens, or meadows. 3-ER-0345–46.

The ROD claimed that the AMP would decrease impacts on the Chemult Pasture compared with the status quo by improving distribution of cattle across a larger land base. 3-ER-0356. However, the agency's soil specialist admitted that, "every year livestock would continue to concentrate in riparian areas and could damage riparian vegetation, streambanks, and soils." 3-ER-0595. Moreover, resumption of grazing within the North Sheep Pasture, along Jack Creek, and in exclosures that had been protected for many years would threaten the fragile

resources there. 3-ER-0553–58. The agency's botany specialist admitted that it was "uncertain whether high or even dispersal of livestock across any of the pastures can be achieved and maintained, and if so, whether this will provide acceptable levels of disturbance compared to current conditions." 4-ER-0641. During the NEPA process, the permittee expressed concerns that a deferred rotation system was "unattainable" due to rough and dry conditions on the allotment. 3-ER-0453–57. But the Forest Service adopted such a system anyway.

F. FWS's ESA Consultation

As required by *CFOW*, Federal Defendants reinitiated consultation over the impacts of the new AMP, and in May 2018, FWS issued a new BiOp. 3-ER-0370; *see CFOW*, 2016 WL 10637010, at *15–16. The new BiOp examined the effects of the expanded grazing scheme on Oregon spotted frogs.

The BiOp found that cattle grazing can harm Oregon spotted frogs and their habitat by physically altering riparian areas and vegetation and degrading water quality and quantity. 3-ER-0407–14. It explained: "[d]amage can begin to occur almost immediately upon entry of the cattle onto the streambanks, and use of riparian zones may be highest immediately following entry of cattle into a pasture." 3-ER-0407. The BiOp also admitted that existing baseline water quantity conditions may not be adequate to support the Oregon spotted frog due to recent low water years. 3-ER-0414.

The BiOp also found that cattle grazing directly disturbs, displaces, and tramples frogs. 3-ER-0414–17. It explained that when cattle and frogs use the same stream reaches, cattle can trample and kill frogs or cause them to flee from preferred microhabitats, which increases predation risks, consumes energy, and reduces foraging opportunities. 3-ER-0414. This risk increases as frogs and cattle use the same remnant pools as water dries up in the summer months and in dry water years. 3-ER-0415. The BiOp admitted that these direct effects will be "significant" and estimated that each year a substantial number of frogs will be harmed due to disturbance and killed due to trampling. 3-ER-0416.

Importantly, the BiOp determined that the proposed grazing scheme was likely to adversely affect the Oregon spotted frog but that it was *not likely* to adversely affect critical habitat for the species. 3-ER-0372. In other words, FWS determined that grazing is likely to have more harmful *direct* impacts to frogs than it will to habitat conditions.

Overall, the BiOp expected impacts to Oregon spotted frogs would be insignificant, "*[e]xcept during drought conditions*, when Oregon spotted frogs may aggregate in isolated pools or small sections of Jack Creek that are used by livestock[.]" 3-ER-0429 (emphasis added). In such low water conditions, the BiOp relied heavily on the AMP's adaptive management strategy to exclude cattle from frog habitat in Jack Creek. 3-ER-0414, 17–19. The BiOp concluded that these and

other measures would allow the species "to persist" and would not likely lead to the extirpation of frogs in Jack Creek. 3-ER-0416, 0429.

III. PROCEEDINGS BELOW

Plaintiffs filed this case in April 2019, in the District of Oregon, against the Forest Service and FWS, alleging violations of NEPA, NFMA, and the ESA. 1-ER-0006. Because the Forest Service was poised to authorize grazing on the Chemult Pasture, the North Sheep Pasture, and within most of Jack Creek for the first time in many years, Plaintiffs filed a motion for preliminary injunction to maintain the status quo of no grazing in those areas. 5-ER-1144.

In response, the Forest Service agreed to "substantially reduce" grazing during the 2019 season by limiting cattle to a few "exclosures" on the Chemult Pasture. 5-ER-1149–50. Despite the limited scope of grazing and a pending preliminary injunction motion, the permittee continued to violate grazing permit conditions by failing to repair and maintain fences on the allotment, resulting in a notice of noncompliance from the Forest Service. 5-ER-1153. The district court denied Plaintiffs' motion for preliminary injunction on July 9, 2019. 5-ER-1149.

The Parties subsequently moved for summary judgment. 1-ER-0004. After holding oral argument twice and ordering supplemental briefing on climate change issues, the district court granted Defendants' cross-motion for summary judgment on July 5, 2022. 1-ER-0031.

STANDARD OF REVIEW

This Court "'review[s] de novo a challenge to a final agency action decided on summary judgment and pursuant to Section 706' of the Administrative Procedure Act ('APA')." *Corrigan v. Haaland*, 12 F.4th 901, 906 (9th Cir. 2021) (quoting *Ctr. for Biological Diversity v. Esper*, 958 F.3d 895, 903 (9th Cir. 2020)). "De novo review of a district court judgment concerning a decision of an administrative agency means [this Court] views the case from the same position as the district court" and directly reviews the challenged action under the APA. *Id.* (quoting *Turtle Island Restoration Network v. Nat'l Marine Fisheries Serv.*, 340 F.3d 969, 973 (9th Cir. 2003)).

The APA directs courts to set aside agency actions that were "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 960 (9th Cir. 2005) (quoting *Wilderness Soc'y v. U.S. Fish & Wildlife Serv.*, 353 F.3d 1051, 1059 (9th Cir. 2003) (en banc)). Under the APA, the *scope* of this Court's review is narrow, but the *depth* of its analysis is not: the APA requires courts "to engage in a substantial inquiry, a thorough, probing, in-depth review" of the agency action to ensure that the agency has provided adequate and reasonable justifications for its conclusions and decision. *Id.* (cleaned up).

SUMMARY OF THE ARGUMENT

Instead of solving more than a decade of management problems on the Antelope Allotment, the Forest Service's decision to expand grazing into sensitive riparian areas will exacerbate longstanding conflicts and deepen ecological harm. In reaching this decision, the Forest Service violated NEPA and NFMA when analyzing and justifying the AMP's new grazing scheme, and FWS violated the ESA when analyzing the impacts of the AMP on Oregon spotted frogs.

Under NEPA, the Forest Service's EIS failed to analyze and disclose key *direct* impacts that cattle grazing will have on Oregon spotted frogs in Jack Creek, even though that issue was central to the planning process. This was a serious error because direct impacts like trampling and displacement are poised to kill and harm a significant number of frogs each year, and more frequent and severe drought due to climate change is likely to exacerbate these conflicts. This was also an obvious error, since the Forest Service analyzed these impacts in an internal draft but then deleted the analysis from the final EIS without explanation. By doing so, the Forest Service hid key information from the public and failed to take a "hard look" at the impacts of its proposed grazing, in violation of NEPA.

Under NFMA, the Forest Service failed to address two important issues when concluding that the AMP was consistent with the Winema Forest Plan.

First, the agency failed to explain, rationally and within the record, why the AMP's riparian standards deviated from more stringent directives in the Winema Forest Plan. The AMP allowed soil in key areas and streambank conditions on Jack Creek to sustain greater levels of damage each year than the Winema Forest Plan permitted. The Forest Service's unexplained and unsupported change to the riparian directives will allow cattle grazing to cause much more harm to fens and Jack Creek than the Winema Forest Plan contemplated, in violation of NFMA.

Second, the agency overlooked a key problem: that the permittee's actions, fences and other management measures, agency orders, and even a federal court injunction failed to keep cattle in authorized pastures and protect sensitive resources for more than a decade. Rather than acknowledging and addressing this evidence head on, the agency largely brushed it aside and arbitrarily assumed similar measures would ensure compliance with the Winema Plan directives to protect sensitive species, riparian areas, and other natural resources.

Under the ESA, FWS's BiOp acknowledged the serious threat that climate change and increasing drought pose to Oregon spotted frogs but failed to analyze how those threats will exacerbate the impact of grazing on the species. And like the Forest Service, the agency also ignored longstanding problems with allotment management and relied on mitigation measures that have been ineffective at keeping cattle out of Jack Creek during drought and low water conditions.

Because the Federal Defendants ignored key issues, brushed aside evidence that contradicted their conclusions, and lacked rational explanations to justify their decisions, this Court should find that the EIS, ROD, AMP, and BiOp are arbitrary and unlawful and reverse the District Court's order upholding those decisions.

ARGUMENT

I. THE FOREST SERVICE FAILED TO TAKE A HARD LOOK AT THE DIRECT IMPACTS OF GRAZING ON OREGON SPOTTED FROGS AS REQUIRED BY NEPA.

NEPA's mandate that federal agencies prepare an EIS before taking major action serves two key purposes. 42 U.S.C. § 4332(C). First, an EIS "is an action-forcing device, ensuring that the goals of NEPA are infused into the government's actions." *Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723, 734–35, 740 (9th Cir. 2020) (citing 40 C.F.R. § 1502.1[6]). Second, an EIS discloses "important information to the public" about the proposed action. *Id*. at 734. To fulfill these purposes, NEPA's provisions "are to be strictly interpreted to the fullest extent possible in accord with the policies embodied in the Act." *Id*. (cleaned up).

NEPA requires agencies to evaluate the direct and indirect effects of the proposed action in an EIS. *Bernhardt*, 982 F.3d at 737 (citing 40 C.F.R. §

[6] The NEPA regulations were revised in 2020. 85 Fed. Reg. 43,304 (July 16, 2020). But the NEPA process in this case was completed before September 14, 2020, so the prior version of the regulations applies here. 85 Fed. Reg. at 43,372–73. Accordingly, all citations to NEPA regulations are to that prior version.

1502.16). In doing so, an agency must take a "hard look" at the probable environmental effects of their proposed decisions in order "to foster environmentally informed decision-making." *WWP*, 632 F.3d at 486. An agency must rely on accurate data and effective mitigation measures, and discuss adverse impacts without "improperly minimiz[ing] negative side effects." *Id*. at 491.

Here, the Forest Service's EIS failed to take a "hard look" at important impacts of cattle grazing on Oregon spotted frogs despite admitting this was a key issue and concern for the public. 2-ER-0060. The EIS summarized general background information and potential impacts to Oregon spotted frogs. 2-ER-0200–04. However, the EIS's meager four-page effects analysis overlooked three key threats to Oregon spotted frogs. 2-ER-0205–08.

A. Direct Impacts to Frogs

First, the EIS focused on impacts to frog *habitat* in Jack Creek and did not examine the *direct* impacts to individual frogs. 2-ER-0205–08. Direct impacts include mortality from trampling adults or other life history forms, along with non-lethal forms of harm due to harassment and displacement. 3-ER-0475–76; *CFOW*, 2016 WL 10637010, *12–13. These impacts increase as water levels drop in the summer, forcing cattle and frogs to use the same remnant pools, which becomes a more serious problem during low water or drought years. 3-ER-0475.

The EIS did not analyze these types of direct harm nor compare how they would differ under each alternative.[7] Instead, the EIS merely admitted that trampling is a "potential" risk to frogs. 2-ER-0206. But such "general statements about 'possible' effects…do not constitute a 'hard look' absent a justification" for why an agency could not supply more "definitive information." *Or. Nat. Desert Ass'n v. Rose*, 921 F.3d 1185, 1191 (9th Cir. 2019) (quotation omitted).

Here, the Forest Service did not claim that it lacked information about direct impacts. To the contrary, the agency was aware that death or injury by trampling, harassment, or displacement are serious threats facing the species. *See, e.g.*, 3-ER-0475 (identifying "direct mortality by trampling" as the first impact from grazing in the species' ESA listing rule); *CFOW*, 2016 WL 10637010, at *12–13 (ruling that the omission of non-lethal forms of harm to frogs, such as displacement by cattle, was a "glaring flaw" in the 2015 BiOp). Thus, the EIS could and should have analyzed these direct impacts.

[7] The EIS asserted that a Biological Assessment (BA) provided unspecified additional detail. 2-ER-0208. But the BA, which was merely in draft form at the time the EIS was released to the public, could not and did not fulfill the agency's duty to take a "hard look" under NEPA. *See* 3-ER-0372, 2-ER-0033 (showing that BA was not finalized before November 2017, when EIS was released); *Save the Yaak Comm. v. Block*, 840 F.2d 714, 718–19 (9th Cir. 1988) (post-NEPA BA did not substitute for NEPA duties); *see generally* 5-ER-0923–0950 (draft BA providing only a cursory analysis of direct impacts).

Indeed, the Forest Service initially analyzed this issue in an internal draft of the EIS, which compared how those impacts would differ between alternatives. 5-ER-0972–73. That draft EIS included "a matrix of potential threats and impacts" that "integrate[d] the biological and habitat conditions to arrive at an impact determination for each alternative." 5-ER-0972. That matrix listed many threats to frogs, including trampling and other impacts from livestock grazing, and evaluated how each alternative would affect each threat compared to current conditions. 5-ER-0973. It showed that the expanded grazing alternatives would, unsurprisingly, worsen almost half of the threats to the frog and improve none, while the other alternatives would maintain or improve all threats and worsen none.

Without explanation, the Forest Service deleted this revealing analysis. *See* 2-ER-0205–08 (excluding such information from the final EIS). This prevented the public from understanding how the expanded grazing alternatives would worsen threats to the species when compared to the status quo or to the no or reduced grazing alternatives. Furthermore, this revealed that the agency could have analyzed these impacts but refused to do so, rendering the EIS arbitrary and capricious. *See Coal. to Protect Puget Sound Habitat v. U.S. Army Corps of Eng'rs*, 417 F. Supp. 3d 1354, 1360–63, 1367 (W.D. Wash. 2019) (finding a NEPA analysis flawed that omitted effects that were discussed in a draft). *See also*

Native Vill. of Point Hope v. Jewell, 740 F.3d 489, 499–505 (9th Cir. 2014) (finding an EIS arbitrary based on internal drafts).

By focusing on impacts to habitat in the EIS, instead of the more harmful direct impacts to frogs, the Forest Service "acted arbitrarily and capriciously by offering an analysis that ran 'counter to the evidence before the agency.'" *Env't Def. Ctr. v. Bureau of Ocean Energy Mgmt.*, 36 F.4th 850, 874 (9th Cir. 2022) (quoting *Defs. of Wildlife Zinke*, 856 F.3d 1248, 1257 (9th Cir. 2017)).

B. Drought and Climate Change

Second, and relatedly, the EIS did not take a "hard look" at how climate change and increasing drought will exacerbate the direct impacts of grazing on frogs. In its background section for the species, the EIS admitted that climate change was a threat and that "the magnitude of stressors to [Oregon spotted frogs] are expected to increase as they interact with water supply." 2-ER-0202.

But the EIS's *effects analysis* for the frog failed to even mention drought or climate change, let alone analyze related impacts or how they would differ under each alternative. 2-ER-0205–08. As a result, the EIS did not disclose that expanding grazing along Jack Creek under Alternatives 3 and 5 would make conditions worse for frogs as drought and low water conditions become more frequent and severe under climate change. Instead, that section touted purported benefits to vegetation and habitat features while overlooking more harmful direct

impacts from increased trampling and displacement of frogs. 2-ER-0206–08. And the meager three-page climate change analysis in another section of the EIS selectively cited stale data that obscured the seriousness of increasing drought and climate change. *Compare* 2-ER-0307–09 (EIS climate data from 2000-10) *with* 4-ER-0897 (describing more serious drought conditions during that period); *CFOW*, 2016 WL 10637010, at *3 (describing subsequent and increasing drought conditions). Such "inaccurate information … materially impeded informed decisionmaking and public participation." *Or. Nat. Desert Ass'n v. Jewell* , 840 F.3d 562, 570 (9th Cir. 2016).

This was a serious oversight given the significant threat that drought and climate change pose to water levels in Jack Creek and to spotted frogs there. *See* 4-ER-0897 (climate change is one of the "greatest threats to the hydrological regime of Jack Creek"); 3-ER-0495 (identifying climate change as a threat to Oregon spotted frog in the Williamson sub-basin); *see supra* pp. 6–8 (summarizing threats from drought and climate change). Successive drought years have already harmed the Jack Creek population, contributing to its critically low numbers. 3-ER-0472.

Drought is a particular concern for frogs that inhabit the intermittent sections of Jack Creek Pasture 4 and the North Sheep Pasture. *See* 4-ER-0864 (describing observations that "just a few cattle using intermittent pools in Jack Creek have caused significant harm to [Oregon spotted frogs]"); 4-ER-0828–30 (explaining

how low water conditions, particularly when exacerbated by drought, are a serious concern in the intermittent reaches). But the EIS did not consider whether or how drought would further dry up these intermittent sections, resulting in even fewer remnant pools spaced farther apart. Instead of analyzing that serious threat to frogs in intermittent sections of the creek, the EIS brushed aside potential impacts in the North Sheep pasture due to the intermittent nature of Jack Creek there. 2-ER-0207.

By failing to analyze and disclose this key issue, and ignoring evidence that drought and climate change would be a more significant problem in the future than the EIS suggested, the Forest Service's EIS was arbitrary and unlawful. *See N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1082 (9th Cir. 2011) (failing to address foreseeable impacts violates NEPA).

C. Jack Creek Population

Finally, the EIS did not analyze or disclose how direct harm to individual frogs would affect the Jack Creek population as a whole, particularly in light of climate change and increasing drought. The EIS included background information about this local population, 2-ER-0200–04, but did not examine the population-level effects in its analysis for each alternative. 2-ER-0205–08.

This was a serious omission, given that the population is, according to the EIS, at "critically low numbers, with fewer than 20 known breeding females." 2-ER-0203. Another drought event could easily put this small and isolated

population at an even higher risk of extirpation. *See* 3-ER-0487 (explaining that smaller, isolated populations are at greater risk of extirpation from stochastic events). Indeed, when a population of a threatened species falls to such low numbers, "it may reach a point at which it is no longer recoverable: a species can often cling to survival even when recovery is far out of reach." *Wild Fish Conservancy v. Salazar*, 628 F.3d 513, 527 (9th Cir. 2010) (quotation omitted).

Given the precarious state of the Jack Creek population, the Forest Service should have taken a closer look at how the alternatives would affect the population's risk of extirpation. *See Ctr. for Biological Diversity v. BLM*, No. 4:21–cv-00182-BLW, 2023 WL 387609, at *8–9 (D. Idaho Jan. 24, 2023) (finding that agency failed to take a hard look at the impact of a proposed action on the risk of extirpation for a local sage-grouse population). Moreover, the EIS should have disclosed to the public how direct impacts to frogs may push this population closer toward extinction and admitted that the reduced grazing alternatives would likely provide a better opportunity for the population to recover.

Moreover, the EIS should have taken a "hard look" at how the alternatives would affect the population given the Forest Service's substantive duty to ensure the frog's viability across the Forest. 3-ER-0616 (requiring the Forest Service to maintain "viable populations" of species like Oregon spotted frogs); *see Or. Nat. Desert Ass'n v. BLM*, 625 F.3d 1092, 1109 (9th Cir. 2010) (finding NEPA requires

an agency to consider impacts made relevant by an applicable substantive statute). But the EIS only mentioned the frog's viability across the Forest in an introductory paragraph within the Cumulative Effects section. 2-ER-0208. But that paragraph was conclusory and ignored how direct impacts of trampling and displacement of frogs in Jack Creek would affect the viability of the species across the Forest, and how climate change and increased drought will exacerbate these impacts.

By failing to consider this important aspect of the problem, the Forest Service fell short of its duty to take a "hard look" at the viability of the frog across the Forest. *See Native Ecosystems Council v. Tidwell*, 599 F.3d 926, 936, 937 (9th Cir. 2010) (finding that an EIS failed to take a "hard look" at maintaining viable populations of a species under a Forest Plan as required under NEPA).

II. THE FOREST SERVICE FAILED TO SHOW THAT EXPANDING GRAZING INTO FEN AND FROG HABITAT WAS CONSISTENT WITH THE WINEMA FOREST PLAN UNDER NFMA.

"NFMA charges the Forest Service with the management of national forest land, including planning for the protection and use of the land and its natural resources." *All. for the Wild Rockies v. U.S. Forest Serv.*, 907 F.3d 1105, 1109 (9th Cir. 2018). To do so, the Forest Service prepares forest-wide management plans that include standards, guidelines, and desired conditions. *Id.*; 16 U.S.C. § 1604(a). Subsequent site-specific actions must then be consistent with the governing forest plan. *All. for the Wild Rockies*, 907 F.3d at 1109; 16 U.S.C. § 1604(i).

Under NFMA, the Forest Service employs a multiple-step process for authorizing livestock grazing. *2-Bar Ranch Ltd. P'ship v. U.S. Forest Serv*., 996 F.3d 984, 986-87 (9th Cir. 2021). The agency first prepares an AMP that determines whether, or how, livestock grazing must be carried out to comply with the Forest Plan and other objectives for each allotment. *Or. Nat. Desert Ass'n v. U.S. Forest Serv*., 465 F.3d 977, 980 (9th Cir. 2006). The agency then issues a ten-year grazing permit that establishes terms and conditions that govern grazing, followed by annual operating instructions through which the agency may adjust grazing operations each grazing season. *Id.*

When reviewing agency actions for consistency with forest plans under the APA, courts look to whether the agency supplied a rational explanation, in the administrative record, for how the action is consistent with the forest plan. *All. for the Wild Rockies*, 907 F.3d 1105 at 1112–13, 1115–16.

The Chemult and North Sheep pastures on the Antelope Allotment are governed by the Winema Forest Plan, which set goals, objectives, and standards for range management, riparian areas, and other resources. 3-ER-0608–20 (Winema Forest Plan excerpts). Instead of providing the Forest Service with carte blanche to authorize livestock grazing, the Winema Forest Plan declared that: "[t]he demand for livestock grazing will be met *only* when it does not conflict with other uses." 3-ER-0615 (emphasis added).

The ROD, relying on the EIS, concluded that the expanded grazing scheme under the AMP was consistent with Forest Plan standards. 3-ER-0350–58, 0362–65, 0368–69. In reaching this conclusion, the Forest Service made two key errors.

A. Riparian Standards

First, the Forest Service adopted numerical soil and streambank standards in AMP that differed from those in the Winema Forest Plan. 3-ER-0344–45. The Forest Service failed to supply a rational explanation for doing so, rendering the ROD and AMP inconsistent with the Forest Plan and thus arbitrary and capricious. *See All. for the Wild Rockies*, 907 F.3d at 1113 (holding that the agency's failure to rationally explain its deviation from a forest plan was arbitrary and capricious).

i. Riparian Soils

The Winema Forest Plan provides that "[t]he cumulative total area of detrimental soil conditions in riparian areas shall not exceed 10 percent of the total riparian acreage within an activity area." 3-ER-0620.[8] The AMP did not limit "detrimental soil conditions" for riparian areas to ten percent but instead set use standards for related "indicators" like soil compaction, bare soil, and alteration in fens and fenced areas. 3-ER-0344–45; *see* 3-ER-0601–02 (explaining that fenced areas include fens and wet meadows). These indicators are types of detrimental soil

[8] This standard applies to riparian areas, which include fens, other wet meadows, and Jack Creek and adjacent areas. 3-ER-0619.

conditions that cattle can cause within wet meadows, fens, or riparian areas. *See* 3-ER-0620 (defining detrimental soil conditions); 3-ER-0582–85 (explaining that grazing can cause and has caused detrimental soil conditions such as compaction and bare ground); 3-ER-0520 (identifying compaction as a type of soil alteration). Under these use standards, alteration in fenced areas and fens may reach twenty percent each year, while the long-term desired conditions for fenced areas is up to twenty percent soil compaction. 3-ER-0344–45.[9]

The Forest Service failed to explain how allowing twenty percent soil compaction, bare soil, and alteration in key areas will limit total detrimental soil conditions to less than ten percent across riparian areas in the activity area. Such an explanation was necessary because it is not obvious that maintaining twice the level of allowable degradation in key areas will ensure half that level of detrimental conditions overall. To the contrary, key areas are designed to "reflect overall compliance with current grazing management standards and guidelines" and to "show both short- and long-term effects of current grazing management over the pasture or unit as a whole." 2-ER-0101. Accordingly, key areas that

[9] The AMP also includes a long-term bare soil desired condition of ten percent for "high priority" fens, 3-ER-0344–35. However, "[t]he large majority of fens are not categorized as High-Value," 4-ER-0675, and the record does not explain the basis for that distinction or how that desired condition will ensure detrimental soil conditions remain below ten percent across other riparian areas.

exhibit twenty percent compaction, bare soil, or alteration would indicate similar conditions are present across the pasture or the allotment as a whole.

The AMP's allowance for such high levels of soil degradation is concerning because grazing has already contributed to greater than ten percent soil disturbance in specific wet meadows and fens on the allotment. 2-ER-0274–76. Based on its own monitoring, the Forest Service determined that the total extent of detrimental soil conditions is between 300 and 350 acres out of approximately 4,000 acres of riparian areas on the western pastures.[10] 2-ER-0276; 3-ER-0582. Thus, existing detrimental soil conditions are roughly seven or eight percent overall already, leaving little room for additional damage—little more than fifty to one hundred acres—before exceeding the Forest Plan's ten percent standard.

Additional damage is likely because the AMP opened *thousands* of acres of fenced riparian areas, hundreds of acres of frog and fen habitat, and miles of Jack Creek to grazing for the first time in years. 2-ER-0106-11. The Forest Service's specialists admitted that adverse effects and decreasing conditions are likely to occur in these newly opened riparian areas. 4-ER-0650, 0622–63 (expecting decreasing conditions in currently-fenced exclosures and the North Sheep Pasture); 3-ER-0553-54, 0556–67; 0597, 0602 (admitting that "seven riparian areas not

[10] The Winema Forest Plan standard for detrimental soils in riparian areas only applies to the western pastures on the Winema portion of the forest. 3-ER-0578.

meeting Forest standards would continue to be impacted by cattle grazing" and that "soil compaction, post-holing, pedestalling, and trampling would continue to occur"). Instead of grappling with this problem, the agency focused on purported benefits to riparian areas on the Chemult Pasture and claimed, without a rational explanation or adequate support, that Forest Plan standards would be met. 3-ER-0597–98, 0600–02.

Even more troubling, the AMP's twenty percent bare soil and compaction standards are inconsistent with the Forest Service's longstanding position that ten percent detrimental soil condition—the Forest Plan standard—is an indicator of good conditions in fens. *See* 4-ER-0635 (finding fens that exceeded 10% bare ground were not in good condition); 4-ER-0681 (using <10% soil disturbance to show good condition). The agency has explained that a "good" condition ranking indicates that impacts from grazing "are within Forest Standards and Guidelines (e.g., less than 10% soil disturbance in riparian areas for the Winema [National Forest])." 3-ER-0516; *see also* 5-ER-1026 (adopting 10% standard for monitoring to be consistent with Forest Plan standards). In other words, the agency has used good conditions in fens, measured by less than ten percent soil disturbance, to show compliance with the Forest Plan.

The Forest Service neither acknowledged this tension nor explained why the AMP allowed most fens to sustain *double* the amount of soil degradation than what

is indicative of good condition or allowed under the Forest Plan. As a result, it is also not clear how the AMP will ensure consistency with other Forest Plan standards that require grazing to "maintain or improve" conditions in moist and wet meadows and riparian areas. 3-ER-0612 ("Livestock will be controlled to maintain or improve vegetative condition of moist and wet meadows."); 3-ER-0618 ("In riparian ecosystems, hydrologic conditions and riparian habitat shall be maintained or improved.").

ii. Streambank Degradation

The Forest Service made a similar error when establishing standards in the AMP to protect riparian areas adjacent to streams. 3-ER-0609–10. For Jack Creek, the Forest Plan mandates: "[l]ivestock shall be managed so that no more than 5 percent of the stream banks in a stream reach [] exhibit degradation caused or perpetuated by livestock." *Id.*[11]

The AMP did not establish monitoring or objectives for streambank degradation. Instead, the AMP established a streambank "alteration" use standard of twenty percent (monitored annually) and a streambank stability desired condition of greater than or equal to ninety-five percent (measured every five to ten years during the ten-year permit term). 3-ER-0344–45. But the Forest Service did

[11] This standard applies to Class II streams, 3-ER-0614, including Jack Creek. 2-ER-0258.

not explain how allowing up to twenty percent alteration of streambanks each year, and monitoring for streambank stability only every five to ten years, will ensure that cattle do not cause more than five percent degradation in stream reaches.

While the ROD claimed that alteration "does not always equate to long term degradation or stream instability," it did not explain how allowing grazing to cause up to twenty percent alteration each year will ensure that livestock grazing contributes to less than five percent degradation over any time period. 3-ER-0355. Instead, the ROD admitted that alteration is a way to measure annual impacts to stream banks from direct disturbance due to activities such as livestock grazing. *Id*. But it did not address how allowing high levels of disturbance year after year will ensure compliance with degradation standards when streambank stability is only measured every five to ten years during the ten-year permit term.

This is not a theoretical concern, since according to the Forest Service, grazing is likely to negatively impact streambanks in Jack Creek. 3-ER-0546 (explaining that "[i]t is well documented that grazing can impact stream channel morphology due to changes in streambank stability"); 3-ER-0554, 0557 (forecasting negative impacts to streambank stability); 2-ER-0207 (explaining that "every year livestock would continue to concentrate in riparian areas and could damage… streambanks"). Yet the Forest Service did not provide a rational

explanation as to why allowing such impacts to reach twenty percent alteration every year will ensure less than five percent degradation in stream reaches occurs.

Without such explanations and adequate factual support in the record, the Forest Service failed to demonstrate that the AMP's requirements are consistent with the Winema Forest Plan's riparian soil and streambank standards. *See All. For the Wild Rockies*, 907 F.3d at 1113–14, 1116–17; *Native Ecosystems Council*, 418 F.3d at 964 (explaining that an inadequate record and "contradictory calculations" prevented this Court from concluding that an agency decision was consistent with a forest plan under NFMA).

B. Longstanding Trespass and Noncompliance Problems

The Forest Service also overlooked the permittee's substantial history of noncompliance and the potential for such problems to recur under the new AMP. This made it impossible for the Forest Service to legitimately assess the full scope and potential impact of the new grazing scheme, which was necessary to ensure the AMP was consistent with Winema Forest Plan directives that require, *inter alia*, maintaining or improving conditions in riparian areas and moist and wet meadows and ensuring the viability of sensitive species like Oregon spotted frogs. 3-ER-0609–13, 0617–20 (goals, desired conditions, and standards for riparian areas adjacent to streams and moist and wet meadows); 3-ER-0616 (viable population standard). By ignoring key evidence about the impacts of grazing, the Forest

Service failed "to consider an important part of the problem." *Tidwell*, 599 F.3d at 935 (quoting *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)). Thus, the ROD's conclusion that the AMP is consistent with Forest Plan standards was arbitrary and capricious. 3-ER-0351.

The root of the Forest Service's error was its inaccurate summary of management problems under the old AMP. The EIS claimed that between 2005 and 2015, only "7 occurrences of unauthorized use" happened, and that effects from trespass "were typically light." 2-ER-0074. These findings were inconsistent with the high levels of trespass and resulting harm to riparian areas and species that happened during that decade and in subsequent years. *See supra* pp. 11–13.

For example, *Sabo* recounted the following agency report that documented numerous instances of unauthorized grazing and harm during just *one* season:

> cattle breached the exclosure fences into frog habitat on Jack Creek in late June through late October 2009, with observations on weekly basis and distributed all along the excluded area; despite effort to get cows out and electric wire, cows were "commonly seen" inside no-graze fenced area all season long. It was reported that cattle were "grazing and drinking freely" within sensitive mollusk species habitats in spring/fen complex in the Jack Creek headwaters and more than four dozen other smaller springs/fens habitat; manure and urine in water lowered water quality, and hoof action/postholing created pedestals and denuded vegetation; it was noted that "Habitat is being degraded/destroyed."

854 F. Supp. 2d at 906. Far from an isolated incident, trespass continued year after year and often on multiple occasions during subsequent grazing seasons. *CFOW*,

2016 WL 10637010 at *3 (describing trespass in 2012–2014); *see also* 5-ER-0095-99 (more trespass in 2016–2017).

Trespass and management problems occurred despite the implementation of management measures like water troughs and fences, which failed to prevent cattle from drinking in fens or reaching Jack Creek. 4-ER-0861–62; 5-ER-1001 (documenting excess use and problems with water troughs); 5-ER-1013 (describing "repeated occurrences" of trespass along Jack Creek "even after temporary troughs were placed"); 5-ER-1019–20 (explaining a litany of issues with gates, limited water sources, and trespass during drought conditions in one grazing season).[12] These problems persisted in part because it is exceedingly difficult to control cattle on this rough and remote allotment. The permittee himself admitted that the cows grazing the allotment are "wily" and not easily herded, are able to evade "even the most knowledgeable and experienced riders," and dissipate to reach water sources that are spread far apart. 3-ER-0456–57.

Instead of fully disclosing and analyzing the scope and severity of these management problems, the AMP's adaptive management plan doubled down on

[12] The Court should consider these letters from the Forest Service to the permittee about grazing on the allotment during 2014, which were inexplicably excluded from the administrative record but include important information about the permittee's history of noncompliance that the agency should have considered. *See Humane Soc. of U.S. v. Locke*, 626 F.3d 1040, 1058 (9th Cir. 2010) (explaining that a court may consider extra-record documents to determine if the agency ignored relevant information).

many of the same measures that failed to control cattle in previous years: resting or excluding cattle from the Jack Creek Pasture, 3-ER-0345–47 (#1, 4, 8); installing artificial water sources, 3-ER-0345–46 (#2, 5); and erecting temporary or permanent fencing, 3-ER-0345–47 (#2, 3, 7, 8, 9). The Forest Service, in the ROD and EIS, irrationally assumed that these measures would be effective and minimize impacts to sensitive species, fens, soils, Jack Creek, and other resources. *E.g.*, 3-ER-0351, 0353–54, 0358, 0361, 0363 & 2-ER-0284–85, 0288–89. As a result, the agency overestimated the benefits of the mitigation measures and underestimated the likely impacts from unauthorized grazing. *See, e.g.*, 2-ER-0080, 0091 (claiming unauthorized use should be "insignificant"); 2-ER-0210 (claiming the new AMP would "minimize the effects [on frogs] significantly"); 2-ER-0255 (asserting that such measures would reduce impacts to hydrologic resources).

Contrary to the Forest Service's assertions, potential impacts from trespass or ineffective mitigation measures are not discountable. Cattle, even a few, that trespass into pastures that are supposed to be closed to cattle under the AMP (like Jack Creek 2 and 3 while restoration occurs, or North Sheep while fence building occurs or rest rotation is in place) can quickly cause considerable damage to fens, Jack Creek, and sensitive species. *See* 3-ER-0407 (stating damage and high use can occur "immediately" upon entry into pasture).

In fens, even low levels of grazing on wet soils can lead to unacceptable levels of soil disturbance from compaction and bare soil, cause degraded conditions to persist, and dry up fens and groundwater levels. 4-ER-0640, 0675; 4-ER-0810–13; 4-ER-0858–59. Such harm threatens the "extraordinarily unique and diverse communities of rare and regionally sensitive species" that exist within fens, which include "mollusks (invertebrate animals), vascular plants, bryophytes (mosses and other non-vascular plants), insects, and wildlife." 4-ER-0805–06. Additional harm to fens and soils in riparian areas, even from low levels of trespass grazing, is a serious concern given that conditions in some areas are already poor or close to exceeding Forest Plan directives. *Supra* pp. 36–37; *see also* 4-ER-0634–35 (admitting that several fens exceeded ten percent bare soil and that many were declining and not in good condition); 4-ER-0857–60 (describing dramatic water tables declines and damage in fens).

Similar problems can also easily occur in Jack Creek. In past years, Ms. Simpson documented small numbers of trespass cattle concentrating in Jack Creek, causing remnant pools to dry up, altering stream banks, and significantly harming spotted frogs there. 4-ER-0839–40; 4-ER-0862, 0868. And contrary to the EIS's assertion that trespass effects "were typically light (5–10% utilization)," 2-ER-0074, the Forest Service admitted that trespass cattle caused utilization of twenty-four percent in Jack Creek at one time. 5-ER-1025.

Moreover, the Forest Service should have considered that trespass and management problems are most likely to arise later in the season when cattle may need to be removed quickly once implementation standards are met or exceeded, or low water conditions or other concerns develop. Once this occurs, the record shows the permittee may be unable to remove cattle in a timely manner despite requirements in the AMP or orders from the Forest Service. *CFOW*, 2016 WL 10637010, at *3 (reporting that cattle remained on the allotment more than a month after the permittee was required to remove them early due to drought conditions); 5-ER-1023 (permittee failed to remove 15 pairs of cattle by permit "off dates"); 5-ER-1005–06 (summarizing the permittee's "failure to follow management instructions" during multiple grazing seasons); 4-ER-0861. The Forest Service failed to disclose how much damage to fens, frogs, Jack Creek, and other resources may occur when delays with removing cattle arise, or if cattle trespass back into pastures of concern after removal. This will be a particular problem if low water conditions arise because cattle are more likely to breach fences in search of water when temperatures are high and water is limited later in the season.

Climate change is poised to exacerbate these conflicts and degraded conditions in riparian areas like Jack Creek, fens, and springs as water levels drop, particularly during drought, which is already occurring at alarming levels. 5-ER-1050–53; 4-ER-0814–18; 4-ER-0857–58. The Forest Service should have

considered how climate change may increase the frequency and severity of drought and whether this will further decrease the effectiveness of mitigation measures designed to protect fens, sensitive species, and Jack Creek. Yet this is another issue that the Forest Service overlooked when analyzing compliance with Forest Plan standards. *See generally* 3-ER-0512–65 (failing to address climate change impacts in the hydrology report), 3-ER-0566–0607 (same in soil report), 4-ER-0622–89 (same in botany report).

By brushing aside the severity of past management problems and climate change, the Forest Service could not rationally conclude that the AMP was consistent with Forest Plan directives to maintain or improve soil stability and productivity, hydrologic conditions, and riparian habitat; to maintain the viability of sensitive species; and to control livestock to maintain or improve conditions in moist and wet meadows. 3-ER-0609–20; (Forest Plan); 3-ER-0350–58, 0362–65, 0368–69 (ROD) & 2-ER-0162, 0164, 0284–85, 0288–89 (EIS) (concluding that Forest Plan standards will be met because, *inter alia*, the adaptive management plan will be effective). By overlooking a key aspect of the problem and failing to supply a rational explanation that addressed contradictory evidence, the agency violated NFMA and the APA. *All. for the Wild Rockies*, 907 F.3d at 1110, 1113; *Native Ecosystems Council*, 418 F.3d at 963; *Tidwell*, 599 F.3d at 935 (faulting the agency for ignoring contradictory evidence).

III. THE BIOP FAILED TO EXAMINE HOW GRAZING WILL EXACERBATE HARM TO OREGON SPOTTED FROGS FROM DROUGHT AND CLIMATE CHANGE.

Section 7 of the ESA requires federal agencies to consult with FWS to ensure that their actions are "not likely to jeopardize the continued existence" of any endangered or threatened species under FWS's jurisdiction.[13] 16 U.S.C. § 1536(a)(2). FWS then issues a BiOp that must address the "direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline." 50 C.F.R. § 402.02. FWS must consider the "immediate and long-term effects" of an action and "articulate[ ] a rational connection between the facts found and the conclusions made." *Wild Fish Conservancy*, 628 F.3d at 525 (quoting *Pac. Coast Fed'n of Fishermen's Ass'ns v. U.S. Bureau of Reclamation*, 426 F.3d 1082, 1090 (9th Cir. 2005)).

In reaching its conclusions in a BiOp, FWS "may rely on mitigation measures" that are proposed by others. *Bernhardt*, 982 F.3d at 741. However, the

[13] To "[j]eopardize the continued existence" of a species means to "engage in an action that 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 C.F.R. § 402.02. Although the ESA regulations were revised in 2019, FWS's BiOp was completed in 2018 prior to the effective date of those regulations, so they do not apply. 84 Fed. Reg. 44,976 (August 27, 2019). Accordingly, all citations to ESA regulations are to that prior version.

mitigation measures "must constitute a 'clear, definite commitment of resources,' and be 'under agency control or otherwise reasonably certain to occur.'" *Id.* at 743 (quoting *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv.*, 524 F.3d 917, 936 & n.17 (9th Cir. 2008)). The measures "must be subject to deadlines or otherwise-enforceable obligations; and most important, they must address the threats to the species in a way that satisfies the jeopardy and adverse modification standards." *Id.* (quoting *Ctr. for Biological Diversity v. Rumsfeld*, 198 F. Supp. 2d 1139, 1152 (D. Ariz. 2002)). In fulfilling these various ESA obligations, FWS must use "the best scientific and commercial data available." 16 U.S.C. § 1536(a)(2).

Here, FWS's 2018 BiOp admitted that low water conditions due to drought are "probably the most severe threat to the Jack Creek spotted frog population, particularly in intermittent reaches." 3-ER-0403. Despite acknowledging this risk, the 2018 BiOp failed to address this threat in two key ways.

A. Climate Change

First, FWS overlooked a serious problem: that climate change will exacerbate harm to Oregon spotted frogs from grazing by increasing the frequency and severity of drought and low water conditions in Jack Creek. Instead of analyzing this issue in the effects analysis, the BiOp briefly mentioned climate change in just two brief sentences.

In the section on range-wide threats to the species, the BiOp first mentioned, in a sentence copied from the frog's ESA listing rule, that climate change is "potentially" exacerbating the loss of habitat and other factors affecting the species. *Compare* 3-ER-0397 (BiOp) *with* 3-ER-0468 (ESA listing rule). Inexplicably, FWS omitted much more pertinent information from its ESA listing rule about specific climate projections and their potential impacts on the species that the agency had included in its 2015 BiOp. *See* 3-ER-0492–95, 0463 (climate predictions in ESA listing rule include that climate change is a particular threat to populations in the Williamson sub-basin, where Jack Creek is located); 5-ER-0990, 0994 (including some predictions from ESA listing rule in 2015 BiOp).

The BiOp mentioned the issue only one other time, when referencing, without discussion, a research study about climate change and grazing within habitat for the endangered California tiger salamander. 3-ER-0409. But the BiOp never analyzed this information nor otherwise addressed climate change issues. As a result, FWS never considered the combined effects of climate change and grazing on Oregon spotted frogs.

This was a significant omission. For more than a decade, district courts in this Circuit have recognized that climate change will alter water temperatures and water flows, and those altered hydrologic conditions must be addressed in a BiOp's analysis of impacts to species that may be affected by such changes. *See Nat'l*

Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 184 F. Supp. 3d 861, 914–23 (D. Or. 2016); *Wild Fish Conservancy v. Irving*, 221 F. Supp. 3d 1224, 1233–34 (E.D. Wash. 2016); *S. Yuba River Citizens League v. Nat'l Marine Fisheries Serv.,* 723 F. Supp. 2d 1247, 1273–74 (E.D. Cal. 2010); *Pac. Coast Fed'n of Fishermen's Ass'ns v. Gutierrez*, 606 F. Supp. 2d 1122, 1183–84 (E.D. Cal. 2008); *Nat. Res. Def. Council v. Kempthorne*, 506 F. Supp. 2d 322, 367–70 (E.D. Cal. 2007) (all holding BiOps for imperiled fish did not adequately explain and analyze the effects of climate change); *see also Oceana, Inc. v. Ross*, No. 15-0555 (PLF), 2020 WL 5995125, at *15–16 (D.D.C. Oct. 9, 2020) (BiOp did not explain how it reached no jeopardy conclusion in light of the significant effects from climate change).

And this Court recently faulted FWS for failing to address the effects of climate change on a species that is vulnerable to its effects. In *Center for Biological Diversity v. Zinke*, this Court found that FWS arbitrarily rejected ESA protections for the arctic grayling, a fish that relies on cold streams. 900 F.3d 1053, 1058-59, 1072–73 (9th Cir. 2018). In its decision, FWS expressly declined to address the "synergistic effects of climate change" due to uncertainty about its effects. *Id*. at 1072. This Court found that "approach [was] unacceptable" because FWS had evidence that climate change will increase threats of low water flows and exacerbate threats of dewatering streams. *Id*. at 1072–73. By failing to address that

information and at least explain why uncertainty about climate change warranted denial of ESA protections, FWS acted arbitrarily. *Id*. at 1073.

In the BiOp at issue in this case, FWS made an even more obvious error. Rather than acknowledging its refusal to analyze climate change issues, as the agency did in the BiOp at issue in *Zinke*, FWS simply ignored the issue in the BiOp's effects analysis.

The BiOp in this case is more akin to one that the Fourth Circuit found arbitrary in *Appalachian Voices v. U.S. Dep't of Interior*, 25 F.4th 259, 276–78 (4th Cir. 2022). There, FWS spent only "one sentence discussing the impacts of climate change" by simply acknowledging that it is an increasing threat. *Id.* at 276. The Fourth Circuit faulted FWS for this and for failing "to account for the one thing we know about climate change: that it will get worse over time." *Id*. at 277. This is just like FWS's BiOp here, which included only two brief sentences about climate change and never grappled with how climate change will likely worsen water conditions for spotted frogs over time and interact with grazing impacts.

Instead of ignoring the issue, FWS's BiOp should have considered how climate change will affect hydrologic conditions in Jack Creek and what this meant for Oregon spotted frogs, particularly given that low water conditions from drought are such a serious concern for the population. The BiOp recognized that the Jack Creek population has been impacted by drought in the past, and that moving

forward, the effects of grazing would be insignificant, *except during drought conditions*, when spotted frogs may aggregate in isolated pools or small sections of Jack Creek that are used by cattle. 3-ER-0399, 0429. The BiOp found that cattle would shrink these pools even further by drinking from them (one cow can drink fifteen to twenty gallons of water per day), polluting the pools with their waste, trampling streambanks and adding sediment to the pools, and trampling frogs or displacing them from the pools onto dry land where they are vulnerable to desiccation and predation. 3-ER-0412–15, 0424, 0428.

Despite recognizing this significant risk, FWS did not consider how climate change will likely affect this dynamic by making drought more frequent or more severe, as expected. *See* 4-ER-0897, 3-ER-0492–93, 0508 (climate change forecasts). Instead, FWS downplayed the issue by claiming that drought "may occur periodically (perhaps once per decade)." 3-ER-0403. FWS's assertion is flatly inconsistent with evidence that drought was already occurring on a much more regular basis leading up to the BiOp's issuance. *See* 4-ER-0824, 0827, 0843–44, 0846, 4-ER-0868 (drought conditions in Klamath County occurred during 1991, 1994, 1995, 1996, 2001, 2004, 2010, 2013, 2014, and 2015).[14] *See also*

[14] FWS should have considered the serious drought conditions in Klamath County that occurred for many years, which were summarized in the cited declarations by Ms. Simpson in *CFOW*, No. 1:14-cv-737-CL (D. Or.), a case in which FWS was a party. Drought conditions were also a matter of public record. *See* https://www.drought.gov/historical-

Klamath Irrigation Dist. v. U.S. Bureau of Reclamation, 48 F.4th 934, 939 (9th Cir. 2022) (explaining that the Klamath Basin has experienced "multiple extremely dry years that unfortunately appear to be the new normal").

Worsening drought conditions that reduce water levels in Jack Creek more often and earlier in the summer already pose a substantial threat to Oregon spotted frogs, particularly in the intermittent sections of the creek. *See supra* pp. 6–8. FWS was aware that climate change is predicted to further reduce water levels in Jack Creek and harm the population of spotted frogs there. *See* 4-ER-0897 (climate change is one of the two "greatest threats to the hydrological regime of Jack Creek"); 5-ER-1055–57 (explaining that climate change will greatly impact Jack Creek and Oregon spotted frogs, and impacts will "become more severe" downstream, where the creek is intermittent).

Accordingly, FWS should have discussed, in the BiOp, the combined effects of climate change and opening up miles of Jack Creek to grazing, which will allow cattle to congregate in dwindling remnant pools where they can harm and kill frogs. This is particularly true given the small size of the Jack Creek population, 3-ER-0447, and FWS's projection that grazing may kill or harm hundreds of individuals each year. 3-ER-0431. Thus, FWS should have considered how much

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information?state=oregon&countyFips=41035&dataset=0&selectedDateUSDM=20090630&dateRangeUSDM=2000-2019 (showing drought conditions occurred repeatedly Klamath County between 2000 and 2018) (last visited April 5, 2023).

more mortality and stress the Jack Creek population and the species as a whole can take as climate change worsens drought and low water conditions. 4-ER-0898 (explaining that "the risks of stochastic events causing extinction are significant particularly while the Jack Creek population is so small").

By failing to consider an important aspect of the problem—the additive effects of climate change on low water conditions and drought—FWS's BiOp was arbitrary and capricious. *Zinke*, 900 F.3d at 1072–73. Furthermore, by ignoring key information about climate change, drought, and low water conditions in Jack Creek, FWS violated the ESA's best available science requirement. 16 U.S.C. § 1536(a)(2); *Conner v. Burford*, 848 F.2d 1441, 1454 (9th Cir. 1988) (explaining that an agency "cannot ignore available biological information"); *Turtle Island Restoration Network v. U.S. Dep't of Com.*, 878 F.3d 725, 740 (9th Cir. 2017) (finding that an agency failed to articulate a rational connection between "the best available science" related to climate predictions and its conclusions in a BiOp).

B. Mitigation Measures

Second, rather than considering how much worse climate change will make the impacts of grazing on Oregon spotted frogs, FWS arbitrarily concluded that the Forest Service's monitoring and adaptive management measures would mitigate harm caused by low water conditions. 3-ER-0414, 0417, 0424, 0428, 0429.

FWS assumed, without adequate support in the record, that the Forest Service's low water management strategies would be effective at keeping cattle out of Jack Creek during worsening low water conditions. 3-ER-0417 ("By excluding cattle from Jack Creek and ponds when low water conditions are present, the likelihood of spotted frog exposure to grazing livestock will be *entirely eliminated*.") (emphasis added). The AMP's low water strategy required that if perennial waters in Jack Creek become intermittent, pasture gates will be closed or temporary fencing will be installed to prevent access to the creek; if cattle continue to access the creek, "then livestock will be completely removed from the pasture of concern." 3-ER-0385. For intermittent sections of Jack Creek, the AMP provided that if the water level at a designated pool in the intermittent section of Jack Creek goes below 1.5 feet, then pasture gates will be closed or temporary fencing will be installed to prevent access to the creek; if cattle continue to access the creek, "then livestock will be completely removed from the pasture of concern." *Id*. Thus, the low water strategies depend on closing pasture gates, building temporary fencing, and implementing unspecified cattle removal procedures to keep cattle out of Jack Creek during low water conditions.

Yet FWS was aware that the permittee has been unable to keep cattle out of Jack Creek despite fencing, agency orders, and a court injunction. *See, e.g.*, *CFOW*, 2016 WL 10637010, at *3 (recounting the history of cattle repeatedly

breaching fences to reach Jack Creek and Oregon spotted frog habitat despite permit conditions prohibiting such grazing). This made it irrational for FWS to assume similar measures would suddenly be effective at keeping cattle out of Jack Creek, particularly during low water conditions when frogs are at significant risk of harm and thirsty cattle are seeking whatever water is available. Nothing in the BiOp or the record suggests that FWS considered these issues or supplied a rational explanation for why such problems would not continue.

Instead, the record reveals that FWS initially concluded, in an internal draft, that these measures would only "significantly reduce[]" the likelihood that frogs would be exposed to grazing during low water conditions. 5-ER-0981, 0985. Without explanation, FWS altered this conclusion in the final BiOp, proclaiming that the measures would "entirely eliminate[]" the likelihood of such exposure. 3-ER-0417. Given the permittee's poor track record of keeping cattle out of Jack Creek when required, FWS's assumption that the AMP's adaptive management plan would "entirely" mitigate the likelihood of cattle grazing in Jack Creek during low water conditions when they could significantly harm frogs was arbitrary and capricious. *See Bernhardt*, 982 F.3d at 743–44, 746–47 (faulting FWS for relying on vague mitigation measures in a BiOp).

Even if it was rational for FWS to rely on these mitigation measures (closing gates, erecting temporary fencing, and removing cattle), FWS should have

considered that these measures would not become effective immediately after low water conditions occur on the ground. Deployment of these mitigation measures will depend on "field visits" by undefined actors at unknown times. 3-ER-0385. The BiOp did not explain how often these field visits would occur, so days, weeks, or even months could pass between visits. And once low water conditions are discovered during a field visit, there is no deadline for the permittee to remove cattle from the Jack Creek pasture of concern and then close pasture gates or erect temporary fencing. Accordingly, the BiOp did not consider how long cattle could remain in Jack Creek during low water conditions, further lowering water levels and displacing or trampling frogs in dwindling pools, before initial action under the adaptive management plan would be taken.

And even once action is taken, the adaptive management measures recognize that pasture gates and temporary fencing may not be enough to keep cattle out of a closed pasture. The plan provides that if cattle *continue* to access Jack Creek, for some undefined period of time, the Forest Service is supposed to order the permittee to remove cattle from all Jack Creek pastures. 3-ER-0385. But FWS did not consider how long it might take—days, weeks, or even months—to discover the problem and then how much more time the permittee will need to remove all cattle from Jack Creek pastures and then keep them out for good.

Long delays between the discovery of low water conditions and removal of cattle are not a hypothetical concern. FWS was aware that it took the permittee more than one month to remove cattle from the Chemult Pasture after trespass problems and low water conditions arose in 2014. *CFOW*, 2016 WL 10637010, at *3. Moreover, climate change may further exacerbate low water conditions and cause remnant pools to dry up even faster between field visits, increasing the harm that occurs to frogs before adaptive management action begins. Accordingly, FWS should have considered that cattle could continue to graze in Jack Creek for days or weeks after low water conditions arise and then analyzed what that meant for spotted frogs in the BiOp, particularly in light of climate change predictions for Jack Creek. *See Nat'l Wildlife Fed'n*, 184 F. Supp. 3d at 918 (finding that a BiOp should have considered how climate change may reduce the effectiveness of mitigation measures).

Had FWS analyzed this issue, it would have realized that during such delays, harm may occur quickly as water levels drop and concentrate frogs and cows in the same remnant pools where direct harm from trampling can occur. Indeed, the BiOp admitted that cattle grazing during drought and low water conditions may cause significant effects. 3-ER-0429 (finding that effects would be insignificant "[e]xcept during drought conditions, when Oregon spotted frogs may aggregate in isolated pools or small sections of Jack Creek that are used by livestock"). But FWS then

ignored those effects by assuming that the low water management strategies prevent cattle from accessing Jack Creek during low water conditions. 3-ER-0417. By failing to address the potential harm that frogs may face between the onset of low water conditions and the successful removal of cattle from Jack Creek, FWS failed to fully evaluate the effects of the AMP on the species and ignored an important aspect of the problem. *See Save Our Cabinets v. U.S. Fish & Wildlife Serv*., 255 F. Supp. 3d 1035, 1063 (D. Mont. 2017) ("By not considering the potential inadequacy of these proposed measures, the agency failed to consider an important aspect of the problem.")

In sum, FWS's BiOp failed to analyze how climate change will exacerbate the impacts of grazing on Oregon spotted frogs and instead irrationally assumed that mitigation measures would avoid harm to frogs during drought and low water conditions. By ignoring climate change and uncertainties about the AMP's mitigation measures, FWS "entirely failed to consider an important aspect of the problem," rendering the BiOp arbitrary and capricious. *Pac. Coast Fed'n of Fishermen's Ass'ns*, 426 F.3d at 1094 (quoting *State Farm*, 463 U.S. at 43).

IV. THIS COURT SHOULD VACATE THE ROD, EIS, AMP, AND BIOP AND ORDER THE DISTRICT COURT TO REMAND THOSE DECISIONS TO THE FEDERAL DEFENDANTS.

If the Court agrees with Plaintiffs on any of their claims, it should reverse the district court's opinion, vacate the associated agency decisions (the EIS and

ROD for NEPA claims; the ROD and AMP for NFMA claims; and the BiOp for ESA claims), and order the district court to remand those decisions to the Federal Defendants. *See Env't Def. Ctr.*, 36 F.4th at 882 (awarding vacatur after finding that the lower court erred in granting summary judgment to defendants).

CONCLUSION

For the foregoing reasons, this Court should reverse the district court's judgment.

Date: April 7, 2023

Respectfully submitted,

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UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

Statement of Related Cases Pursuant to Circuit Rule 28-2.6

9th Cir. Case Number 22-35706

The undersigned attorney or self-represented party states the following:

[x] I am unaware of any related cases currently pending in this court.

[ ] I am unaware of any related cases currently pending in this court other than the case(s) identified in the initial brief(s) filed by the other party or parties.

[ ] I am aware of one or more related cases currently pending in this court. The case number and name of each related case and its relationship to this case are:

Signature /s/ Elizabeth H. Potter **Date** April 7, 2023

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

Certificate of Compliance for Briefs

9th Cir. Case Number 22-35706

I am the attorney representing Plaintiff-Appellants.

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Signature /s/ Elizabeth H. Potter **Date** April 7, 2023