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**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ALASKA**

CASCADIA WILDLANDS, GREATER SOUTHEAST
ALASKA CONSERVATION COMMUNITY,
GREENPEACE, CENTER FOR BIOLOGICAL
DIVERSITY, and THE BOAT COMPANY,

Plaintiffs,

v.

FORREST COLE, in his official capacity as Tongass
National Forest Supervisor; BETH PENDLETON, in her
official capacity as Alaska Regional Forester;
THOMAS L. TIDWELL, in his official capacity as Chief
of the United States Forest Service; and the UNITED
STATES FOREST SERVICE, an agency of the United
States Department of Agriculture,

Defendants,

STATE OF ALASKA,

Inteviewer-Defendants.

Civ. Case No. 1:14-cv-0015-RRB

PLAINTIFFS' PRINCIPAL BRIEF

**(Violation of National Environmental Policy
Act, National Forest Management Act, and
Administrative Procedure Act)**

ORAL ARGUMENT REQUESTED

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INTRODUCTION

Plaintiffs Cascadia Wildlands, Greater Southeast Alaska Conservation Community, Greenpeace, Center for Biological Diversity, and The Boat Company (“Plaintiffs”) hereby submit their Principal Brief pursuant to D. Alaska Local Rule 16.3(c) and Federal Rule of Civil Procedure 56.

Plaintiffs challenge the final agency action of Defendants Forrest Cole, Beth Pendleton, Thomas Tidwell, and the United States Forest Service (“Defendants,” “Forest Service,” or “agency”) in approving the Big Thorne project (“project”). The Big Thorne project is the largest old-growth timber sale on the Tongass National Forest in more than a decade and would result in the logging of more than 6,000 acres of low elevation old-growth forest on Prince of Wales Island, an area already heavily impacted by 60 years of commercial logging. The Forest Service’s final agency action of approving the project is arbitrary, capricious, not in accordance with, or otherwise without observance of procedure required by the National Forest Management Act (“NFMA”), 16 U.S.C. §§ 1600 *et seq.*, and its implementing regulations; the Tongass National Forest Land and Resource Management Plan (“TLMP”), as amended in 2008; and the National Environmental Policy Act (“NEPA”), 42 U.S.C. §§ 4321 *et seq.*, and its implementing regulations.

Plaintiffs challenge the Forest Service’s management of two wildlife species that depend upon the old-growth forest ecosystem on Prince of Wales Island: the Alexander Archipelago wolf (the ‘wolf’) and its primary prey the Sitka black-tailed deer (the “deer”). The Forest Service has designated both the wolf and deer as Management Indicator Species (“MIS”), and the 2008 Tongass Land Management Plan instruct the Forest Service to maintain sufficient deer habitat to ensure a “sustainable wolf population.” The wolf, the deer, and subsistence hunters exist in a delicate balance on the Tongass, a balance dependant on low elevation old-growth forest to provide critical winter habitat for the deer. To meet the needs of both wolves and subsistence hunters, the the Forest Service is to focus on providing enough old-growth habitat that the carrying capacity for deer is at least 18 deer/mi². If deer populations decline due to old-growth logging, wolf populations suffer in two ways. First, their prey base of deer is reduced. Second, hunters will increasingly target wolves and will utilize an expanded network of logging roads to kill wolves both legally and illegally to prop up deer populations for subsistence uses.

Because of past old-growth logging, road building, and access for hunters and trappers, deer carrying capacity throughout the project area is already below 18 deer/mi² and wolf populations in the project area are already on the brink of extirpation. In recent years, wolf populations appear to have declined rapidly in the project area because of hunting and trapping facilitated by the existing network of logging roads. In short, a legacy of past logging and road building has jeopardized the stability of the predator-prey relationship on Prince of Wales Island.

Despite the overwhelming evidence of the unsustainable rate of logging in the project area, which by all measures is resulting in unsustainable mortality of wolves and population declines, the Forest Service approved an additional 6,000 acres of old-growth logging. The Big Thorne project will further reduce carrying capacity for deer and will further increase the risk of extirpating wolves from the project area. Plaintiffs therefore challenge the Forest Service's arbitrary explanation as to how the Big Thorne project is consistent with the requirements of the 2008 TLMP to provide for a sustainable population of wolves. To the extent that the 2008 TLMP permits the agency to place the wolf at such risk, the TLMP's entire conservation strategy for protecting wolf viability crumbles. If this is the case, the 2008 TLMP itself is inconsistent with the statutory requirements of the National Forest Management Act.

Because of the dire situation in the project planning area and the size of the Big Thorne project, Dr. David Person, the country's foremost expert on the wolf, raised during the administrative process his concerns that the Big Thorne timber sale threatens the sustainability of the wolf population on Prince of Wales Island. Dr. Person has conducted research on wolves in the project planning area for more than 20 years and from scoping all the way through the agency's final decision has expressed concerns over the Project with the Alaska Department of Fish and Game and with the Forest Service. The U.S. Fish and Wildlife Service, in its own comments, raised similar concerns. In addition to the substantive violations of NFMA, Plaintiffs challenge the Forest Service's failure to disclose the dissenting scientific opinions of Dr. Person and the U.S. Fish and Wildlife Service as required by the action-forcing procedures of NEPA. Indeed, the Forest Service admits that it was aware of Dr. Person's opinions before it published the Final Environmental Impact Statement ("FEIS") in this case and that the FEIS does not disclose or respond to those dissenting scientific opinions as required by law.

FACTUAL BACKGROUND

I. The Big Thorne Project will degrade old-growth habitat on Prince of Whales Island well below the minimum levels necessary for a sustainable wolf population.

The Big Thorne project is located within the Tongass National Forest ("Tongass") in Southeast Alaska, situated in the Thorne Bay Ranger District on north-central Prince of Wales Island ("POW"). POW is the largest island in Southeast, and the third largest island in the Country. Ex. 25, at 26.¹ Of the 232,000-acre Project area, the vast majority (94%) is National Forest system land. The other six percent includes 11,343 acres of State and 2,826 acres of private land. *Id.* at 59.

POW and the Big Thorne project area encompass unique, temperate old-growth rainforest habitat. As the Forest Service explains, "[o]ld-growth forests support high levels of biodiversity due to their

¹ Citations are to exhibits filed concurrently with this brief, in the following style: Ex. [x], at [page number]. A Table of Exhibits is at the end of this brief, and it notes the corresponding administrative record (AR) citation for each exhibit.

structural and ecological complexity.” *Id.* at 147. This distinctive ecosystem provides habitat for a host of terrestrial and aquatic species, including the wolf, and numerous other endemic, sensitive, or otherwise at risk wildlife populations including the Queen Charlotte goshawk and the Northern flying squirrel. It’s rivers, streams, and lakes provide habitat for anadromous and resident fish species. The region supports local communities that depend upon wildlife and fish as part of their subsistence diet. *See Id.* at 37 (“Because of its proximity to residents of Thorne Bay, Coffman Cover, Klawock, Craig, and Naukati, the Big Thorne project area is considered an important deer hunting area for these communities.”).

Since 1954, approximately 455,00 acres of old growth have been harvested on the Tongass, with an additional 351,000 acres of old-growth harvested on non-National Forest System lands. *Ex. 9*, at 65, 67. In addition, more than 4,000 km (2,485 miles) of roads have been built, mostly to facilitate logging. *Ex. 28*, at 5. In the Big Thorne project area, 49,594 acres of old-growth forest have already been harvested. *Ex. 25*, at 149. The project itself consists of 148.9 million board feet of timber that will be logged from roughly 6,185 acres of old-growth forest and another 2,299 acres of recovering second growth across a 232,000-acre project area. *Ex. 26*, at 7. In addition, the Big Thorne project includes the construction of 46.1 miles of new road and the reconstruction of 36.6 miles of existing roads for a total of 82.7 miles. *Id.* This adds to an existing road network comprising 580 miles. Complaint (Dkt. #1) and Answer (Dkt. #25) at ¶ 38.

The Tongass and POW are divided into several different land classifications, which form the basis for resource management. The project area impacts four Wildlife Analysis Areas (“WAAs”), land divisions used by the Alaska Department of Fish and Game (“ADF&G”) for wildlife analysis and regulating wildlife populations: 1315, 1318, 1319, and 1420. *Ex. 25*, at 49. In addition, all of the project area is within ADF&G Game Management Unit (“GMU”) 2. GMUs are geographical areas defined by ADF&G to manage wildlife populations; legal hunting and trapping regulations govern each unit. *Id.* Finally, the Project area is located within Biogeographic Province 14, the North Central Prince of Wales province. *Id.* at 51.² The biogeographic province designation refers to the 21 ecological subdivisions of Southeast Alaska. *Id.* North Central Prince of Wales biogeographic province has experienced the highest amount of harvest relative to other provinces. *Id.* at 147. The Big Thorne project reduces deer habitat capability to a level below 18 deer/mi² across all of these management scales.

At the biogeographic province scale, deer habitat carrying capacity for North Central POW will drop to 71% of 1954 (pre-commercial harvest) conditions on National Forest system (“NFS”) lands, and the same 71% across all ownerships. *See Ex. 26*, at 33–34. The picture at the WAA scale is even bleaker,

² In addition, the Project area includes 16 Value Comparison Units (“VCUs”), “distinct geographic areas, each encompassing a drainage basin containing one or more large stream systems [with] boundaries usually follow[ing] major watershed divides.” *Ex. 25*, at 48.

where all four WAA's impacted by the project will drop well below the 18 deer/mi² threshold. *See id.* By stem exclusion,³ deer habitat capability across the four WAAs will have seen an average 8.5 deer/mi² reduction on NFS lands and 6.5 deer/mi² for all ownerships. The following tables are derived from Tables ROD 7 and 8. *Id.*

Deer Habitat Capability – NFS Lands Only (deer/mi²)					
	1954	2013	Post-Implementation (Stem Exclusion)	% of 1954 (Stem Exclusion)	% Reduction from 2013 (Stem Exclusion)
WAA 1315	28.3	16.7	14.8	52%	-11%
WAA 1318	14.7	13.6	12.3	84%	-9%
WAA 1319	20.9	16.0	14.4	69%	-10%
WAA 1420	21.5	11.8	9.9	46%	-16%
North-Central POW Bio- Province	24.28	17.95	17.23	71%	-4%

Deer Habitat Capability – All Ownerships (deer/mi²)					
	1954	2013	Post-Implementation (Stem Exclusion)	% of 1954 (Stem Exclusion)	% Reduction from 2013 (Stem Exclusion)
WAA 1315	15.9	9.4	8.3	52%	-12%
WAA 1318	6.6	6.1	5.5	84%	-10%
WAA 1319	20.7	15.8	14.3	69%	-10%
WAA 1420	19.4	10.5	8.6	44%	-18%
North-Central POW Bio- Province	19.8	14.6	14.0	71%	-4%

The Big Thorne Project also increases the density of roads per mile in the project area, adding to the most extensive road system in Southeast Alaska on POW, including an existing 610 miles of roads in watersheds affected by the project, of which 463 are in the project area. Ex. 25, at 283, 289. The TLMP

³ “Stem exclusion” refers to the post-timber harvest phase where, as the forest regenerates after clear-cut harvest, a dense canopy forms that shades out understory vegetation, thereby reducing foraging habitat. Ex. 25, at 157. This condition may last for 150 years. *Id.*

recommends road densities below 0.7–1.0 mi/mi² in WAAs where wolf mortality is an identified concern. Ex. 11, at 35. Despite this Standard and Guideline, the Project authorizes the construction or reconstruction of 82.7 miles of roads, Ex. 26, at 7. The following table showing road density is derived from the ROD. *Id.* at 44.

	Road Density Below 1200 feet (mi/mi ²)			
	NFS Only	% Over TLMP Standard (0.7 – 1.0)	All Lands	% Over TLMP Standard (0.7 – 1.0)
WAA 1315	2.3	329% – 230%	2.8	400% – 280%
WAA 1318	0.8	114% – N/A	2.5	357% – 250%
WAA 1319	1.7	243% – 170%	1.7	243% – 170%
WAA 1420	2.6	371% – 260%	2.5	357% – 250%

Over 80% of the Big Thorne project area is or will be accessible to hunters and trappers. Complaint (Dkt. #1) and Answer (Dkt. #25) at ¶ 79; *see also* Ex. 30, at ¶¶ 22–23. The Forest Service has been aware since 2006 of best available science indicating that when about 40% of a wolf pack’s home range is logged and/or roaded, there is a very high risk that mortality (mostly from hunting and trapping) will exceed reproduction and the pack area will become a population sink.⁴ *Id.* at ¶ 8; *see also* Ex. 7, at 3. While the agency’s decision will close or seasonally gate a nominal amount of roads, the agency conceded in the ROD that: “[w]ith respect to road management affecting wolf sustainability, the number of road miles within the Big Thorne project area is so high that there is little that can be accomplished to reduce risk of wolf mortality by closing a small number of roads.” Ex. 26, at 36.

II. Wolves, deer, and humans exist together in a precarious relationship within the old-growth ecosystem.

The wolf and the deer are particularly adapted to the old-growth forest on POW and within the project area. These species are important indicators of the health of the Tongass old-growth ecosystem because deer provide the wolf’s primary prey and depend on low-elevation old growth to survive the winter. The Forest Service has designated both as MIS, given their importance as bellwether species. *See* Ex. 25, at 154 (deer), 157 (wolf). Accordingly, particular standards and guidelines in the TLMP govern the management of wolf and deer habitat, including the 18 deer/mi² deer habitat capability standard. *See infra* Factual Background, Part II.C. Humans make up a third, integral leg of a predator-prey triangle.

⁴ A population “sink” is an area where wolf mortality is greater than wolf recruitment and therefore cannot support a population without immigration of wolves from other areas. *See* Ex. 37, at ¶ 24.

Many communities in the Tongass rely on deer for subsistence,⁵ and wolves are hunted both legally and illegally throughout the Tongass. *See* Ex. 30, at ¶ 20 (“Deer, wolf, and humans in this region therefore exist in [a] predator-prey relationship that depends in large part on the habitat provided by the Tongass National Forest.”).

A. The Wolf

The wolf is a rare subspecies of gray wolf endemic to Southeast Alaska, and the population on POW is genetically isolated from other populations. *See* Ex. 25, at 157.⁶ Due to its small population, and coupled with the fact that it exists in a naturally fragmented, insular environment, the wolf is acutely susceptible to the cumulative effects of habitat degradation and road building (which facilitates access by hunters and trappers). *See* Ex. 3, at 17.

The wolf plays an important ecological role as an apex predator. *See* Ex. 19, at 7; Ex. 8, at 3 (“Because of its . . . ecological position as a top-level carnivore, the wolf represents an important umbrella species for maintaining ecosystem integrity throughout its range in Southeast.”). It spends most of its time in low-elevation (below 270 feet) old-growth forests; young second growth and clearcuts are typically avoided. Ex. 5, at 67–68; Ex. 25, at 158. Wolves are social animals that generally travel in packs and actively defend territories from encroachment by other individuals or packs. Ex. 2, at 15. The average home range of wolf packs in GMU 2 is about 300km² (116mi²). Ex. 37, at ¶ 10.

On POW, as in most of Southeast Alaska, the wolf depends heavily on the deer. As the Forest Service acknowledges, “[s]uitable habitats for wolves equate to areas capable of supporting this prey base.” Ex. 9, at 105. Research suggests that the deer comprises a substantial majority of the wolf’s diet. Ex. 19, at 7 (77%); Ex. 2, at 16.

Due to old-growth logging, reductions in deer carrying capacity, and high mortality from legal and illegal harvest, the wolf population on POW is estimated to have declined substantially in recent years. *See* Ex. 30, at ¶ 13. However, the Forest Service does not have a scientifically credible estimate of wolf population numbers region-wide in Southeast, or on POW: “[c]urrent estimates of the wolf population in GMU 2 are lacking[.]” Ex. 25, at 157; *see also* Ex. 30, at ¶ 15 (“No formal wolf population estimations have been conducted since 2004.”). Nor does the Forest Service have an estimate of population trends over time. Ex. 8, at 2. Estimates of habitat capability suggest that in the mid-1990s, the Big Thorne project area had sufficient habitat to support 45–50 wolves, comprising three separate packs and a portion of a fourth pack. Ex. 30, at ¶ 17. In recent years, however, data collected by Dr. Person and

⁵ For many local residents, venison constitutes their only supply of red meat. Ex. 28, at 5.

⁶ *See also* Ex. 9, at 105 (“Recent genetic analyses have shown that wolves on [POW] (GMU 2) are a population segment isolated from all other wolves in Southeast Alaska and coastal British Columbia”).

other scientists indicate that the wolf population in the project area has declined quickly and may have fallen to as few as six or seven individuals. *See id.* at ¶¶ 18–19.

In response to a petition submitted by the Plaintiffs, the U.S. Fish and Wildlife Service (“USFWS”) recently concluded that “substantial scientific or commercial information indicat[es] that listing the Alexander Archipelago wolf [under the Endangered Species Act] wolf may be warranted.” Ex. 33 (79 Fed. Reg. 61 (March. 31, 2014)). USFWS found, pursuant to the Endangered Species Act (“ESA”),⁷ that three of five statutory factors may warrant listing: (1) the present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or education purposes; and (3) the inadequacy of existing regulatory mechanisms. *Id.* The USFWS specifically cited the legacy of past timber harvest and continued logging; unsustainable wolf harvest in areas with high densities of roads; and reduction in deer habitat capability, despite Forest Plan standards, as substantial scientific or commercial information indicating that listing may be warranted. Ex. 34, at 1–9.

In addition to the inextricable link between wolf populations and deer habitat, human take of wolves—both legal and illegal—is a major determinant of wolf viability. Although natural mortality is only about 5%, wolf populations can sustain about 35–38% total annual mortality. Ex. 30, at ¶ 25; *see also* Ex. 25, at 159. Accordingly, total human-caused mortality cannot exceed 30–33% without threatening sustainability of the wolf population. *Id.*

GMU 2 (morth-central POW) consistently has the highest rate of legal (reported) take of wolves. Ex. 8, at 3. Legal harvest in GMU 2 annually removes about 25–30% of the last wolf population estimate; about 50 to 95 wolves are killed and reported each year. Ex. 28, at 13. According to the results of one study, 29 of 32 WAAs in GMU 2 had “unsustainable” harvest rates at least once during the 25 years 1985–2009 (including all WAAs affected by Big Thorne Project, 1315, 1318, 1319, and 1420). Ex. 22, at 20; *see also* Ex. 25, at 159. Of these, 19 had “chronically unsustainable” harvest, *id.*, while 16 exhibited a “high risk of pack depletion.” Ex. 22, at 20. WAAs 1315, 1318, and 1420 fit both these metrics. Ex. 25, at 159. Five WAAs (including 1420) had unsustainable rates in at least 10 of the 25 years, Ex. 22, at 20, while six (including 1420) risked pack in at least five of the years. *Id.* at 21.

Notably however, this study did not take into account illegal/unreported take. *Id.* at 9. Because illegal take and unreported harvest can represent a substantial portion of total annual mortality of wolves, the relative degree of unsustainable harvest reported in the study was underrepresented, and thus on-the-ground conditions are actually worse. *Id.* at 34. Dr. Person has estimated that illegal take may at times equal the legal harvest wolves on Prince of Wales Island and is certainly a substantial percentage of the

⁷ 16 U.S.C. § 1533(a)(1).

wolf population. Ex. 30, at ¶ 26; Ex. 12, at 1, 9.

There is growing concern that expanding road access, particularly on POW, may increase wolf mortality beyond sustainable levels. Ex. 30, at ¶ 26; *see also* Ex. 9, at 105. Road building provides increased access for trappers and hunters, resulting in high levels of wolf mortality from legal and illegal trapping in recent years. *See* Ex. 30, ¶ 13.a. Dr. Person has reported that wolf harvest increased twofold when total road density below 1,200 feet elevation exceeded 0.7 mi/mi². Ex. 2, at 5. Another study found that the “spatial distribution of WAAs with chronically unsustainable harvests and high risks of pack depletion also tend to reflect the distribution of roads on Prince of Wales Island.” Ex. 22, at 30. According to this study’s model, an increase of road density of 0.2 mi/mi² resulted in a 167% increase in a risk of chronic unsustainable harvest. *Id.* at 26.

Logging of deer winter habitat, when combined with the increased access provided by an extensive network of logging roads, is likely to cause a decline in the wolf population because hunters will increasingly targeting wolves to prop up deer populations. “As deer population declines, deer hunters will perceive wolves as competitors and likely seek to reduce their population by legal and illegal means.” Ex. 12, at 1. “Empirical evidence supports the contention that wolf populations become locally extirpated from intentionally focused killing by humans and that hunting/trapping mortality, both legal and illegal, can lead to wolf extirpation in a wide range of situations.” Ex. 39, at 6.

B. The Deer

Sitka black-tailed deer rely on old-growth forest for habitat, particularly during winter when the dense canopy intercepts heavy winter snow. *See* Ex. 25, at 54–55. “The quantity, quality, distribution and arrangement of winter habitat are considered the most important limiting factors for Sitka black-tailed deer in Southeast Alaska.” Ex. 9, at 98. Old-growth forests composed of tall, large-canopied trees are particularly important to deer, and harvest of old-growth habitat therefore directly reduces deer habitat capability. Ex. 2, at 29.⁸

Forests transition through successive stages following clear-cut logging, but ultimately reach a condition known as “stem exclusion” at 20 to 30 years that is largely unproductive for deer. *See* Ex. 28, at 4; *see also* Ex. 25, at 156–57. While short-term benefits may accrue,⁹ they are outweighed by long-

⁸ *See also* Ex. 25, at 337–38 (“The Forest Service acknowledges that high-volume mature forests at low elevations are needed to sustain deer populations during severe winters and that following clearcut harvest, deer populations are impacted by the combination of increased snow accumulation that reduces forage availability and the conversion of winter habitat to young-growth stands.”).

⁹ This is due to the fact that after the forest canopy is removed by logging, “vegetative growth responds to unrestricted sunlight by producing an abundance of forage[.]” *See* Ex. 28, at 7. However, while there may be a significant quantity of forage, it is of much lower quality as compared to the same species of plants grown in the shade. *Id.* (citing Hanley and Mckendrick 1983).

term ecological consequences. Ex. 28, at 4. This phenomenon has been termed “succession debt,” as the full impacts to wildlife—particularly deer—may not be immediately expressed but once established will be sustained for many decades. Ex. 8, at 5. These ultimate, unproductive, year-round habitat conditions may last more than 150 years. Ex. 28, at 7.

Winter snow conditions can have critical effects on deer populations—especially in areas degraded by logging.

During a winter with average snowfall more habitat is available at higher elevations than during years with more severe winters. Increasing snow depths bury more nutritious evergreen forbs and herb-layer shrubs, causing deer to forage more extensively on shrubs and, during deep snow conditions (greater than 30 inches), low quality conifer forage. (White et al. 2009). Deep snow may also confine deer to lower elevations or may isolate deer by precluding movement between patches of old-growth (McNay 1995). Concentrated use of such areas can result in over browsing of forage and ultimately malnutrition and death (Farmer et al. 2006).

Ex. 24, at 16; *see also* Ex. 28, at 9 (“Mortality of deer from malnutrition, disease, and predation is often high during those winters.”). Importantly, in places where deer winter habitat has been degraded, and long-term carrying capacity diminished, deer could be even more susceptible to winter weather. Ex. 5, at 34.

Recovery from stochastic events (i.e., severe winters), and even average winters in areas where winter habitat has been degraded, depends on a number of variables, including the “reproductive potential of the survivors, immigration from other areas, and the numerical response of wolves and other predators (including humans) to declining deer density.” Ex. 2, at 24.¹⁰ In GMU 3, for instance, the deer population crashed during the early 1970s as a result of a series of hard winters. *Id.* Although deer hunting was halted in 1975 and remained closed for 18 years, deer levels today are still at levels far below carrying capacity over most of the GMU. *Id.*

The Forest Service does not have a current estimate of Tongass deer population numbers, and instead primarily monitors the species through a model that projects habitat capability.¹¹ Deer populations in GMU 2 have historically fluctuated, with steep declines following severe winters. *See* Ex. 9, at 150. The Forest Service notes that while population levels in GMU 2 are reported to be at moderate levels, decline is expected. *Id.*

Continued logging is anticipated to result in a decrease in carrying capacity over the long-term due to reductions in the amount of available winter range. In GMU 2 a reduction in

¹⁰ In addition to being the primary prey of the wolf, the deer receives the highest hunting and subsistence use of all terrestrial species in Southeast Alaska. Ex. 9, at 98.

¹¹ This Court recently discussed and analyzed the deer habitat capability model in detail. *Greenpeace et al. v. Cole et al.*, No. 3:08-cv-00162-RRB, 2014 U.S. Dist. LEXIS 136026, at *7–9 (D. Alaska Sept. 26, 2014).

carrying capacity of up to 60 percent has been projected (Porter 2005). This means that over the long-term reductions in habitat capability could cause deer numbers to decline, reducing the number of deer available to wolves.

Id. at 150–51. A recent study designed to estimate the abundance of the deer, and conducted in watersheds affected by the Big Thorne project, estimated a 30% decline in deer density between 2006 and 2008. Ex. 15, at 1; Ex. 30, at ¶ 22.

C. The 2008 TLMP instructs the Forest Service to provide enough deer habitat to support a sustainable wolf population.

Because they depend on old-growth forest habitat, the Forest Service designated both the wolf and deer as MIS in the land management plan. The 2008 TLMP therefore includes specific standards and guidelines that apply to management of the wolf and deer when planning and implementing timber sales.¹² The TLMP outlines a management strategy designed to ensure adequate old-growth habitat exists to sustain viable populations of the wolf and the deer, with specific standards and guidelines (“S&Gs”) governing their management and protection. The centerpiece of wolf-deer management is the TLMP’s conservation strategy, intended to maintain the integrity of old-growth forests.

The strategy—adopted during the 1997 Forest Plan Revision process, and amended as part of the 2008 TLMP—aims to provide core habitats with low road density, maintain wolf harvest within sustainable limits, and provide adequate deer habitat to support an abundant and stable deer population. Ex. 9, at 106. This conservation strategy is based in large part on recommendations set forth in the 1996 Wolf Conservation Assessment prepared for the Forest Service by a team of scientists led by Dr. Person. Ex. 10, at 8.¹³

The strategy centers on two components. The first is retention of intact, largely undisturbed habitat, called Old-growth Reserves (“OGRs”). *See* Ex. 10, at 8. It is important to note, however, that the OGRs do not necessarily support the best, or most productive habitat. Low-elevation, larger tree stands have been disproportionately harvested on the Tongass; in the North Central POW biogeographic province, about 40% of the original high-volume productive old growth (“POG”) has been logged. Ex. 25, at 147.¹⁴

¹² Pursuant to NFMA, the Forest Service developed the Tongass National Forest Land and Resource Management Plan (“TLMP”) in 1979. This original TLMP was amended in 1986 and 1991, and revised in 1997. 2008 amendments to the 1997 TLMP, resulted in the forest plan relevant to this case, the “2008 TLMP.” *See* Ex. 11.

¹³ This conservation assessment is found in the record at AR 736_0302 (Ex. 2).

¹⁴ Old growth forests on the Tongass are classified as either productive or unproductive. POG is generally defined as “old-growth forest capable of producing at least 20 cubic feet of wood fiber per acre per year, or having greater than 8,000 board feet per acre.” Ex. 25, at 145. High-volume POG is a

The second component applies to management of lands where commercial timber harvest and road building is permitted—the “matrix.” On matrix lands, “components of the old-growth ecosystem are maintained by standards and guidelines to protect important habitats and provide old-growth forest habitat connectivity.” Ex. 10, at 8. These managed lands are an integral part of the conservation strategy. As noted in the scientific literature, “conservation strategies that focus primarily on systems of habitat reserves and roadless patches frequently fail to meet their objectives because they ignore the importance and function of the intervening matrix of unprotected lands.” Ex. 28, at 23. The Forest Service was clear in 2008 that the Standards and Guidelines that apply to matrix lands are essential pieces of the conservation strategy for ensuring the sustainability of wolf populations over the long term. *See* Ex. 10, at 38 (noting that deer habitat capability was the most important factor influencing viability ratings); *id.* at 62.

Standard and guideline WILD1.XIV.A.2. sets the following requirements for the matrix:

Provide, where possible, sufficient deer habitat capability to first maintain sustainable wolf populations, and then to consider meeting estimated human deer harvest demands. This is generally considered to equate to the habitat capability to support 18 deer per square mile (using habitat capability model outputs) in biogeographic provinces where deer are the primary prey of wolves. Use the most recent version of the interagency deer habitat capability model and field validation of local deer habitat conditions to assess deer habitat, unless alternative analysis tools are developed. Local knowledge of habitat conditions, spatial location of habitat, and other factors need to be considered by the biologist rather than solely relying on model outputs.

Ex. 11, at 35 (emphasis added).

As the Forest Service makes clear, “[t]he 18 deer per square mile is what is generally considered to [sic] necessary to maintain populations of wolves and deer while providing for sustainable harvest by humans and wolves.” Ex. 25, at 336 (citing Person, et al., 1996). As Dr. Person and his team recommended in 1996, “[m]aintaining viable, well-distributed wolf populations ultimately will depend on maintaining habitat to support a relatively well-distributed and stable population of deer [and] [s]hort-rotation clearcut logging of old-growth forests in southeast Alaska will reduced habitat capability for Sitka black-tailed deer.” Ex. 2, at 29. Where habitat capability is lower than the minimum standard, “maintaining deer numbers would reduce long-term risk to wolf viability.” *Id.* at 37. Thus, the best available science emphasizes the importance of maintaining the status quo in heavily degraded habitat.

The TLMP also establishes road density guidelines for the Tongass where road access and associated human mortality has been determined to be a significant contributing factor to locally

classification representing the three highest volume classifications under the Forest Service’s Size Density Model—a tool for mapping POG and assessing impacts to wildlife and habitats. *Id.* at 145–46.

unsustainable wolf mortality. Ex. 11, at 35 (WILD1.XIV.A.1.c). In such cases, “[t]otal road densities of 0.7 to 1.0 miles per square mile or less may be necessary.” *Id.*

PROCEDURAL HISTORY

I. Dr. Person and the U.S. Fish and Wildlife Service raised serious concerns that the Big Thorne project threatened the sustainability of the wolf population, concerns that were not disclosed in the FEIS.

Dr. David Person is the country’s foremost expert on wolf-deer predator-prey ecological communities in Southeast Alaska. *See* Ex. 30, at ¶ 12. He has 22 years of experience studying wolves—in particular, on GMU 2—and has written extensively on deer and wolves, authoring or co-authoring more than 20 peer-reviewed papers published in scientific journals, three book chapters, and numerous agency reports and publications. *Id.* at ¶¶ 1, 4, 9. Dr. Person worked for the ADF&G for 14 years, researching wolf-deer predator prey dynamics in Southeast Alaska. *Id.* at ¶ 3. Dr. Person worked closely with the Forest Service and USFWS to develop the wolf conservation strategy adopted by the 1997 TLMP, and was the senior author of the 1996 Wolf Conservation Assessment, which formed the basis for TLMP revisions with respect to conservation of wolves. *Id.* at ¶ 5. During his career, Dr. Person collaborated with the Forest Service on issues of wolf management, and participated extensively in the Big Thorne Project environmental review process. *Id.* at ¶¶ 6–10.

Beginning February 28, 2011, just after scoping for the Big Thorne project commenced, Dr. Person sent a series of electronic messages to six other ADF&W biologists expressing his concern about the impacts of the Big Thorne project on the wolf. He stated at that time that the “Big Thorne timber sale likely will have consequences for the future viability of the watersheds involved to sustain wolves and deer.” Ex. 17, at 1. He also attached three maps documenting the cumulative impacts to date and the additional impacts of the Big Thorne project on deer winter range, emphasizing the impacts on the Thorne River and Steelhead Creek watersheds. *Id.* He then observed that there “are simply no methods of mitigation that will compensate for that much loss of winter habitat.” *Id.* In sum, Dr. Person concluded, “I doubt that a resilient and persistent wolf-bear-deer-human predator-prey system will be possible within the watersheds affected after the project is completed, if indeed it is still possible as current conditions progress inexorably toward stem exclusion.” *Id.*

On March 14, 2011, Plaintiffs submitted scoping comments on the Big Thorne project, specifically requesting that the Forest Service consult with ADF&G biologists—especially Dr. Person—and carefully review recent scientific literature on prey availability and wolf mortality to understand the potential adverse impacts of additional old-growth logging in GMU 2. *See* Ex. 18, at 12–13.

On October 26, 2012, the Forest Service released the Draft Environmental Impact Statement (“DEIS”) for the Big Thorne project, which failed to disclose any of Dr. Person’s concerns regarding the

impacts of the Big Thorne project. In comments submitted on the DEIS on December 10, 2012, Plaintiffs noted that the Forest Service failed to disclose to the public and consider dissenting scientific opinions and scientific controversy regarding the project's impacts on wolf viability. While ADF&G had withheld Dr. Person's comments from the Forest Service, Plaintiffs obtained this information from the State pursuant to a public records request and submitted those documents to the Forest Service in conjunction with their comments on the Draft EIS. *See* Ex. 20, at 60–71.

On the same day, the USFWS also submitted comments on the DEIS raising similar concerns about impacts to the wolf, in particular because “deer habitat capability [is] already well below the Forest Plan guideline level across the project area * * *.” Ex. 21, at 5. The USFWS thus recommended that “[a]ll of the action Alternatives in the EIS need to minimize potential impacts to Sitka black-tailed deer by avoiding harvest of forest stands that provide important winter habitat * * *.” *Id.* at 5 (emphasis added). And USFWS also stated that “we believe it is inappropriate to rely on, or cite in the Final EIS, wolf immigration as a way to maintain wolves in the project area.” *Id.* at 6.

Following the release of the DEIS but before the release of the Final EIS (“FEIS”), Dr. Person continued to express his concerns regarding the Project's impacts. On April 9, 2013, Dr. Person met with Forest Service officials including Defendant Forest Supervisor Forrest Cole and representatives from the USFWS. *See* Ex. 30, at ¶ 9. At that meeting, Dr. Person emphasized that the existing condition of the Project area was degraded as a result of past logging and road building, and that to protect wolves and deer, the Forest Service should focus on preserving the remaining deer winter habitat. *Id.* During the same period, Dr. Person also communicated directly with other Forest Service personnel, including Brian Logan, a Forest Service Wildlife Biologist, through email and phone conversations. *Id.* at ¶ 10. Dr. Person again expressed his scientific opinion that the Big Thorne Project would threaten the viability of the wolf on POW. *Id.*

When the agency issued its FEIS and Draft Record of Decision (“ROD”), Dr. Person's expert opinions on the effects of the Project were conspicuously missing. Nor do those documents disclose the opinions and concerns expressed by the U.S. Fish and Wildlife Service. Plaintiffs therefore appealed to the Regional Forester on August 16, 2013. *See* Ex. 27. Plaintiffs asserted that the Forest Service violated NEPA by failing to disclose to the public and respond to Dr. Person's dissenting scientific opinions on the impacts of the Big Thorne Project. *See, e.g., id.* at 110–12. As Plaintiffs noted in their appeal, “[W]hile ADF&G appears to have suppressed that information, the Forest Service, once it was provided with those responsible scientific opinions, was under an obligation to disclose that information to the public prior to making a decision on the project.” *Id.* at 111.

The Forest Service, in its Answer, concedes that Dr. Person communicated his concerns about the

effects of the Big Thorne project to the agency during the administrative process. Importantly, the Forest Service also concedes that neither the DEIS nor the FEIS “respond directly” to the dissenting opinions of Dr. Person regarding the impacts of the Big Thorne project on viability of the wolf. Dkt. #1 (Complaint), Dkt. #25 (Answer) ¶ 108 (DEIS), ¶ 116 (FEIS). Rather, the Forest Service asserts that it discussed “other scientific work developed to date by Dr. Person.” *Id.*

Because of these shortcomings in the NEPA documents for the Big Thorne Project, in conjunction with their appeal, Plaintiffs included a detailed statement prepared by Dr. Person, explaining his scientific opinions regarding the effects of the Big Thorne Project. *See* Ex. 37. Specifically, Dr. Person noted that the effects of the Big Thorne Project, when combined with the effects of other logging on POW, will likely be the collapse of a sustainable and resilient predator-prey ecological community. *Id.* at ¶ 11. As Dr. Person advised,

I wrote this statement because I have concluded that the Big Thorne timber sale, if implemented, represents the final straw that will break the back of a sustainable wolf-deer predator-prey ecological community on Prince of Wales Island, and consequently, the viability of the wolf population on the island may be jeopardized.

Id. at ¶ 13.

II. The Forest Service addressed Dr. Person’s dissenting scientific opinions in a Supplemental Information Report and refused to supplement the FEIS.

In response to Plaintiffs’ appeal on September 27, 2013, the Appeals Reviewing Officer noted that “recent reports, including the Person statement . . . demonstrate a localized decline in wolf numbers, and incompletely understood processes including wolf immigration and direct mortality attributed to hunting and trapping create uncertainty regarding the sustainability of wolf populations that utilize the Big Thorne project area.” Ex. 31, at 72. The Regional Forester, in her Appeals Decision, agreed that the opinions expressed by Dr. Person’s opinion constituted “new information that I cannot ignore.” Ex. 32, at 1. Accordingly, and despite upholding the FEIS and ROD, the Regional Forester directed the Forest Supervisor to convene an Interagency Wolf Task Force (“WTF”) to evaluate Dr. Person’s statement to evaluate whether it presented significant new information, and to prepare a Supplemental Information Report (“SIR”). *Id.* at 2.

Participants in the WTF included six scientists from three agencies—the Forest Service, the USFWS, and the ADF&G. Ex. 39, at 1. Within a very short timeline, the WTF prepared a report evaluating Dr. Person’s appeal statement, based on discussions from a two-day meeting and follow-up correspondence. There formed a significant division between members of the WTF regarding Dr. Person’s opinion on whether the Project would threaten wolf viability. *See id.* at 4; *see also* Ex. 36, at 1 (USFWS comment on Draft SIR, explaining that there were “disagreements among members of the [WTF] on the risks to wolves posed by the Big Thorne Project.”). Specifically, the two representatives

from the Forest Service could not agree with each other on central conclusions of the WTF. While one Forest Service representative (Greg Hayward) and the two ADF&G representatives expressed their opinion that Dr. Person's conclusions regarding the ecological collapse of the predator-prey system was not supported, the other Forest Service representative (Brian Logan) and the two USFWS representatives believed that uncertainty remained and that there is some risk of collapse if management agencies do not protect deer winter habitat and restrict wolf harvest to a sustainable level. Ex. 39, at 14.

Plaintiffs commented on the WTF Report and the Draft SIR prepared by the Forest Service, which assessed the conclusions of the Report pursuant to the agency's NEPA duties. *See* Ex. 35. The USFWS also commented, asserting that the Draft SIR was "misleading" and specifically pointing out their disagreement with the Forest Supervisors' conclusion that "none [of the WTF members] definitively agreed with the final conclusions in the (Person) Statement." Ex. 36, at 1. Rather, the USFWS noted that it could not rule out the possibility that viability of wolves on POW would be jeopardized by implementation of the Project. *Id.* at 2.

Dr. Person also submitted a review of and rebuttal to the Report and Draft SIR, commenting on the position of Dr. Hayward and ADF&G, which ignores critical information and the best available science. *See* Ex. 37. Significant points he raised include: (1) the failure to account for the non-linearity of predator-prey dynamics; (2) the failure to assess actual habitat conditions and sizes of the six of 23 WAAs with deer habitat capability over 18 deer/mi²; (3) misguided assumptions regarding the ability of managers to address wolf mortality via harvest limits; (4) the failure to address empirical evidence that when more than 41% of a wolf home range is roaded or logged, there is a high risk that it becomes a population sink; (5) failure to address concerns over the genetic consequences to wolves in an isolated population that already exhibits low genetic diversity. *See id.* at ¶¶ 6, 8, 10, 18–20, 24–26, 27.

The Forest Supervisor released a Final SIR on August 14, 2014, concluding that there were no new circumstances or information relevant to environmental concerns that require preparation of a Supplemental EIS. Ex. 42, at 27. In particular, he concluded that the issues raised by Dr. Person and assessed by the Task Force "do not represent significant new circumstances or information relative to the cumulative effects on wolves including habitat effects and wolf harvest." *Id.* at 18. Notably, the Final SIR did not respond to any of the dissenting scientific opinions raised by Dr. Person in his rebuttal.

The FEIS, ROD, and Final SIR constitute the Forest Service's final agency action in reviewing and approving the Big Thorne Project. Plaintiffs timely filed suit in this Court.

LEGAL BACKGROUND

I. The National Forest Management Act

NFMA establishes a two-step process for forest planning, with procedural and substantive

requirements. Procedurally, it requires the Forest Service to develop, maintain, and revise forest resource management plans. 16 U.S.C. § 1604(a). The Forest Service must implement each forest plan through site-specific projects. After a forest plan is developed, all subsequent agency actions must comply with NFMA and the governing forest plan. *Id.* § 1604(i).

Substantively, the statute requires that forest plans “provide for diversity of plant and animal communities based on the suitability and capability of the specific land area.” *Id.* at § 1604(g)(3)(B) (the “biodiversity requirement”). As the Ninth Circuit has instructed, the Forest Service is required to “safeguard the continued viability of wildlife in the Forest.” *Idaho Sporting Cong. v. Rittenhouse*, 305 F.3d 957, 961 (9th Cir. 2002). To meet this statutory obligation, the agency selects certain wildlife species in a planning area as MIS. These are species whose population changes are believed to indicate the effects of management activities on other species with similar habitat needs. *Id.* at 962; *see also* Ex. 25, at 141; Forest Service Manual 2631.3. In other words, “[a]n MIS species is a bellwether, or class representative, for other species that have the same special habitat needs of population characteristics.” *Earth Island Inst. v. U.S. Forest Serv.*, 442 F.3d 1147, 1173 (9th Cir. 2006) *abrogated in part on other grounds Winter v. Nat. Res. Def. Council*, 555 U.S. 7 (2008).

The 1982 Forest Service Planning Regulations clarify the diversity requirement: “Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area.” 36 C.F.R. § 219.19 (1983) (the “1982 Rule”); *Ecology Ctr. v. Austin*, 430 F.3d 1057, 1067–68 (2005).¹⁵ A “viable population” is one that “has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area.” 36 C.F.R. § 219.19. At bottom, the agency must ensure that its action does not contribute toward federal listing. Ex. 25, at 141.

II. The National Environmental Policy Act

NEPA is our nation’s charter for protecting the environment. *N. Idaho Comm’y Action Network v. U.S. Dep’t of Transp.*, 545 F.3d 1147, 1153 (9th Cir. 2008) (citation omitted). It prescribes the necessary procedures an agency must undertake to ensure that the “agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of the decision.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). NEPA requires federal agencies to prepare an environmental impact statement (“EIS”) for all “major Federal actions significantly

¹⁵ There is no dispute in this case that the TLMP was adopted pursuant to the 1982. *See, e.g.*, AR 603_1591, at 4-89 (Standard WILD1.II.B); AR 603_1592, at D-51 (citing language from the 1982 Rule as the governing standard in discussing wildlife viability requirements).

affecting the quality of the human environment.” 42 U.S.C. § 4332(C). The EIS “shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1.

“The sweeping policy goals announced in § 101 of NEPA are . . . realized through a set of ‘action-forcing’ procedures that require that agencies take a ‘hard look’ at environmental consequences[.]” *Robertson*, 490 U.S. at 350 (internal citations omitted). A ‘hard look’ includes analyzing all foreseeable direct, indirect, and cumulative impacts. *N. Alaska Envtl. Ctr. v. Kempthorne*, 457 F.3d 969, 975 (9th Cir. 2006). “[G]eneral statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided.” *Or. Nat. Res. Council Fund v. Brong*, 492 F.3d 1120, 1133 (9th Cir. 2007) (citations omitted).

In preparing the FEIS, the agency must “discuss at appropriate points . . . any responsible opposing view which was not adequately discussed in the draft statement and [must] indicate the agency’s response to the issue raised.” *Robertson*, 490 U.S. at 350 n.13 (citing 40 C.F.R. § 1502.9(b)); *see also Earth Island Institute v. Calrton*, 626 F.3d 462, 472 (9th Cir. 2010); *Greenpeace et al. v. Cole*, 2014 U.S. Dist. LEXIS 136026, at 3 (the EIS “must respond explicitly and directly to conflicting views in order to satisfy NEPA’s action forcing requirements”) (quotations omitted)). Indeed, NEPA procedures ensure that “environmental information is available to public officials and citizens before decisions are made and before actions are taken. This information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.” 40 C.F.R. § 1500.1(b). Similarly, agencies must ensure the scientific integrity of the discussions and analysis in the EIS. 40 C.F.R. § 1502.24.

Regulations implementing NEPA further require federal agencies to prepare a supplemental EIS (“SEIS”) if “[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” 40 C.F.R. § 1502.9(c)(1)(ii). The decision whether to prepare an SEIS is similar to the decision whether to prepare an EIS in the first instance. *Marsh v. Or. Nat. Res. Council*, 490 U.S. 360, 374 (1989). The Forest Service will often prepare supplemental information reports (“SIRs”) to determine “whether new information is sufficiently significant to trigger the need for an SEIS.” *Friends of the Clearwater v. Dombeck*, 222 F.3d 552, 555 (9th Cir. 2000) (quoting FSH 1909.15 § 18.1). In determining “significance” the agency must consider both context and intensity. 40 C.F.R. § 1508.27. Context varies depending on the scope of the project, while intensity is measured according to the severity of the impact. *Id.* Factors to be addressed when evaluating a project’s intensity are set forth at 40 C.F.R. § 1508.27, and include whether the action’s effects on environmental quality are

likely to be highly controversial and the extent to which the possible environmental effects are highly uncertain or involve unique or unknown risks. In reviewing an agency’s decision not to prepare an SEIS, a court will carefully review the record and must satisfy itself that the agency has made a “reasoned decision based on its evaluation of the significance—or lack of significance—of the new information.” *Marsh*, 490 U.S. at 378.

STANDARD OF REVIEW

Summary judgment is appropriate where the pleadings and the record demonstrate that “there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” FED. R. CIV. P. 56(c). The Administrative Procedure Act (“APA”), 5 U.S.C. §§ 701–706, governs review of NEPA and NFMA claims. *Or. Nat. Res. Council Fund v. Goodman*, 505 F.3d 884, 889 (9th Cir. 2007).

Pursuant to the APA, the reviewing court shall “hold unlawful and set aside agency actions, findings, and conclusions found to be . . . arbitrary, capricious, or an abuse of discretion, or otherwise not in accordance with law,” or which have been taken “without observance of procedure required by law.” 5 U.S.C. § 706(2)(A)–(D). Agency action should be overturned when the agency has “relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Mtr. Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). Although a court’s review of agency action is deferential, the court must still undertake a “thorough, probing, in-depth review” of the agency’s decision.” *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 415–16 (1971).

ARGUMENT

I. Plaintiffs have standing to bring this case.

Plaintiffs are Cascadia Wildlands, the Center for Biological Diversity (“Center”), Greater Southeast Alaska Conservation Community (“GSACC”), Greenpeace, and The Boat Company. To establish standing, a plaintiff must allege actual or imminent harm to a “legally protected interest,” *i.e.*, injury in fact; “there must be a causal connection between the injury and the conduct complained of”; and it must be likely that a favorable decision will redress the injury. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–61 (1992).⁴

Plaintiffs’ declarants demonstrate their cognizable interests, explaining that they use the Big Thorne project area and that the project would harm their respective recreational, aesthetic, scientific, and spiritual interests. Members of the Plaintiff organizations use and enjoy the old-growth forests and lands

managed by the Forest Service in the Tongass on POW, including in the north-central portion of the island where the Big Thorne project is slated to occur, for hiking, camping, photographing scenery and wildlife, and engaging in other vocational, scientific, and recreational activities and intend to continue these activities into the future. *See* Ex. 44 (Declaration of Don Hernandez); Ex. 45 (Declaration of Joel Hanson); Ex. 46 (Declaration of Natalie Dawson); Ex. 47 (Declaration of Peter Smith); Ex. 48 (Declaration of Rebecca Knight); Ex. 49 (Declaration of Sylvia Garaghty). “[E]nvironmental plaintiffs adequately allege injury in fact when they aver that they use the affected area and are persons ‘for whom the aesthetic and recreational values of the area will be lessened’ by the challenged activity.” *Friends of the Earth v. Laidlaw*, 528 U.S. 167, 180–81 (2000) (citations omitted).

Plaintiffs’ injuries would be redressed by the remedy sought because the FEIS and ROD would be vacated, and the Project remanded to the agency to renew environmental review consistent with NEPA and NFMA. *See Lujan*, 504 U.S. at 572–73 n.7 (1992); *Massachusetts v. EPA*, 549 U.S. at 517–18; *Lemon v. Geren*, 514 F.3d 1312, 1315 (D.C. Cir. 2008) (“[I]f the agency’s eyes are open to the environmental consequences of its actions . . . it may be persuaded to alter what it proposed.”).

Because Plaintiffs’ members have standing, Plaintiffs themselves have organizational standing to bring this case. *See Friends of the Earth*, 528 U.S. at 181 (holding that an “association has standing to bring suit on behalf of its members when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization’s purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit”).

II. Claim 1 - The Forest Service failed to provide a rational explanation for how the BigThorne project provides enough deer habitat to maintain a sustainable wolf population.

The Alexander Archipelago wolf is uniquely dependent on the old-growth forest ecosystem and has been selected as a Management Indicator Species specifically because the status of the wolf is likely to reflect the status of other species that also depend on this same type of habitat. The combined impacts of old-growth logging, a heavily roaded landscape, and high levels of wolf mortality from hunting and trapping have pushed the wolf to the brink of extirpation, not only in the project area, but also in the surrounding old-growth reserves and Prince of Wales Island as a whole. As a result, the wolf population is crashing, although the Forest Service does not know how grave the current situation has become because it does not have adequate estimates of the wolf population. Moreover, there is no dispute that the planned logging would decrease carrying capacity for deer well below 18 deer/mi² at every spatial scale: WAA, Project area, or biogeographic province.

In developing and implementing the 2008 TLMP, however, the Forest Service concluded that 18 deer/mi², set forth in Standard and Guideline WILD1.XIV.A.2, is the minimum carrying capacity

necessary to maintain a sustainable wolf population.¹⁶ See Ex. 11, at 35; Ex. 4, at 8–9. Given the unambiguous requirements of the 2008 TLMP and the overwhelming record evidence documenting the heavily degraded condition of the project area, the Forest Service faces a formidable task in carrying its burden to explain how the project is consistent with the governing forest plan. See *Earth Island Inst. v. Carlton*, 626 F.3d 462, 470 (9th Cir. 2010) (the Forest Service must “explain the conclusions it has drawn from its chosen methodology * * *”) (citations omitted).

As explained in more detail below, the record in this case simply does not support the Forest Service’s decision to authorize this much old-growth logging in an area where the predator-prey relationship is already so clearly out of balance. The Forest Service has not “articulate[d] a satisfactory explanation for its action including a rational connection between the facts found and the choices made.” *State Farm*, 463 U.S. at 43.

A. The Forest Service has not provided a rational explanation for how it can authorize extensive logging in areas that are already below 18 deer/mi² while still ensuring a sustainable wolf population.

As the 2008 TLMP explains, the “[s]tandards and guidelines [in the plan] represent minimum achievement levels” Ex. 11, at 9. Standard and Guideline WILD1.XIV.A.2 plainly states:

Provide, where possible, sufficient deer habitat capability to first maintain sustainable wolf populations, and then to consider meeting estimated deer harvest demands. This is generally considered to equate to the habitat capability to support 18 deer per square mile (using habitat capability model outputs) in biogeographic provinces where deer are the primary prey of wolves.

Ex. 11, at 35 (emphasis added).

Currently, none of the Project area WAAs support 18 deer/mi². Ex. 26, at 30. As the table presented at page 4 of this brief demonstrates, more than 6,000 acres of old-growth logging will combine with the ongoing effects of a legacy of past old-growth logging to push the conditions in the project area even further from the objectives and requirements of the Forest Plan. There is no dispute that authorization of the Big Thorne Project will cause deer habitat capability across Project WAAs to drop further below this 18 deer/mi² threshold.

As the agency explained in the FEIS:

[r]emoval of low elevation POG under all alternatives would reduce the amount of available deer winter habitat capability. Currently, deer habitat capability in all of the Wildlife Analysis Areas (WAAs) coinciding with the project falls below the Forest Plan

¹⁶ As this Court recently noted in *Greenpeace et al. v. Cole*, the 2008 TLMP differs from its predecessor in that the Forest Service is now directed to provide sufficient deer habitat capability for sustaining wolf populations and then meeting harvest demands “where possible.” 2014 U.S. Dist. LEXIS 136026, at *9. The Forest did not assert during the NEPA process that this new proviso materially alters its duty to provide for sustainable wolf population, based on the Big Thorne record.

standard of 18 deer per square mile considered necessary to maintain a sustainable wolf population and meet human harvest demands.

Ex. 25, at 12 (emphasis added); *see also id.* (“Further reductions in deer habitat capability resulting from the action alternatives may result in local declines in the deer population, reducing the number of deer available to wolves and subsistence hunters”); Ex. 26, at 36 (“At the scale of the biogeographic province, the cumulative effect of all alternatives would be the maintenance of approximately 13.9 to 14.0 deer per square mile 25 years after harvest (at stem exclusion).”).

While the narrative language of WILD1.XIV.A.2 provides some discretion for the Forest Service to crosscheck model results using field validation, local knowledge of habitat conditions, and spatial location of habitat, *see* Ex. 11, at 35, there is no evidence in the record or relied upon by the Forest Service that conditions on the ground differ from the dire results the deer model. In fact, all of the available evidence reinforces the deer model results that habitat conditions will be inadequate to support sufficient deer numbers after implementation of the project.

With no dispute that the Big Thorne Project decreases deer habitat capability below 18 deer/mi² across every spatial scale, the agency must explain how it can approve the project consistent with the 2008 TLMP and the requirements of the governing land management plan. 16 U.S.C. § 1604(i); *Earth Island Inst. v. Carlton*, 626 F.3d 462, 470 (9th Cir. 2010). The agency has not done so here, as it has failed to cite any record evidence supporting the conclusion that sufficient deer habitat capability will be provided in project area WAAs to maintain a sustainable wolf population and to meet the needs of subsistence hunters. By failing to provide a rational explanation for how the Big Thorne Project is consistent with the TLMP, the agency has violated NFMA. *Cf. Native Ecosystems Council v. U.S. Forest Service*, 418 F.3d 953, 965 (9th Cir. 2005).¹⁷

¹⁷ In this respect, the present case presents a distinctly different factual and procedural posture than what was at issue in the D. Alaska case involving the Logjam project. *See Tongass Conservation Soc’y (“TCS”) v. U.S. Forest Serv.*, No. 3:010-cv-00006 TMB (D. Alaska Mar. 8, 2010) (Order Denying Plaintiffs’ Motion For Preliminary Injunction), *aff’d* 385 Fed. Appx. 708 (9th Cir. 2010); *TCS v. U.S. Forest Serv.*, No. 3:10-cv-00006-TMB (D. Alaska Sept. 24, 2010), *aff’d* 455 Fed. Appx. 774 (9th Cir. 2010). There, the Ninth Circuit observed that the Forest Service’s approval of a project that would result in less than 18 deer/mi² was “reasonable.” The court expressly noted conflicting objectives of the Forest Plan, use of alternative analyses, and local knowledge of habitat conditions as evidence of reasonableness.

Here, in contrast, the agency has not demonstrated how approving the Big Thorne project that will lower deer habitat capability below the 18 deer/mi² threshold across four WAAs, and the entire north-central POW biogeographic province, in light of alarming evidence of wolf population declines, is a “reasonable” interpretation of the duty to provide for a sustainable wolf population. The agency has simply not provided any rational explanation to support its decision, let alone a “reasonable” one.

B. The Forest Service failed to reconcile its decision to approve the project with recent data indicating a crash in the wolf population in the project area.

While the information on habitat runs directly counter to the agency's decision, the information on actual wolf populations paints an even more dire picture. All of the available evidence, much of it collected by Dr. Person, points to a severe decline in wolf numbers in GMU 2, a trend that appears to be accelerating in recent years. Based on the rapid decline in wolf numbers, the Forest Service, at the time it approved the Big Thorne project, had no reliable estimate of current wolf populations in GMU 2 and further had no idea of population trends over time.

The agency relies heavily in the record on anecdotal evidence of a POW wolf population of 150 wolves in GMU 2. Ex. 25, at 157–58. Even this estimate reflects a population decline of about 50% from the last, scientifically validated and peer-reviewed estimate. See Ex. 30, at ¶ 15. But the record reflects on-the-ground conditions that are likely far worse than the agency accounted for in its analysis. Recent data documents severe declines in local populations and mortality from human harvest far above sustainable levels. All evidence suggests that the population is crashing to levels far below the population assessments in the mid-1990s.

- The estimated population on the POW Archipelago during autumn **1995** was approximately **300–350 wolves**, an extrapolation from smaller study areas and based on aerial counts of wolves in packs containing radio-collared wolves, plus an estimate of potential nonresident wolves derived from rates of dispersal among radio-collared wolves. See *id.* at ¶ 15.
- During **2000–2004**, another formal population estimate of wolves in the same area was **250–300** wolves, again based on aerial counts. *Id.*
- Field reviews conducted during **2009 and 2010** found only **36 fresh scats** in the exact same area where, 15 years prior, 150 scats were collected with much less effort. *Id.* at ¶ 16.
- Likewise, in **2010**, “eleven known, previously used dens of five wolf packs were checked, and **no denning activity was found.**” *Id.*
- Through DNA hair trapping and radio-collaring in autumn **2012**, researchers determined that there were approximately **29 wolves in the Big Thorne project area** and two packs, down from an estimate of 45–50 wolves and three separate packs and a portion of a fourth pack in the mid 1990s. *Id.* at ¶¶ 17–18.
- In the spring of **2013**, before the ROD for the Big Thorne Project issued, the researchers “could only account for **six to seven wolves left in the Big Thorne project area.**” *Id.* at ¶ 19.

The high levels of wolf mortality are a direct result of the legacy of logging and road building in the project area. As deer populations decline, wolves have fewer prey and hunters will increasingly target wolves both legally and illegally to prop up deer populations. *Id.* at ¶ 23. The extensive network of logging roads provides access for hunters and trappers, resulting in high levels of legal and illegal killing

of wolves.

The USFWS, in comments on the Big Thorne draft EIS, specifically noted its concern that “wolf mortality has been excessive across the project area and other areas of [POW].” Ex. 21, at 3. Dr. Person, in his appeal statement, also emphasized the precarious condition of the wolf population in GMU 2 based on his 22 years of research in this area of Prince of Wales Island, and the fact that “[n]o formal wolf population estimations have been conducted since 2004.” Ex. 30, at ¶ 15. Since 2009, Dr. Person was the lead researcher on the present project using new experimental methods to estimate wolf abundance, and it is that scientific effort that provides all of the recent information and data indicating a steep decline in wolf populations. Based on this work, it is entirely possible that wolves are on the very brink of extirpation from the project area. As Dr. Person noted, “wolves are already facing extinction on Prince of Wales Island.” *Id.* at ¶ 31.

Nowhere in the Record of Decision or the FEIS has the Forest Service reconciled its decision to authorize another 6,000 acres of old-growth logging with this available data on the recent severe declines in the wolf population on Prince of Wales Island. Indeed, the very purpose of the 2008 TLMP standard is to ensure a “sustainable population” of wolves, and the MIS program is similarly designed to “insure viable populations” of critical wildlife species that are indicative of the ecosystem as a whole. It is arbitrary for the Forest Service to authorize additional land disturbance without reconciling its decision with the most recent information on steep declines of the population of the very species of wildlife that serve as the bellwether for ecosystem function. *Cf. Native Ecosystems Council v. Tidwell*, 599 F.3d 926, 936 (9th Cir. 2010) (Forest Service’s failure to consider evidence that the sage grouse population continued to trend downward over several decades was arbitrary and capricious).

C. The Forest Service ignored the uncertain and potentially severe effects on actual deer and wolf populations when habitat capability drops below 18 deer/mi².

While the Forest Service ignored the worsening population conditions for the wolf, it also compounded this problem by failing to consider and explain the potentially severe future effects on wolf populations that could result from logging areas of habitat that are already below the 18 deer/mi² threshold in the 2008 TLMP. From a biological perspective, 18 deer/mi² represents a minimum value for habitat conditions, because falling below that threshold can have cascading consequences for actual populations of the deer. As a result, authorizing the further removal of old-growth forest in areas that already fail to provide adequate carrying capacity for deer can have severe and unpredictable effects on actual wolf populations. The Forest Service never squared its decision to approve this project with the degraded condition of the habitat within the project area and these indisputable dynamics of the wolf and deer predator-prey system.

As Dr. Person emphasizes,

if a timber sale project results in deer habitat capability below 18 deer/mi², the likelihood is that predator-prey dynamics will become more erratic and the resilience of deer to predation, hunting, and winter weather is reduced . . . Indeed, an incremental reduction in deer habitat capability likely will result in a much larger effect on the predator prey-system owing to the nonlinear dynamics that characterize predator-prey interactions.”

Ex. 30, at ¶ 34o. The science on this point is clear. *See id.* (citing Person et al. 2001; Person 2001; Bowyer et al. 2005; Person and Brinkman 2013 to support the proposition). Once the system is out of balance—once the carrying capacity for deer drops below the level necessary to meet the needs of both wolves and subsistence hunters—small changes in actual populations of deer can cause much larger changes in the population of wolves.¹⁸ In other words, once carrying capacity drops below 18 deer/mi², there is an adverse nonlinear relationship between carrying capacity for deer and wolf populations.

During the administrative process, the Forest Service stubbornly refused to acknowledge this point, aside from a brief mention in the FEIS that “the deer model assumes a linear relationship between habitat capability and habitat values.” Ex. 25, at 155. This recognition, of course, does nothing to assuage the serious concerns over continued logging of critical old-growth stands below the minimum threshold. And the ROD does not even mention the adverse non-linearity of predator-prey dynamics. Moreover, the fact that an entire biogeographic province’s deer habitat capability is “maintained” well below 18 deer/mi² elevates, rather than alleviates the concern, because the consequences could be much more broad, impacting a greater proportion of the population. The Forest Service failed to consider an important aspect of the problem—*i.e.*, the potentially severe impact on populations of the deer and wolf that may result from logging in areas that are already below 18 deer/mi² carrying capacity. *See The Lands Council v. McNair*, 537 F.3d 981, 994 (9th Cir. 2008) (en banc) *overruled in part on other grounds*, *Winter v. Nat. Res. Def. Council*, 555 U.S. 7 (2008) (“The Forest Service must support its conclusions that a project meets the requirements of the NFMA and relevant Forest Plan with studies that the agency, in its expertise deems reliable . . . We will conclude that the Forest Service acts arbitrarily and capriciously . . . when the record plainly demonstrates that the Forest Service made a clear error in judgment in concluding that a project meets the requirements of the NFMA and relevant Forest Plan.”).

D. The Forest Service ignored the inadequate habitat conditions for wolves in areas predicted to serve as source populations.

Instead of acknowledging the current state of the wolf population and the potentially severe

¹⁸ Specifically, research suggests that “deer will decline disproportionately to the decay of *K*” [*K* is carrying capacity]. Thus a small change in *K* may precipitate a large change in deer numbers . . . Consequently, net annual recruitment of deer, which represents the portion of a deer population that can be removed by predators and hunters without causing a decline in the population is reduced disproportionately to the decline in *K*.” Ex. 5, at 96–7.

effects of continued old-growth logging in heavily degraded habitat, the Forest Service falls back on a theory that conflicts with all of the available data in the record as well as the entire premise of the conservation strategy of the 2008 TLMP. More specifically, the Forest Service assumes that nearby WAAs and adjacent old-growth reserves would provide a “source” population of wolves to prop up a sustainable population in the Big Thorne project area. *See* Ex. 26, at 31, 34. With this assumption, the agency not only has entirely failed to consider an important aspect of the problem, but has offered an explanation that runs counter to the evidence, and is so implausible that it cannot be ascribed to a difference in view or product of agency expertise. *State Farm*, 463 U.S. at 43.

The ROD asserts that “[w]olves are highly mobile within their territories and nearby WAAs with higher deer densities (e.g., WAAs 1323 and 1332) would continue to support wolves in the vicinity of the project.” Ex. 26, at 34. This assertion is erroneous and misleading without even having to resort to a review of habitat conditions. Indeed, WAA 1332 has a *current* habitat capability of 12.44. Ex. 23, at 4. Why the agency believes this WAA can serve as a “source” population is entirely unclear. Perhaps in an attempt to resolve this discrepancy, the Appeals Reviewing Officer pointed to other WAAs on POW that support 18 deer/mi², but stopped short of assessing their location, habitat conditions, and relative sizes. Ex. 31, at 69.

While the fact that the agency offered no support for its assumption that “nearby WAAs” provide sufficient habitat capability is itself fatal to the agency’s conclusion, *see State Farm*, 463 U.S. at 43 (agency must provide a satisfactory explanation to support its decision), field validation, local knowledge of habitat conditions, and spatial location of habitat sheds further light on the inadequacies of the agency’s assumption. Dr. Person took the opportunity to provide the analysis the Forest Service failed to conduct, and found entirely inadequate habitat conditions on the WAAs the agency assumed could support—without any site-specific analysis—a sustainable wolf population and predator prey system given conditions elsewhere on POW. As he explained in detail:

[f]or example [WAA] 1323 is mostly muskeg scrub, habitat that is poor for deer and thus not likely to sustain a resilient population capable of supporting wolves (and deer hunters). [WAA] 1526 is mostly a combination of muskeg scrub with alpine and subalpine landscapes that are poor winter habitat for deer. [WAA] 1532 is a collection of more than 100 small islands, and all the larger islands have already been logged extensively.

Ex. 37, at ¶ 9.

Dr. Person also highlighted the respective sizes of the WAAs relied upon by the agency, noting that only one is comparable to the size of a wolf pack home range (*i.e.*, 300 km²). *See id.* at ¶ 10. WAAs 1323, 1525, 1527, and 1531 are only about half of that size. *See id.*; *see also* Ex. 23, at 2. Dr. Person further pointed out anticipated transfers of land to Sealaska Corporation, exchanges that will convert NFS

lands to lands that will be logged under state rules (and which the Forest Service assumes through the deer habitat capability model will have zero habitat capability). *See id.* at ¶ 11. Moreover, the isolated location of these WAAs further undermines the agency’s “source” population assumption: these WAAs are nestled in the far corner of POW and separated from the Project area by several WAAs with insufficient deer habitat capability. *See id.* at 21 (figure showing future deer habitat capability).

Accordingly, had the Forest Service conducted the necessary analysis to confirm its source population theory, the significant flaws would have been abundantly clear. Where record evidence clearly cuts against the agency’s position in any event, the Forest Service cannot credibly rely on “nearby” WAAs to support a sustainable wolf population.

Nor could the Forest Service rely on a nearby old-growth reserve complex (Honker Divide) and wilderness area (Karta Wilderness) as areas that will diffuse the Big Thorne Project’s impacts to the wolf population. *See Ex. 31*, at 70 (Appeal Recommendation, noting that “the proximity of the Honker Divide Large OGR [and] the Karta Wilderness . . . will help assure the persistence of wolf packs that may serve as source populations”); *see also Ex. 25*, at 225 (FEIS, noting that local population persistence in the Big Thorne Project area with insufficient deer habitat capability would rely on dispersal of wolves from surrounding areas).

Importantly, the Forest Service’s position ignores the very premise of the deer habitat capability standard: to provide adequate deer habitat capability in matrix lands. *See Ex. 10*, at 8. Indeed, the conservation strategy in the 2008 TLMP includes two components that are both critical to the conservation of the wolf: 1) preservation of old-growth reserves; *and* 2) protection of deer habitat capability in matrix lands. *See supra* Factual Background, Part II.C. Relying on old-growth reserves to support sustainable wolf populations as justification for a project that results in the degradation of habitat in the matrix to levels far below 18 deer/mi² turns the entire conservation strategy on its head.¹⁹ The Forest Service does not reconcile its decision on the Big Thorne project with its earlier statements when developing the Forest Plan that deer carrying capacity in the matrix must be preserved for wolves. *Cf. Idaho Sporting Cong. v. Rittenhouse*, 305 F.3d 957, 972 (9th Cir. 2002) (“While the Forest Service argues that it is saving a sufficient quantity of R4 old growth from logging in the Lightning Ridge and Long Prong areas, it is not acting according to a forest-wide plan as required by law. It is looking only at two small isolated areas, without any knowledge of the geographic or ecological relationship of stands of R4

¹⁹ *See generally* Ex. 14, at 1 (“[R]esource management practices that maintain or improve the suitability of the matrix are fundamental to the conservation of biodiversity.”); *Id.* at 2 (“Managers must realize that conservation of biological diversity is not primarily a set-aside issue that can be dealt with by reserving or modifying management on 10 or 20% of their landscape; rather, it is a pervasive issue that must be considered on every acre of land that they manage.”).

in the Lightning Ridge and Long Prong areas to the distribution of R4 throughout the Forest.”).

Moreover, the Forest Service has not provided any evidence to support the notion that relying just on reserves would “assure” wolf persistence in the Big Thorne Project area. On a basic level, the agency’s position is incomplete if not misleading where it identifies administrative land use designations but stops short of assessing actual conditions. The fact that an area is administratively closed to logging says nothing about habitat juxtaposition, fragmentation, proximity to or inclusion of roads, and whether the size is adequate for a wolf pack home range.²⁰ Once again, had the agency attempted to provide such support, field validation, local knowledge of habitat conditions, and spatial location of habitat would directly diisolve the agency’s position. The critical evidence in the record the agency ignored includes:

- the fragmented nature of the landscape, *see, e.g.*, Ex. 30, at ¶ 34l. (rebutting the notion that Honker Divide “complex” is a 200,000-acre single reserve because an identified connecting link has been extensively clear-cut logged and it is bisected by a major paved highway);
- on-the-ground habitat conditions, *see, e.g.*, Ex. 37, at ¶ 14 (“The Karta wilderness area is 166 km² [about half the size of an average wolf pack home range] of mostly muskeg scrub land and a big lake”); and
- ability to supply a source population, *see, e.g., id.* ¶ 15 (“The wolves in Honker Divide have been decimated by trappers during the last two trapping seasons.”); Ex. 41, at 21 (email correspondence between ADF&G and Forest Service, noting that “[t]he Honker and Logjam packs will likely have no recruitment this year due to mortality of both alpha females”).

The Forest Service made no effort to reconcile its “source pack” theory with existing scientific information on the quality of habitat and the status of wolf populations in those areas of the Tongass. Had the agency taken the requisite next step of actually assessing this record information, it would have seen the fundamental flaw of its theory. Indeed, the wolves occupying Honker Divide “are at great risk.” Ex. 37, at ¶ 15. One of the packs in the area “is so small [that] it appears to be struggling to raise a successful litter of pups,” while the larger pack’s two breeding females were killed last year. Ex. 30, at ¶ 18. Moreover, Dr. Person notes that during his 22 years of wolf research in GMU 2, he “never once detected a wolf pack permanently occupying the Karta wilderness area. It was a borderland between two adjacent packs” Ex. 37, at ¶ 15.

The flawed logic of the source pack theory is underscored by the fact that the USFWS explicitly rejected the Forest Service’s position that it can comply with the TLMP’s deer habitat capability standard by relying on “source” populations. In comments submitted on the draft EIS, the USFWS observed that the Forest Service appeared to suggest that “the project area’s failure to meet the Forest Plan standard of 18 deer per square mile may be mitigated by factors not considered by the standard, including

²⁰ Interestingly, the Forest Service does not take the position that Honker Divide and Karta Wilderness are even areas that support at least 18 deer/mi².

immigration of wolves dispersing from adjacent source populations, young-growth management to benefit deer, or road management to limit hunter access.” Ex. 21, at 6. The USFWS went on to explain:

[w]e believe that the Forest Plan standard already fully accounts for dispersal ability of wolves, particularly as the project area includes the Honker Divide Large Old Growth Reserve, which provides much of the deer habitat capability remaining in the area. Regardless, dispersing wolves on [POW] have been shown to be particularly vulnerable to harvest, which [sic] annual survival of 16 percent, compared to 65 percent survival of resident wolves (Person and Russell 2008, p. 1547). Therefore, we believe it is inappropriate to rely on, or cite in the Final EIS, wolf immigration as a way to maintain wolves in the project area.

Id.

The Forest Service’s “source population” theory is flatly inconsistent with the 2008 TLMP and the agency’s earlier statements on the best available science as it relates to conservation of the wolf. As the Ninth Circuit has made clear:

Our scope of review does not include attempting to discern which, if any, of a validly-enacted Forest Plan’s requirements the agency thinks are relevant or meaningful. If the Forest Service thinks any provision of the [relevant Forest Plan] is no longer relevant, the agency should propose amendments to the [Forest Plan] altering its standards, in a process complying with NEPA and NFMA, rather than discount its importance in environmental compliance documents.

Native Ecosystems Council v. U.S. Forest Serv., 418 F.3d 953, 961 (9th Cir. 2005).

III. Claim 2 - The Forest Service failed to disclose and consider information on the direct, indirect, and cumulative effects of the project on the wolf population.

In addition to these substantive violations, the Forest Service also failed to fully and fairly disclose and analyze the potential adverse consequences of the Big Thorne project on wolf populations in the project area and on Prince of Wales Island. In particular, the Forest Service in the FEIS did not respond explicitly to Dr. Person’s dissenting scientific opinion regarding the impacts of the Big Thorne project on the viability of the wolf on POW. Not only did the agency fail to respond to Dr. Person’s significant concerns over the Project’s impacts, the agency failed to substantiate its assumptions by disclosing and considering scientific evidence on the significant threats to wolf viability that result from additional logging in areas that already fail to provide for a deer habitat carrying capacity of 18 deer/mi². These were significant failures given the agency’s manifest NEPA duty to fully disclose to the public and analyze the direct, indirect, and cumulative effects of the Project. In discharging this duty the agency must both (1) disclose scientific controversy, and (2) ensure the scientific integrity of its analysis. By not doing so, the Forest Service here failed to take the required hard look.

A. The FEIS does not disclose and respond to the dissenting scientific opinions of Dr. Person and the U.S. Fish and Wildlife Service.

From the inception of the Big Thorne Project, Dr. Person expressed his grave concerns about the

Project's impacts on the resilience of a predator-prey ecological community on POW. The Forest Service, however, failed to disclose this responsible opposing view in its EIS. This failure was fatal to the agency's analysis and decision. *See WildWest Inst. v. Bull*, 547 F.3d 1162, 1171 (9th Cir. 2008). Indeed, NEPA requires that the agency in the draft EIS make every effort to disclose and discuss at appropriate points in the document all major points of view on the environmental impacts of the alternatives, including the proposed action. 40 C.F.R. § 1502.9(a). In the FEIS, the agency must respond to all comments and discuss at appropriate points "any responsible opposing view which was not adequately disclosed in the draft [EIS] and shall indicate the agency's response to the issues raised." *Id.* § 1502.9(b).

Throughout the administrative process, Plaintiffs identified the discrepancies between the Forest Service's unsupported assumptions about the project's impacts and Dr. Person's deliberate input, based on decades of experience. In scoping comments, Plaintiffs urged the Forest Service to solicit and take into consideration input from ADF&W biologists, including the ADF&W's "expert on Alexander Archipelago wolves." Ex. 18, at 12. Nevertheless, the draft EIS did not disclose Dr. Person's "major point of view on the environmental impacts" of the project, and there is no evidence that the Forest Service actively sought out Dr. Person's critical input for the draft document, in contravention of 40 C.F.R. § 1502.9(a).

To the extent that Dr. Person's opinion was withheld from the Forest Service through the State of Alaska's "One Voice" policy,²¹ Plaintiffs remedied the situation by systematically providing the Forest Service comments on the DEIS that included Dr. Person's detailed statements—made before publication of the DEIS—on the Project's serious consequences for the viability of the POW wolf population. *See, e.g.,* Ex. 20, at 60–71. For example, Plaintiffs highlighted Dr. Person's observation that "[i]t is difficult to recommend any scoping changes other than simply reconsider the whole sale, because it will remove the best remaining old-growth in every watershed touched by the project." *Id.* at 73 (emphasis added). Indeed, the USFWS shared the same view, stating that "[a]ll of the action Alternatives" must minimize threats to the wolf by "avoiding harvest of forest stands that provide important winter habitat [for deer] * * *." Ex. 21, at 5. Both Dr. Person and the USFWS agreed that any further logging of low elevation, old-growth that provides essential winter habitat for deer threatens the sustainability of the wolf population.

The FEIS, however, patently failed to respond to and discuss Dr. Person's responsible opposing view and the views of the USFWS, or indicate the agency's response to the issues raised. 40 C.F.R. § 1502.9(b). The Forest Service admits as much: "the FEIS did not respond directly to Dr. Person's recent conclusions that the Big Thorne Project would threaten the viability of the Alexander Archipelago

²¹ It must be noted, however, that the record reflects that Dr. Person did participate in meetings with the Forest Service—including the Forest Supervisor—and engaged in informal correspondence with Forest Service personnel. *See, e.g.,* Ex. 30, at ¶ 9, 10.

wolf population on Prince of Wales Island” Complaint (Dkt. #1) and Answer (Dkt. #25) at ¶ 116. This was a direct violation of NEPA because the EIS “must respond explicitly and directly to conflicting views in order to satisfy NEPA’s procedural requirements.” *Earth Island Inst. v. US Forest Serv.*, 442 F.3d 1147, 1172 (9th Cir. 2006), *abrogated in part on other grounds, Winter v. Nat. Res. Def. Council*, 555 U.S. 7 (2008). Moreover, as the Ninth Circuit has instructed, the disclosure requirement “obligates the agency to make available to the public high quality information before decisions are made and actions taken.” *Ctr. for Biological Diversity v. U.S. Forest Serv.*, 349 F.3d 1157, 1167 (9th Cir. 2003) (citing 40 C.F.R. § 1500.1(b)) (emphasis added).

The FEIS does conclude that the Project “has the potential to result in localized declines in the deer population, and thus the prey base for wolves. At project completion (all alternatives), none of the project area WAAs (all land ownerships included) would support 18 deer per square mile, though none of them do currently (Table WLD-26).” Ex. 25, at 224. The FEIS also notes that project area WAAs would not be able to support local populations (*i.e.*, they would be “population sinks”) without dispersal of wolves from surrounding areas (“source populations”). *Id.* at 225, 284. Yet nowhere does the FEIS analyze the consequences of reducing deer habitat capability further below the minimum threshold the agency itself set, based on Dr. Person’s expert opinion. *Contra Pac. Coast Fed’n of Fishermens’s Ass’ns v. Nat’l Marine Fisheries Serv.*, 482 F. Supp. 2d 1248, 1243 (W.D. Wash. 2007) (“NEPA requires that the agency candidly disclose in its EIS the risks of its proposed action, and that it respond to adverse opinions held by respected scientists.”) (citations omitted). Nor does the FEIS resolve the glaring issue of local population persistence as being a harbinger of the persistence of the POW wolf population.

Instead, the agency offered vague projections (without providing any supporting analysis) about wolf immigration, the appropriate spatial scale of analysis, and mitigation measures. Not only are these conclusions unsupported, they stand in direct contrast to information the agency had in front of it, based on Dr. Person’s extensive research on the subject. In comments submitted on the draft EIS, Plaintiffs highlighted Dr. Person’s credible scientific opinion directly rebutting all of these assumptions.

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	FINAL EIS	DR. PERSON
On “mitigation”	“Benefits to wolves in the project area would be provided indirectly (by improving habitat for deer) through young-growth management.” Ex. 25, at 234.	“There are simply no methods of mitigation that will compensate for that much loss of winter habitat.” Ex. 17, at 1.
On the appropriate spatial scale for the deer density guideline	“Moreover, the intent of this guideline was to apply to a larger spatial scale (i.e. multiple WAAs or biogeographic province).” Ex. 25, at 224.	“What spatial scale should the deer density guideline be applied? <u>Conclusion 5</u> : 300 km ² – average size of wolf pack home range.” Ex. 6, at 17.
On wolf immigration sustaining the BT population	“Wolves are highly mobile within their territories and nearby WAAs with higher deer densities (e.g. WAAs 1323 and 1332) would continue to support wolves in the vicinity of the project.” Ex. 25, at 224.	“I doubt that a resilient and persistent wolf-bear-deer-human predator-prey system will be possible within the watersheds affected after the project is completed, if indeed it is still possible as current conditions progress inexorably toward stem exclusion.” Ex. 17, at 2.
On non-development lands sustaining BTP area wolves	“[P]ortions of the larger landscape surrounding the Big Thorne Project area would continue to provide sufficient deer habitat to maintain a sustainable wolf population.” Ex. 25, at 225.	“TLMP does not assume that adequate habitat is maintained only in nondevelopment lands . . . [R]eliance on habitat reserves is often a recipe for failure and . . . the matrix of managed lands between reserves is critical to successful conservation. Ex. 17, at 7.

As these examples make clear, the dissenting scientific opinion of Dr. Person, who “knows [the Big Thorne Project area] ecosystem as well as anybody working here and who has worked in that system doing research on that system for almost 20 years,” Ex. 37, at 13–14, was not included in the FEIS. Moreover, the agency’s conclusions stand in direct contrast to Dr. Person’s informed scientific perspective, presented to the agency before the publication of the FEIS. An agency does not take the requisite “hard look” where it does not assess and consider “comments received during the NEPA process and to respond to such in its Final EIS.” *W. Watersheds Proj. v. Kraayenbrink*, 632 F.3d 472, 493 (9th Cir. 2011); *see also Ctr. for Biological Diversity v. U.S. Forest Serv.*, 349 F.3d 1157, 1167 (9th Cir. 2003) (“Because the commenters’ evidence and opinions directly challenge the scientific basis upon which the Final EIS rests and which is central to it, we hold that [the agency was] required to disclose and respond to such viewpoints in the final impact statement itself.”).

In their appeal, Plaintiffs again reiterated Dr. Person’s dissenting scientific opinion, noting in particular Dr. Person’s observation that the Big Thorne Project will “‘remove the most important winter habitat for migratory deer in the watershed’, and that the project will ‘likely have consequences for the future viability of the watersheds involved to sustain wolves and deer,’” and Dr. Person’s overall conclusion, “‘I doubt that a resilient and persistent wolf-bear-deer-human predator-prey system will be

possible within the watersheds affected after the project is completed.” Ex. 27, at 111 (citing Person comments). To drive home Dr. Person’s opinion, and highlight the agency’s failure to account for it in the FEIS, Plaintiffs submitted along with their appeal a written statement from Dr. Person summarizing his consistent position—based on decades of research and peer-reviewed publications on the wolf population in SE Alaska and on POW—that the Big Thorne timber sale “represents the final straw that will break the back of a sustainable wolf-deer predator-prey ecological community on Prince of Wales Islands, and consequently, [that] the viability of the wolf population on the island may be jeopardized.” Ex. 30, at ¶ 13.

The Appeals Reviewing Officer (“ARO”) attempted to fill the holes of the agency’s disclosure by vaguely referencing the fact that “issues similar to those raised by Dave Person in his August 2013 Statement . . . were acknowledged and considered prior to the Big Thorne decision.” Ex. 31, at 71. She asserted that, “[p]ublic comments, including those of dissenting scientific opinion, are part of the project record and were considered in the final decision [ROD, p. 4].” *Id.* at 72. The ROD in turn states that the Forest Supervisor, in making his decision, considered “[p]ublic comments received for this project regarding issues such as wildlife habitat, subsistence, cumulative watershed effects, and economics.” Ex. 26, at 10. Nowhere, however, does the ARO discuss where in the EIS the Forest Service discloses and responds to the dissenting scientific opinions of Dr. Person as required by NEPA’s action forcing procedures. *Contra McNair*, 537 F.3d at 1001 (“[T]he Forest Service must acknowledge and respond to comments by outside parties that raise significant scientific uncertainties and reasonably support that such uncertainties exist.”).

The Forest Service’s position in defense of the FEIS’s failure to disclose and respond specifically to Dr. Person’s dissenting scientific opinion seems to be that the agency implicitly assessed Dr. Person’s opinion vis-à-vis the agency’s overall analysis of Dr. Person’s scientific work generally. That position of course stands in direct contrast to NEPA regulations. As the Ninth Circuit has noted, when an agency solicits public comment, “and then offers no meaningful response to serious and considered comments by experts, the agency renders the procedural requirement meaningless and the EIS an exercise in form over substance.” *W. Watersheds Proj.*, 632 F.3d at 492–93 (citing *Metcalf v. Daley*, 214 F.3d 1135, 1141 (9th Cir. 2000)).

B. The Forest Service did not disclose the potentially severe effects of logging in areas of POW that are already below the 18 deer/mi² threshold.

“NEPA requires that a federal agency consider every significant aspect of the environmental impact of a proposed action and inform the public that it has indeed considered environmental concerns in its decisionmaking process.” *The Lands Council v. Forester of Region One of the U.S. Forest Serv.*, 395 F.3d 1019, 1026 (9th Cir. 2005). Here, however, the agency failed to address the consequences of the Big

Thorne project's impacts to the wolf population by further reducing deer habitat capability below the 18 deer/mi² threshold. Thus, the problem with the Forest Service's failure to disclose and consider the responsible opposing opinion of Dr. Person—which specifically addressed these consequences—is that it robbed the public and the decisionmaker of high quality scientific information regarding the severity of project's impacts. In other words, the agency's procedural violation of its duty with regard to dissenting scientific opinion did not exist in a vacuum; rather, it was amplified where the agency hinted at the continued sustainability of the wolf population, but failed to address available scientific information directly rebutting the agency's assumptions.

A centerpiece of NEPA is that high quality information be made available to public officials and citizens before decisions are made and actions taken. 40 C.F.R. § 1500.1(b). "Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." *Id.* Accordingly, the agency must ensure the scientific integrity of the discussions and analysis in the EIS. *Id.* § 1502.24. NEPA's procedural requirements ensure that agencies provide a full and fair discussion of significant environmental impacts and inform decisionmakers and the public of reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment. *Id.* § 1502.1.

Here, the Forest Service failed to fully appraise the consequences to POW wolf viability through the implementation of the Big Thorne project: while it acknowledged reductions in deer habitat capability, it failed to disclose the risks to wolves and deer that results when logging in habitat that already fails to meet 18 deer/mi². *See Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1241 (9th Cir. 2005) ("A hard look does not dictate a soft touch or brush-off of negative effects."). This failure was critical because the agency—through the work of Dr. Person and other scientific information in the record—had all of the information it needed to assess the risks of further degrading old-growth habitat.²²

Record evidence documents that the non-linear cascading consequences of logging in areas that are below the minimum threshold may be especially severe in the project area and GMU 2 in light of existing unsustainable wolf harvest rates and the high-density road network. It is entirely possible that the combined effects of habitat destruction and wolf mortality may lead to the extirpation of wolves in the project area. *See Ex. 30*, at ¶¶ 13d., 31. Yet, the Forest Service did attempt to quantify or even

²² To the extent that an accurate risk assessment here depended on an accurate population estimate, the agency had a duty to acquire the necessary information. *See* 40 C.F.R. § 1502.22(a). "The purpose of an EIS is to obviate the need for . . . speculation by insuring that available data are gathered and analyzed prior to the implementation of the proposed action." *Sierra Club v. U.S. Forest Serv.*, 843 F.2d 1190, 1195 (9th Cir. 1988).

acknowledge the unique risks to the wolf population from targeting the little remaining low-elevation old-growth forest that exists in these watersheds. As Dr. Person’s extensive work demonstrates, however,

[a]s deer numbers inevitably decline on [POW] as a consequence of on-going logging and the still pending succession debt of past logging (Person and Brinkman (2013), subsistence and recreational hunters will perceived competition from wolves for deer. Legal and illegal take of wolves can be predicted to increase as a result, particularly in areas accessible by roads or boats (Person et al. 1996; Person 2001).

Id. at ¶ 23.²³

The basic failure to disclose the unpredictable consequences of logging in areas below the 18 deer/mi² threshold—let alone place in context those consequences in light of unsustainable harvest rates and increased road density—was a critical omission of the agency’s analysis. An agency fails to take a hard look where it does not provide a full and fair discussion of environmental impacts by providing accurate scientific information and responding to expert comments. *W. Watersheds Proj.*, 632 F.3d at 491. Because the Forest Service here did not respond to Dr. Person’s expert predictions about the grave consequences of the Big Thorne project on the wolf-deer-human relationship, or even address the project’s impacts through the lens of accurate scientific analysis, the agency failed to take the required “hard look.”

IV. Claim 3 - The Forest Service violated NEPA’s requirements regarding preparation of Supplemental environmental impact statements.

The information provided by Dr. Person in this case is of profound significance, and the fate of the wolf hangs in the balance. The alarm bells rung by Dr. Person, considered by the Forest Service for the first time in the Supplemental Information Report, warrant the hard look that can be provided only in a proper NEPA document. The Forest Service’s refusal to supplement the Final EIS is arbitrary, capricious and contrary to law.

A. A SIR cannot correct deficiencies in the FEIS

The allowable purpose of a SIR is narrowly limited to the question of whether new information or circumstances are significant. Actual consideration of that information, by contrast, must come in a NEPA document. *See* 40 C.F.R. § 1502.9(c)(4) (supplemental analysis must comply with NEPA procedures); FSH 1909.15, § 18 (“A SIR cannot repair deficiencies in the original environmental analysis or documentation, nor can it change a decision.”); *Idaho Sporting Cong. Inc. v. Alexander*, 222 F.3d 562, 566 (9th Cir. 2000) (“Once an agency determines that new information is significant, it must prepare a

²³ The Forest Service’s failure to adequately account for increasing pressure on wolves is all the more critical where the agency acknowledges that road access is significantly contributing to wolf mortality in Project Area WAAs, Ex. 25, at 160–61; *see also id.* at 12, but failed to explain why increasing total road density above the TLMP Standard and Guideline of 0.7 to 1.0 mi/mi² is consistent with the TLMP. *See* Ex. 11, at 35.

supplemental EA or EIS; SIRs cannot serve as a substitute.”)

The threshold question is whether the information being evaluated is truly new. A SIR is not allowed by law where it addresses information that was known, or should have been known, at the time the EIS was prepared. *Alexander*, 222 F.3d at 567 (holding that “[i]t is inconsistent with NEPA for an agency to use an SIR, rather than a supplemental EA or EIS, to correct” deficiency in earlier EIS with information that agency knew or should have known it needed to provide in the original EIS). Applying that precedent, in *Friends of the Clearwater v. McAllister*, 214 F. Supp. 2d 1083, 1088–89 (D. Mont. 2002), the court ordered the Forest Service to prepare a supplemental NEPA document where the agency attempted to address in the SIR information that it had known prior to the EIS. *Id.* at 1088–89. Judge Molloy did so even though he also found that the SIR would have been substantively adequate in evaluating the issue. *Id.* at 1088–1089. The Montana court noted that agencies are afforded deference on factual matters only where they have followed the correct procedure. *Id.* at 1088–89.

The underlying consideration in such cases is the action-forcing purpose of NEPA. *See Robertson v. Methow Valley Citizens Council*, 490 US. 332, 350 (1989) (NEPA procedures serve action-forcing purpose); *see Alexander*, 222 F.3d at 567 (holding SIRs violated NEPA timing requirements, by reference to NEPA’s “action-forcing” procedures) (citing *Robertson*); *Friends of the Clearwater v. McAllister*, 214 F. Supp. 2d 1083, 1088–89 (D. Mont. 2002) (holding that NEPA analysis “must be prepared early enough so that they can serve practically as an important contribution to the decision-making process and will not be used to rationalize or justify decisions already made” and “bait-and-switch tactic . . . defeats the purpose and intent of NEPA to allow the public opportunity to participate in the decision-making process.”).

Here, the information evaluated in the SIR and by the WTF was known to the Forest Service prior to preparation of the EIS. *See infra* Procedural History, Part I; Argument, Part III. The agency is foreclosed as a matter of law from addressing this information in a SIR, prepared after the decision was made, without supplementing the EIS for the project.

While the Forest Service did afford some public process by posting the draft SIR on a public website and accepting comments from appellants, this approach was recently rejected by a Montana district court. *See Friends of the Wild Swan v. U.S. Forest Serv.*, No. CV 11-125-M-DWM, 2013 U.S. Dist. LEXIS 45488, at *5 (D. Mont. Mar. 27, 2013) (holding that allowing for public comment doesn’t transform a document into a NEPA document); *see also Alexander*, 222 F.3d at 568 (rejecting SIR under NEPA where it was opened to public comment, but not to administrative appeal); 40 CFR § 1502.9(c)(4). Indeed, in this case the SIR ignores the extensive rebuttal provided by Dr. Person during the comment period.

Plaintiffs are mindful of this court’s recent decision in *Greenpeace, Inc. v. Cole*, 2014 U.S. Dist. LEXIS 136026, in particular its observations regarding compliance with NEPA. *Id.* at *26–28. There, the Court explained that it would have deferred to the Forest Service’s judgment, and that use of the SIR was the appropriate course of action under NEPA in those particular circumstances. *Id.* at *28 (citing *North Idaho Community Action Network v. U.S. Dep’t of Transportation*, 545 F.3d 1147 (9th Cir. 2008)). This case, however, is fundamentally different. The order to enforce the judgment on remand in the earlier case involved only a NFMA violation. Here, in contrast, the Forest Service for all practical purposes concedes that it did not address dissenting scientific viewpoints in the original NEPA document. *North Idaho Community Action* is distinguishable for the same reason—it did not involve an agency’s failure to disclose dissenting scientific opinions that were before the agency at the time the FEIS was released. The Forest Service may not remedy its failure to disclose and respond to Dr. Person’s dissenting opinions in the Final Environmental Impact Statement by analyzing that information in a Supplemental Information Report.

B. The Forest Service violated NEPA by failing to apply mandatory significance factors to new information.

To the extent the information addressed by the WTF and discussed in the SIR is truly new (*i.e.*, was not available to the Forest Service before it prepared the FEIS), the agency’s consideration is still arbitrary, capricious and contrary to law.

1. The Forest Service failed to apply the correct regulatory criteria.

The Forest Service did not apply the correct legal standards to evaluate whether the information was significant. The “significance” of new information is evaluated by reference to the context and intensity factors spelled out in CEQ regulations. *Marsh*, 490 U.S. at 374; *see also* 40 C.F.R. § 1508.27(a), (b)(1)–(10) (CEQ context intensity factors for significance). It is the same that is performed when deciding whether to prepare an EIS in the first place. This is generally a low standard. *Klamath-Siskiyou Wildlands Ctr. v. Boody*, 468 F.3d 549, 561–62 (9th Cir. 2006) (holding standard for significance is low); *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1150 (9th Cir. 1998) (same). Notably, it is not Plaintiffs’ burden to establish that significant effects will in fact occur, but rather to raise “substantial questions” whether there will be significant effects. *Boody*, 468 F.3d at 562; *Laflamme v. FERC*, 852 F.2d 389, 397 (9th Cir. 1988).

Here, the Forest Service never explained what test it applied, aside from parroting the regulatory language. *See* Ex. 42, at 25–26. The Forest Service ignores entirely the criteria in the CEQ regulations, which, as discussed below, would have led the Forest Service to the inevitable conclusion that this information must be disclosed to the public in a supplemental NEPA document.

This is not a mere technical failing. The SIR appears to have applied criteria directly contrary to

those required by law. The Forest Supervisor asks himself the question whether, if the No Action alternative were selected, the threats from unsustainable mortality of wolves on Prince of Wales Island would disappear. *Id.* at 3. The answer, of course, is no. But that is the wrong question, because it foreordains the answer, applies an erroneous threshold, and places the burden of proof in the wrong place. The correct question is whether the new information raises substantial questions as to whether the direct, indirect and cumulative effects of the may result in significant effects on the environment. Similarly, the Forest Service attempts to rely on its perception that none of the task force participants wholly agreed with Dr. Person’s conclusion that this sale will be the straw that breaks the camel’s back. *Id.* at 14 (“No one on the Task Force definitively agreed . . .”). Whether they definitively agreed is again the wrong question. The proper test is whether or not substantial questions exist as to whether the project may have significant effects.

When the correct legal test is applied, the information provided by Dr. Person undoubtedly was significant enough to spur the decision-maker to action. *See id.* at 2 (“[t]here are sufficient public concerns to adjust certain aspects”); *id.* at 3 (expressing “hope” that deferred old-growth reserve harvest will contribute to “success of future regulatory changes” in promoting sustainable wolf population); *id.* at 4 (committing to work with State on regulatory changes); *id.* at 5 (acknowledging “critical need” for wolf population data); *id.* at 14 (same); *id.* at 19 (recognizing need to consider regulatory changes). These project changes, and the extensive debate within the WTF, belie the proclaimed belief that the new information is insignificant, or that the issue was correctly resolved in the original EIS.

2. To the extent the information from Dr. Person is new, it is also plainly significant.

When properly analyzed under the criteria laid out in 40 C.F.R. § 1508.27, the information provided by Dr. Person clearly crosses the threshold of significance under 40 C.F.R. § 1502.9(c)(1)(ii). *See Boody*, 468 F.3d, 549, 561 (9th Cir. 2006) (holding that § 1502.9(c)(1)(ii) is an independent threshold). Several of the NEPA context and intensity factors are particularly relevant.

First, the information provided by Dr. Person raises important issues regarding the correct context in which effects occur. *See* 40 C.F.R. 1508.27(a) (“context” factor as to significance). Notably, Dr. Person raises the concern that the proposed action could result in the project area being a population sink, leading inexorably towards extirpation of the wolf from Prince of Wales Island as a whole. Ex. 30 at ¶¶ 8, 13b, 29, 30. These considerations were not analyzed in the FEIS. Ex. 39 at 21, 23 (FEIS doesn’t directly analyze population sink). Additionally, information has come to light showing the importance of analyzing effects by reference to wolf pack home ranges. *See* Ex. 30 at ¶ 8 (OGR size, 40% home range logged = population sink); *id.* at ¶ 9 (OGRs inadequate because they are too small to support a wolf home range); *id.* at ¶ 30. Dr. Person, with his unmatched knowledge of area wolf packs, has carefully explained

why the FEIS analysis is inadequate by failing to analyze effects at correct scales.

A second important significance factor is “the degree to which the effects . . . are likely to be highly controversial.” 40 C.F.R. § 1508.27(b)(4); *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1240 (9th Cir. 2005) (explaining the “substantial dispute” standard); *Friends of the Wild Swan v. U.S. Forest Serv.*, 875 F. Supp. 2d 1199, 1216 (D. Mont. 2012) (“A substantial dispute exists when evidence . . . casts serious doubt upon the reasonableness of the agency’s conclusions”). The new information here shows such controversial effects. The WTF process itself highlights the controversy. Remarkably, the WTF as a whole, and the Forest Service’s own staff, split right down the middle on the core issue of whether or not there was a wolf viability and sustainability concern related to the proposed action that warranted a closer look. *See e.g.*, Ex. 39, at 9–10 (Logan and USFWS finding Person’s scenario plausible); Ex. 36, at 1 (describing the draft SIR’s representations as “misleading”). These differences are important. Ex. 37, at ¶ 28 (noting the significance of the fact that the most experienced members of WTF showed the most concern for the wolf).

Another important significance factor is the “degree to which the possible effects . . . are highly uncertain or involve unique or unknown risks. 40 C.F.R. § 1508.27(b)(5); *See Ctr. for Biological Diversity v. U.S. Forest Serv.*, 349 F.3d 1157 (9th Cir. 2003). First and most striking is the lack of any wolf population data, making almost every conclusion regarding effects on wolf sustainability or viability highly uncertain. *See* Ex. 37, at ¶¶ 18–19, 21; Ex. 42, at 9, 18–20; *see also* 40 C.F.R. § 1500.22 (addressing duty under NEPA to account for and gather missing information). Additionally, what population information is available suggests a population crash, making the need for a valid wolf population estimate even more urgent, and magnifying the uncertainty of predicted effects. *See infra* Part C.II.; Dkt. #25 at ¶ 76 (admitting Forest Service’s view that the recent apparent population decline of wolves creates uncertainty regarding their status); Ex. 25, at 157–58; Ex. 30, at ¶¶ 15–19; Ex. 36, at 3 (USFWS, noting that “wolf mortality has been excessive”). A third source of emerging uncertainty is the predicted interplay between the proposed logging and roadbuilding, decreasing deer populations, and wolf mortality. The Forest Service admits it lacks information regarding whether diminishing deer population would increase wolf hunting. Dkt. #25 at ¶ 91. The WTF Report concedes that “[w]hether residents of POW will increase their harvest of wolves in response to low deer numbers is unknown. * * * We note that understanding this characteristic of the predator/prey system is low and there is modest uncertainty in our conclusion.” Ex. 39, at 10. Turning the NEPA significance factors on their head, the Forest Service attempts to rely on uncertainty to dismiss these considerations. Ex. 42, at 14 (noting “doubt” raised as to Person’s conclusions, and lack of “definite[] agree[ment]”).

Dr. Person’s opinion also implicates cumulative effects under 40 C.F.R. § 1508.27(b)(7). Dr.

Person's conclusion regarding those cumulative effects — that this sale would be the straw that breaks the camel's back — could not be more profoundly significant for conservation of the wolf. Dr. Person identifies additional factors that need to be considered to arrive at a valid conclusion regarding the cumulative effects of the Big Thorne project on the wolf, in particular (1) the importance of deer habitat (2) the role of overharvest; (3) the connections between the deer population, roads, and wolf mortality; (4) efficacy of reliance on game regulations; and (5) the paramount importance of a valid wolf population estimate. *See* Ex. 30; Ex. 37.

Finally, the Forest Service needed to, but did not, consider the significance of the new information under 40 C.F.R. § 1508.27(b)(10) (threatened violations of law). Indeed, the information provided by Dr. Person suggests that the 2008 TLPM is inadequate to ensure the continued viability of the wolf and thus inconsistent with the requirements of the National Forest Management Act.

C. The Forest Service's decision to rely on regulation of wolf killing is arbitrary and capricious.

Finally, even if the Court excuses the Forest Service's failure to apply explicitly the significance criteria from the CEQ regulations, the agency's analysis in the SIR is still arbitrary and capricious. The agency's analysis rests on the effectiveness of game management to prevent unsustainable mortality of wolves, even where adequate deer habitat is not present, critical information regarding the wolf population is missing, and actual evidence shows chronically unsustainable mortality. This approach is unsupported, and unsupportable, by the record.

1. Reliance on hunting and trapping regulations is arbitrary and capricious in the face of inadequate deer habitat.

First, this approach is contrary to the TLMP, and is unsupported by the TLMP conservation strategy. Deer habitat, transportation management and effective game management are all considered essential parts of the conservation strategy for wolves. The Forest Plan EIS explicitly addresses the need for deer habitat and game management to sustain populations. Ex. 9, at 106. The Forest Supervisor's decision here is a radical departure from that understanding, but that change in direction is not even acknowledged, let alone supported by a rational explanation.

Nor could it be. There is no scientific basis for relying on hunting regulation to sustain wolf populations, in the absence of adequate deer winter habitat and deer populations, and in the presence of high road densities. All the evidence demonstrates that wolf viability requires both adequate deer habitat and effective game management. The Forest Service never explains its basis for deciding now that it can sacrifice habitat for the wolf's prey only to fall back on the regulation of hunting and trapping to ensure the sustainability of the wolf populations. The wolf needs food, it needs habitat, and it needs to be protected from overutilization. Ex. 2, at 5

2. The Forest Service ignored critical missing information on the wolf population.

The Forest Service has also failed to set forth a rational connection between its reliance on regulation of hunting and trapping with critical missing information on wolf populations. It is arbitrary and irresponsible to assume that game management can sustain wolf population in the absence of any working estimate of the wolf population.

Information from Dr. Person and others directly contradicts the Forest Supervisor's reliance on hunting regulations, because (1) those regulations hinge on a valid population estimate to be effective, and (2) there is no currently valid population estimate. Ex. 37, at ¶ 18–19, 21. That estimate does not exist, and without it, there can be no rational basis for believing harvest mortality is held below 30–33%, or for drawing any conclusions as to sustainability from harvest numbers. The Forest Supervisor does not seem to have grasped this critical factor. The SIR points to recent emergency closure of wolf hunting after 53 wolves had been reported killed, for example, as evidence that current regulation is functioning. Ex. 42, at 16. But without a wolf population, there is no rational basis for believing that number, as opposed to any other number, represents a sustainable harvest.

Remarkably (and tellingly), the SIR never directly addresses the current wolf population. Logically, the Forest Service conclusion must rest on a belief that the wolf population is currently large enough to be resilient to the negative effect brought about by the proposed action. Ex. 42, at 10 (“the risk . . . to wolf viability is not high”). The problem is that there is no rational basis for that belief, because there is no scientifically valid population estimate.

3. The Forest Service ignored the best available science documenting that illegal harvest in GMU 2 has contributed to unsustainable levels of wolf mortality.

All of the available record evidence documents chronically unsustainable mortality of wolves and a crashing population, directly contradicting the SIR's conclusion. Harvest numbers indicate “widespread, chronically unsustainable” harvest of wolves in the project area, and on Prince of Wales Island more broadly. Ex. 39, at 12; *see also* Ex. 36, at 3 (USFWS comment that current mortality is unsustainable). The Forest Service and State conclusions rest on the assumption that current management keeps human harvest below the 30–33% level. The problem is that the evidence shows the human-caused mortality of wolves regularly exceeds this level and contributes to unsustainable levels – thus the current crash in the wolf population in GMU 2. Mortality the last two years appear to have been on the order of 80% mortality. Ex. 29; Ex. 36, at 3. The harvest cap was set at its current 60 at the same time the State's working estimate of the POW wolf population was 150. Ex. 30, at ¶ 19. That translates to 40% of the population, an unsustainable harvest even before accounting for illegal harvest.

Moreover, in 2008 Dr. Person published a peer reviewed study (Person and Russell 2008) documenting that 16 of 55 (29%) wolves that were studies were killed illegally. Ex. 12, at 6. Combined with 18 wolves that were killed legally, the total annual mortality from hunting and trapping was 34 of 55 wolves (62%). *Id.* The authors concluded that they “observed high rates of illegal harvest indicating that reported harvest substantially underestimated mortality due to hunting and trapping.” *Id.* at 9. These concerns appear to be borne out by recent evidence suggesting that the Prince of Wales wolf population is crashing. See Ex. 29; Ex. 36, at 3. This site-specific knowledge comes on top of abundant evidence that regulating wolf populations through harvest regulation is inherently difficult, especially in remote areas with extensive road access. Ex. 40; see also Ex. 35, at 14 (“experienced wildlife law enforcement officials report that wolf poaching cases are among the most difficult to detect and solve”). The SIR does not address any of this record evidence in concluding that harvest regulation will be effective at preventing unsustainable mortality in the face of decreasing deer winter habitat.

V. Claim 4 - The 2008 Tongass Land Management plan fails to comply with the species viability requirement of the National Forest Management Act.

The National Forest Management Act “requires that the Forest Service adopt regulations specifying guidelines for forest plans.” *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 957 n.1 (9th Cir. 2005) (citing 16 U.S.C. § 1604(g)(3)). Those regulations must include substantive standards that “provide for diversity of plant and animal communities.” 16 U.S.C. § 1604(g)(3)(B). To implement the biodiversity mandate in its governing statute, the U.S. Forest Service promulgated regulations in 1982, which “set forth a process for developing, adopting, and revising land and resource management plans for the Nation Forest System as required by [NFMA].” 36 C.F.R. § 219.1.

Specifically with respect to biodiversity, “[f]ish and wildlife habitat shall be managed to maintain viable populations of existing native * * * vertebrate species in the planning area.” 36 C.F.R. § 219.19.

For planning purposes, a viable population shall be regarded as one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area. In order to insure that viable populations will be maintained, habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area.

Id.

As will be discussed in more detail below, the basic needs of the wolf are well known and have been accepted by the Forest Service since Dr. Person prepared and the Forest Service published the 1996 Conservation Assessment for the wolf. As demonstrated by the Big Thorne project, the 2008 TLMP and the standards and guidelines that apply to management of habitat for the wolf are plainly inadequate to insure viable populations of the wolf within the planning area and, in particular, on Prince of Wales Island. If the Big Thorne project is consistent with the 2008 TLMP, the 2008 TLMP must fail as a matter

of law to comply with the minimum statutory requirements of NFMA.

A. Ripeness and Judicial Review of Substantive Challenges to Land and Resource Management Plans Under NFMA

In *Ohio Forestry Ass'n v. Sierra Club*, 523 U.S. 726 (1998), the Supreme Court held that substantive challenges to forest plans under NFMA are not ripe for adjudication until the Forest Service develops and approves a logging project under that plan that would have site-specific impacts. *Id.* at 734. In particular, the Supreme Court noted that a challenge to the plan could be brought at a later time in the context of a specific timber sale “if the Plan plays a causal role with respect to the future, then-imminent, harm from logging.” *Id.*

Since that time, the Ninth Circuit Court of Appeals has further refined the principles of judicial review that apply in the context of a challenge to a site-specific project and the governing forest plan. *See Sierra Forest Legacy v. Sherman*, 646 F.3d 1161 (9th Cir. 2011) (per curiam). *Sierra Forest Legacy*, like the case at bar, involved a site-specific challenge to a logging project as well as a substantive challenge to the land management plan. *Id.* at 1171. The Ninth Circuit held that the plaintiffs’ claim that the forest plan violated the statute was not ripe unless and until the district court found that the project was in compliance with the forest plan in effect at the time of the site-specific decision. *Id.* at 1194.

The Ninth Circuit noted that there was no majority agreement on the resolution of the NFMA claim, and therefore the holding of the circuit court is not binding authority. *Id.* at 1169 n.1. Nevertheless, the decision in *Sierra Forest Legacy* is relevant for this Court in determining how and when to resolve Plaintiffs’ claim that the 2008 TLMP is inconsistent with the wildlife diversity requirements of the National Forest Management Act. If the Court determines that the Big Thorne project is not consistent with the 2008 TLMP, it would then face a choice on whether to resolve Plaintiffs’ claims against the 2008 TLMP. One option, the one consistent with *Sierra Forest Legacy*, would be to remand the Big Thorne project to the Forest Service for further proceedings without determining whether the 2008 TLMP is inconsistent with the statute. In Plaintiffs’ view, however, it would be appropriate for the Court to resolve their claim against the forest plan even if it also strikes down the site-specific project. That is because the problems with the 2008 TLMP have manifested themselves at the project-specific level, and it is now apparent that the agency interprets the 2008 TLMP in a way that is fundamentally at odds with its statutory obligation to ensure the continued viability of the wolf.

If the Court were to hold that the Big Thorne timber sale complies with the 2008 TLMP, then it would clearly be appropriate for the Court to resolve Plaintiffs’ claim that the 2008 TLMP is not consistent with the statute.

In any event, it may make sense for the Court first to resolve the site-specific claims against the Big Thorne project and then for the parties to submit supplemental briefing on the appropriate disposition

of Plaintiffs' substantive claims against the 2008 TLMP. If the Court strikes down the project, the parties can address at that time whether the claims against the 2008 TLMP remain ripe. If the Court upholds the project, the parties can then provide additional briefing for the Court as to whether the plan, as interpreted by the Court, adheres to the statute.

For now, Plaintiffs provide the following argument as to why the 2008 TLMP does not comply with the wildlife diversity requirements of the National Forest Management Act, 16 U.S.C.

§ 1604(g)(3)(B).

B. The minimum requirements of an effective conservation strategy for the wolf are undisputed.

In 1996, the U.S. Forest Service published *The Alexander Archipelago Wolf: A Conservation Assessment*, and Dr. Person served as the principle author of that study. Relying largely on his own research, Dr. Person articulated several threats to the viability of the wolf. "Projected growth in human population, increasing road access, and the continuing loss and fragmentation of high-quality deer habitat will increase the risk of not maintaining a viable, well-distributed population of wolves in southeast Alaska." Ex. 2, at 5. Moreover, Dr. Person and his team identified the specific area at issue in this case as particularly critical for the viability of the wolf. "The area of most immediate concern is [GMU] 2, including Prince of Wales and Kosciusko Islands." *Id.*

Based principally on Dr. Person's empirical research, the authors of the Conservation Assessment laid out the basic elements of a conservation strategy.

Management actions that address risk to wolf populations include modifying hunting and trapping regulations as necessary, limiting construction of new roads and effectively closing some existing ones, and modifying timber harvest strategies to minimize fragmentation and loss of critical deer winter range. Habitat to support a minimum density of 5 deer per square mile (13 deer/mi²),²⁴ where deer are the primary prey for wolves, would provide for current levels of deer harvest by hunters, trappers, and wolves. In areas less productive for deer, maintaining current densities of deer is particularly important. Setting aside contiguous blocks of habitat within each biogeographic province that are large enough to encompass at least one wolf pack core home range (200 square kilometers [76 mi²]) would markedly increase the likely persistence of wolves, especially if the reserves contain high-quality deer habitat sufficient to support an average density of deer equal to 7 deer per square mile (18 deer/mi²).

Id. at 6.

The scientific credibility of the 1996 Conservation Assessment has never been subject to serious question, and it still forms the basis for the conservation strategy in the 2008 Tongass Land Management Plan, which includes a system of old-growth reserves and standards and guidelines that apply within the

²⁴ This is a density of actual deer, for which a carrying capacity of 18 deer/mi² is necessary, as per Person et al. (1997), Ex. 4, and adopted by the Forest Service. Ex. 11, at 35 (WILD1.XIV.A.2).

matrix of lands that are available for timber harvest. In the FEIS for the 2008 TLMP, the Forest Service again recognized these basic requirements for conservation of the wolf, particularly within the matrix.

Important components of a wolf conservation strategy include providing core habitat with low road density, maintaining wolf harvest within sustainable limits through regulations, and providing adequate deer habitat to support an abundance and stable deer population. Under the current Forest Plan, this is accomplished through standards and guidelines for road density, deer density, and den site buffers with associated timing restrictions.

Ex. 9 at 106. At that time, the Forest Service was operating under certain assumptions regarding the existing wolf population on Prince of Wales Island. “GMUs 2 and 3 support some of the highest wolf densities in the state and populations are thought to be stable in GMU 2 and increasing in GMU 3 (ADF&G 2003).” *Id.* (emphasis added). At that same time, however, the Forest Service conceded that it did not have any scientifically valid estimate of population trends over time. “However, the datasets available for monitoring wolves are insufficient for detecting all but very large changes in the wolf population and are not designed to track trends in the population resulting from changes in their habitat.” *Id.* The standards and guidelines in the TLMP are thus designed to focus on maintaining important habitat characteristics that the Forest Service, based on the work of Dr. Person, determined were necessary to ensure a sustainable wolf population on Prince of Wales Island and in GMU 2.

C. Standard and Guideline WILD1.XIV.A.2 on deer habitat capability fails to ensure a sufficient prey base for the wolf and subsistence hunters within the matrix lands

As the Big Thorne timber sale demonstrates in no uncertain terms, the 2008 TLMP is plainly inadequate to preserve adequate deer carrying capacity within the matrix to ensure a viable population of wolves. As this Court recently discussed, the Forest Service, based on the guidance of Dr. Person, incorporated into the 1997 TLMP a numerical standard for deer carrying capacity of 13 deer per square mile, which was later amended to 18 deer per square mile. *See Greenpeace et al. v. Cole*, 214 U.S. Dist. LEXIS 136026, at 4–5 nn.15–16.²⁵ The standard of 18 deer/mi² was thus carried forward into the 2008 TLMP in standard and guideline WILD1.XIV.A.2.

Without belaboring a point that has already been made many times over through the administrative process and the briefing before this Court, the Big Thorne project will result in deer carrying capacities well below this standard and guideline at every spatial scale used in the FEIS. It has yet to be determined whether the project complies with the plain language of the 2008 TLMP, and the Forest Service will presumably explain in its brief to this Court how it interprets the Forest Plan in a way that allows the Big Thorne timber sale to move forward. The administrative record for the Big Thorne

²⁵ The standard was amended because to achieve actual densities of deer of 13 deer/mi², because Dr. Person demonstrated that the carrying capacity must be 18 deer/mi² to achieve this result. *See* AR Ex. 30, at ¶ 7.

timber sale is less than clear on how the Forest Service interpreted and applied the deer density requirements in the 2008 TLMP.

At the time it approved the 2008 TLMP, however, the Forest Service stated that WILD1.XIV.A.2 was a “standard.” In describing the conservation strategy for wildlife and, in particular, the wolf, the Forest Service described the changes that had been made from the 1997 TLMP:

4. Edited the wolf standard to clarify the use of the deer habitat capability model and standardized this to a habitat capability of 18 deer/square mile. The wolf standard was also changed to direct biologists to consider local knowledge of habitat conditions, spatial location of habitat and other factors rather than solely relying upon model results.

Ex. 10, at 14 (emphasis added).

In other places of the EIS, the Forest Service describes the deer density requirement as a “guideline” and discusses predictions that many WAAs may fall below the 18 deer/mi² level over the life of the forest plan, but it claims this figure is “inflated because many either do not naturally contain much suitable deer habitat or are areas where wolves also prey heavily on species other than deer such as moose, beaver, or mountain goat.” Ex. 9 at 151. At best, the Forest Service provided an inconsistent discussion of the requirements of the Forest Plan in the FEIS. Nowhere in the FEIS, however, has the Forest Service explained how it could authorize logging in a way that reduced carrying capacity for deer well below 18 deer/mi² across broad swaths of Prince of Wales Island—where wolves rely on deer as their main prey—while ensuring a viable wolf population. Beginning with Dr. Person’s work in the 1996 Conservation Assessment and continuing until this day, there has been a broad scientific consensus that maintaining deer habitat capability within the matrix is an essential element of a conservation strategy. As Dr. Person concluded in 1996, “[i]n areas less productive for deer, maintaining current densities of deer is particularly important.” Ex. 2, at 6 (emphasis added). The Forest Service has never provided a rational explanation for how the 2008 TLMP ensures the continued viability of the wolf without maintaining deer habitat capability in the matrix subject to old-growth logging.

D. The road density provisions in Standard and Guideline WILD1.XIV.A.1.c fail to prevent unsustainable wolf mortality, which increases when logging of old-growth forest habitat reduces the deer population.

The second fundamental flaw in the 2008 TLMP is the lack of an enforceable road density standard. Wolf populations are closely correlated with road density, because both open and closed roads provide access for hunters and trappers to kill wolves both legally and illegally. The 2008 TLMP, however, does not include any enforceable or mandatory limitations on road density. Thus, as a result, the Big Thorne project area and GMU 2 suffer from very high road densities and, as a direct result, wolf mortality has been well documented by Dr. Person and other scientists to be unsustainable. Old-growth logging results in lower deer populations, which provides additional incentive for hunters and trappers to

kill wolves both legally and illegally, because they are perceived as competition for a limited supply of deer. Old-growth logging, road densities and the 2008 TLMP are thus inextricably linked in contributing to unsustainable wolf populations. *See* Ex. 37, at ¶ 24–25.

As is the case with deer density, the information on the impacts of road densities on wolf habitat is undisputed. Based on Dr. Person’s work, the Forest Service concluded in the FEIS for the 2008 TLMP that “roads exert a strong influence on wolf mortality, particularly when connected to main road systems.” Ex. 9, at 105. Dr. Person modeled the road density on Prince of Wales Island and concluded that “32 percent of the WAAs on Prince of Wales Island have road densities indicative of a high probability of overkill and 52 percent have road densities indicating a high probability of having had at least one destructive harvest between 1985 and 1999.” *Id.* In 2008, Dr. Person published a peer reviewed study concluding that road densities greater than 0.9 km/km² likely resulted in unsustainable wolf mortality from both legal and illegal hunting and trapping. *See* Ex. 30, at ¶ 25; Ex. 12. In that study, Dr. Person concluded that 87% of the mortality of wolves on Prince of Wales Island was from hunting and trapping and that illegal harvest may be as significant as legal harvest. Ex. 30, at ¶ 26.

As a result, it is undisputed that existing road densities on Prince of Wales Island and in the project area are far above limits necessary to prevent unsustainable mortality wolves. *See infra* Part I (table showing road densities two- and three-times higher than the TLMP standard). This situation results from the discretionary language of the 2008 TLMP, which does not include any mandatory road density limits.

Where road access and associated human-caused mortality has been determined, through an interagency analysis, to be a significant contributing factor to locally unsustainable wolf mortality, incorporate this information into Travel Management planning and hunting/trapping regulatory planning. The objective is to reduce mortality risk and range of options to reduce this risk should be considered. In these landscapes, both open and total road density should be considered. Total road densities of 0.7 to 1.0 mile per square mile or less may be necessary.

Ex. 11, at 35 (WILD1.XIV.1.A.c).

The Forest Service was clear in the FEIS for the 2008 TLMP that the standard and guideline does not set an upper limit on road densities. Instead, the Forest Service stated that it would rely on “a cooperative interagency analysis to identify regions where wolf mortality is apparently excessive.” Ex. 10, at 31. The Forest Service stated at that time that road and access management would result from future “site-specific analysis discussed above that would identify a problem requiring local and cooperation management resolution.” *Id.*

The Big Thorne project again demonstrates in stark terms why the standards and guidelines of the 2008 TLMP are too weak to ensure a viable population of wolves on Prince of Wales Island. In

particular, the U.S. Fish and Wildlife noted in its comments on the Draft EIS that human caused mortality of wolves was unsustainable in the project area and that the Forest Service should focus on road closure in conjunction with the proposed timber sale. Citing to Dr. Person's work, the FWS raised concerns about "unsustainable annual mortality" of wolves on POW and noted the "[c]hronic unsustainable harvest * * * in four of the Wildlife Analysis Areas in the project area." Ex. 21, at 4. And, the FWS then stated, "[t]his project offers an opportunity to reduce unsustainable harvest of wolves by effectively closing roads that contribute to high mortality risk." *Id.* at 5.

As noted above, the Big Thorne project will in fact increase and not decrease road density, thus contributing to a significant risk that wolves could soon be extirpated altogether from the project area. The Standard and Guideline of the 2008 TLMP is simply too weak to ensure adequate protections for the wolf. Despite the best available science on the impacts of roads, the 2008 TLMP leaves total road densities to the discretion of the Forest Service to be considered on a site-specific basis. As the Big Thorne project, Dr. Person's scientific work, and the comments from the U.S. Fish and Wildlife Service all demonstrate, current road densities are already contributing to unsustainable levels of mortality, and another 82 miles of road construction will only make this situation that much worse.

Moreover, the 2008 TLMP establishes an interagency process in which to address these issues, whereby the Forest Service is to "develop and implement a Wolf Habitat Management Program in conjunction with ADF&G." Ex. 11, at 35 (WILD1.XIV.A.1.). But this Court has previously deferred to the Forest Service's interpretation of these requirements and held in a challenge to the earlier Logjam timber sale that the 2008 TLMP does not require the Forest Service to develop and implement a Wolf Habitat Management Plan before timber sales are implemented. *See Tongass Conservation et al. v. U.S. Forest Serv.*, Case No. 3:10-cv-00006-TMB (Order Denying Plaintiffs' Motion for Preliminary Injunction) (D. Alaska March 8, 2010). Thus, under the 2008 TLMP, the Forest Service may authorize logging and road building first while delaying indefinitely the preparation of a Habitat Management Plan.

Because of these weak provisions in the 2008 TLMP, six years later, the Forest Service has authorized thousands of acres of old-growth logging and the construction of dozens of miles of new road without ever moving forward with the habitat management plan envisioned by the forest plan. Earlier this year, the U.S. Fish and Wildlife Service again raised its concerns regarding the missing management plan:

The Fish and Wildlife Service participated in a Wolf Task Force effort in 2011 in response to wolf mortality concerns expressed during the Logjam Timber Sale (which is also on Prince of Wales Island, and near the Big Thorne project area), but that Task Force was disbanded following its first meeting, before a Wolf Habitat Management Plan was developed. We recommend that such a plan be developed prior to implementation of the Big Thorne project.

Ex. 36 at 3 (emphasis added). The habitat planning requirements of the 2008 TLMP have been

interpreted by the Forest Service in a way that provides no protections whatsoever for the wolf, because a plan still has yet to be developed by the Forest Service many years after the TLMP was approved while the timber sale program has marched forward unabated.

RELIEF

I. The Court should vacate the Forest Service’s decision.

Plaintiffs respectfully request that the Court vacate the Forest Service’s approval of the Big Thorne project, and remand to the agency with orders to comply with NFMA and NEPA. Under the APA, a court will normally set aside unlawful agency action and remand the matter for further consideration. 5 U.S.C. § 706(2); *F.C.C. v. Nextwave Personal Commc’ns, Inc.*, 537 U.S. 293, 300 (2003); *Cal. Wilderness Coalition v. U.S. Dep’t of Energy*, 631 F.3d 1072, 1095 (9th Cir. 2011). In considering whether to depart from the normal remedy of vacatur, courts in the Ninth Circuit are to consider: (1) the seriousness of the agency’s error (“and thus the extent of doubt whether the agency choose correctly”), and (2) “the disruptive consequences of an interim change that may itself be changed.” *Cal. Wilderness Coalition*, 688 F.3d at 992 (citing *Allied-Signal, Inc. v. U.S. Nuclear Reg. Comm’n*, 988 F.2d 146, 150-51 (D.C. Cir. 1993)).

Here, the violations are particularly serious because they relate to substantive standards under NFMA designed to protect habitat for the Alexander Archipelago wolf and the Sitka black-tailed deer. Indeed, the continued existence of the wolf on Prince of Wales Island and in the project area hangs in the balance. Vacatur will ensure that the agency on remand takes a fresh look at the project in full compliance with the procedures required by law instead of rationalizing a decision previously made in the absence of adequate public disclosure. In contrast, vacatur will not impose any unreasonable disruptive consequences on the Forest Service.

II. In the alternative, the Court should enjoin the Big Thorne Project until the Forest Service complies with applicable law.

If the Court decides that the Forest Service’s approval of the Big Thorne project does not comply with applicable law, but does not set aside the agency’s decision, the Court should enter an injunction prohibiting the Forest Service from implementing the project. To obtain permanent injunctive relief, a plaintiff must show: (1) irreparable injury; (2) inadequacy of legal remedies, such as monetary damages; (3) that an equitable remedy is warranted, considering the balance of hardships between the plaintiff; and (4) that a permanent injunction would not disserve the public interest. *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 156–57 (2010). Here, irreparable injury flows from the logging of over 6,000 acres of old-growth forest, and the direct consequences to the wolf-deer-human community that will result. *Cf. Alliance for the Wild Rockies v. Cottrell*, 632 F.3d 1127, 1135 (9th Cir. 2011). In addition, “[e]nvironmental injury by its nature, can seldom be adequately remedied by money damages”

Northern Cheyenne Tribe v. Norton, 503 F.3d 836, 843 (9th Cir. 2007) (quoting *Amoco Prod. Co. v. Villego of Gambell*, 480 U.S. 531, 545 (1987)). Moreover, if irreparable injury is sufficiently likely, the balance of harms usually tips in favor of issuing an injunction to protect the environment. *League of Wilderness Defenders/Blue Mts. Biodiversity Proj. v. Connaughton*, 752 F.3d 755, 765 (9th Cir. 2014) (citing *Amoco*, 480 U.S. at 545).²⁶ Finally, the public interest militates in favor of granting an injunction because “the public’s interest in preserving precious, unreplaceable resources must be taken into account in balancing the hardships.” *Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1125 (9th Cir. 2002) *abrogated on other grounds*, *Wilderness Soc’y v. U.S. Forest Serv.*, 630 F.3d 1173 (9th Cir. 2011).²⁷

III. The Court should reinstate the 1997 Tongass Land Management Plan provisions that relate to management of habitat for the wolf and deer.

In the Ninth Circuit, “[t]he effect of invalidating an agency rule is to reinstate the rule previously in force.” *Paulsen v. Daniels*, 413 F.3d 999, 1008 (9th Cir. 2005); *see also Klamath Siskiyou Wildlands Ctr. v. Boody*, 468 F.3d 549, 562 (9th Cir. 2006) (applying *Paulsen* to the amendment of a land management plan). Here, because the 2008 TLMP weakened the protections for the wolf and deer, the Court should vacate the Forest Service’s decision authorizing the 2008 TLMP (at least with respect to those provisions), thereby reinstating the applicable Standards and Guidelines of the 1997 Tongass Land Management Plan. Plaintiffs respectfully submit that additional briefing at the remedial phase of this litigation may be appropriate, and Plaintiffs reserve their right to seek further permanent injunctive relief to implement an order of the Court and to prevent irreparable harm to their interests in the conservation of the Alexander Archipelago wolf.

CONCLUSION

For all of the foregoing reasons, Plaintiffs respectfully request that the Court hold unlawful and set aside the Forest Service’s decisions approving the Big Thorne Project and approving the standards and guidelines that apply to management of the deer and wolf in the 2008 Tongass Land Management Plan.

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²⁶ While the Forest Service may claim potential monetary losses and economic losses to potential contractors or local communities, the Ninth Circuit has been clear that potential monetary damage either to the Forest Service or to a private litigant is outweighed by loss of old growth forests and other environmental harm. *See Idaho Sporting Cong., Inc. v. Alexander*, 222 F.3d 562, 569 (9th Cir. 2000).

²⁷ Any economic impacts resulting from an injunction are outweighed by the public interest “of the highest order: the interest in having governmental officials act in accordance with the law. *Seattle Audubon Soc’y v. Evans*, 771 F. Supp. 2d 1081, 1096 (W.D. Wash. 1991) *aff’d in part and rev’d in part on other grounds*, 952 F.2d 297 (9th Cir. 1991).

Respectfully submitted this 14th day of November, 2014,

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CERTIFICATE OF SERVICE

I hereby certify that on November 14, 2014, a copy of the foregoing Plaintiffs' Principal Brief was served electronically on the Federal Defendants.

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TABLE OF EXHIBITS

Ex. #	AR #	Year	Author/Title
1	736_3588	1995	McNay, R. Scott and Voller, Joan M., <i>Mortality Causes and Survival Estimates for Adult Female Columbian Black-Tailed Deer.</i>
2	736_0302	1996	Person, David K. et al., <i>The Alexander Wolf: A Conservation Assessment.</i>
3	736_4077	1997	Person, David K., and Bowyer, R. Terry, <i>Population Viability Analysis of Wolves on Prince of Wales and Kosciusko Islands, Alaska.</i>
4	736_0367	1997	Person, David K., et al., <i>Letter to Beth Pendleton re: Proper Use of Wolf Conservation Assessment.</i>
5	736_3361	2001	Person, David K., <i>Alexander Archipelago Wolves: Ecology and Population Viability in a Disturbed, Insular Landscape.</i>
6	736_3522p	2006	TLMP Conservation Strategy Review, <i>Wolves and Predator-Prey Interactions.</i>
7	736_3575	2006	Tongass CSR Workshop (Ketchikan April 2006) Wolf Panel, presented by David Person.
8	736_0320	2007	Schoen, J. and Person, D., <i>Alexander Archipelago Wolf (Canis Lupis Lugoni).</i>
9	603_1591	2008	U.S. Forest Service, <i>Tongass Land and Resource Management Plan: Final Environmental Impact Statement.</i>
10	603_1592	2008	U.S. Forest Service, <i>Tongass Land and Resource Management Plan: Final Environmental Impact Statement – Appendices (excerpts).</i>
11	603_1593	2008	U.S. Forest Service, <i>Tongass Land and Resource Management Plan (excerpts).</i>
12	736_0300	2008	Person, David K. and Russell, Amy L., <i>Correlates of Mortality in an Exploited Wolf Population.</i>
13	736_3165	2009	Brinkman, Todd, J., <i>Resilience of a Deer Hunting System in Southeast Alaska: Integrating Social, Ecological, and Genetic Dimensions.</i>
14	736_3348	2009	Franklin, Jerry, F. and Lindenmayer, David B., <i>Importance of matrix habitats in maintaining biological diversity.</i>
15	736_0481	2011	Brinkman, Todd, J. et al, <i>Estimating Abundance of Sitka Black-Tailed Deer Using DNA From Fecal Pellets.</i>

Ex. #	AR #	Year	Author/Title
16	736_0339	2011	U.S. Forest Service, <i>2011 Direction for Project-level Deer, Wolf, and Subsistence Analysis</i> .
17	736_4310	2011	Person, David K. et al., <i>Internal ADF&G correspondence about the Big Thorne timber project 2011 – February and March</i> .
18	736_0053	2011	Tongass Conservation Society and Greenpeace, <i>Big Thorne Project Scoping Comments</i> .
19	736_0228	2011	Center for Biological Diversity and Greenpeace, <i>Petition to List the Alexander Archipelago Wolf As Threatened or Endangered Under the Endangered Species Act</i> .
20	736_3112	2012	Cascadia Wildlands, Center for Biological Diversity, Greenpeace, Greater Southeast Alaska Conservation Community, Tongass Conservation Society, <i>Comments on Big Thorne Project</i> .
21	736_3156	2012	U.S. Dep't of the Interior, <i>Comments on the Big Thorne Timber Sale, Draft Environmental Impact Statement</i> .
22	736_4523	2012	Person, David K. and Logan, Brian D., <i>A spatial analysis of wolf harvest risk on Prince of Wales and associated islands, Southeast Alaska</i> .
23	736_0385	2013	U.S. Forest Service, <i>Deer Model Results for Big Thorne Project (Updated)</i> .
24	736_0419	2013	Tetra Tech EC, Inc., <i>Big Thorne Project: Wildlife and Subsistence Report</i> .
25	736_2244	2013	U.S. Forest Service, <i>Big Thorne Project: Final Environmental Impact Statement</i> (excerpts).
26	736_2248	2013	Cole, Forrest, U.S. Forest Service, <i>Big Thorne Project: Record of Decision</i> (excerpts).
27	736_3707	2013	Cascadia Wildlands, Center for Biological Diversity, Greenpeace, Greater Southeast Conservation Community, Tongass Conservation Society, <i>Appeal on Big Thorne Project</i> .
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48	-	2014	Declaration of Rebecca Knight.
49	-	2014	Declaration of Sylvia Garaghty.