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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MONTANA
MISSOULA DIVISION

NATIVE ECOSYSTEMS COUNCIL and ALLIANCE FOR THE WILD ROCKIES	)	CV-17- -
Plaintiffs,	)	COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF
vs.	)	
MARY C. ERICKSON, Custer Gallatin National Forest Supervisor, LEANNE MARTEN, Regional Forester of Region One of the U.S. Forest Service, THOMAS L. TIDWELL, Chief of the U.S. FOREST SERVICE, an agency of the Department of Agriculture, and the U.S. FISH & WILDLIFE SERVICE, an agency of the Department of the Interior,	)	
Defendants	)	

I. INTRODUCTION

1. STATEMENT OF RELATED CASE: Plaintiffs hereby notify the Court that this case is related to a previous case before this court challenging the Smith Creek Vegetation Project, *Hapner v. Tidwell,* Civ. No. 9:08–cv–00092–DWM. The Smith Creek portion of the Smith Shields Project challenged herein is in the same general project area as the Smith Creek Project, project documentation from the Smith Creek Project informs, in part, the challenge to Smith Shields, especially concerning potentially significant cumulative impacts, and there are common issues involving impacts to species, including big game/elk and pine marten.

2. This is a civil action for judicial review, under the citizen suit provision of the Endangered Species Act and the Administrative Procedure Act, of the U.S. Forest Service's (Forest Service) and/or U.S. Fish and Wildlife Service's (FWS) authorizations of (1) the Smith Shields Forest Health Project on the Custer Gallatin National Forest (GNF, or Gallatin); (2) relevant provisions of the Clean-Up Amendment (#51) of the Gallatin National Forest Land and Resource Management Plan (Forest Plan); (3) the Northern Rockies Lynx Management Direction; and, (4) the May 20, 2014 landscape-scale insect and disease designations for Montana under

Section 602(d) of the Healthy Forest Restoration Act (HFRA) of 2003 (16 U.S.C. 6591a (Montana 602 designations). Plaintiffs file this timely amended complaint pursuant to Fed. R. Civ. P. 15(a)(1)(B).

3. Plaintiffs Native Ecosystems Council and Alliance for the Wild Rockies attest that these decisions are arbitrary and capricious, an abuse of discretion, and/or otherwise not in accordance with law.

4. Defendants' decisions violate the National Environmental Policy Act (NEPA), 42 U.S.C. 4331 *et seq.*, the National Forest Management Act (NFMA), 16 U.S.C. § 1600 *et seq.*, the Endangered Species Act (ESA), 16 U.S.C. § 1531 *et seq*, the HFRA, 16 U.S.C. § 6591a, and the Administrative Procedure Act (APA), 5 U.S.C. §§ 701 *et seq.*

4. Plaintiffs request that the Court set aside the decisions authorizing the Smith Shields Project, the Clean-Up Amendment, and/or the Montana designations, pursuant to 5 U.S.C. § 706(2)(A) and 16 U.S.C. § 1540(g) and enjoin implementation of the Projects.

5. Plaintiffs seek a declaratory judgment, injunctive relief, the award of costs and expenses of suit, including attorney and expert witness fees pursuant to the Equal Access to Justice Act, 28 U.S.C. § 2412, and the Endangered Species Act, 16 U.S.C. § 1540(g)(4), and such other relief as this Court deems just and proper.

II. JURISDICTION

6. This action arises under the laws of the United States and involves the United States as a Defendant. Therefore, this Court has subject matter jurisdiction over the claims specified in this Complaint pursuant to 28 U.S.C. §§ 1331, 1346.

7. An actual controversy exists between Plaintiffs and Defendants. Plaintiffs' members use and enjoy the Gallatin for hiking, fishing, hunting, camping, viewing and photographing scenery and wildlife, and engaging in other vocational, scientific, spiritual, and recreational activities. Plaintiffs' members intend to continue to use and enjoy the area frequently and on an ongoing basis in the future, including, but not limited to, use by members that live and own homes near the Gallatin.

8. The aesthetic, recreational, scientific, spiritual, and educational interests of Plaintiffs' members have been and will be adversely affected and irreparably injured if Defendants implement the challenged decisions. These are actual, concrete injuries caused by Defendants' failure to comply with mandatory duties under NFMA, NEPA, ESA, HFRA, and the APA. The requested relief would redress these injuries and this Court has the authority to grant Plaintiffs' requested relief under 28 U.S.C. §§ 2201 & 2202, and 5 U.S.C. §§ 705 & 706.

9. Plaintiffs sent a notice of intent to sue under the ESA on February 3, 2017 asserting claims against the Smith Shields Project, which were answered by letter dated April 7, 2017 from Defendant Mary Erickson. Plaintiffs commence those claims against Defendants by pleading them in this amended complaint. Thus, Plaintiffs have complied with the 60 day notice requirement for claims under the ESA and this Court has jurisdiction to review Plaintiffs' ESA claims.

10. Plaintiffs submitted timely written scoping comments concerning the Smith Shields Project, and fully participated in available administrative review and appeal processes for the Clean-Up Amendment to the GNF Plan. No administrative remedies were provided by the Defendants regarding the HFRA Montana 602 designations, which Plaintiffs allege constitutes a programmatic decision subject to review under NEPA, and that decision is ripe for review at this time, under the facts of this case. Thus, Plaintiffs have exhausted administrative remedies. Defendants' denials of Plaintiffs' administrative appeals were the final administrative actions of the U.S. Department of Agriculture Forest Service. Thus, the Court has jurisdiction to review Plaintiffs' APA claims.

III. VENUE

11. Venue in this case is proper under 28 U.S.C. § 1391(e) and LR 3.3(a)(1).

Defendant Marten, the chief representative for U.S. Forest Service Region One, and the chief representative of the U.S. Forest Service in the State of Montana, resides within the Missoula Division of the United States District Court for the District of Montana.

IV. PARTIES

13. Plaintiff NATIVE ECOSYSTEMS COUNCIL is a non-profit Montana corporation with its principal place of business in Three Forks, Montana. Native Ecosystems Council is dedicated to the conservation of natural resources on public lands in the Northern Rockies. Its members use and will continue to use the Gallatin National Forest for work and for outdoor recreation of all kinds, including fishing, hunting, hiking, horseback riding, and cross-country skiing. The Forest Service's unlawful actions adversely affect Native Ecosystems Council's organizational interests, as well as its members' use and enjoyment of the GNF, including the Smith Shields Project area. Native Ecosystems Council brings this action on its own behalf and on behalf of its adversely affected members.

14. Plaintiff ALLIANCE FOR THE WILD ROCKIES is a tax-exempt, non-profit public interest organization dedicated to the protection and preservation of the native biodiversity of the Northern Rockies Bioregion,

its native plant, fish, and animal life, and its naturally functioning ecosystems. Its registered office is located in Missoula, Montana. The Alliance has over 2,000 individual members, many of whom are located in Montana. Members of the Alliance observe, enjoy, and appreciate Montana's native wildlife, water quality, and terrestrial habitat quality, and expect to continue to do so in the future, including in the Smith Shields Project area in the Gallatin National Forest. Alliance's members' professional and recreational activities are directly affected by Defendants' failure to perform their lawful duty to protect and conserve these ecosystems. Alliance for the Wild Rockies brings this action on its own behalf and on behalf of its adversely affected members.

15. Defendant MARY C. ERICKSON is the Custer Gallatin National Forest Supervisor, and in that capacity is charged with ensuring that decisions made on the Gallatin National Forest are consistent with applicable laws, regulations, and official policies and procedures.

17. Defendant LEANNE MARTEN is the Regional Forester for the Northern Region/Region One of the U.S. Forest Service, and in that capacity is charged with ultimate responsibility for ensuring that decisions made at each National Forest in the Northern Region, including the Gallatin National Forest, are consistent with applicable laws, regulations, and

official policies and procedures.

18. Defendant THOMAS L. TIDWELL is the Chief of the United States Forest Service, an administrative agency within the U.S. Department of Agriculture, and as head of that agency he is responsible for the lawful management of our National Forests, including the Gallatin National Forest, including but not limited to ensuring compliance with NEPA for any programmatic decisions he makes affecting how these forests are to be managed, such as implementing HFRA Section 602.

19. Defendant UNITED STATE FISH AND WILDLIFE SERVICE is an administrative agency within the U.S. Department of Interior and is responsible for lawful management of species listed under the Endangered Species Act.

V. PROCEDURAL BACKGROUND

20. On November 2, 2015, pursuant to an Environmental Assessment and Finding of No Significant Impact from Defendant Erickson, Defendants adopted a sweeping "Clean-Up" Amendment (a.k.a., Amendment #51) to correct outdated, ineffective or unnecessary direction from the Gallatin Forest Plan" that, according to the Supervisor, was "not an attempt to change the underlying substance of the 1987 Forest Plan" (from "Reasons for the Decision," pp. 27-28, April 30, 2015 DRAFT Decision Notice and

Finding of No Significant Impact). Plaintiffs exhausted their administrative remedies opposing aspects of the proposed amendment, and objecting to the FONSI, and Smith Shields represents a challenge to implementation of some of those objectionable provisions in the Clean-Up Amendment - especially concerning big game habitat and management of old growth habitat.

21. On January 6, 2017, Defendant Erickson signed the Decision Memo for the Smith Shields Forest Health Project, categorically excluding it from NEPA. The only opportunity for public input for this project was in the form of comments on the potential for a project in this area pursuant to a scoping period initiated on September 12, 2016. Plaintiffs submitted scoping comments appropriate to the notice of scoping, raising many of the same issues that form the basis of this Complaint.

22. On January 25, 2017, Plaintiffs requested further additional environmental review for the Smith Shields Forest Health Project to consider new information in the form of best available science concerning the impacts of fuels reduction timber harvest and fragmentation of habitat on the MIS pine marten. By letter dated February 9, 2017, the decision-maker indicated that she had considered the new information, and re-affirmed her prior decision based on existing documentation.

23. On May 20, 2014, by letter to Governor Steve Bullock, Defendant Chief Tidwell designated 4,955,159 acres of National Forest lands in Montana for eligibility to be excluded from NEPA study and analysis pursuant to Section 8204 of the Agriculture Act of 2014 (Public Law 113-79), amending Title VI of the Healthy Forests Restoration Act of 2003 (HFRA) (16 U.S.C. 6591 et seq.). No NEPA analysis, solicitation of public comment, or administrative review and appeal process was made available for this sweeping designation by the Chief, though Smith Shields would not have been eligible for a categorical exclusion from NEPA without it. As such, Plaintiffs have exhausted their administrative remedies in relation to the 2014 designation, and now challenge it in the context of implementation at the site-specific level.

24. On February 3, 2017, Plaintiffs sent a 60 day notice of intent to sue under the ESA regarding the impacts of the Smith Shields Forest Health Project on Canada lynx. By letter dated April 7, 2017, the decision-maker for the Smith Shields Project acknowledged Plaintiffs' NOI, and rejected any claims that the decision violated the ESA.

25. As of the date of the filing of this Complaint, Plaintiffs are not aware that the Forest Service has advertised, awarded, or commenced any commercial timber sales for the Smith Shields Project.

VI. FACTUAL BACKGROUND

26. Plaintiffs are herewith filing detailed expert declarations on the following issues: Big Game & Elk (First Dec. Sara Jane Johnson, Ph.D.); Canada Lynx (Second Johnson Dec.); Old Growth Habitat & Species of Concern (Third Johnson Dec.); and, Soils (Declaration of Jeff Juel). To the extent allowed by FRCP 10, Plaintiffs hereby incorporate as exhibits to this Complaint the facts and information from these contemporaneously filed declarations, as necessary or helpful to inform the courts and parties of the factual basis of their claims, beyond the simple notice pleading set forth in this Complaint.

Elk Habitat Security

27. According to best available science ("BAS"), hiding cover is an important element of elk security, as recognized in the GNF Plan EIS at p. II-13, along with road densities.

28. Calculating security area in an Elk Management Unit ("EMU") pursuant to the "Hillis Paradigm" in a manner that equates forested acres with forest acres not capable of providing hiding cover ignores a relevant factor that is critical in the application of BAS.

29. In calculating elk security levels for the Smith Shields EMU, the Forest Service (FS) included all forest system lands greater than 250 acres in size

more than 1/2 mile from an open road, without excluding non-forested acres or previously logged acres from their calculations.

30. Displacement of elk from national forests and other public lands during hunting season is a significant issue in Montana that is making interfering with Montana Fish, Wildlife & Parks (MFWP) ability to manage the size of elk herds, including the Smith Shields EMU herd(s).

31. According to BAS, traditional concepts for managing elk security need to be expanded to address the refuge effects of adjacent private lands, with a special emphasis on road densities in relation to elk habitat security.

32. BAS shows that the displacement impacts of roads on elk continue to increase with increasing road densities up to a density of 6 miles per square mile, by which point elk have been displaced from 80% of the landscape. *Lyon et al.* (1985). Areas that exceed an open road density of 2 miles per section (50% habitat effectiveness) must be recognized as making only minor contributions to elk management goals." *Christensen et al.* (1993).

33. 58% of the Smith Shields landscape has an open road density greater than one mile per section, the relevant threshold according to BAS on elk habitat security. The average open road density within the Project Area (19,636 acres = 30.7 square miles), is 1.4 miles/sq. mi.

34. According to BAS, *any* motorized vehicle use on roads will reduce habitat

effectiveness for elk. See, e.g., *Christensen et al.,* (1993); *Proffitt et al.* (2013).

35. The FS did not consider and analyze the potentially significant cumulative impacts of increasing road densities and decreasing hiding cover on the ongoing problem with elk displacement onto private lands during hunting season in approving further road construction and reductions in hiding cover in approving the Smith Shields Project.

36. Based upon BAS at the time the GNF Plan was adopted and pursuant to the Circuit Court's interpretation of the GNP Plan's hiding cover standard for big game habitat, the Plan required the FS to calculate hiding cover as a percentage of total area utilized by big game, such as an EMU.

37. The effect of the Clean-Up Amendment was to change the methodology for demonstrating compliance with the GNF Plan's 2/3 hiding cover standard, such that it is now calculated as a proportion of forested acres of certain kinds of forest on National Forest lands only, excluding private lands, non-forested acres, and certain kinds of forested acres.

38. For the EAU affected by proposed timber harvest in Smith Shields, even excluding private lands from the calculation, the amount of hiding cover as a percentage of total area is already less than the 2/3 required by the previous GNF Plan standard (22,263/38,693 = 58%), according to

information set forth in the Wildlife Report.

39. According to the FS calculations utilizing the methodology for demonstrating compliance with the 2/3 hiding cover standard pursuant to the Clean-Up Amendment, there is now 98.5% hiding cover in the Smith Shields EMU.

40. With reference to a standard that requires retaining 2/3 hiding cover, the difference between methodology that results in an estimate of 58% hiding cover versus one that results in an estimate of 98.5% hiding cover is ecologically significant.

41. The FS represented to the public in adopting the Clean-Up Amendment that "It is also not projected that the Amendment would lead to changes in management activities."

42. According to MWFP's comments on proposed reductions in elk security in the Helena NF, which were made part of the administrative record in Smith Shields, the "lack of fall security [is] likely limiting both survival of bull elk and retention of elk on public lands during the fall hunting seasons… Hunter opportunity and MFWPs management capabilities generally decrease as elk are displaced from public to private lands… Displacement of elk from public land to private land refuges is an increasing concern" (emph. added).

43. By utilizing a "proxy" for the definition of hiding cover, namely 40% canopy closure, the Forest Service inflates the calculations of hiding cover quantity in two ways that are not supported by BAS: it now assumes that any forested stands with 40% crown closure constitute hiding cover, without regard to understory conditions; and, as in the Smith Shields project, it assumes that logging which removes all existing vegetation in the understory can still be considered hiding cover if the crown canopy is 40% or more.

44. According to "Gallatin Forest Plan Hiding Cover Assessment" (*Canfield* 2011), *all logged acres* in "[p]roject treatment units [that] would partially reduce canopy cover" (p. 13) are to be removed from the calculation of existing hiding cover post-treatment in any hiding cover assessment.

45. In Smith Shields, only 985 out of a total of 1658 (proposed) logged acres were included in the Wildlife Report's hiding cover reduction calculation, as well as only 332 out of 829 acres recently logged, in spite of the claim the FS presumed that "all acres treated would eliminate all elk cover."

46. The GNF Plan defines "hiding cover" as that horizontal (ground-level) cover that is capable of hiding 90% of an elk at equal to or less than 200 feet.

47. Due to the highly variable structure of understory vegetation, ocular

estimates of hiding cover can vary tremendously between observers, or by shifting the view perspective by minute amounts.

48. A more objective method for calculating hiding cover is set forth in *Smith and Long* (1987), which correlates stand exam data with the number of tree bolls (stems) necessary to hide 90% of an elk at 200 feet.

49. The FS proxy for calculating hiding cover on the basis of canopy closure is not based on BAS referenced popularly as the "Montana Rule," as it assumes that such stands will satisfy the forest plan definition 100% of the time based on *Canfield* (2011), whereas the methodology identified in Montana Rule found that similar stands would satisfy the definition in only 38-63% of the stands, averaging 50% - much closer to the 66% figure arrived by Canfield in applying the objective stem-density methodology, and nowhere near 100% found by the subjective cover board analysis.

50. Based on the Montana Rule developed by *Lyon et al.* (1982), the use of 40% canopy cover as a proxy for elk hiding cover in Amendment #51 will significantly overestimate actual hiding cover, cumulatively contributing to displacement of elk from public lands in Montana.

<u>Canada Lynx Issues</u>

51. About 67 percent of lynx habitat in the Northern Rocky Mountains occurs on pubic lands managed by the Forest Service and Bureau of Land

Management (2003 FR Vol. 68, No. 128, p. 40089). The agencies noted that forest fragmentation may eventually become severe enough to isolate lynx habitat into small patches, thereby reducing the viability of wildlife that are dependent upon larger areas of forest habitat.

52. Intensive tree harvesting can eliminate the mosaic of habitats and mix of forest stand age classes that promote lynx survival (2000 FR Vol. 65 No. 58, p. 16071).

53. Partial forest thinning commonly carried out as fuels reduction also adversely impacts habitat connectivity for lynx. *Squires et al.* (2013). Dense forests utilized by lynx for connectivity purposes are those with a canopy cover of 60% or greater (*Ibid*., Table 1, p. 190), whereas the Forest Service is protecting only 40% for wildlife purposes at this time in these areas of the forest.

54. According to FWS, large portions of Montana are identified as unoccupied secondary lynx habitat, with limited amounts of occupied secondary habitat within close distances of core areas, and the long-term recovery of Canada Lynx in Unit 5 depends upon retaining connectivity through secondary habitat areas like the Crazy Mountains.

55. In spite of the recovery requirement that lynx populations remain connected to the source population in Canada, the Lynx Amendment does not require

connectivity to be maintained between these core areas, and does not provide any measurable criteria for analyzing habitat connectivity.. Indirect adverse impacts on long-term persistence attributable to this failure of the Lynx Amendment to ensure connectivity between lynx populations in the two widely-separated core areas was summarily dismissed by the Forest Service (Lynx Amendment FEIS, p. 323), and were also not considered in designating over 7,000 square miles of national forest in Montana for inclusion in the "Insect and Disease" categorical exclusion from NEPA analysis.

56. The National Forest System Lands Designated Under Section 602 of the Healthy Forest Restoration Act in Montana shows a clean break in the link that is represented by the Crazy Mountains, beginning with Smith Shields, which is situated at a key passageway along the eastern corridor for lynx movement through designated linkage areas.

57. Current best science defines "connectivity" for lynx as a function of movement between patches and the likelihood that patches are suitable for resident populations (*Squires et al.* 2013).

58. Retention of lynx habitat connectivity requires not only that lynx can move through a given landscape, but that sufficient suitable habitat is actually provided to allow for lynx survival.

59. The BA for the Smith Shields Project defines connectivity as consisting of an adequate amount of vegetation cover arranged in a way that allows lynx to move around. However, the quantity and distribution of forested canopy and horizontal (ground-level "hiding") cover that will allow lynx to move through this area is never disclosed and analyzed in relation to cumulative impacts from fuels reduction.

60. High volumes of logging traffic over a number of years across the Smith Shields/Smith Creek Project Areas could significantly disrupt lynx migration through this designated corridor.

61. Impacts of timber harvest on the pine marten is considered by the Forest Service to be a good indicator for impacts to a whole suite of furbearers that depend upon mature and over-mature forested habitat in the Gallatin NF.

62. In a recent research report on the Pacific pine marten, another forest carnivore that avoids forest openings and is a management indicator species for lynx (i.e., mature and/or old-growth related species), *Moriarity et al.* (2016, Abstract) reported that fuels treatments which simplify forest stands through removal of understory trees and logs negatively affected marten movements and habitat connectivity.

63. The Smith Shields Project BA (Table 8, p. 21) fails to disclose the density of tree saplings or presence of dense shrub habitat in the 1,850 acres of stand

initiation summer lynx/hare habitat included in the analysis, as would be necessary for the decision-maker to consider potential cumulative impacts on lynx in light of the best available science.

64. When overly large landscapes are used as the basis for analyzing vegetation impacts on lynx, such as the 87,653-acre West Crazies LAU, individual lynx home ranges can be eliminated without analyzing the potential impacts of such fragmentation on movement and long-term recovery.

65. The Lynx Amendment ROD (p. 32) notes that the conservation value of areas outside of lynx core habitat is unclear, though FWS acknowledges that secondary areas may contribute to lynx persistence by providing habitat to support lynx during dispersal movements or other periods.

66. Smith Shields Project BA (pp. 13-14) states that the management strategy for unoccupied secondary areas in the Lynx Amendment has been "updated" by an interagency team (ILBT 2013) - with no public involvement and without Forest Plan amendment - downgrading the conservation value of unoccupied secondary habitat as needed only for nonresident, dispersing lynx.

Snag-Dependent Species Issues

67. Snags are one of 12 "key ecosystem characteristics" that "have high habitat value because they provide homes for wildlife in hollow cavities and insect

food for a variety of birds."

68. For most of the 20th century, snags were regularly eliminated as part of timber harvest operations.

69. In the past 50 years, about 80,000 acres (125 sq. mi.) on the GNF were clearcut, and an additional 10,000 acres (15.6 sq. mi.) were thinned. It is unknown how much of the forest on these 140+ square miles of National Forest lands contain any snags needed for cavity-dwelling wildlife species

70. In the Custer Gallatin National Forest portion of Montana, forest cavity nesting birds as tallied in *Hutto* (1995) include 18 species, and there are at least four species of owl and two sensitive bat species in the GNF not tallied by Hutto.

71. While the forest-wide standard for snag habitat in the Gallatin provides that "[s]tanding snags will be provided for dependent wildlife species," the FS has not designated any MIS for snag-dependent species, and does not monitor snag-habitat levels across the forest.

72. The strategy of leaving some snags in logged units fails to address the foraging needs of wildlife, as well as the overall habitat needs for birds that require relatively dense forests for nesting, according to BAS on snag-dependent species. *Bull et al.* (1997); *Saab et al*. (2012).

73. The FS did not evaluate snag habitat in the Smith Shields Project Analysis,

in spite of the role of disease and infestation in creating snag habitat, the critical relevance of that habitat to "the ecological integrity, including maintaining or restoring structure, function, composition, and connectivity" of the Project Area, and in spite of the fact that snags in the Project Area last on average only 5 years.

74. While the FS strategy for insuring the viability of snag-dependent species is to require loggers to follow snag protocol specified in Amendment #15, including leaving three live trees per acre in harvest units that are not to be broadcast burned, in the most recent timber harvest in the Smith Shields project area, these protocol were not followed, and this failure was not disclosed in Smith Shields.

75. If the mitigation standard for impacts of timber harvest on snag habitat, as measured by proxy, is not being met in this project area, then there is no scientific basis for dismissing the significance of potential cumulative impacts to cavity nesting wildlife from timber harvest.

76. Due in part to the historic practice of removing snags as part of timber operations, the absence of any monitoring of snag habitat forest-wide, the absence of any MIS for snag-dependent species of bird, and the paucity of snag habitat analysis in Smith Shields, the cumulative impacts of reducing snag habitat through fuels reduction and forest health treatments in the

Crazy Mountains and the GNF on snag-dependent species is highly uncertain.

Old-Growth Habitat & Old-Growth Species Issues

77. The 2015 Clean-Up Amendment (Clean-up Amendment DN, p. 10) changed the old growth requirement from 10% of total area (1,735,412 ac.) to 10% of forested area (1,334,776).

78. Forest-wide, 23% of the acreage in the Gallatin NF is non-forested (GNF Plan, p. A-14), and one example of the result of the Clean-Up Amendment to the old growth standard is to that the amount of old-growth habitat to be managed for in the Smith Shields Project Area has been reduced by 28%.

79. The EA for the Clean-Up Amendment did not disclose or analyze the potential significance of the environmental impact of reducing the amount of old-growth habitat to be protected under the forest plan by just over 4,000 acres, or about 6.25 square miles of centuries-old wildlife habitat.

80. The Clean-Up Amendment also effectively eliminated or at least significantly altered the distribution requirement for old-growth habitat in the GNF, by changing the scale of analysis from timber compartments to mountain ranges.

81. According to BAS, species viability generally requires adequate levels of habitat for a particular species well-distributed across the forest.

82. The EA for the Clean-Up Amendment did not disclose or analyze the potential significance of the environmental impact of changing the distribution component of the 10% old growth standard from timber compartments to mountain ranges.

83. BAS for birds that depend in part upon old-growth habitat recommends 25% habitat levels to provide for diversity and viability. *Montana Partners in Flight,* "Montana Bird Conservation Plan," 2000.

84. The old-growth habitat levels in the Crazy Mountains and in the Smith Shields project area is less than the 25% recommended by BAS, and no old-growth analysis in either the Clean-Up Amendment EA or in Smith Shields addressed this concern or the significance of clearcuts and forest thinning cumulatively on maintaining species diversity in the GNF.

85. The scientific basis for deleting the pine marten as an old growth MIS in the Clean-Up Amendment did not address BAS. See, e.g.: *Sherburne and Bissonette* (1994); *Fager* (2003); *Moriarty et al.* (2015).

86. The significance of eliminating all MIS for old-growth habitat in the GNF without substituting a new MIS was not addressed in the Clean-Up Amendment.

87. Since the data upon which old growth estimates are made under the Clean-Up Amendment to the old growth standard is not capable of being mapped,

the FS provided no map of old-growth habitat strata for the Smith Shields Project, as they did for example in the pre-Amendment Smith Creek Project, nor did they analyze the impacts of proposed Smith Shields timber harvest on old-growth species - such as evaluating how current and planned levels of old growth will impact either the goshawk or pine marten - as there is no longer any MIS for same.

88. There are about 2,800 acres of lodgepole pine stands in the Smith Shields Project area that exceed 10 inches in diameter (Project Vegetation Silviculture Report, p. 7). Many of these stands have extensive mortality from pine beetles, ranging from 30-40% mortality (Ibid., p. 13), and are thus capable of providing effective old growth habitat for wildlife in terms of an abundance of both snags and downed logs.

89. The unsubstantiated claim in Smith Shields that no old growth will be impacted by the project is not true as a matter of science, since lodgepole pine stands of at least a 10-inch diameter (Clean-up Amendment DN, p. 27) are suitable old growth once they've been infested with mountain pine beetles - the condition this project is designed to "treat" - and the project includes logging such stands.

90. The flammulated owl, a sensitive species on the Custer Gallatin National Forest, is associated with mature and old growth forests, including Douglas-

fir. There are 1,240 acres of potential nesting habitat for flammulated owl where Douglas-fir is dominant, and the project proposes logging 42 acres of this habitat (Ibid., p. 13).

91. The GNF Plan requires the Forest Service to determine population trends of indicator species (MIS) and relationships to habitat changes (p. IV-6, #16), intended to keep the public and decision-maker apprised of the cumulative effects of forest management, and to avoid any unanticipated consequences of such management.

92. Specifically, the GNF Plan defines MIS as "[s]pecies identified in a planning process that are used to monitor the effects of planned management activities on viable populations of wildlife and fish including those that are socially or economically important" (p. IV-16). A "viable population," in turn, is defined as: "A population which has adequate numbers and dispersion of reproductive individuals to ensure the continued existence of the species population in the planning area" (IV-52).

93. Under the Clean-Up Amendment, the pine marten and northern goshawk are now MIS for mature forest. The FS provided no population trends for either MIS, and there is no longer a habitat proxy for such trends.

94. Pine marten are considered "rare" in the Crazy Mountains, and the Gallatin 5-year Monitoring & Evaluation Report of 2006 surmised that this might be

a habitat related function, or it may be a monitoring problem (*Cherry*, p. 130). Only 2% of the marten's preferred habitat is found in the Crazy Mountains. USFS 2016 (GNF MIS Assessment, p. 28).

95. The Forest Service made no attempt to actually evaluate the cumulative impacts of past and planned vegetation projects on the MIS pine marten for the Smith Shields Project, and has not demonstrated that it is even present in the project area. The GNF MIS Assessment of 2011, *Canfield* (2011) cited speculation by some researchers that pine marten in the Crazy Mountains may have been "trapped out" - likely due to increases in stress and vulnerability from habitat degradation and excessive road densities. This speculation was confirmed by extensive lynx-detection surveys and sampling in 2010-2011 in the Crazy Mountains, including many plots in or near the Smith Shields project area, which demonstrated species like bobcat and cougar were present, but not lynx or pine marten.

96. Given the synergistic effects between logging and trapping (*Fager*, supra.), it is reasonable to conclude that the cumulative effects of forest plan implementation in the Crazy Mountains has been extirpation of furbearers, as illustrated by the MIS pine marten.

97. The Forest Service did not define any current science or monitoring as to why only 60 acres of preferred marten habitat and 21% suitable pine marten

habitat in the Smith Shields Project Area, with the fragmentation impacts this limited habitat suggests, will ensure the persistence of pine marten in the Project Area or, if pine marten are indeed absent from the Project Area, what this "indicates" for the other furbearers.

98. Moose are dependent upon old-growth habitat for winter survival, as well as the thermal cover such habitat provides in the summer to avoid heat stress. According to the FS, "[r]eductions in forest canopy due to proposed treatment could decrease the area suitability as winter range for moose and deer…"

99. Moose in Montana and other western states are currently experiencing significant population declines

100. The FS has not demonstrated that the Smith Shields Project has been coordinated with moose winter habitat, in violation of Forest Plan standard 6(a)(3) and in accordance with BAS. The only information provided is that moose hiding and thermal cover will be reduced, but the extent of this reduction is not disclosed.

Soils Productivity

101. The FS analysis concerning cumulative losses in soil productivity in the Smith Shields project area is not based upon the best scientific information currently available. For example, AWR asked the FS to disclose the

analytical data that supports proposed soil mitigation/remediation measures, and none was provided.

102. Similarly, pre-existing soil damage is purported to have been determined by field data following certain scientific protocol, and yet no such field data could be found in the project record.

103. As detailed in the Juel Declaration, proposed cutting unit #17 in Smith Shields exceeds the threshold established as a proxy for ensuring against irreversible losses in soils productivity under NFMA. While the applicable forest plan standard (the Regional Soil Standards) precludes timber harvest activities that would result in further increases in detrimental soils disturbance for unit #17, and in fact requires that any further management activities result in a trend towards compliance with the threshold, the FS has failed to demonstrate compliance with this mandatory standard.

104. Violation of applicable soils standards due to past and proposed timber harvest is, by definition, a significant cumulative impact under NEPA.

105. Due to past logging activities in the project area, including logging that was conducted prior to the adoptions of standards for protecting soils, the cumulative impacts to soils productivity from timber harvest is not confined to proposed cutting units. However, analysis of cumulative impacts to soils productivity from timber harvest is limited in the Smith Shields project to

proposed activity area (e.g., cutting units).

106. The FS failed to consider the significance of cumulative impacts to soils productivity from past, ongoing, and proposed management activities in the project area as a whole (e.g., system roads, un-reclaimed log landings, livestock grazing, and invasive plants/weeds), creating uncertainty over the actual impacts of timber harvest in the Smith Shields project area on sustained yields and diversity of plant and animal species.

107. The FS concedes that the relationship between soil productivity and soil quality is not completely understood, adding to the uncertainty over the cumulative impacts of timber harvest in an area like Smith Shields on the productivity of the land.

108. The FS has never actually validated the 15% Detrimental Soils Disturbance threshold that they use as a "proxy" for ensuring against irreversible losses of soil productivity.

VII. CLAIMS FOR RELIEF

FIRST CLAIM FOR RELIEF

Defendant Tidwell violated NFMA, ESA and NEPA in implementing the Farm Bill Categorical Exclusion.

1. All above paragraphs are incorporated by reference.

2. NEPA allows a federal agency to adopt a categorical exclusion for a "category of actions which do not individually *or cumulatively* have a significant effect on the human environment." 40 C.F.R. §1508.

3. In implementing the Insect & Disease Categorical Exclusion created under the Farm Bill, it was incumbent upon the Chief, in the exercise of his delegated authority, to designate eligible areas in such a manner as to avoid cumulative effects on the human environment.

4. Because designating "treatment areas" pursuant to 16 U.S.C. § 6591(a) has the indirect effect of allowing projects in those areas to proceed under NEPA without an EA or EIS (eligible projects in designated areas "may be . . . considered an action categorically excluded" pursuant to § 6591b), such designations could potentially have cumulatively significant impacts on the human environment.

5. Designating nearly five million acres of national forestlands in Montana is an example of how such an exercise of statutory authority could create potentially significant cumulative environmental impacts, and thus result in a violation of NEPA and its implementing regulations.

6. In order to avoid such potentially significant cumulative impacts in designating millions of acres of treatment areas in Montana pursuant to 16 U.S.C. § 6591(a), which constitutes a programmatic decision that effectively

changes the way national forests are to be managed, the Chief was obligated to conduct NEPA analysis prior to any final designations.

7. Had the Chief solicited public input on proposed designations of the forest lands included for eligibility in his programmatic decision implementing 16 U.S.C. § 6591(a), one issue that would surely have been raised is the potential cumulative impacts on migration corridors for Canada lynx connecting the GYE core habitat to the source populations in Canada, including the effects on connectivity in the Crazy Mountains generally, and the Smith Shields project area in particular.

SECOND CLAIM FOR RELIEF

Defendants Approval of Smith Shields Project Impermissibly Threatens Canada Lynx in Violation of ESA, NFMA, and NEPA

1. All above paragraphs are incorporated by reference.
2. The Northern Rockies Lynx Management Direction (hereafter "Lynx Amendment") is a violation of the Endangered Species Act (ESA) because lynx persistence in the southern core habitat is not protected by science-based, objective standards requiring maintenance of habitat connectivity to the northern core habitat and Canada, even though lynx recovery requires population persistence in this southern core habitat
3. The absence of protective standards for connectivity of lynx habitat in secondary habitat areas adopted pursuant to recommendations in accord with

best available science violates the ESA, since according to *Squires et al.* (2013): *"Maintaining the integrity of these connectivity corridors is of primary importance to lynx conservation in the Northern Rockies."*

4. The Biological Assessment for Canada lynx is not based on the best scientific information available for the protection of connectivity between the GYE core habitat and source populations of lynx.

5. Substantial uncertainty exists concerning the connectivity of lynx habitat in and through the Smith Shields project area, sufficient to preclude categorically excluding further habitat degradation from study under NEPA. 36 C.F.R. § 220.6(c).

6. The impacts of past, present and proposed timber harvest on lynx habitat and connectivity in the Smith Shields project area represents a potentially significant cumulative impact that jeopardizes recovery and long-term persistence of lynx populations in the Northern Rockies, and thus at a minimum requires an environmental assessment in order to determine the degree of significance under NEPA.

7. In light of the importance of maintaining connectivity through migration corridors like the Crazy Mountains, recent science indicating that connectivity requires suitable habitat for resident populations, and the recovery-orientation of the ESA, any cumulative degradation of lynx habitat that impairs connectivity is a significant ecological and environmental concern that

necessitates a hard look under NEPA.

8. The update of the management strategy for unoccupied secondary areas set forth in the Lynx Amendment by the an interagency team (ILBT 2013) - with no public involvement, and without Forest Plan amendment - which had the effect of downgrading the conservation value of unoccupied secondary lynx habitat and eliminating the Lynx Amendment's requirement that LAUs be mapped across their geographic range was a potentially significant forest plan amendment that required at least an EA pursuant to NEPA. 36 C.F.R. §§ 219.14, 220.4.

THIRD CLAIM FOR RELIEF

Defendants Approval of Smith Shields Project Pursuant to the Amended Big Game Standards of the Gallatin Forest Plan Violates NFMA and NEPA

1. All above paragraphs are incorporated by reference.
2. The Forest Service's adoption of the amended big game standards in the 2015 Clean-Up Amendment (#51) significantly reduced the quantity and/or quality of big game habitat protected under the Gallatin Plan, and it was thus arbitrary and capricious to adopt same without supplementing the EIS for the forest plan. 36 C.F.R. §§ 219.14, 220.4.
3. The analysis in Smith Shields is improperly tiered to the invalid big game standards adopted in Amendment #51, and demonstrates as well that the approval of the project violates the prior big game standards, which remain in

full force and effect.

4. Displacement of elk from public lands, including national forests, to private lands during hunting season is a significant environmental issue in Montana.

5. Displacement of elk from public lands in Montana is due, in part, to the cumulative degradation of secure habitat conditions for elk on public lands, including national forests generally, and the Gallatin NF and Crazy Mountains in particular.

6. The approval of Smith Shields pursuant to a categorical exclusion was arbitrary and capricious as it was not based on consideration of the best available scientific information on impacts of logging on elk, it was not consistent with the Gallatin forest plan's big game standards, and because it failed to account for the cumulative effects of fuels reduction and forest health projects on displacement of elk from public lands in Montana.

7. The approval of Smith Shields project failed to demonstrate compliance with the GNF Plan's standards for protecting moose, forest-wide standard - 6(a)(3) - as it failed to consider the cumulative effects and best scientific information available for coordinating moose forage and cover needs in winter range with fuels reduction timber harvest, like Smith Creek and Smith Shields.

FOURTH CLAIM FOR RELIEF

Defendants Approval of Smith Shields Project Pursuant to the Amended Old Growth Standards of the Gallatin Forest Plan Violates NFMA and NEPA

1. All above paragraphs are incorporated by reference.
2. There is substantial uncertainty over the cumulative impacts of timber harvest on forest bird and bat species that depend upon snag habitat for their reproductive capacity on the Custer Gallatin National Forest, as habitat trends for these species have never been monitored on the Gallatin NF, there is no designated indicator species for estimating the cumulative impacts of forest management/plan implementation on their persistence, and as the Forest Service does not adequately monitor compliance with snag retention standards and guidelines, thus precluding categorical exclusion under NEPA for projects like Smith Shields. 36 C.F.R. § 220.6(c).
3. The Forest Service failed to consider the best available scientific information on the impacts of timber harvest on snag-dependent species in approving Smith Shields, including but not limited to the cumulative impacts from failing to follow snag protocol in the recently completed Smith Creek project and the limited average snag retention expectancy in the project area attributable to high winds.
4. The reduction of old-growth habitat to be protected and/or managed for in the Gallatin NF by 23%, together with the elimination of the requirement for well-distributed old-growth habitat, has significant implications for the diversity of plant and animal species, and thus could not be effective without first supplementing the forest plan EIS to take a hard look at those impacts.

5. The failure to analyze the potential impacts of treating mature forest that is exhibiting the kinds of decadence necessary for natural development into old growth habitat in Smith Shields is arbitrary and capricious, especially absent any mapping of existing old-growth habitat and absent any designated MIS for old-growth habitat.
6. Because the Forest Service did not properly amend the old growth standard in the Clean-Up Amendment, the failure to analyze the potential significance of impacts from timber harvest proposed in Smith Shields on MIS pine marten and goshawk was arbitrary and capricious.

FIFTH CLAIM FOR RELIEF

Defendants Approval of Smith Shields Project Violates HFRA

1. All above paragraphs are incorporated by reference.
2. The Forest Service failed to consider the best available scientific information for maintaining and/or restoring the ecological integrity, including but not limited to maintaining or restoring structure, function, composition, and connectivity of wildlife habitat, in approving Smith Shields.
3. The Forest Service failed to demonstrate that it has designed treatments in Smith Shields in such a way as to maximize retention of old growth and large trees.
4. The Forest Service has failed to demonstrate that it is not logging old-growth habitat or otherwise impacting old-growth dependent species in approving the

Smith Shields project, including but not limited to its failure to disclose and analyze the impacts of the project on: lodgepole pine forests with trees greater than ten inches diameter that otherwise meet the Region One criteria for old-growth habitat; Douglas-fir trees with at least a 15-inch diameter that qualify as old growth under the Clean-Up Amendment; and, forest stands and large trees that meet the definition of old growth contained in the Gallatin NF Plan.

SIXTH CLAIM FOR RELIEF

Defendants Approval of Smith Shields Project Violates NFMA and NEPA by Utilizing an MIS that is no longer Present in the Project Area

1. All above paragraphs are incorporated by reference.
2. According to the best available scientific information, the forest plan MIS pine marten is more sensitive to fuels reduction projects like Smith Creek and Smith Shields than presumed at the time the Gallatin forest plan was originally adopted.
3. According to the best available scientific information, the forest plan MIS pine marten no longer inhabits the Smith Shields project area.
4. It is not consistent with NFMA to analyze the impacts of timber harvest on an MIS that is no longer present in the project area.
5. The Forest Service has never validated the assumptions of its modeling of pine marten habitat or verified its assumptions concerning the impacts of timber harvest on pine marten as an MIS for old growth and furbearer species

of wildlife in the Gallatin NF, and it is arbitrary and capricious to continue relying on those assumptions in an area of the forest where the MIS has apparently been extirpated, and where Forest Service biologists speculate that such extirpation may be habitat-related.

6. Extirpation of species, especially MIS, from an island habitat like the Crazy Mountains is a significant environmental issue and indicates a potential unforeseen consequence from the cumulative impacts of forest plan implementation.

SEVENTH CLAIM FOR RELIEF

Defendants Approval of Smith Shields Project Violates NFMA and NEPA by Failing to Ensure Against Irreversible Losses in Soil Productivity

1. All above paragraphs are incorporated by reference.
2. The Forest Service failed to consider the best scientific information currently available concerning cumulative losses in soil productivity in approving the Smith Shields project.
3. The Smith Shields project as approved violates the Region One Soil Standards in unit #17.
4. The Forest Service failed to disclose and/or analyze the cumulative effects of logging, roads, grazing, and non-native species of plants on soil and land productivity, and cannot ensure that such effects are not resulting in

irreversible losses and/or preventing sustained yields in the Smith Shields project area.

VIII. RELIEF REQUESTED

For all of the above-stated reasons, Plaintiffs request that this Court award the following relief:

A. Declare that the agencies violated/are violating the law;

B. Vacate the Chief's designation of treatment areas in Montana;

C. Vacate the DM for the Smith Shields Project;

D. Permanently enjoin implementation of the Smith Shields Project;

E. Award Plaintiffs their costs, expenses, expert witness fees, and reasonable attorney fees under the ESA and/or under EAJA; and

F. Grant Plaintiffs any such further relief as may be just, proper, and equitable.

Respectfully submitted this 27th Day of April, 2017.

/s/ Thomas J. Woodbury
Thomas J. Woodbury
FOREST DEFENSE, PC

Attorneys for Plaintiffs