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**UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF OHIO
EASTERN DIVISION**

OHIO ENVIRONMENTAL COUNCIL,

Plaintiff,

vs.

U.S. FOREST SERVICE, RANDY MOORE in his official capacity as Chief of the United States Forest Service; **CARRIE GILBERT** in her official capacity as Forest Supervisor for the Wayne National Forest; **TIM SLONE** in his official capacity as District Ranger for the Ironton Ranger District of the Wayne National Forest,

Defendants.

) Case No. 2:21-cv-4380

) Chief Judge Algenon L. Marbley
) Magistrate Judge Kimberly A. Jolson

) **SECOND AMENDED COMPLAINT FOR
DECLARATORY AND INJUNCTIVE
RELIEF**

INTRODUCTION

This action challenges the Wayne National Forest’s “Sunny Oaks” Project (the Project) Final Decision Notice and Finding of No Significant Impact (DN-FONSI), signed by the Wayne’s Ironton District Ranger and issued on November 19, 2020, and the Project’s associated final decision documents, including the Environmental Assessment (EA) which was made available to the public for comment during the period spanning December 13, 2018 to February 14, 2019. Plaintiff OHIO ENVIRONMENTAL COUNCIL (OEC) brings this action under the Administrative Procedure Act (APA), [5 U.S.C. §§ 701 et seq.](#); the National Environmental Policy Act (NEPA), [42 U.S.C. §§ 4321](#)

et seq.; and the National Forest Management Act (NFMA), [16 U.S.C. §§ 1600](#) et seq. Defendants are hereinafter collectively referred to as “Forest Service.”

A. Summary of this Action

1. The Sunny Oaks Project threatens to cause significant adverse outcomes that are exactly the opposite of two of the Project’s four purposes — to promote the continuation of the oak-hickory forest ecosystem on the landscape and to respond to insect and disease threats.

2. In a rush to meet rapidly swelling timber volume quotas, the Forest Service tossed aside the Wayne’s mandatory Indiana bat habitat tree retention Standard. And it failed to take a hard look at the fact that its action would likely cause the irretrievable loss of native plant and wildlife diversity in the project area. Specifically, that the Project would likely significantly and permanently reduce the project area’s populations of the American white oak (*Quercus alba*), a singularly important ecological keystone species. And one that provides important habitat and food for numerous forms of wildlife, including the federally endangered Indiana bat and the Regional Forester Sensitive Species Cerulean warbler.

3. The Forest Service further failed to consider the fact that its action would likely cause severe and lasting damage to forest soil health and function in the project area. Specifically, the Forest Service failed to consider the role of the Wood-Wide-Web (the underground fungal networks that connect, sustain, and protect forests) as a relevant factor in the Project’s analysis. As a result, Forest Service literally could not “see the forest for the trees” when analyzing the Sunny Oaks Project.

4. Defendants failed to prepare an EIS where one is required; failed to take the required hard look at many of the Project’s environmental effects; failed to adequately disclose critical Project information to the public; failed to consider a reasonable and meaningfully broad range of

feasible project alternatives; and, violated mandatory terms of the applicable Forest Plan, as well as federal law and regulation.

5. Defendants' approval of the Sunny Oaks Project, as well as Defendants' underlying EA and Finding of No Significant Impact, and any timber sale contracts arising under the Sunny Oaks Project, should be set aside. Further, any new Project activities should be enjoined until Forest Service prepares a legally adequate EIS.

B. Context of the Sunny Oaks Project

6. The Sunny Oaks Project is located in the largely forested landscape of southeast Ohio. The project area includes approximately 25,000 acres of National Forest System lands of the Ironton Ranger District of the Wayne National Forest and approximately 25,000 acres of private land. The Project is located in parts of Jackson (Jefferson and Madison Townships), Gallia (Greenfield and Perry Townships), and Lawrence (Aid, Elizabeth, Decatur, Symmes, and Washington Townships) Counties, Ohio.

7. The Sunny Oaks Project authorizes even-aged timber harvest on about 2,485 acres of forest within different stands of the Wayne. The Project's chosen alternative, Updated Alternative 2, specifies an objective of either "Oak" or "young brushy forest" for the majority of these stands, and assigns a minority of Project stands an objective of "Native pine or young brushy forest."

8. The Wayne's 2006 Forest Plan and the Plan's underlying EIS estimated that, forest-wide, up to 1,925 acres of even-aged timber harvest could be implemented during the Plan's first decade. The Plan and EIS further estimated that up to 2,257 acres of even-aged timber harvest could be implemented during the Plan's second decade. *See* Forest Plan at Appendix B-3.

9. Updated Alternative 2, which is the selected project alternative, authorizes 712 acres of "clearcut," 1,408 acres of "shelterwood," and 365 acres of "two-aged" timber harvests for a total of 2,485 acres of even-aged timbering.

10. The Project states that its 365 acres of “two-aged” timber harvest are “clearcut with reserves.”

11. The Project authorizes an indeterminate number of its 1,408 acres of shelterwood treatments to be implemented as “clearcut with reserves.”

12. Even-aged management encompasses timber harvesting techniques which involve cutting all or almost all of the trees in the same stand at the same time. This results in the creation of stands in which trees of essentially the same age grow together. Clearcut, two-aged, and shelterwood harvesting are even-aged techniques.

13. NFMA imposes a default maximum size limit of 40 acres for even-age timber harvests in the Forest Service’s Eastern Region, which is where the Wayne National Forest is located. This size limit may be exceeded with appropriate public comment and Regional Office review and approval. Several of the Project’s proposed timber harvests exceed this default 40-acre maximum. These harvests and many others in the project also exceed the Wayne’s 2006 Forest Plan guideline, G-FSM-WLF-1, that openings resulting from even-aged timber harvest should vary in size from 2 to 30 acres to provide habitat for a variety of early successional species.

14. The Forest Service failed to provide the public with notice and comment for the cuts it approved in excess of 40 acres on an individual timber sale basis.

15. The Sunny Oaks Project has a stated 20-year timeframe. In addition to timber harvest, it authorizes approximately 60 acres of log landings, approximately 180 acres of skid roads, approximately 10 miles of new road construction, approximately 17 miles of existing road reconstruction, approximately 41 miles of fire line construction per year (23 miles of which are bulldozer line), the application of prescribed fire at 2,000 to 4,000 acres per year across the project area, and an unspecified amount of “mechanical and/or herbicide mid-story control” across the project area.

16. The Project's stated Purpose and Need is to: "1. Create young, brushy forest that is lacking in the area, 2. Regenerate oak forest in areas where it is favored so that forest type is maintained across the landscape, 3. Respond to insect and disease threats, and 4. Contribute to the local economy through commercial timber harvests."

C. Timeline of the Sunny Oaks Project

17. The Wayne was assigned a federal FY 2018 timber target of 14,607 "CCF" ("centum cubic feet"), or 1,460,700 cubic feet.

18. 14,607 CCF was nearly four times greater than the Forest's preceding 21-year average of annual timber targets (FYs 1997- 2017).

19. Early in the Project planning process, Forest Service projected that the Wayne's FY timber targets would continue to steadily increase for each coming fiscal year and then plateau at the equivalent amount of 32,000 CCF in FY 2021 through FY 2023. At that time, Forest Service had already grouped the Project's stands into sale packages, tracked how much estimated CCF each sale package would generate, and assigned each sale package to a fiscal year. And, Forest Service tracked these sale packages against its anticipated FY timber targets for FY 2018 through FY 2023.

20. Forest Service issued the initial proposal for the Sunny Oaks Project for Scoping on April 1, 2018. The Scoping request for comments included the stated purposes of the project (the "statement of purpose and need"), the proposed action (later referred to as Alternative 1), and maps.

21. Forest Service did not include meeting its CCF timber targets in its statement of purpose and need.

22. The OEC timely filed Scoping comments.

23. Forest Service issued a completed Environmental Assessment (EA) for public comment on December 13, 2018. The EA consisted primarily of a series of PowerPoint video

presentations and accompanying transcripts of the presentations. The comment period for the EA ran through February 14, 2019. The OEC timely filed comments on the EA.

24. Forest Service issued a Draft Decision Notice and Finding of No Significant Impact (DDN-FONSI) in January 2020. Notice of the DDN and FONSI was published in the Ironton Tribune on January 19, 2020. The deadline to submit objections to the Project was March 4, 2020. The OEC timely filed an objection to the project.

25. On November 16, 2020, the Wayne's Forest Supervisor issued written responses to the OEC's objection. The Forest Service's responses did not satisfy or resolve Plaintiff's concerns with the Project.

26. The Final DN-FONSI was signed by the Ironton District Ranger on November 19, 2020.

27. Forest Service included data from the Sunny Oaks Project's 2018 Economic Efficiency Analysis on a PowerPoint slide in the Sunny Oaks Project's EA and DN-FONSI. This data estimated that the revenue generated by the Project's timber sales minus the costs of its implementation would be between approximately \$500,000 to over \$1.5 million.

28. Data from the Project's 2019 Economic Efficiency Analysis was not included in the DN-FONSI, however. The 2019 Analysis contained an estimate that the cost of building the Project's logging roads would exceed the Project's timber revenues by \$1,705,725.76.

29. On March 4, 2021, Forest Service issued a statement that it would conduct prescribed fire on approximately 655 acres of the Wayne pursuant to the Sunny Oaks Project. The statement indicated a burn window of March 4 through May 31, 2021.

30. Forest Service issued an advanced notice of timber sale letter for the "Peniel Railroad sale" dated July 8, 2021. Forest Service authorized the Peniel Railroad timber sale pursuant to the Sunny Oaks Project EA and DN-FONSI.

31. Forest Service issued a Peniel Railroad sale timber sale bid letter dated July 27, 2021. The letter stated an approximate timber harvest area of 251 acres and an August 25, 2:00pm bid opening. Forest Service cancelled the bid opening on August 24, 2021 and notice of this cancellation was provided to Plaintiff.

JURISDICTION AND VENUE

32. Jurisdiction is proper in this Court pursuant to 28 U.S.C. §§ 1331 (federal question), 2201 (injunctive relief), 2202 (declaratory relief), and 28 U.S.C. § 1346 (United States as a defendant). This cause of action arises under the laws of the United States, including the Administrative Procedure Act (APA), 5 U.S.C. §§ 701 et seq.; the National Forest Management Act (NFMA), 16 U.S.C. §1600 et seq.; and the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq.

33. Venue is proper in this Court pursuant to 28 U.S.C. § 1391(e)(1)(B), because (1) a substantial part of the events or omissions giving rise to each of Plaintiff's claims occurred in this judicial district, (2) a substantial part of property that is the subject of this action is situated in this judicial district, and (3) the Forest Service has offices in this district, and Plaintiff Ohio Environmental Council has offices and members in this district. Assignment to the Eastern Division in Columbus is appropriate because a substantial part of property that is the subject of the action is situated in Gallia County.

34. An actual, justiciable controversy exists between Plaintiff and Defendants, and the requested relief is therefore proper under 28 U.S.C. §§ 2201-02 and 5 U.S.C. §§ 701-06.

PLAINTIFF

35. Plaintiff OHIO ENVIRONMENTAL COUNCIL (OEC) is a non-profit environmental organization whose mission is to secure healthy air, land, and water for all who call Ohio home. The OEC has over 100 environmental and conservation member organizations and thousands of

individual members throughout the state of Ohio. The OEC has a long history of advocating for the ecological, recreational, and aesthetic integrity of the Wayne National Forest. Many of the OEC's members have visited the Wayne National Forest's Ironton Ranger District for recreational, scientific, educational, and other pursuits and will continue to do so in the future. The OEC brings this action on its own behalf and on behalf of its adversely affected members.

36. The OEC has individual members who live or own property in or near the Wayne National Forest's Ironton Ranger District and the project area; regularly visit this area, including the areas specified in the Peniel Railroad timber sale, and areas near or downstream of these areas and the Ironton Ranger District. These members plan to continue to use and enjoy these areas in the near future and beyond. They use and enjoy these areas for a variety of purposes, including scientific study, education, hiking, camping, photography, sightseeing, wildlife observation, botanical observation, and fishing, and plan to continue to do so on an ongoing basis in the future. Plaintiffs' members derive recreational, spiritual, professional, aesthetic, educational, and other benefits and enjoyment from these activities. The logging, roadbuilding, and prescribed fire and herbicide applications authorized by the Sunny Oaks Project will directly and irreparably injure these interests.

37. Plaintiff and its members have been, are suffering, and will continue to suffer irreparable injury as a result of the Forest Service's decision to authorize the Sunny Oaks Project and its failure to comply with NEPA, NFMA, and the APA. The Project's timbering will result in noise, visual blight, increased traffic, loss of natural soil function, habitat fragmentation and degradation, the rapid erosion of oak-hickory ecosystems, the proliferation of harmful non-native invasive species, and greater air and water pollution. Public and member health and safety effects stemming from the Project include the reduction of forest soil rainwater infiltration (caused by logging and prescribed fire), which adds to existing flood hazard potential in the Symmes Creek watershed; increased logging truck traffic in the area; the use of herbicides across the project area; and smoke

exposure from the Project's prescribed fires. All of these harms will diminish Plaintiffs' members' ability to enjoy recreational, spiritual, professional, aesthetic, educational, and other activities in and around the Wayne National Forest.

38. Defendants' failure to comply with NEPA, NFMA, and the APA in this case has frustrated the ability of Plaintiff and its members to involve themselves in a meaningful public process intended to foster informed agency decisionmaking. The interests and organizational purposes of the Plaintiff and the interests of its members are directly and irreparably injured by Defendants' violations of the laws as described in this complaint.

39. Plaintiff participated actively in the administrative process for the Sunny Oaks Project. The OEC submitted comments on Scoping and the Environmental Assessment, and filed an objection to the Draft Decision Notice. Plaintiff has exhausted administrative remedies for the agency decision challenged in this complaint.

40. Plaintiff seeks declaratory and injunctive relief preventing the Forest Service from proceeding with unlawful and uninformed actions that cause harm to the environment, and thereby to its members, pending compliance with the law. Plaintiff seeks to ensure informed agency decision-making, compliance with federal law, and the prevention of unacceptable harm to the Project area and its ecology. Plaintiff's injuries will therefore be redressed by the relief sought.

41. The Plaintiff has no adequate remedy at law to address the injuries to its interests.

DEFENDANTS

42. Defendant UNITED STATES FOREST SERVICE is an agency or instrumentality of the United States and is charged with managing the public lands and resources of the Wayne National Forest in accordance and compliance with federal laws and regulations.

43. Defendant RANDY MOORE is sued in his official capacity as Chief of the U.S. Forest Service.

44. Defendant CARRIE GILBERT is sued in her official capacity as Forest Supervisor for the Wayne National Forest. Supervisor Gilbert signed the written response to Plaintiff's objection to the Draft Decision Notice for the Sunny Oaks Project.

45. Defendant TIM SLONE is sued in his official capacity as District Ranger for the Ironton Ranger District of the Wayne National Forest. Ranger Slone was the Responsible Official for the Sunny Oaks Project and signed the Final Decision Notice and Finding of No Significant Impact (DN-FONSI).

FACTUAL BACKGROUND

A. The Wayne National Forest

46. The Wayne National Forest is the largest public forest in Ohio, and a significant body of land in a state where only about 15 percent of forestland is publicly owned. Located in the foothills of the Appalachian Mountains in southeast Ohio, the Wayne is within only a few hours driving distance of Columbus, Cleveland, and Cincinnati. The Wayne provides numerous recreational opportunities to Ohio residents and out-of-state visitors. Thousands of people visit the Wayne National Forest each year for hiking, camping, canoeing, wildlife viewing, bird watching, and mushroom gathering, among many other activities.

47. The Wayne National Forest is divided into two Ranger Districts – the Ironton Ranger District and the Athens Ranger District. The Athens Ranger District is further split into two Administrative Units – the Athens Unit and the Marietta Unit. The Forest contains 244,465 acres of federal land located in twelve counties, and its proclamation boundary contains 855,532 acres. The Ironton Ranger District contains approximately 107,113 acres of federal land.

48. The Ironton Ranger District offers a variety of recreational features and opportunities to its visitors, including hiking, horse, and motorized trails; multiple lakes; hunting; fishing; camping; and nature viewing.

49. Hundreds of wildlife species and plant species are found in the Wayne. Rare and sensitive species such as bobcat, black bear, beaver, river otter, Cerulean warbler, Indiana bat, Northern long-eared bat, and tri-colored bat inhabit the Forest. The Indiana bat is a federally endangered species, the Northern-long eared bat is federally threatened, and the tri-colored bat and Cerulean warbler are designated as Regional Forester Sensitive Species.

B. Why Oak Forests Are Important

50. Oaks support more forms of life than any other tree genus in North America.

51. Oak acorns are the primary food energy source in the forest ecosystems of eastern North America during the fall, winter, and early spring. Oak acorns contain large amounts of carbohydrates, fats, and protein, as well as calcium, phosphorus, potassium, and niacin. Acorns are the primary food source for many mammals and birds during the fall and the dormant season of temperate deciduous forests. Acorn availability can affect the weight, condition, reproductive rates, and the size and quality of white-tailed deer antlers. American black bear rates of birth, survival, and seasonal movements vary with the abundance and distribution of acorn crops. Acorns are the primary food of wild turkey during the winter and spring. Acorn production is the minimum limiting factor for ruffed grouse population growth in Ohio. Variation in acorn production also influences population levels and distributions of a variety of small mammals and birds, including mice, squirrels, jays, and woodpeckers.

52. Oaks in eastern North America support more than 500 species of moths and butterflies and their caterpillars, which is far more than any other plant genera. By comparison, the tulip tree, which competes with oaks for dominance, supports only 29 species of caterpillar. Oaks' unmatched ability to host large numbers and diversity of caterpillars, moths, and butterflies (lepidopterans) make them crucially important for federally-listed bats, as well as forest songbird populations. Bats are the primary consumers of night-flying insects, and moths are an important

component of bat diets. The nestlings of most forest songbirds depend on caterpillars and insects for growth and survival. Birds have been found to be more abundant and diverse in oak-dominated stands than in stands dominated by competing tree species. Conversion of oak forests to maple and tulip tree forests would have a severe impact on bat and bird communities in the Eastern United States.

53. Oaks provide superior habitat stability and quality due to their long lifespans and resistance to decay. Oaks are long lived, resistant to rot, and grow to large sizes. Once established, oak forests are relatively stable plant communities. Once they achieve canopy dominance, oaks likely will persist for decades to centuries as they readily withstand insect outbreaks, lightning strikes, wind events, and ice storms. When damage does occur, the ability to compartmentalize rot helps ensure their continued survival. Injury sites may become cavities which, in turn, become dens for wildlife. Dens are especially valuable as wildlife habitat when they occur in large trees. Large, hollow oaks are the preferred denning sites of Appalachian black bear.

54. The leaf litter of oaks provides important habitat, nutrient-cycling, and biochemical qualities not provided by the leaf litter of competing species.

55. Oak forest soils have been found to store more carbon than the soils of competing forest types.

56. The oak species most commonly found in the Wayne's Ironton Ranger District include northern red oak (*Quercus rubra*), black oak (*Quercus velutina*), scarlet oak (*Quercus coccinea*), chestnut oak (*Quercus prinus*), and American white oak (*Quercus alba*), commonly known as "white oak."

57. Of the oak species native to Ohio, white oak (*Quercus alba*) is deserving of special mention. Even among the native oaks, *Quercus alba* is a singularly important species. This

charismatic megaflores has been praised by nature writers as “an outstanding tree among all trees,” “the standard by which all other oaks are measured,” and “the king of kings.”

58. White oak’s unique, flakey and plate-like bark serves as excellent habitat for many species, including the federally endangered Indiana bat.

59. The potential lifespan of *Quercus alba* runs longer than any other oaks native to the region, and longer than nearly all other native hardwood species in its native range. It can produce abundant crops of acorns well into its sixth century of life. Its rot resistance and tendency to form long-lasting wildlife cavities are well known. And, its acorns are less bitter than those of the red oak family, making white oak acorns the preferred food source for many wildlife species. For example, *Quercus alba* acorns, specifically, are the single most important factor in black bear population dynamics and fall movement patterns in the Appalachians. The ability of mother bears to lactate and the fitness and survival of black bear cubs are tied closely to *Quercus alba* acorn masting (cropping) patterns. The American black bear is currently one of three Ohio state endangered mammal species, and is listed in Ohio’s State Wildlife Action Plan as a Mammal Species of Greatest Conservation Need (SGCN).

60. The cerulean warbler is one of North America’s most imperiled migrant songbirds and has experienced steep and ongoing population declines over the past several decades. This species holds the number one ranking in the Ohio State Wildlife Action Plan’s conservation status rankings for avian species of greatest conservation need. Cerulean warblers have a strong preference for nesting and rearing their young in large white oak trees. White oak therefore plays an important role in these birds’ ability to perpetuate on the landscape.

61. Oak in general and white oak in particular tend to be highly valued on the timber markets. White oak, in particular, is virtually the only tree species used to produce the bourbon

barrels that age bourbon. It has been said that 100% of a bourbon's color and 60% of its flavor comes from the oak barrel.

62. White oak bourbon barrel stave mills and cooperages are an important and growing part of the economy at the local and regional levels surrounding the Sunny Oaks project area. At least two major bourbon barrel cooperages are located in Jackson County, Ohio. Part of the Sunny Oaks project area is located in southern Jackson County.

63. Declines in the amount of oak composition on the forested landscape have significant negative impacts on wildlife populations, human enjoyment, and the current and future economic value of forest stands. This holds especially true for declines in white oak composition.

C. Oak Forests Dominated Eastern North America Prior to European Settlement; Clearcutting Drove their Decline

64. Estimates indicate 95% of Ohio was forested before European settlement. Today, about 30% of the state is forested. Nearly all forestland in Ohio and the eastern United States was clearcut logged during the "Clearcut Era" of the 19th and early 20th Centuries. The deforestation was so severe that both white-tailed deer and wild turkey — ubiquitous inhabitants of the state today — were declared extirpated from Ohio in 1904. The American black bear was extirpated from the state in the mid-to-late 19th Century and is a state-listed endangered species today. The clearing of America's eastern forests drove other species to extinction, including the spectacularly colored Carolina parakeet (an Ohio-native parrot) and the passenger pigeon (once the most numerous bird on the planet).

65. The present tree species composition, structure, aesthetics, and ecological age of the forests of Ohio and eastern North America are all — in substantial measure — a reflection of post-European-settlement and land use. Many of the oak tree species common to Ohio have lifespans in the range of 200-400 years, with individual white oaks (*Quercus alba*) capable of living beyond 600

years. Large, old trees tend to possess high aesthetic and wildlife habit value, yet they are largely missing from Ohio's landscape. The vast majority of Ohio's forests today are less than 100 years of age and still on a path towards full ecological recovery.

66. The extensive land clearing that occurred during the Clearcut Era *ca.* 1850-1920 was a primary driver of the decline of oak ecosystems across much of eastern North America and Ohio.

67. Prior to European settlement, oak was the dominant genus in the forests throughout much of what is now the eastern United States, with much of Ohio included. Records indicate that the percentage of oaks in pre-European settlement eastern North America has dropped from 55% to 25% today. Public Land Survey records for southeast Ohio demonstrate that approximately 50% of the trees in the region were oaks prior to European settlement. The presettlement oak composition of Gallia and Lawrence Counties was even higher, with 59.4% and 57% oak composition, respectively. By contrast, today the forests of the southeast Ohio region are 22.3% oak. Gallia County is now at a much reduced 21.1% oak. And the forests of Lawrence County are 36.5% oak.

68. White oak, specifically, was once the dominant tree species of much of eastern North America. This included southeast Ohio, where this single species accounted for an astounding 40% of presettlement Public Land Survey witness trees. By the early 1990s, however, white oak accounted for only about 14.5% of canopy trees in the region.

69. White oak's slide continues today, and the species is the most commercially overexploited tree in Ohio. Unsustainable logging is diminishing its already greatly reduced place in the landscape. American white oak logging removals in Ohio exceed annual net growth at a growth-to-removal ratio of 0.7:1. This species is being logged out of many forests far faster than it can grow back.

70. Forest Service estimated, as part of the Sunny Oaks Project planning process, that the white oak group (the separate, but related white oak and chestnut oak species) would provide the largest amount of CCF on a per-species or species group basis to meet its timber targets.

D. Multiple Factors Influence the Decline of Oak Today; When Not Carefully Planned and Implemented, Even-Aged Timbering Is a Primary Factor

71. In the eastern United States, many oak forests appear to be threatened with gradual replacement by competing forest types. Even though oaks are often capable of persisting in the forest canopy or “overstory” for hundreds of years, they will eventually lose their dominant positions if new generations of oak seedlings and saplings do not replace them at some point in the future. Over many decades or centuries, the oak trees currently in a forest overstory will fall out due to mortality or natural disturbance (assuming timber harvest does not first remove them). Gradual conversion of existing oak-dominated canopies occurs when competing tree species found in the forest floor or “understory” grow up and into the spaces left by fallen oaks. This oak replacement phenomenon tends to occur when forest understories are dominated by seedlings and saplings of non-oak species.

72. In the oak forest stands of southeast Ohio, oak seedlings and saplings are often lacking in the understory. Small oak seedlings can be relatively rare, and competitive (large) oak saplings can be very rare.

73. The lack of oak reproduction in forest understories and the gradual decline and replacement of oak ecosystems has been attributed to multiple interacting factors. These factors include modern-day fire suppression (the use of fire by indigenous peoples and unsuppressed wildfires originating from lightning strikes may have favored oaks in the past), increased rainfall (many oaks tend to have competitive advantages in drier conditions), and increased shade in forest understories (the reproduction of some competing species fare better and persist longer than many oak seedlings and saplings in shady understories).

74. The apparent shifts away from oak dominance in many locations due to understory species composition trends is concerning. However, these ecosystem shifts —whether currently real or merely forecasted — are gradual. In the absence of heavy logging, natural shifts away from oak dominance take many decades to centuries to unfold.

75. On the other hand, when not carefully planned and implemented to reflect forest stand conditions, clearcutting and other forms of even-aged logging tend to rapidly and dramatically convert oak forests into stands dominated by less ecologically and economically valuable competing native species like red maple (*Acer rubrum*) and tulip tree (*Liriodendron tulipifera*) (also commonly referred to as “yellow poplar” or “tulip poplar”), as well as by ecologically harmful non-native invasive species (NNIS). Some of the unique characteristics and survival strategies of white oak — including slow rate of growth and poor stump sprouting ability at maturity — make it a comparatively poor competitor, even among the oaks, in these types of heavy disturbance scenarios.

E. Networked Mycorrhizal Soils Are a Foundational Factor in Oak-Hickory Ecosystems, Oak Regeneration Success, and Forest Health and Resiliency; Forest Service Failed to Consider or Analyze this Foundational Factor

76. Intact forest soils have highly developed mycorrhizal structure that is vitally important for oak regeneration and forest resiliency, including insect and disease response.

77. A mycorrhiza is a mutual symbiotic relationship between a fungus and a plant. The word “mycorrhiza” comes from the Greek for fungi (*mykes*) and roots (*rhiza*).

78. Mycorrhizal fungi are species of fungi that form mycorrhizal relationships with plants, including trees. More than 90 percent of all plant species the world over depend on mycorrhizal fungi. In fact, it is believed that fungal associations with plant life pre-dated the evolution of roots and facilitated the establishment of complex plant life on land.

79. The small and profuse strands (hyphae) of mycorrhizal fungi have 60 times more absorptive area than fine roots. As a result, mycorrhizal fungi dramatically enhance their host plant’s

ability to take up nutrients, including water, nitrogen, and minerals like phosphorus. This often helps the host plant survive adverse conditions. In exchange, the fungal symbiont is provided with a portion of the carbohydrate energy (sugars) the plant host generates through carbon capturing photosynthesis.

80. Mycorrhizal fungi increase the volume of water that the soil can absorb, reducing the quantity of nutrients leached out of the soil by rainfall by as much as fifty percent. They boost the ability of plants to fight off attacks by insect pests by stimulating the production of defensive chemicals. The diverse capacities amongst mycorrhizal species for mobilizing nutrients from soil, mineral, and organic matter insure a host tree against environmental stresses. At the ecosystem level, mycorrhizal fungi are not only important for nutrient cycling, but high mycorrhizal fungal species diversity can facilitate resistance to disease and drought, increased rates of tree growth, mineral access, and soil carbon storage.

81. Mycorrhizal fungi not only support and boost individual plant hosts, they also often connect plants (including trees) to one another in what are called “mycorrhizal networks.” Mycorrhizal networks have been popularly dubbed the “Wood Wide Web,” and they play a foundational role in forest ecology. Mycorrhizal soils are what make forests more than mere collections of trees. Forests with strong mycorrhizal networks are communities of interconnected and interrelating trees — trees that can share both resources and information.

82. Mycorrhizal soils influence the survival, growth, physiology, competitive ability, and behavior of the plants linked in their networks. They enable networked trees to share nutrients, carbon, water, electrical signals, and biochemical information. Plant behavioral responses to information sent through mycorrhizal soils have been observed to include rapid changes in mycorrhizal colonization, root growth, shoot growth, photosynthetic rate, foliar nutrition, foliar defense chemistry, and defense response to pest pressures.

83. Networked trees can send chemical warning signals to other trees in their linked soil networks when they come under attack by insect pests. This allows trees connected by fungal networks to get a head-start on increasing defense chemicals in their leaves and other sensitive tissues. And, networked trees that are under stress can benefit from inter-tree nutrient and resource sharing facilitated by mycorrhizal soils.

84. Large, old trees tend to serve as especially important network “hubs” in mycorrhizal fungal networks, as they have been found to have more numerous and robust mycorrhizal connections than younger, smaller trees. The presence of large trees can influence the ambient temperature and moisture of local environments, modify local soil conditions, and sustain rich assemblages of mycorrhizal fungi species that provide a diverse inoculum source to regenerating tree seedlings.

85. The presence of robust mycorrhizal soils is important for seedling establishment and growth. When seedlings become linked into a fungal network with veteran trees, they gain access to photosynthate carbon, hydraulically lifted water, and patchily distributed nutrients that might otherwise be limiting resources.

86. Plaintiff submitted comments and scientific literature on the fundamental importance of mycorrhizal soils for forest health, forest ecosystem function, and tree seedling establishment and growth as part of the Project’s public comment process. Forest Service offered only a passing official response to Plaintiff’s comments, stating that mycorrhizal networks are not a relevant factor for the creation of early successional habitat through even-aged timbering. Plaintiff subsequently emphasized the importance and relevance of mycorrhizal networks to the Sunny Oaks Project’s stated purpose and need in the objection it filed. Forest Service’s official response to the OEC’s objection conspicuously failed to even mention mycorrhizal networks.

F. Clearcutting Destroys the Mycorrhizal Networks of Oaks and Facilitates Invasion by Competing Mycorrhizal Networks that Suppress Oak Seedlings; Forest Service Failed to Consider these Adverse Effects

87. Mycorrhizal soils generally fall under two separate categories: those made up of ectomycorrhizal (EcM) fungi and those made up of arbuscular (AM) fungi. These two classes of mycorrhizal soils have some fundamental differences and appear to compete with one another. Notably, oaks and (often co-occurring) hickories are served by EcM networks, whereas the primary competitors of oaks — such as maples and tulip trees — are served by AM networks.

88. At least one study has shown that AM networks suppress EcM-affiliated tree seedlings (e.g., oaks) and that EcM networks suppress AM-affiliated tree seedlings (e.g., maples and tulips). In other words, it appears that oak forests are locked in competition against maple-tulip forests below ground just as they are above ground.

89. EcM networks are especially sensitive to intensive commercial logging. Research has shown that EcM fungi decline significantly due to clearcut logging. In contrast, AM populations increase in extensively logged areas. This is likely due to AM's common symbioses with successional plant cover.

90. Even-age timber harvesting with heavy machinery can cause widespread and severe soil compaction and erosion. Logging-induced soil compaction profoundly affects EcM fungi abundance, structure, and function; it therefore raises concerns regarding forest productivity, juvenile tree regeneration, and long-term ecosystem functioning. The disruption and diminishment of EcM networks due to harvest-induced soil compaction has been shown to be substantial and long-lasting, and recovery of a soil from severe compaction may take centuries rather than decades. Data shows that clearcut harvesting is especially destructive of EcM fungal networks. A meta-analysis of harvesting impacts on ectomycorrhizal fungi found that it generally takes 90 years for

ectomycorrhizal species richness in heavily harvested forests to approach that found in undisturbed forests.

91. The majority of the Sunny Oaks project is located on soils that are rated severe or very severe for erosion hazard risk and severe for rutting and compaction hazard risk.

92. The removal of mature EcM trees, the compaction of forest soils, and the corresponding disruption of EcM networks likely facilitates AM invasion and succession from oak-hickory to maple-tulip ecosystems.

93. Plaintiff submitted comments and scientific literature on the distinction between AM and EcM networks and on the highly sensitive response of EcM networks to heavy timbering during the Project's public comment process. Forest Service offered only a passing official response to Plaintiff's comments, stating that mycorrhizal networks are not a relevant factor for the creation of early successional habitat through even-aged timbering. Plaintiff subsequently emphasized the importance and relevance of mycorrhizal networks to this Project's stated purpose and need in its objection to the Project. Forest Service's objection response conspicuously failed to even mention them.

G. Successful Oak Regeneration Through Timber Harvesting Requires Careful Data Collection and Analysis, Planning, and Implementation

94. There are thousands of papers published on the problems associated with regenerating oaks. Despite decades of research, experimentation, and tools development, successful oak regeneration through commercial timber harvest remains difficult throughout much of the eastern United States. Achieving desirable regeneration outcomes can be difficult, unpredictable, and expensive.

95. Put briefly, the oak regeneration problem occurs when the probability of replacing an existing oak stand with a new one by a final timber harvest or other stand-replacing disturbance is

zero or unacceptably low for the stated management objective. In other words, the timber harvest is poorly timed with the oak regeneration process. Even-aged oak forests pass through a regeneration process that often spans 20 or more years. First, acorns must be produced and a sufficient number must survive to germinate and establish new oak seedlings. These seedlings must survive long enough to develop root systems and stems that can compete successfully for dominant positions once a new forest is initiated by a timber harvest. If the harvest occurs before oak seedlings are established or they are able to build large root systems, then it is highly unlikely that a new oak forest will form.

96. Though oak regeneration silviculture is fraught with difficulties and uncertainties, one thing is clear: *sufficient numbers of large oak seedlings and saplings are required to sustain oak stocking into the future*. Sufficient numbers and spatial distribution of competitive (large) oak seedlings must be present prior to substantial overstory removal in order for oak regeneration to succeed. This principle has been well known by professional foresters for several decades. The Wayne's 2006 Forest Plan recites this fundamental principle.

97. Poor oak regeneration after a disturbance occurs when the abundance, spatial distribution, and the size of oak advance reproduction¹ is insufficient to compete with well-established sapling and poles of shade-tolerant species (*e.g.*, red maple) or newly established but fast-growing shade-intolerant species (*e.g.*, tulip poplar). These competitors outnumber, out-grow, and ultimately shade-kill advance oak reproduction when harvest conditions are less than optimum.

98. Because forest regeneration is a process, not an event, it may take 20–30 years of waiting and active management to increase oak advance reproduction numbers, distribution, and size to competitive levels necessary for successful oak regeneration harvest. Few land managers or landowners plan for oak regeneration this far in advance of harvesting, can afford the time or money

¹ “Advance reproduction” (also known as “advance regeneration”) is composed of the seedlings and/or saplings present in the understory of a mature forest prior to a canopy disturbing or canopy removing event.

investment to implement oak regeneration treatments, or can sustain the long-term regime of practices necessary with changes in personnel or landownership.

H. The SILVAH:OAK Decision Support System Is an Important Tool that Can Be Used by Land Managers to Analyze Stand Exam Data When Considering Oak Management Prescriptions; Forest Service Materially Relied Upon SILVAH:OAK to Conduct its Analysis of the Sunny Oaks Project

99. Forest managers and policymakers need information on the likelihood of regeneration success before implementing regeneration treatments and policies to ensure long-term sustainability of forest ecosystems.

100. Pre-harvest inventories of reproduction are important because advance reproduction is a primary regeneration source in many forest ecosystems. Inventory-based evaluations have been developed to gauge the potential for advance reproduction to meet regeneration objectives.

101. SILVAH:OAK (also known as “SILVAH”) is a computer tool for making silvicultural decisions in which current forest stand conditions are identified through a systematic inventory of overstory and understory.

102. Forest Service used the SILVAH:OAK decision support system to provide much of the baseline inventory data for the Sunny Oaks Project.

103. The purpose of SILVAH:OAK is to provide guidance to forest managers in the sequence and timing of silvicultural treatments designed to foster the development of small oak regeneration to competitively sized reproduction that can form new oak stands following a timber harvest. Informed by previous studies of harvested stands, SILVAH:OAK uses a pre-harvest inventory of oak advance reproduction to recommend treatments for successful oak regeneration after a final removal harvest.

104. The SILVAH decision support system uses a strategic inventory to identify the abundance and spatial distribution of various desirable seedlings of known competitive status and

the barriers to their success. At the heart of SILVAH are silvicultural guidelines for reducing barriers to regeneration and fostering growth or release of desirable oak seedlings. SILVAH organizes these potential silvicultural interventions and links them to inventoried conditions in the forest overstory and understory at the forest stand level. These interventions may be costly, as they require advance inventory of overstory and understory conditions and careful timing of treatments to stages of oak forest and seedling development.

I. Forest Service Failed to Collect the Recommended Minimum Data Required to Generate Reliable SILVAH Information and Reports for the Majority of Project Stands; Forest Service Failed to Disclose these Informational Shortcomings in the EA or the DN-FONSI, and Further Failed to Provide Any Justification Regarding Why More Definitive Information Could not be provided

105. SILVAH can be used to generate reports when its users input stand exam data.

SILVAH reports were generated for most of the Project's Oak objective stands, as well as other stands in the Project.

106. The OEC initially acquired portions of the Project's SILVAH data through Freedom of Information Act (FOIA) request. Forest Service subsequently provided the OEC with additional Sunny Oaks SILVAH data upon the OEC's request and without requiring formal FOIA process.

107. The Project's SILVAH reports likely would not have become publicly known during the NEPA process had the OEC not requested and received them from Forest Service.

108. Forest Service did not disclose or analyze site-specific SILVAH data for the Project in Scoping, the EA, or the DN-FONSI.

109. A majority of Forest Service's SILVAH stand exams for this Project did not collect the SILVAH minimum recommended plot data points. Forest Service did not disclose or analyze this fact in Scoping, the EA, or the DN-FONSI.

110. Many of the Project's SILVAH stand exams date from field surveys taken in 2009-2011.

111. Forest Service did not provide any mention or justification in the EA or DN-FONSI as to why more definitive or current SILVAH plot data could not be provided.

J. A Majority of the Sunny Oaks SILVAH Reports State or Reflect that the Project's Stands Are At or Near the Beginning of the Oak Regeneration Process and Are Therefore Currently Not Ready for Even-Age Timber Harvest

112. A majority of the Project's SILVAH stand informational reports expressly state or otherwise reflect that the stands they analyze are not currently ready for even-aged timber harvest if successful oak regeneration is a desired outcome.

113. The SILVAH:OAK guidelines recommend that at least 50 percent of sample plots within a stand should be "stocked with competitive oaks" for oaks to maintain dominance after a final removal harvest.

114. Per the Sunny Oaks Project's SILVAH data and reports, a majority of the Project's Oak objective stands do not satisfy the SILVAH:OAK 50 percent stocking guidelines. Forest Service did not adequately disclose or analyze this fact in the EA or DN-FONSI.

K. The Sunny Oaks Project Threatens to Diminish Oak Ecosystems in the Project Area

115. The Sunny Oaks Project threatens to violate a fundamental principle of oak silviculture: that sufficiently sized oak reproduction must be present in sufficient numbers and in sufficient spatial distribution in a stand's understory before the overstory is removed.

116. Based on the Project's SILVAH plot data inventories (the majority of which, again, are inadequate per SILVAH methodology), a majority of the Project's Oak objective stands lack not only large oak advance reproduction, but small seedlings as well. As a result, either clearcutting or shelterwood logging these stands threatens to result in the sharp decline of their oak composition. Were this to occur, the future stands would likely come to be dominated by competing species such as red maple, tulip poplar, and non-native invasive species (NNIS), all of which have far less wildlife and economic value than oak.

117. According to the SILVAH guidelines and scientific literature, it could take decades of appropriate management investments to get this Project's stands adequately stocked with the advance oak reproduction required for successful oak regeneration harvest. Despite this fact, Forest Service approved a Project that authorizes various forms of clearcutting or shelterwood harvesting on all of its Oak objective stands.

L. An Undisclosed Purpose and Need Infected the Heart of Sunny Oaks' NEPA Analysis.

118. At or near the dawn of Sunny Oaks, its forest stands were already chosen, bundled into sales packages, expressed in CCF, and indexed to rapidly swelling timber targets.

119. Later in the planning process, Forest Service was still tracking its NEPA project alternatives by CCF.

120. In 2019, the cumulative projected FY 2020 – 2023 CCF estimate for Alternative 2 was 38,375 CCF.

121. In 2019, the cumulative projected FY 2020 – 2023 CCF estimate for Alternative 2b (the selected Alternative) was 32,855 CCF.

122. At that time, however, the Wayne's projected cumulative FY 2020 – 2023 CCF timber target was 111,400 CCF (or 27,850 CCF per fiscal year).

123. Terms like "CCF" and "targets" were not mentioned in the public-facing NEPA documents prepared by Forest Service. Nor were the agency's sale package bundles.

124. Nor was the fact that Forest Service reinterpreted its Indiana bat tree retention standard to avoid retaining bat habitat trees in the cutting units of the Project's stands.

125. Forest Plan Standard SFW-TES-12 requires Forest Service to retain a minimum of 12 live, loose-barked trees per acre in all hardwood timber harvest cutting units as habitat for the federally endangered Indiana bat.

126. While white oak retention in the Project's stands would have been the obvious way to meet this Standard, Forest Service remarkably chose to construe the mandatory requirements of SFW-TES-12 as impossible to satisfy due to, among other things, the agency's determination that these trees do not exist in nature.

127. The Wayne's Forest Plan also includes a Guideline, GFW-VEG-11, which requires the retention of approximately 15 to 30 square feet of tree basal area per acre in two-aged harvests.

128. The Sunny Oaks Project departed from GFW-VEG-11 because Defendants limited final tree basal area retention in the Project's proposed harvests to a maximum of 15 square feet per acre.

129. Defendants did not document or disclose their departure from GFW-VEG-11 in the EA, DN-FONSI, or other public-facing NEPA documentation.

130. Defendants' decision to limit tree retention to a maximum of 15 square feet per acre constituted the adoption of a new, *de facto* Forest Plan Guideline.

131. The OEC timely proposed project alternatives — including the retention of all mature oak trees in the stands to be harvested (i.e., leave the oaks and take the rest) and an alternative in which all mature white oak trees would be retained in harvested stands (i.e., leave the white oak trees and take the rest). The alternatives offered by the OEC would have better met the stated objectives of the Project than the alternatives Forest Service analyzed in the EA and DN-FONSI. The OEC oak retention alternatives would have better avoided or mitigated oak ecosystem loss (particularly the loss of white oak), adverse impacts to mycorrhizal soils, and adverse impacts to the forest's ability to resist harmful insects and disease — all while likely meeting the Forest Plan's bat tree retention Standard and numerous Plan Guidelines this Project deviates from. Despite this, Forest Service only briefly considered the OEC's proposed alternatives and then eliminated them from detailed analysis.

132. Defendants materially relied upon their *de facto* 15 square foot maximum tree retention Guideline when they decided to eliminate the OEC's proposed project alternatives from analysis.

CLAIMS FOR RELIEF

FIRST CLAIM

DEFENDANTS' VIOLATION OF NEPA AND THE APA

133. Plaintiff hereby realleges and incorporates by reference the allegations set forth in the preceding paragraphs.

134. The National Environmental Policy Act and its implementing regulations require federal agencies to take a hard look at the environmental consequences of proposed actions and the reasonable alternatives that would avoid or minimize such impacts or enhance the quality of the human environment. *See* [42 U.S.C. § 4332\(2\)\(C\)\(i\)](#); [40 C.F.R. pt. 1502, 1508](#).

135. NEPA is “our basic national charter for protection of the environment.” [40 C.F.R. § 1500.1\(a\)](#). Its twin aims are to facilitate informed agency decision-making and public access to information. By focusing both agency and public attention on the environmental effects of proposed actions, NEPA facilitates informed decision-making by agencies and fosters public participation.

136. To accomplish these objectives, NEPA requires “responsible [federal] officials” to prepare an environmental impact statement (“EIS”) to consider the effects of each “major Federal action[] significantly affecting the quality of the human environment.” [42 U.S.C. § 4332\(2\)\(C\)\(i\)](#). To determine whether the impacts of a proposed action are significant enough to warrant preparation of an EIS, the agency may prepare an Environmental Assessment or “EA.”

137. An EA must provide sufficient information for determining whether to prepare an EIS or issue a finding of no significant impact. [40 C.F.R. § 1508.9\(a\)](#). The information presented in the EA must be of “high quality,” and include “accurate scientific analysis.” [40 C.F.R. § 1500.1\(b\)](#). The

EA must take a “hard look” at the impacts and must analyze not only the direct impacts of a proposed action, but also the indirect and cumulative impacts. *Id.* §§ 1508.7, 1508.8. Such analysis must include all reasonably foreseeable impacts of the proposed action.

138. If, after preparing an EA, the agency determines an EIS is not required, the agency must provide a “convincing statement of reasons” why the project’s impacts are insignificant and issue a Finding of No Significant Impact or “FONSI.” *Id.* §§ 1501.4, 1508.9, 1508.13.

139. NEPA also requires agencies to consider a range of alternatives to each proposed action. The agency’s analysis must consider the underlying “purpose and need” for the proposed action, and “rigorously explore and objectively evaluate” the environmental impacts of “all reasonable alternatives” to the proposed action. 40 C.F.R. §§ 1502.13, 1502.14. The alternatives analysis is “the heart” of the NEPA process because it “present[s] the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public.” *Id.* § 1502.14. This requirement is critical to serving NEPA’s primary purposes of ensuring fully informed decisions and providing for meaningful public participation in environmental analyses and decisionmaking. *Id.* § 1500.1(b), (c).

140. NEPA’s implementing regulations require that the agency “shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions,” and shall ensure the scientific accuracy and integrity of environmental analysis. *Id.* § 1502.24. The agency must disclose if information is incomplete or unavailable and explain “the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts.” *Id.* § 1502.22(b). The agency must also directly and explicitly respond to dissenting scientific opinion. *Id.* § 1502.9(b).

141. Federal agencies must prepare an EIS for any federal action that may have a significant environmental effect. 42 U.S.C. § 4332. In determining whether a proposed action may “significantly” impact the environment, both the context and the intensity of the action must be considered. 40 C.F.R. § 1508.27.

142. In evaluating intensity, the agency must consider numerous “significance” factors, including impacts that may be both beneficial and adverse; the degree to which the effects on the quality of the human environment are likely to be highly controversial; the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks; whether the action is related to other actions with individually insignificant but cumulatively significant impacts; the degree to which the action may adversely affect an endangered or threatened species or its critical habitat; and whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment. 40 C.F.R. § 1508.27(b).

143. If the agency’s action may be environmentally significant according to any of the factors, the agency must prepare an EIS.

(Violation of NEPA and 5 U.S.C. § 706(2))

144. Forest Service violated NEPA and its implementing regulations through issuance of the Sunny Oaks Project EA and DN-FONSI. These violations include, but are not limited to:

A. Failure to Take the Required NEPA Hard Look at the Project’s Effects.

145. Failing to consider Project impacts to mycorrhizal soils and networks. Forest Service’s failure to consider harmful impacts to mycorrhizal networks means that Forest Service also failed to consider resulting negative effects to oak forest regeneration and insect and disease response, as well as to the preservation of regional tree species diversity;

146. Failing to adequately consider significant adverse impacts to wildlife and plant species diversity in the project area, as required by NEPA and NFMA (16 U.S.C. 1604(g)(3)(B)),

and the Forest Plan (*see, e.g.*, SFW-TES-12, SFW-TES-32), including but not limited to: failing to adequately consider or disclose likely adverse impacts to the Forest's white oak population; to Indiana bat, Northern long-eared bat, and Tri-colored bat populations; and to cerulean warbler populations;

147. Failing to provide the high-quality data and analysis necessary to support its Decision Notice and FONSI for the Sunny Oaks Project. This includes, but is not limited to: incomplete stand regeneration baseline data and unreliable regeneration baseline reports for the project area;

148. These violations of NEPA are arbitrary, capricious, an abuse of discretion, and not in accordance with law under the APA, which has caused or threatens serious prejudice and injury to Plaintiffs' rights and interests.

B. Failure to Consider an Adequate Range of Project Alternatives.

149. Failing to adequately and objectively evaluate Plaintiff OEC's proposed oak and white oak retention project alternatives and failing to adequately explain the grounds for dismissing said alternatives, including: failing to evaluate the OEC alternatives on a site-specific basis in both the Project's pre-selected stands and the other forest stands within the Project Area; and, eliminating Plaintiff OEC's proposed project alternatives from analysis based on adherence to a *de facto* 15 square foot maximum tree retention Guideline. This failure further implicates cornerstone Forest Service NFMA mandates for the protection of soils and plant and wildlife diversity;

150. Failing to consider a meaningfully broad range of feasible Project alternatives when making its NFMA even-aged harvest optimality and appropriateness determinations; and

151. Failing to analyze a No Action Alternative for the Project.

152. The Forest Service's failure to consider an adequate range of feasible NEPA alternatives is arbitrary, capricious, an abuse of discretion, and not in accordance with law under the APA, which has caused or threatens serious prejudice and injury to Plaintiffs' rights and interests.

C. Failure to Prepare an EIS where one is Required.

153. Failing to prepare an EIS prior to authorizing the challenged decision, instead relying upon the issuance of a FONSI, when several of NEPA's significance finding factors exist with respect to the Sunny Oaks Project. This is a major federal project significantly affecting the human environment. The Project's context and an examination of the NEPA intensity factors (40 C.F.R. § 1508.27) demonstrate the significance of the Project's effects:

154. The Project threatens numerous adverse impacts on oak-hickory ecosystems, soil mycorrhizal structure and function, forest pest insect and disease response, sensitive wildlife, human enjoyment, public health and safety, and the current and future economic value of the forest;

155. The effects are highly controversial because, *inter alia*:

a. Decades of agency science, the Forest Plan, and the EA state that sufficient numbers, distribution, and sizes of oak reproduction must be present in a stand's understory prior to oak regeneration harvest — but the available project baseline data shows that these factors are absent or insufficient in many of the Project's stands;

b. The Project fails to address the contrary scientific information and analysis before it regarding the efficacy of shelterwood cutting as an oak forest regeneration method when advance oak reproduction is absent or scarce;

c. Several of the Project's cutting units exceed the NFMA-mandated default Regional maximum size limit of 40 acres. And many more of the Project's cutting units exceed the applicable Forest Plan Guideline (G-FSM-WLF-1) limiting even-aged harvesting to 30 or fewer acres for the benefit of early successional wildlife species. In addition, the DN-FONSI contains conflicting statements about the number of Project cuts that will exceed these acreage limitations;

d. An indeterminate proportion of the Project's shelterwood harvests could be

implemented as “clearcut with reserves.” This raises substantial questions about the nature and effects of the Project’s harvests;

156. The effects are highly uncertain because, *inter alia*:

a. The Project fails to select a specific action for the majority of the Project’s acreage: the forest stands labeled “Shelterwood” could be implemented through several different silvicultural prescriptions, including clearcutting;

b. The Project relies on substantially incomplete SILVAH understory plot data for a majority of its Oak objective stands. This deficiency infects the Project’s oak regeneration analysis with a high degree of unreliability; and

c. The baseline data that is available shows that many of the Project’s Oak Objective stands are not ready for even-age regeneration harvest. Forest stands in this condition often require 20 to 30 years to develop oak advance reproduction adequate for successful oak regeneration harvest.

157. The Project raises substantial health and safety concerns due to its potential to contribute to existing flood and unstable soil risks, and because of the air pollution that will result from many thousands of acres of authorized prescribed fire.

158. The decision sets major precedent for future timber projects on the Wayne National Forest that violate the Forest Plan’s bat tree retention Standard (SFW-TEs-12) and basal area retention Guideline (GFW-VEG-11); that exceed numerous Plan Guidelines that are intended to limit the size, location, and aesthetic impacts of timber harvesting; that fail to collect adequate stand examination data; that fail to meaningfully disclose critical project data in the NEPA process; and that adopt inappropriately vague and poorly-defined “adaptive management” approaches. Forest Service oak silviculture projects like this one set the example for other land managers and private landowners in the immediate area, the region, and the oak forests of eastern North America,

generally. Oak ecosystem maintenance and sustainable oak regeneration timber harvest are issues of great ecological and economic importance. Because of the patience, expenses, and careful data collection and analysis required, it is likely up to government agencies like U.S. Forest Service to be the leaders in developing and modeling sustainable oak regeneration timber harvests.

159. The action is cumulatively significant because it will contribute to the erosion of white oak's place on the landscape in southeast Ohio and the Region.

160. The EA states the Sunny Oaks project is likely to adversely affect federally endangered and threatened species, specifically the Indiana bat, and the northern long-eared bat. All even-aged hardwood timber harvests approved by the Project (i.e., the vast majority of the Project's approved cuts) violate the Forest Plan's mandatory Indiana bat tree retention Standard SFW-TES-12 and basal area retention Guideline GFW-VEG-11.

161. The action violates NEPA, NFMA, the APA, the implementing regulations of the forgoing statutes, the Wayne National Forest's 2006 Forest Plan, and applicable Forest Service Directives.

162. Forest Service's failure to prepare an EIS is arbitrary, capricious, an abuse of discretion, and not in accordance with law under the APA, which has caused or threatens serious prejudice and injury to Plaintiffs' rights and interests.

D. The Agency Abused its Discretion by Withholding Material Project Information.

163. The Forest Service abused its discretion under the APA and NEPA by withholding the Project's most up-to-date Economic Efficiency Analysis information from the public.

SECOND CLAIM

DEFENDANTS' VIOLATION OF NFMA AND THE APA

164. Plaintiff hereby realleges and incorporates by reference the allegations set forth in the preceding paragraphs.

165. In 1976, Congress enacted the National Forest Management Act (NFMA) 16 U.S.C. §§ 1600 et seq., which governs the Forest Service’s management of the National Forests.

166. NFMA was enacted in response to a nationwide controversy over the U.S. Forest Service’s use of clearcutting in the National Forest System.

167. NFMA requires the creation of a resource management plan — called a “Land and Resource Management Plan” (LRMP) or “Forest Plan” — for each unit of the National Forest System. NFMA establishes a two-step process for forest planning. It first requires the Forest Service to develop, maintain, and revise a Forest Plan for each national forest. 16 U.S.C. § 1604(a). The Forest Plan guides natural resource management activities forest-wide, setting management goals and objectives, standards and guidelines, and monitoring and evaluation requirements.

168. Once a Forest Plan is in place, site-specific actions are planned and evaluated by the Forest Service. All site-specific decisions must be consistent with the broader Forest Plan. 16 U.S.C. § 1604(i). Project-level departures from Forest Plan Standards require a Forest Plan Amendment.

169. The Wayne’s Forest Plan requires that project-level departures from Forest Plan Guidelines be analyzed during project level analysis and documented in a project decision document.

170. NFMA constrains the Forest Service’s use of clearcutting to circumstances in which it is determined to be the “optimum” method of achieving applicable forest plan requirements and goals. 16 U.S.C. § 1604(g)(3)(F)(i). And, NFMA constrains the agency’s use of other even-aged harvest methods (*e.g.*, shelterwood cuts) to circumstances in which they are determined to be “appropriate” methods of achieving applicable forest plan requirements and goals. *Id.*

171. NFMA proscribes any and all timber harvests in the National Forest System where soil will be irreversibly damaged; and, limits the use of clearcuts, shelterwood cutting, and other forms of even-aged cutting to situations where such cuts are consistent with the protection of soil and the regeneration of the timber resource. 16 U.S.C. § 1604(g)(3)(E)(i); (F)(v).

172. NFMA mandates the provision of plant and animal community diversity, as well as the preservation of tree species diversity similar to that in the Forest's region. 16 U.S.C. § 1604(g)(3)(B).

173. NFMA requires public participation in the development, review, revision, and amendment of Forest Plans. 16 U.S.C. § 1604(d)(1), (f).

174. NFMA also mandates that the harvesting system to be used "is not selected primarily because it will give the greatest dollar return or the greatest unit output of timber." 16 U.S.C. § 1604(g)(3)(E)(iv).

(Violation of NFMA and 5 U.S.C. § 706(2))

175. The Forest Service has violated the Forest Plan and NFMA because the Sunny Oaks Project deviates from Forest Plan Standard SFW-TES-12's requirement that all hardwood timber harvests retain a minimum of 12 live trees with loose bark per acre in the cutting unit for the federally-endangered Indiana bat. Forest Service's determination that loose-barked trees do not exist in nature and that it was therefore not required to implement any of SFW-TES-12's live, loose-barked tree retention mandate is arbitrary and capricious. Moreover, deviations from Forest Plan Standards require Amendments to the Forest Plan, which Forest Service did not choose to avail itself of for this Project;

176. Forest Service violated the Forest Plan and NFMA by limiting tree basal area retention in the Project's stands to a maximum of 15 square feet per acre. This limitation on basal area retention departs from Forest Plan Guideline GFW-VEG-11. Forest Service failed to analyze this guideline departure as part of the Project's analysis and failed to document this departure in a Project decision document;

177. Defendants' novel approaches to SFW-TES-12 and GFW-VEG-11 constitute the adoption of *de facto* Forest Plan directives. Defendants adopted these Forest Plan directives without

adhering to the public notice and comment process NFMA requires for Forest Plan development, review, revisions or amendments, and Defendants have therefore violated NFMA;

178. The Forest Service violated NFMA and the Forest Plan by authorizing even-age timber harvests without reviewing their adverse effects on mycorrhizal soils or ways to avoid or mitigate those adverse effects;

179. The Forest Service violated NFMA's diversity mandate (16 U.S.C. 1604(g)(3)(B)) and the Forest Plan by failing to adequately consider adverse effects on tree and wildlife populations, including but not limited to: white oak; Indiana bat, Northern long-eared bat, Tri-colored bat; and cerulean warbler (*e.g.*, SFW-TES-32);

180. The Forest Service violated NFMA by relying on incomplete SILVAH data and unreliable information to make its NFMA mandated optimality and appropriateness determinations for all even-aged harvests approved by the Project;

181. The Forest Service violated NFMA by approving clearcuts and shelterwood cuts for Project stands where oak advanced reproduction is absent, scarce, or poorly distributed. Implementation of clearcuts, including clearcuts with reserves, and shelterwood cuts under these conditions threatens to result in oak regeneration failure;

182. The Forest Service violated NFMA and the Forest Plan by failing to analyze its even-age harvest optimality and appropriateness determinations among a reasonably broad range of feasible project alternatives and silvicultural treatments. The Wayne's 2006 Forest Plan includes, *inter alia*, Goal 6.1 and Objective 6.1a, which directs the Wayne to promote the maintenance and restoration of the oak-hickory ecosystem using all available silvicultural treatments;

183. The Forest Service violated NFMA, its implementing regulations, and the Forest Plan by approving the Project's timber sales in excess of 40 acres without providing the public with notice and comment on an individual timber sale basis;

184. The Forest Service violated NFMA and the Forest Plan by authorizing a Project — as a whole and on a stand-by-stand and sale-by-sale basis — that it designed and selected primarily to meet CCF targets;

185. These violations of NFMA are arbitrary, capricious, an abuse of discretion, and not in accordance with law under the APA, which has caused or threatens serious prejudice and injury to Plaintiffs' rights and interests.

REQUEST FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court:

A. Adjudge and declare that Defendants' approval of the Sunny Oaks Project violates NEPA, NFMA, those statutes' implementing regulations, and the Wayne's Forest Plan, and is arbitrary, capricious, an abuse of discretion, and contrary to law under the judicial review standards of the APA, [5 U.S.C. § 706\(2\)](#);

B. Hold unlawful and set aside the Decision Notice, FONSI and EA for the Sunny Oaks Project, and order the Defendants to withdraw the DN, FONSI and EA and any and all associated contracts until such time as Forest Service demonstrate that it has complied with the law;

C. Order Forest Service to revise the Sunny Oaks Project so that it meets with the requirements of NFMA and the Wayne's Forest Plan;

D. Order Forest Service to prepare an EIS;

E. Enjoin Forest Service and its contractors, assigns, and other agents from proceeding with commercial logging prescriptions, sales, or harvesting unless and until the violations of federal law set forth herein have been corrected;

F. Enter such other declaratory relief, and temporary, preliminary, or permanent injunctive relief as may be prayed for hereafter by Plaintiff;

G. Award Plaintiff its costs of suit, reasonable expenses and attorney fees pursuant to all applicable legal authority including, but not limited to, the Equal Access to Justice Act, 28 U.S.C. § 2412, and any and all other provisions of law or equity; and

H. Grant such further relief as the Court deems just and proper in order to provide Plaintiff with relief and protect the public interest.

DATED: December 8, 2022

Respectfully submitted,

/s/ Nathan G. Johnson
Nathan G. Johnson
(OH State Bar No.0082838)
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