OHIO ENVIRONMENTAL COUNCIL

March 3, 2020

USDA Forest Service, Eastern Region
Gaslight Building, Ste 700
ATTN: PAL/LSC Staff
626 East Wisconsin Avenue
Milwaukee, WI 53202-4616

Objections Reviewing Officer
Forest Supervisor Carrie Gilbert
Wayne National Forest
13700 US Hwy 33
Nelsonville, OH 45764
Email: objections-eastern-region@fs.fed.us

Re: OBJECTION Pursuant to 36 C.F.R. § 218.8 to the SUNNY OAKS PROJECT, Ironton Ranger District, Wayne National Forest, Responsible Official Ironton District Ranger Tim Sloane

Dear Reviewing Officer:

The Ohio Environmental Council hereby submits these objections to the Wayne National Forest's Draft Decision Notice (DDN), Finding of No Significant Impact (FONSI) and Environmental Assessment (EA) for the Sunny Oaks Project.

Project Objected To

Pursuant to 36 C.F.R. § 218.8(d)(4), we object to the following project:

> *Project:* Sunny Oaks Project, Lawrence, Gallia and Jackson Counties, Ohio
>
> *Responsible Official and Forest/Ranger District:* Tim Sloane, Ironton District Ranger, Ironton Ranger District, Wayne National Forest

Timeliness

These objections are timely filed. Notice of the DDN and FONSI was published in the Ironton Tribune on January 19, 2020. The deadline to submit objections is thus March 4, 2020.

Lead Objector

As required by 36 C.F.R. § 218.8(d)(3), the Objector designates the "Lead Objector" as follows:

> Nathan G. Johnson, Public Lands Director

Ohio Environmental Council
1145 Chesapeake Avenue, Suite I
Columbus, Ohio 43212
(614) 487-5841
NJohnson@theOEC.org

Interests and Participation of the Objectors

The Ohio Environmental Council (OEC) is a non-profit environmental organization with thousands of members throughout the state of Ohio who value public lands, the many benefits they provide, and the many species that reside there. Our mission is to secure healthy air, land, and water for all who call Ohio home. The OEC has organizational interests in the proper and lawful management of the Wayne National Forest and associated impacts on the forest's wildlife and wild places. The OEC submitted comments on the Sunny Oaks Project and the matters addressed below on May 1, 2018; July 20, 2018; July 25, 2018; August 21, 2018; August 22, 2018; January 14, 2019; and February 14, 2019.

The Sunny Oaks Project

The DDN-FONSI states the Project's 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." (Page 5).

OBJECTIONS

I. THE SUNNY OAKS PROJECT VIOLATES THE NATIONAL FOREST MANAGEMENT ACT (NFMA)

A. Clearcutting Is Not the Optimum Silvicultural Method for Maintaining, Restoring, or Regenerating the Oak Stands in this Project.

The National Forest Management Act (NFMA) mandates that clearcutting be used on National Forest System lands "only where […] it is determined to be the optimum method […] to meet the objectives and requirements of the relevant land management plan." 16 U.S.C. 1604(g)(3)(F). The Wayne's 2006 Forest Plan includes, inter alia, Goal 6.1 and Objective 6.1a, which directs staff to promote the maintenance and restoration of the oak-hickory ecosystem:

> Use all available silvicultural treatments, including precommercial and commercial thinning, regeneration harvesting, prescribed fire, shelterwood harvests, site preparation, and improvement cutting to promote the maintenance and restoration of the oak-hickory ecosystem.

In keeping with this Objective of the 2006 Forest Plan, one of the four stated purposes and needs of the "Sunny Oaks" Project is to "[r]egenerate oak forest in areas where it is favored so that forest type is maintained across the landscape."

Unfortunately, the forest stands at issue in the Sunny Oaks Project simply do not contain the numbers, distribution, or size of oak seedlings and saplings that are prerequisite to successful oak clearcut regeneration harvests. Sufficient number, distribution, and size of oak saplings must be present prior to clearcut harvest if oak ecosystem maintenance and regeneration is an objective. See, e.g., January 14, 2019 EA Comments of the OEC, at pages 16-17. Those preconditions are not satisfied in the stands in question (see infra), and clearcutting is therefore not the optimum prescription.[1]

Quite the opposite: clearcutting the Sunny Oaks stands is not even an *appropriate* silvicultural approach for promoting the maintenance and restoration of the oak-hickory ecosystem. The scientific literature clearly shows that – where sufficient oak saplings of significant size and distribution are not in place – clearcutting rapidly diminishes oak ecosystems. See, e.g., January 14, 2019 EA Comments of the OEC, at pages 10-11. This project threatens to diminish oak ecosystems – the opposite of its stated purpose and need. It is widely accepted in the scientific literature that 10 to 30 years of stand preparation is often needed prior to significant overstory removal (clearcut or shelterwood) where oak regeneration is an objective. Unfortunately, the necessary and decades-long investments in preparing the Project's stands for overstory removals have not been made. Oak seedlings in the region are generally scarce, absent, or too small to compete after overstory removal. See, e.g., January 14, 2019 EA Comments of the OEC, at pages 15-16. Based on the available data, it is clear that the WNF's understories are no exception. As a result, clearcutting these stands will result in the sharp decline of their oak composition. In the future, these stands would likely be dominated by competing species such as red maple and tulip poplar (not to mention NNIS), which have far less wildlife value than oak.

B. Condition-Based Management As Proposed By Updated Alternative 2 Violates the 2006 Forest Plan.

NFMA requires the Forest Service to ensure that site-specific management projects are consistent with the applicable forest plan.[2] Thus, the Forest Service must ensure that all aspects of the proposed action comply with the Wayne National Forest Land Management Plan.

The 2006 Forest Plan mandates that "[g]overnment manuals and handbooks are to be followed during site-specific project analysis." Page 2-3, Forest-Wide Direction, under "Other Requirements" (emphasis added). And, the Forest Service Handbook (FSH), Eastern Region (Region 9) Directive at Supplement No.: R9 RO 2409.17-2008-1 mandates that silvicultural prescriptions and associated NEPA analysis must find that clearcutting "is currently the best option for a specific stand." Page 6, Under "Diagnosis of Treatment Needs." ("[W]hile a Forest Plan may find clearcutting to be an optimal treatment to meet objectives under certain conditions, the silvicultural prescription and associated analysis must find that it is **currently** the best option for a specific stand.") (emphasis added). The oak ecosystem clearcuts proposed by the Sunny Oaks project are not currently the best options for the stands in question, because those stands lack the requisite size, number, and distribution of advanced oak regeneration. The

[1] Nor do the 2006 Forest Plan's statements to the contrary make it so. See OEC's EA Comments of January 14, 2019 at pages 3-4, 15-16, passim.
[2] 16 U.S.C. § 1604(i).

Sunny Oaks project therefore violates: Regional Directives in the Forest Service Handbook, the 2006 Forest Plan, and NFMA.

Relatedly, the Sunny Oaks Project's emphasis on "adaptive management" and/or "condition-based management/analysis" threatens to violate the FSH, the 2006 Forest Plan, and NFMA. In many instances, the Project prescribes clearcuts for specific stands contingent on currently unknown, future conditions. See DDN-FONSI, page 3. This approach is unlawful under the 2006 Forest Plan, which requires adherence to FSH directives, which in turn prohibit clearcut prescriptions that are not optimal at the current time. This point is further emphasized by FSH, Supplement No.: R9 RO 2409.17-2008-1, which provides that "[t]he final detailed prescription is accepted when a Decision Notice or Record-of-Decision is issued by the Deciding Officer." Page 9, under "Detailed Silvicultural Prescription." This directive provides that final detailed prescriptions are timed with formal project approval; they are not to be deferred to an unknown time in the future – perhaps as many as 20 years after project approval per this Project's stated timeframe.

C. Updated Alternative 2's "Clearcut," "Clearcut With Reserves," and "Two-Aged Stand" Are Functionally Identical, and Updated Alternative 2 Was Not Appropriately Disclosed or Analyzed Under NEPA.

Updated Alternative 2 advances clearcutting as the primary prescription for stands that have young brushy (early successional) habitat as their assigned primary purpose, and advances clearcutting as the selected option for many stands with "Oak" as the primary purpose. Notably, however, all of the clearcut prescriptions advanced by Updated Alternative 2 appear identical in nature or very nearly so – and this holds true whether they are labeled "Clearcut," "Two-age," or "Clearcut with Reserves." As the 2006 Forest Plan states at Appendix E (page E-7):

> In practice, the Wayne National Forest will not normally prescribe true clearcuts, in which all merchantable trees would be cut from an area. The Wayne is likely to prescribe "clearcutting with reserves," a method in which varying numbers of reserve trees are left standing to attain goals other than regeneration.

By default, virtually all clearcut prescriptions under the 2006 Plan are "clearcut with reserves" or "two-age" clearcut prescriptions. This is because the Plan requires specified amounts of live tree retention or "reserves" in all hardwood timber harvests as potential roost trees for the endangered Indiana bat:

> SFW-TES-12: With all hardwood timber harvests, retain a minimum of 12 live trees per acre (averaged over the cutting unit) of any species that are six inches or more dbh with large areas of loose bark, unless they pose a safety hazard. In addition to these, retain live preferred roost trees, when present, to provide a supply of future roost trees (i.e., large, overmature trees). […] In addition to these, retain live preferred roost trees, when present to provide a supply of future roost trees (i.e., large, overmature trees) as shown in the following table. […]

Indiana Bat Preferred Roost Tree Size Class	Number of live trees to retain (average per acre over the cutting unit)
>20 inches (dbh)	3*
>11 in (dbh and < 20 in (dbh)	6

*If there are few or no live Indiana bat roost trees > 20 inches dbh in the stand, retain three live trees > 16 inches dbh and < 20 inches dbh per acre (averaged across the cutting unit). If there are no live trees > 16 inches dbh, retain nine additional live trees > 11 inches dbh and < 16 inches dbh per acre (averaged across the cutting unit).

Appendix D, page D-9. In practice, this Forest Plan Standard requires all hardwood harvests on the Wayne to retain approximately 13 to 20 square feet of basal area of loose barked/preferred roost trees per acre, averaged across the cutting unit.[3]

And, the 2006 Plan specifies that shagbark and shellbark hickories are to receive retention preference. See, e.g., GFW-TES-9 – "Retain all shagbark and shellbark hickory trees greater than or equal to 6 inches dbh, unless removal is necessary to protect human safety or to avoid adverse impacts to steep slopes, erodible soils, floodplains or wetlands." Appendix D, page D-9. The EA echoes this reality at the Purpose and Need Presentation, at slide 58:

> In these stands a maximum of 15 square feet of basal area, which is a measurement of how many trees are kept after the cut, would be retained. That's averaged across the harvest area. Primary trees retained would be shagbark and shell bark hickory trees that are over six inches diameter at breast height in accordance with our Indiana bat measures in the Forest Plan. Secondary preference for retained trees would be seed producing, healthy white oak trees followed by other oaks if the maximum basal area has not been reached.

Further, the EA's Response to Comments notes the retention hierarchy will retain hickory before retaining oak (white oak if available). EA Response to Comments, Sections 26-1 and 26-2 at page 34. In practice, then, most clearcuts prescribed by the Sunny Oaks Project would be "clearcut with reserves" or "two-age clearcuts," regardless of how the project chooses to label them.

And, because the live tree retention is averaged across the stand/harvest unit, all of the "retention" associated with these clearcut prescriptions could apparently fall within the Indiana bat flight corridors and riparian buffers that are otherwise already required by the 2006 Plan. See, e.g., SFW-TES-7:

> When even-aged regeneration methods are used, retain forested flight corridors within and between early successional habitat patches. These flight corridors may

[3] 12 trees w/ loose bark >6in dbh + 6 IB preferred trees between 11 and 20 in + 3 IB trees >20 in; or (if no 20 in) 9 IB trees between 11 and 16 in. Basal area ranges can be calculated using guidance found at this publication: https://www.aces.edu/blog/topics/forestry/basal-area-a-measure-made-for-management/. In practice, this system appears to equate to the requirement that roughly 13 to 20 square feet of basal area of loose barked/preferred roost trees be retained per acre (of which white oak is a loose barked/preferred roost tree).

> include forested corridors along ephemeral, intermittent, and perennial streams (see GFW-ARR-2); and where present, clumps of snags and trees of varying size classes in the early successional habitat. When present, leave larger-sized trees on the edges of early successional patches for future maternity roosts. Appendix D, page D-8.

The result, then, is that this Project's "clearcuts," "clearcuts with reserves," and "two-age stands with no more than 15 square feet of basal area" would all be functionally the same or very nearly the same. Neither the EA nor the DDN disclose this fact – at least not in an explicit manner.

Further, the EA and DDN cannot rely on Two-age or Clearcut with Reserves prescriptions to recruit or develop oak seedlings where they are not already sufficiently present and/or of sufficient size. The 2006 Plan and the Scoping Response to Comments acknowledge as much:

> To regenerate the two-aged areas to an oak-hickory forest type, the same adequate numbers of healthy and well distributed oak seedlings must exist as was discussed for clearcut harvests prior to applying the twoaged harvest. Plan Appendix E at page E-9.

> This project is not trying to develop new oak seedlings for this rotation in the stands with proposed clearcut or shelterwood harvest. […]The retention of acorn-producing mast trees in a two-aged system does not contribute to the regrowth that is occurring at that time. What retaining those trees would do is provide acorns for wildlife food, and for seedling development [decades later] once the regenerating stand has started to reach canopy closure. Scoping Response to Comments, Section 55-16 at page 35.

Nonetheless, the DDN-FONSI claims to advance two-aged stands as a method to promote oak regeneration where current regeneration stocking is inadequate: "where current oak regeneration stocking may be low, development of two-aged forests with oak overstory retention may be more appropriate to provide oak seed sources to establish oak regeneration in the future." DDN at page 2. This apparent contradiction between the EA and the DDN is neither acknowledged nor resolved in the DDN. If an agency's FONSI contradicts statements in the EA or the record, the agency has failed to make a convincing case that an EIS is unnecessary.[4]

D. Updated Alternative 2's "Shelterwood" Treatments Violate NFMA, NEPA, and the 2006 Forest Plan.

Updated Alternative 2, which is materially different than Alternative 2 in significant ways, was not disclosed in the EA. Disclosed only in the DDN, Updated Alternative 2 must be subject to NEPA review and public comment.

Updated Alternative 2 groups all "Shelterwood" treatments into a bucket of three different prescriptions – all three of which the DDN-FONSI proposes to prescribe at some unknown point

[4] *Humane Soc'y v. Dep't of Commerce*, 432 F. Supp. 2d 4, 21-23 (D.D.C. 2006) (agency FONSI arbitrary for contradicting or omitting impacts identified in EA).

in the future without benefit of site-specific NEPA analysis. DDN-FONSI, page 3. The prescriptions include:

(1) Two-staged shelterwood harvest. Where staff later determine there are enough oak regeneration of the right size; or
(2) Three-staged shelterwood harvest. For harvest units determined in the future to either need more oak regen (contrary to Brose 2008) or need existing oak regen to grow larger; or
(3) TSI followed by a clearcut with reserves, resulting in a two-aged stand. Again, either to recruit more seedlings or to grow existing seedlings larger. This prescriptions would retain up to 15 sq ft basal area (see Purpose and Need slide 45). See DDN, page 3.

As proposed, this "adaptive" or "condition-based" approach violates NEPA (by eliminating agency NEPA review and the public's right to NEPA review from site-specific evaluations) and violates the applicable Regional Directives (clearcutting must currently be the best method; detailed stand prescriptions accompany final DN or ROD signature), the 2006 Forest Plan (which requires adherence to USFS Handbooks), and NFMA (which requires that projects adhere to their applicable forest plans). See references, supra.

And, the new Updated Alternative 2 threatens further legal violations because now all Sunny Oaks "prescriptions" could in theory end up being prescribed as clearcuts. In addition to the "Clearcut" and "Two-age" clearcut categories, Alternative 2 allows for all "Shelterwood" treatments to hypothetically be prescribed (at some future date, based on [non-NEPA] site-specific analysis) as "Clearcuts with Reserves." But, it has already been established that clearcuts are not the NFMA optimal method of achieving oak regeneration when oak seedlings/saplings are either absent or too small (See OEC January 14, 2019 Comment, passim) – and this is precisely the purpose for which the DDN seeks to use the new "clearcut with reserves" category. DDN page 3. And, the clearcut with reserves option adopted by the DDN specifically requires TSI (fire, thinning, herbicides, etc.) to occur prior to clearcut implementation. DDN at page 3. This is a plain violation of the Region 9 Directive that limits the use of clearcutting to situations where clearcutting is "currently" a stand's best option (a Directive the 2006 Plan makes mandatory and legally binding).

E. Shelterwood Treatments are Not Appropriate and Violate NFMA Where Oak Advanced Reproduction is Absent, Scarce, or Poorly Distributed.

Oak seedlings/saplings must be present in sufficient numbers and spatial distribution prior to shelterwood overstory removals if oak ecosystem maintenance and regeneration is an objective. While the initial step of a three-step shelterwood can be used to grow already established oak seedlings that are small yet abundant, shelterwoods often fail when seedlings are absent, sparse, or poorly distributed. The OEC noted this in its January 14, 2019 EA comments at page 4 and 14-17.

The available understory data also shows that very few oak seedlings or saplings are present in this Project's "Oak" purpose stands, whether small or established/competitive in size. As a result,

shelterwood prescriptions are inappropriate for these stands. The OEC noted this in its January 11, 2019 EA comments at pages 1-3, and its February 14, 2019 EA comments at page 2.

As noted in the OEC's earlier comments on this Project (January 14, 2019 at pages 4 and 14-17), the 2006 Forest Plan incorrectly assumes that shelterwood treatments are the likely best option when oak seedlings are small, scarce, or absent: "When oak advanced reproduction is small, scarce, or absent, the shelterwood regeneration method will most likely produce the best results." 2006 Forest Plan Appendix E, at E-7 and 8.

Shelterwood treatments generally fail to increase oak stocking density and distribution, and provide excessive light levels that favor competing species. Best available science holds that shelterwood treatments generally cannot correct for an initial lack of oak seedling numbers and spatial distribution (Steiner et al. 2008; Brose et al. 2008; Vickers et al. 2019; Hutchinson et al. 2016; Dey 2014; Schuler and Miller 1995; Loftis 1990). SUPPORTING LITERATURE (submitted with OEC's January 14, 2019 EA Comments):

See, e.g., **Steiner et al., "Oak Regeneration Guidelines for the Central Appalachians," *Northern Journal of Applied Forestry* 25(1), at 11 (2008)** ("Although the growth of established oak seedlings can be expected to accelerate after a shelterwood cut (when combined with fencing, if necessary), it is less clear whether managers can depend on periodic acorn crops to increase oak seedling densities. ORSPA results indicate that, without a fortuitous acorn crop, less desirable species may benefit most from the improved growing conditions. In other words, experience shows that shelterwoods often fail to achieve the objective of enhancing oak regeneration. […] [S]helterwoods do little to supplement the oak regeneration cohort unless a heavy seed crop occurs within the 1st or (perhaps) 2nd year after harvest. […] [A] strong component of oak regeneration can not develop without an excellent acorn crop, which can be as infrequent as once in a decade. […] We recommend that shelterwoods be used only in stands in which 65% or more of sample milacre plots contain oak seedlings. Our long-term data set shows clearly that nonsprout regeneration of an oak component was always minimal in stands where this criterion was not met."); **Loftis, David L., "A Shelterwood Method for Regenerating Red Oak in the Southern Appalachians," *Forest Science* 36:4, pp. 917-929, at 9261 (1990)** ("It should be emphasized that the basal area reduction recommended […] assumes that red oak reproduction is already established on the site. There is no evidence that this treatment will result in the establishment of new seedlings."); **Vickers et al., "Using a tree seedling mortality budget as an indicator of landscape-scale forest regeneration security," *Ecological Indicators*, article in press, at 2, 8 (2019)** ("the inventory of tree seedlings and small saplings must at least meet the target number of stems desired for the future stand at the assumed endpoint in time. Otherwise, the likelihood of regeneration failure is immediately evident, assuming advance reproduction is the only reproduction source considered." […] "It is unlikely that stands […] with inadequate advanced reproduction after initial overstory reductions will be remedied by canopy release and alternative silvicultural treatments may be needed. In some cases, a reconsideration of regeneration objectives may be the only option."); **Hutchinson et al., "The devil is in the small dense saplings: A midstory herbicide treatment has limited effects on short-term regeneration outcomes in oak shelterwood stands" *Forest Ecology and Management* 372: 189-198 (2016)** (numerous, but small oak seedlings dominated by competing stems after herbicide treatment and 50% shelterwood removal); **Schuler and Miller,**

"Shelterwood treatments fail to establish oak reproduction on mesic forest sites in West Virginia - 10-year results," Gen. Tech. Rep. NE-197, pp. 375-387, 384 (1995) ("for the southern Appalachians, Loftis (1990b) cautioned that the goal of basal area reductions to regenerate oak on mesic sites should be to develop existing seedlings only [rather than to establish seedlings not yet present]. Our results clearly illustrate the basis for this warning. The greater the reduction in basal area, the greater the response by non-oak species to use that growing space."); **Brose et al., "Prescribing Regeneration Treatments for Mixed Oak Forests in the Mid-Atlantic Region," U.S. Forest Service, General Technical Report NRS-33, p. 44 (2008)** ("The first removal cut is the first harvest in a shelterwood sequence **after** the oak regeneration is present and established") (emphasis in original).

F. Harvest Sizes Exceeds NFMA and Forest Plan Limitations.

In addition, many of the project's proposed harvests are in excess of 40 acres, which is not optimal for game species like ruffed grouse, and which exceeds limits found in the WNF's forest plan (G-FSM-WLF-1, 2-30 acres) and the National Forest Management Act (NFMA). The inclusion of even-age harvests in excess of 40 acres violates NFMA, the 1982 Planning Rule, and the 2012 Planning Rule, which requires provision for clearcuts of this size in plan components and for public notice and regional forester review on an "individual timber sale basis." 36 CFR 219.11(4)(ii) (2012); 36 CFR 219.27(d)(2)(ii) (emphasis added). Nor does the EA adequately explain why these departures from 2006 Forest Plan Guidelines are necessary.[5]

> *Suggested Remedy*: The Forest Service should prepare a new NEPA document (preferably a draft EIS) that addresses each of the NEPA, Forest Plan, and NFMA violations described above, and that analyzes a range of alternatives, including at least one that would focus on the Project Area's oak ecosystem needs as they exist at the current time.

II. THE SUNNY OAKS PROJECT FAILS TO DISCLOSE AND ANALYZE CRITICALLY IMPORTANT PROJECT BASELINE DATA

A. The EA Fails to Take the Required Hard Look at Impacts to Oak Ecosystems.

NEPA requires agencies to explain opposing viewpoints and their rationale for choosing one viewpoint over the other.[6] Federal courts have set aside NEPA analysis where the agency failed to respond to scientific analysis that calls into question the agency's assumptions or conclusions, and where the agency responds in an arbitrary and unsupported manner.[7] And yet, the EA and

[5] While the EA briefly mentions factors like urgency, ownership patterns, stand age, and "intent" regarding travel corridors, it stops well short of actually explaining those purported reasons. (EA Purpose and Need Presentation).
[6] 40 C.F.R. § 1502.9(b) (requiring agencies to disclose, discuss, and respond to "any responsible opposing view").
[7] *See Ctr. for Biological Diversity v. U.S. Forest Serv.*, 349 F.3d 1157, 1168 (9th Cir. 2003) (finding Forest Service's failure to disclose and respond to evidence and opinions challenging EIS's scientific assumptions violated NEPA); *Seattle Audubon Soc'y v. Moseley,* 798 F. Supp.1473, 1482 (W.D. Wash. 1992) ("The agency's explanation is insufficient under NEPA – not because experts disagree, but because the FEIS lacks reasoned discussion of major scientific objections."), *aff'd sub nom. Seattle Audubon Soc'y v. Espy,* 998 F.2d 699, 704 (9th Cir. 1993) ("[i]t would not further NEPA's aims for environmental protection to allow the Forest Service to ignore reputable scientific criticisms that have surfaced"); *High Country Conservation Advocates v. Forest Service*,

the DDN-FONSI have failed to take the appropriate NEPA "hard look" at the rigorous scientific rebuttal the OEC filed to this Project in its January 11, 2019, January 14, 2019, and February 14, 2019 EA comments. (All refiled with this Objection). In particular, USFS fails to acknowledge, closely examine, and adequately explain how and why clearcuts are or are not optimum or lawful or why shelterwood treatments are or are not appropriate or lawful for, *specifically*, the many Sunny Oaks Project timber harvest/vegetation management stands included in this Project. The very general discussions in the EA and DDN-FONSI (see, e.g., DDN pages 5-6) about the need for oak ecosystem restoration fail to provide a reasonable baseline for meaningful NEPA analysis of this project.[8] The stand exam data is revealing, and the lack of a NEPA hard look analysis of this data in the EA and DDN-FONSI is conspicuous.

Some 50 years of oak silviculture scientific literature have long established basic oak silviculture principles that clearcut prescriptions fail when substantial amounts of large oak regeneration are not already present in the stands in question. See, e.g., January 14, 2019 Comments of OEC, at pages 16-17. And yet, the on-the-ground data – particularly the SILVAH stand exams/diagnoses – show that the vast majority of Sunny Oaks stands are nowhere near ready for clearcut or shelterwood overstory removals, nor three-stage shelterwood prep cut removals. A close examination of the SILVAH stand exams associated with the Sunny Oaks reveals that most of the Project's Oak objective stands would fall under SILVAH:OAK's Chart J (which does not provide for "prep cut" prescriptions): "New oak seedlings are lacking, but an adequate seed source is present. This chart is for oak stands that do not have enough oak reproduction of any type (<50 percent cumulative stocking) to start the oak regeneration process." (Brose 2019, "Expanding the SILVAH Decision Support System to be Applicable to the Mixed-Oak Forests of the Mid-Atlantic Region," page 65).

The OEC is including as part of this Objection many of the SILVAH stand reports associated with this Project's "Oak" objective stands. These stand exams/diagnoses were not included with the publicly noticed NEPA documents for this project, and were only obtained by the OEC through public records requests. The OEC thanks USFS for providing these Project records upon request. [9] However, these records go to the very heart of NEPA analysis for this Project and should be included as part of the formal NEPA documentation noticed to the public. Neither the EA nor the DDN-FONSI adequately disclose, explain, or rebut the underlying stand exam and

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52 F. Supp. 3d 1174, 1198 (D. Colo. 2014) (finding Forest Service violated NEPA by failing to mention or respond to expert report on climate impacts).

[8] *See Marsh v. Or. Nat. Res. Council*, 290 U.S. 360, 374 (1989) ("NEPA ... require[s] that agencies take a 'hard look' at the environmental effects of their planned action."); *Half Moon Bay Fishermans' Marketing Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988) (NEPA requires consideration of the environmental baseline); *Blue Mts. Biodiversity Proj. v. Blackwood*, 161 F.3d 1208, 1213 (9th Cir. 1998) ("General statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided.") (quoting *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998)) (internal quotations omitted); *Or. Natural Desert Ass'n v. Rose*, 921 F.3d 1185, 1190 (9th Cir. 2019) (Agencies must establish adequate baseline conditions; otherwise, "there is simply no way to determine what effect the project will have on the environment and, consequently, no way to comply with NEPA." (quoting *Great Basin Res. Watch v. BLM*, 844 F.3d 1095, 1101 (9th Cir. 2016))).

[9] The DDN-FONSI states at page 4 that 100 acres of the Project were re-inventoried. It is not clear to the OEC whether those re-inventories were provided to the OEC per its records requests associated with this Project.

diagnosis data that underpin this project. The EA and DDN-FONSI's failure to disclose this critical information as part of the formal NEPA process is a NEPA violation in itself.[10]

In addition to these SILVAH stand exams, the OEC is also including with this Objection filing an OEC-compiled spreadsheet that pulls key findings from the Project's SILVAH exams and tracks them with the "Oak" objective stands listed in the DDN's Appendix B treatment table. As one can see from reviewing this spreadsheet, the SILVAH exam records are voluminous. Among other things, they show that USFS failed to take a site-specific NEPA hard look at the Sunny Oaks Project stands – very few of the SILVAH stand exams took anywhere near the minimum required plot data points. The EA's Response to Comments discussion of this matter at Section 25-2 on page 32 is unavailing ("[w]ith respect to the number of understory plots in the stands proposed for harvest, our intent is to survey all stands with a sufficient number of understory plots prior to any final removal harvest."). This is because a core requirement of NEPA is that effects be analyzed in a timely manner before an agency commits to taking action. And, what SILVAH data USFS did collect shows that, almost universally, the stands in question have very few oak regeneration in them, let alone oak regeneration of significant size. The OEC raised this point previously in its earlier comments. See, e.g., February 14, 2019 OEC Comments, page 2. Of the small minority of stands that do show oak regeneration in meaningful number – many appear to be dominated not by seedlings and saplings, but by projected post-harvest stump sprouts.[11]

B. Deferring Critical Project Decisions Violates NEPA's Site-Specific Analysis and Public Involvement Requirements, as well as the 2006 Forest Plan.

As noted previously in this Objection, the Wayne's 2006 Forest Plan mandates adherence to Forest Service Handbook directives. Region 9 Supplement No.: R9 RO 2409.17-2008-1 states that:

> The silvicultural prescription is an integral part of the National Environmental Policy Analysis (NEPA) process whenever vegetation treatments are proposed in forested lands. […] The silvicultural examination and diagnosis provide information to help describe the affected environment and evaluate the effects of alternatives. Page 2-3.

That same section goes on to say that "[t]he detailed prescription, implementation, monitoring and evaluation help ensure that the NEPA decision is effectively applied to specific stands." Notably, under the Section titled "Detailed Silvicultural Prescription," the Regional Directive provides that "The final detailed prescription is accepted when a Decision Notice or Record-of-Decision is issued by the Deciding Officer." P. 9. NEPA and the Forest Plan do not permit the EA and the DDN-FONSI to defer critical project decisionmaking to some as-yet-unknown point

[10] *See, e.g., Klamath-Siskiyou Wildlands Ctr. v. BLM*, 387 F.3d 989 (9th Cir. 2004) (NEPA documents must contain the environmental data underlying an agency's analysis of impacts, explaining that "generalized conclusory statements are inadequate"); *League of Wilderness Defenders v. Zielinski*, 187 F. Supp. 2d 1263, 1271 (D. Or. 2002) ("A federal agency's defense of its positions must be found in its EA").

[11] Some of which may have been erroneously tabulated due to understory-only exams, as noted in the aforementioned spreadsheet.

in the future long after the NEPA's public involvement and action-forcing effects have run their course.

> *Suggested Remedy*: The Forest Service should prepare a new NEPA document (preferably a draft EIS) that addresses each of the NEPA, Forest Plan, and NFMA violations described above, that fully discloses the critical site-specific data underlying this Project, and that proposes new alternatives that focus on addressing the current and immediate needs of the Project's oak stands.

III. THE EA FAILS TO CONSIDER A REASONABLE RANGE OF ALTERNATIVES

A. Agencies Must Analyze a Range of Reasonable Alternatives in an EA.

CEQ regulations require agencies to "use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment."[12] NEPA requires that federal agencies consider alternatives to recommended actions whenever those actions "involve[] unresolved conflicts concerning alternative uses of available resources."[13] "NEPA's requirement that alternatives be studied, developed, and described both guides the substance of the environmental decisionmaking and provides evidence that the mandated decsionmaking process has actually taken place."[14]

In taking the "hard look" at impacts that NEPA requires, an EA must "study, develop, and describe" reasonable alternatives to the proposed action.[15] "A properly-drafted EA must include a discussion of appropriate alternatives to the proposed project."[16] This alternatives analysis "is at the heart of the NEPA process, and is 'operative even if the agency finds no significant environmental impact.'"[17] Reasonable alternatives must be analyzed for an EA even where a FONSI is issued because nonsignificant impact does not equal no impact. Thus, if an even less harmful alternative is feasible, it ought to be considered."[18] When an agency considers reasonable alternatives, it "ensures that it has considered all possible approaches to, and potential environmental impacts of, a particular project; as a result, NEPA ensures that the most intelligent, optimally beneficial decision will ultimately be made."[19]

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[12] 40 C.F.R. § 1500.1(e).
[13] 42 U.S.C. § 4332(2)(E).
[14] *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228 (9th Cir. 1988) (citation omitted).
[15] 42 U.S.C. § 4332(2)(C) & (E); 40 C.F.R. § 1508.9(b) (an EA "[s]hall include brief discussions ... of alternatives"). The Tenth Circuit explains that this mandate extends to EAs as well as EISs.
[16] *Davis v. Mineta*, 302 F.3d 1104, 1120 (10th Cir. 2002) (granting injunction where EA failed to consider reasonable alternatives).
[17] *Diné Citizens Against Ruining Our Env't v. Klein*, 747 F. Supp. 2d 1234, 1254 (D. Colo. 2010) (quoting *Greater Yellowstone Coal. v. Flowers*, 359 F.3d 1257, 1277 (10th Cir. 2004)). *See also W. Watersheds Project v. Abbey*, 719 F.3d 1035, 1050 (9th Cir. 2013) (in preparing EA, "an agency must still give full and meaningful consideration to *all* reasonable alternatives" (emphasis added) (internal quotation and citation omitted)); 40 C.F.R. § 1502.14 (describing alternatives analysis as the "heart of the environmental impact statement").
[18] *Ayers v. Espy*, 873 F. Supp. 455, 473 (D. Colo. 1994) (internal citation omitted).
[19] *Wilderness Soc'y v. Wisely*, 524 F. Supp. 2d 1285, 1309 (D. Colo. 2007) (quotations & citation omitted).

In determining whether an alternative is "reasonable," and thus requires detailed analysis, courts look to two guideposts: "First, when considering agency actions taken pursuant to a statute, an alternative is reasonable only if it falls within the agency's statutory mandate. Second, reasonableness is judged with reference to an agency's objectives for a particular project."[20]

Any alternative that is unreasonably excluded will invalidate the NEPA analysis. "The existence of a viable but unexamined alternative renders an alternatives analysis, and the EA which relies upon it, inadequate."[21] The agency's obligation to consider reasonable alternatives applies to citizen-proposed alternatives.[22]

Courts hold that an alternative may not be disregarded merely because it does not offer a complete solution to the problem.[23] Even if additional alternatives would not fully achieve the project's purpose and need, NEPA "does not permit the agency to eliminate from discussion or consideration a whole range of alternatives, merely because they would achieve only some of the purposes of a multipurpose project."[24] If a different action alternative "would only partly meet the goals of the project, this may allow the decision maker to conclude that meeting part of the goal with less environmental impact may be worth the tradeoff with a preferred alternative that has greater environmental impact."[25]

The courts also require that an agency adequately and explicitly explain in the EA any decision to eliminate an alternative from further study.[26]

B. The EA and DDN-FONSI Failed to Analyze a Range of Reasonable Alternatives.

The EA and DDN-FONSI failed to adequately consider the "Optimum Oak Alternative" advanced by the OEC in the OEC's scoping comments of May 1, 2018 (pages 2-9) (and supported in the OEC's Literature Review comments of January 14, 2019, and Supplemental comments of February 14, 2019). Specifically, the OEC's May 1, 2018 scoping comments requested that "USFS consider and adopt a NEPA alternative that requires, for all harvest units associated with this project, the full retention of all mature oaks capable of producing seed." Page 2. While our comments of May 1, 2018 and those subsequent have placed special emphasis on the importance and plight of the American white oak (and rightfully so given its historically dominant status in the region, its perhaps unmatched value for wildlife, and its current severe

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[20] *Diné Citizens Against Ruining Our Env't*, 747 F. Supp. 2d at 1255 (quoting *New Mexico ex rel. Richardson*, 565 F.3d at 709). *See also Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1520 (9th Cir. 1992) ("nature and scope of proposed action" determines the range of reasonable alternatives agency must consider).
[21] *Id.* at 1256.
[22] *See Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin*., 538 F.3d 1172, 1217-19 (9th Cir. 2008) (finding EA deficient, in part, for failing to evaluate a specific proposal submitted by petitioner); *Colo. Envtl. Coal. v. Dombeck*, 185 F.3d 1162, 1171 (10th Cir. 1999) (agency's "[h]ard look" analysis should utilize "*public comment* and the best available scientific information") (emphasis added).
[23] *Natural Resources Defense Council, Inc. v. Morton*, 458 F.2d 827, 836 (D.C. Cir. 1972).
[24] *Town of Matthews v. U.S. Dep't. of Transp.*, 527 F. Supp. 1055 (W.D. N.C. 1981).
[25] *North Buckhead Civic Ass'n v. Skinner*, 903 F.2d 1533, 1542 (11th Cir. 1990).
[26] *See Wilderness Soc'y*, 524 F. Supp. 2d at 1309 (holding EA for agency decision to offer oil and gas leases violated NEPA because it failed to discuss the reasons for eliminating a "no surface occupancy" alternative); *Ayers*, 873 F. Supp. at 468, 473.

decline due primarily to unsustainable harvest on private lands), the project alternative we requested sought retention of oaks regardless of species.

This is a reasonable alternative that would satisfy all four of the Sunny Oaks stated goals: creating young, brushy forest; maintaining oak forests across the landscape (a 2006 Forest Plan Management Indicator Habitat); responding to insects and diseases in order to provide for diverse habitats that support a broad array of wildlife and plants; and generating revenue for local communities. Neither the EA nor the DDN-FONSI nor any Response to Comments appears to have addressed, let alone analyzed, the revenue-generating potential of the substantial non-oak species harvest this alternative could have entailed.

USFS appears to offer three primary arguments against close consideration of this alternative. First, the Scoping Response to Comments that accompanied the EA claims that pursuing this alternative would amount to mere "thinning" and therefore fail to create early successional habitat or sufficient light for oak seedling and advanced regeneration development. Scoping Response to Comments, Section 55-3 at pages 29-30. However, USFS' response admits that, in fact, this alternative would meet the Project's purpose and objectives in some stands "In some areas in implementing the commenter's suggested alternative there would be enough canopy removal to provide for oak seedling and advanced regen development, but in other stands this alternative wouldn't provide enough light." Id. And yet, USFS unreasonably declines to provide a meaningful site-specific analysis of where full, seed-bearing oak retention would or would not satisfy project purposes and objectives, stating only that the Project's stands "average 64% oak overstory, so [this alternative] would resemble a thinning and not create early successional habitat." EA Response to Comments, Section 14-6 at page 15. Taken merely at face value, this statement alone shows that the Oak Alternative could remove more than a third of the canopy in the Project's proposed stands – something more akin to a shelterwood removal harvest than a "thinning." And, this statement does not account for the fact that some stands could undoubtedly see much heavier harvesting; not to mention, that alternative stands within the Project Area could be selected in part on the basis of their oak versus non-oak overstory composition.

As has been thoroughly presented in previous comments of the OEC (see, especially, the OEC's January 14, 2019 EA comment), oak reproduction of several species and particularly of white do not require (in fact they often suffer from) canopy openings that allow for more than 6-25% light penetration.

Nor is the USFS argument that Two-age stands in Alternative 2 and Updated Alternative 2 serve the purpose of the proposed alternative OEC advanced. As thoroughly unpacked supra, the two-age stands proposed by this project would in practice function identically to or very nearly identically to the other clearcut and clearcut with reserve harvests contemplated by this Project. The "Optimum Oak" Alternative, by contrast, would typically look much different than these alternatives and would retain far more mature oak (versus a hickory-subordinate position, if any, in a maximum 15 sq feet basal area, which may occur within an otherwise required Indiana bat flight corridor or stream drainage buffer).

The DDN-FONSI at page 8 states that, "I eliminated it from detailed analysis because oak silviculture shows that a developing oak understory would be suppressed if more than 15 square

feet of basal area is kept over the long-term (Stringer 2006)." However, beyond this citation, USFS fails to explain its rationale regarding retention over 15 square feet suppressing oak understories. Notably, this citation is not even on point. The only two articles the OEC could find that were published by Stringer in 2006 found that young oaks, and in particular white oaks, benefitted from and even performed best in light conditions achieved by mid-story thinning operations. (Dillaway & Stringer 2006; Dillaway & Stringer 2006) (submitted with this Objection).

The comments of OEC on this project also highlighted the many benefits the Optimum Oak Approach (of something similar) would confer on species like ruffed grouse, the state-endangered American black bear, and the imperiled Cerulean warbler. And, the Cerulean warbler is especially dependent on large, old white oaks that are situated on relatively secluded north east-facing slopes – precisely the sort of slopes where oaks are less likely to successfully regenerate. The Oak Alternative could be used to preserve oaks on oak-sensitive slopes – in "young brushy habitat" purposed stands (many of which the Sunny Oaks Project targets with little to no regard for present and future oak composition). But, USFS appears not to have accorded these wildlife species benefits close analysis. The wildlife benefits of young brushy forest habitat is ephemeral, lasting only approximately 5-10 years. Whereas it generally takes several decades for stands cycling out of early successional habitat to recapture meaningful habitat and caloric characteristics. The Optimum Oak Alternative was offered as an attempt to balance those realities. See, e.g., May 1, 2018 Scoping Comments of the OEC, at page 9.

Additionally, this alternative spoke to several important Project purpose and need factors relating to forest health, disease, and insect outbreaks. Literature submitted by OEC on February 14, 2019 and elsewhere made a strong case that intact oak forests support (and are supported by) fundamentally important ecto-mycorrhizal networks. See pages 7-9. These fungal networks are vitally important to the health and resiliency of forests – including response to disease and insect pressure, the success of oak seedlings, and the sequestration and storage of carbon. The OEC's comments further substantiated that heavy clearcutting and even-aged harvesting is especially destructive of these ectomycorrhizal networks and thereby of forest health and resiliency. Retaining intact ecto-mycorrhizal oak networks through substantial oak retention could be a powerful way to preserve forest health while still creating significant early successional habitat. And yet, the EA and DDN-FONSI largely ignored this highly relevant and important aspect of the Oak Alternative. See EA Response to Comments, Section 14-10 at page 15 (dismissing mycorrhizal networks as old growth attributes not applicable to the creation of early successional habitat).

The Optimum Oak Alternative was a reasonable alternative that meaningfully satisfies all four of the stated purposes of the Sunny Oaks Project. The EA and DDN-FONSI's rejection of this suggested alternative was arbitrary and capricious and unlawful under NEPA. Its exclusion from the EA infects the EA's overall analysis.

> *Suggested Remedy*: The Forest Service should prepare a new NEPA document (preferably a draft EIS) that addresses each of the NEPA, Forest Plan, and NFMA violations described above, and that considers a reasonable range of alternatives,

including an alternative that maximizes the potential of the Project Area's oak ecosystems.

IV. THE FOREST SERVICE MUST PREPARE AN EIS[27]

A. An Agency Must Prepare an EIS If There Are Questions as to Whether Impacts May Be Significant.

NEPA requires federal agencies to prepare a full environmental impact statement (EIS) before undertaking "major Federal actions significantly affecting the quality of the human environment."[28] The Ninth Circuit agrees.

> We have held that an EIS *must* be prepared if 'substantial questions are raised as to whether a project ... *may* cause significant degradation to some human environmental factor.' To trigger this requirement a 'plaintiff need not show that significant effects *will in fact occur*,' [but instead] raising 'substantial questions whether a project may have a significant effect' is sufficient.[29]

The Tenth Circuit agrees. "If the agency determines that its proposed action *may* 'significantly affect' the environment, the agency must prepare a detailed statement on the environmental impact of the proposed action in the form of an EIS."[30]

And, if an agency "decides not to prepare an EIS, 'it must put forth a convincing statement of reasons that explains why the project will impact the environment no more than insignificantly. This account proves crucial to evaluating whether the [agency] took the requisite 'hard look.'"[31] NEPA "ensures that the agency . . . will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger [public] audience."[32]

B. Because The Sunny Oaks Project Will Have Significant Impacts, The Forest Service Must Prepare An EIS.

"Significance" under NEPA requires consideration of the action's context and intensity.[33] An agency must analyze the significance of the action in several contexts, including short- and long-term effects within the setting of the proposed action (including site-specific, local impacts).[34]

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[27] The OEC previously commented that an EIS was appropriate, needed, and required for this Project. See, e.g., February 14, 2019 Comments of the OEC, at page 2.
[28] 42 U.S.C. § 4332(C).
[29] *Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1149-50 (9th Cir. 1998) (citations omitted) (emphasis original). *See also Ocean Advocates v. U.S. Army Corps of Eng'rs*, 402 F.3d 846, 864-65 (9th Cir. 2005) ("To trigger this [EIS] requirement a plaintiff need not show that significlant effects will in fact occur, but raising substantial questions whether a project may have a significant effect is sufficient." (internal quotations, citations, and alterations omitted)).
[30] *Airport Neighbors Alliance v. U.S.*, 90 F.3d 426, 429 (10th Cir. 1996) (citation omitted) (emphasis added).
[31] *Ocean Advocates v. U.S. Army Corps of Eng'rs*, 402 F.3d 846, 864 (9th Cir. 2005)
[32] *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349, 104 L. Ed. 2d 351, 109 S. Ct. 1835 (1989).
[33] 40 C.F.R. § 1508.27.
[34] *Id.* § 1508.27(a).

Intensity refers to the severity of the impact and requires consideration of ten identified factors that may generally lead to a significance determination, including:

(1) *Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.*

Though the EA failed to properly analyze potential beneficial and adverse effects, the discussion it did provide clearly demonstrates the Sunny Oaks project will have both. This was demonstrated in several resource sections, in particular the wildlife and plant sections where the EA explained Threatened and Endangered (Indiana and Northern long-eared bats) and Regional Forester Sensitive Species may be adversely effected, likely to be adversely affected, (Wildlife Presentation Transcript at page 5) and that other species would benefit from early successional habitat.

(2) *The degree to which the proposed action affects public health or safety.*

The proximity of prescribed burns to private land and the inherent risks involved rise to the level where the proposed action could affect public health and safety. Not only from the risk of burns escaping their firelines, but also from the air pollution local residents may face. Several comments on the proposed action during the scoping phase also raised concerns about flooding and the EA acknowledged the increased risk in two drainages from elevated water yields. This was without taking into account more frequent storm events as a result of human-induced climate change.

(3) *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

The EA explains the project area contains a site that is eligible for the national register, "[it is located along Cambria Creek in Jackson County in the northern end of the project area and it is Cambria iron furnace. It is the remains of a 19th century iron furnace that contributed to the iron production of the Hanging Rock Iron Region." Presentation 9 Transcript, p. 2. Part of the project also includes the Handley-Branch Special Management Area with three unique plant species.

(4) *The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

With respect to the degree to which the environmental effects are likely to be highly controversial, the word "controversial" refers to situations where "'substantial dispute exists as to the size, nature, or effect of the major federal action.'"[35]

[35] *Town of Cave Creek v. FAA,* 325 F.3d 320, 331 (D.C. Cir. 2003) (quoting *North American Wild Sheep v. U.S. Department of Agriculture*, 681 F.2d 1172, 1182 (9th Cir. 1982)) (emphasis in original). *See also Middle Rio Grande Conservancy Dist. v. Norton*, 294 F.3d 1220, 1229 (10th Cir. 2002) (same); *Town of Superior v. U.S. Fish and Wildlife Serv.*, 913 F. Supp. 2d 1087, 1120 (D. Colo. 2012) (same).

The Sunny Oaks project is undoubtedly controversial based on the scoping comments and EA comments, and the fact that it covers such a large area of the Ironton District and will authorize action for a 20 year period, which is unreasonably long. The idea of creating "young, brushy forests" through clearcuts that exceed Forest Plan guidelines that also require an extended comment period proves the WNF is courting controversy.

Substantial dispute exists as to the likely effects of this Project. The Sunny Oaks Project seeks to benefit oak ecosystems on the Ironton Unit. But, the site-specific data available for this Project combined with the robust scientific body of literature on oak silviculture (much of it published by USFS scientists) give rise, at the very least, to a substantial dispute over the Project's likely effects on the oak ecosystem. As proposed, the Sunny Oaks Project disregards fundamental laws of oak silviculture that have been understood and expanded upon for the past 50 years. See, e.g., January 14, 2019 OEC Comments, at page 17. While the project purportedly seeks to advance oak ecosystems in the region, it will very likely achieve the complete opposite effect.

(5) *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*

The 20 year duration of the Sunny Oaks project illustrates why the effects are highly uncertain and involve unknown risks. The Project's failure to give the current stand conditions the required NEPA hard look and to commit to prescriptions that are optimal and/or appropriate at the current time for the current conditions on the ground also inject this endeavor with a high degree of uncertainty.

(6) *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

Should the WNF authorize such an expansive project with so much uncertainty and controversy, it will no doubt establish a precedent for future landscape-scale timber projects resulting in more ill-timed clearcut and shelterwood harvests in the Wayne's oak ecosystems.[36] And, the Project's deferral (avoidance) of site-specific NEPA analysis will set a bad precedent for future agency action.

(7) *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.*

In presettlement times oak ecosystems and the American white oak in particular dominated much of Ohio and the wider region's forests. Those ecosystems have declined dramatically due to historical clearcutting. Today, the trends are especially striking, as American white oak is

[36] In recent years, the Wayne's timber targets have increased dramatically over the past 30-year historical average. The FY 2018 timber target level was more than 422% the size of the Forest's historical target levels (1997 - 2017). (Average of 3,454 ccf from 1997 to 2017; FY18 target of 14,607ccf. *See* PSTAR (Periodic Timber Sale Accomplishment Reports) data for WNF, FYs 1997 – 2018 https://www.fs.fed.us/forestmanagement/products/ptsar/index.shtml).

declining precipitously in Ohio due to unsustainable harvest. Between 2006 and 2016, for example, southeast Ohio lost nearly 25% of its white oak by volume. At a time when private landowners and private industry have neither the economic incentive nor the substantial resources required to manage oak forests, the U.S. Forest Service should set the benchmark for appropriate and sustainable management.

(8) *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.*

As stated above, the project area includes a site that is eligible for the National Register.

(9) *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.*

The EA states the Sunny Oaks project may adversely affect federally endangered and threatened species, specifically the Indiana bat, and the northern long eared bat.

(10) *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

As outlined and discussed above, the Sunny Oaks Project threatens to violate NFMA, NEPA, the 2006 Forest Plan, Forest Service Directives, and the Administrative Procedure Act.[37]

> *Suggested Remedy*: The Forest Service should prepare a Draft EIS that fully discloses the site-specific data associated with the Project Area's stands; that addresses the NEPA, NFMA, and Forest Plan violations discussed above; and that offers a reasonable range of alternatives – including at least one alternative that emphasizes maximizing the many ecosystem benefits oak forests provide.

Sincerely,

Nathan Johnson
Public Lands Director
Ohio Environmental Council
1145 Chesapeake Avenue, Suite I
Columbus, Ohio 43212
(614) 487-5841
NJohnson@theOEC.org

[37] APA 5 U.S.C, Section 706(2)(A): reviewing courts "shall – hold unlawful and set aside agency action, findings, and conclusions found to be – arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law."