

Donald Winslow, Ph.D.

(b) (6)

10 June 2024

Objection Reviewing Officer
Attn: Administrative Review Staff
USDA Forest Service, Eastern Region
626 E. Wisconsin Avenue
Milwaukee, WI 53202
objections-eastern-region@usda.gov

Subject: Objection, Houston South Vegetation Management and Restoration Project Supplement

Dear Objection Reviewing Officer:

I would like to file this written notice of objection to the Houston South Vegetation Management and Restoration Project Supplement for the Brownstown Ranger District, Hoosier National Forest. The Responsible Official for the project is District Ranger Christopher Thornton. Below I provide the reasons for my objections, suggested remedies for resolving the relevant issues, and connections between these objections and my prior comments (Winslow, 19 November 2023). I incorporate by reference my prior comments (dated 19 November 2023) and other sources mentioned herein as permitted under 36 CFR 218.8(b).

Objection 1. I object to this project because it may decrease my family's enjoyment of the forest. On p. 1 of my prior comments (Winslow, 19 November 2023), I stated "My family and I enjoy hiking in this area. I fear that our enjoyment of forest will be diminished if this project is implemented." The Final Supplemental Environmental Assessment (Brownstown Ranger District, 2024) does not address this concern. My suggested remedy is not to implement the logging, burning, and herbicide application described in the Proposed Action.

Objection 2. I object to this project because such a big project clearly has a significant effect on the human environment, so preparation of an Environmental Impact Statement (EIS) is required under the National Environmental Policy Act. On p. 1 of my prior comments (Winslow, 19 November 2023), I stated "A project of this magnitude and extent clearly would have effects on the human environment and thus under the National Environmental Policy Act requires a full environmental analysis, so an Environmental Impact Statement needs to be completed. The appropriate way in which to do this would be in the context of a Forest Plan revision, since it is past time for a new Land and Resource Management Plan to be developed for the Hoosier National Forest. A project of the magnitude and intensity of Houston South should not be implemented before the next Forest Plan is developed."

In the Finding of No Significant Impact, District Ranger Thornton (2024) explains the rationale for determining that the proposed project would have no significant effect on the human environment. To address the first of the 10 factors from 40 CFR 1508.27 ("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.") by stating "My finding of no significant environmental effects is not biased by the beneficial effects of the action..." This misinterprets the factor. An EIS needs to be prepared if

significant beneficial effects are anticipated. Certainly, the agency must believe that significant beneficial effects would result from the project; why else would they conduct all these analyses and prepare all these documents and spend years trying to get the project through the courts? The project proposes multiple treatments at different locations over decades, so it resembles a planning document more than a specific project. My remedy for this issue is to develop and approve a new Forest Plan with an EIS before a decision is made on Houston South.

Objection 3. I object to this project because road construction would fragment the forest and promote the spread of pests, pathogens, and invasive species. On p. 1 of my prior comments (Winslow, 19 November 2023), I stated “Active management would not improve forest health but rather would create roads that fragment the forest and promote the spread of pests, pathogens, and invasive species.” Under Environmental Effects, Issue 1, the Environmental Assessment (Brownstown Ranger District, 2024) acknowledges that project activities would promote the spread of non-native invasive species. My remedy for this issue is not to implement the road construction and other activities described in the Proposed Action.

Objection 3. Implementing this project would liquidate a substantial amount of our standing carbon stock, leading to the net emission of greenhouse gases. On p. 1 of my prior comments (Winslow, 19 November 2023), I stated “It would be prudent to leave our carbon stock standing while we attempt to develop realistic models of future forest trajectories, so the Houston South project should not be implemented.” The specialist reports on carbon cycling have not been updated to reflect new information. My remedy is to establish a moratorium on timber sales on public lands until scientists can develop realistic models (that take into account changes in land use and changes in climate) of future forest trajectories.

Objection 4. I object to this project because some wildlife species would be harmed by the proposed vegetation management. On p. 1 of my prior comments (Winslow, 19 November 2023), I stated “In terms of wildlife habitat, certain species would benefit and others would be harmed by any vegetation management. However, the best approach for conserving biodiversity is to protect ecosystems, with their natural disturbance regimes intact, from human activity (Law et al., 2022).” On p. 2 of my comments, I stated “The management activities proposed may improve habitat for some wildlife, but they will degrade habitat for other species, particularly aquatic species and species adapted to undisturbed interior forest conditions.” The Environmental Assessment (Brownstown Ranger District, 2024) acknowledges that project activities would harm certain species. My remedy for this issue is not to implement the Proposed Action.

Objection 5. I object to this project because it would fragment the Pleasant Run Unit and decrease the value of the Deam Wilderness as a biodiversity reserve. On p. 1 of my prior comments (Winslow, 19 November 2023), I stated “If the Houston South project were implemented, it would increase fragmentation in the Pleasant Run Unit and reduce the value of the Deam Wilderness as a biodiversity reserve.” The Final Environmental Assessment (Brownstown Ranger District, 2024) fails to address this issue. My remedy for this issue is not to implement the Proposed Action.

Objection 6. I object to this project because it would sabotage the Benjamin Harrison National Recreation Area and Wilderness proposed by Senator Mike Braun (2023). On p. 1 of my prior comments (Winslow, 19 November 2023), I stated “It would also sabotage the Benjamin Harrison National Recreation Area and Wilderness proposed by Senator Mike Braun (2023), which includes the

Houston South project area.” The Final Environmental Assessment (Brownstown Ranger District, 2024) fails to address this issue. Since the release of the Final EA, the legislation has gained bipartisan support. My remedy for this issue is to wait until the intent of Congress is clear before making a decision on this project.

Objection 7. I object to this project because it is predicated on the notion that the area where the project is located was historically dominated by oak, but substantial evidence exists that much of the presettlement forest in Indiana was dominated by beech, reflecting a climax mesophytic forest. On p. 2 of my prior comments (Winslow, 19 November 2023), I stated “However, historical data from Indiana indicate that much of the presettlement forest in this state was dominated by beech (Hanbury, 2018). (All sources cited in this document are incorporated by reference.) Oak-hickory ecosystems are more prevalent now than they were in presettlement times, because the climax condition of the mesophytic forest is beech-maple. Therefore, it is questionable whether there is a need for management to promote oak-hickory ecosystems. While there may be concern about a lack of oak regeneration on some sites, it is not at all clear that the proposed management activities will increase oak regeneration.” In support of this last statement, on p. 1 of my prior comments (Winslow, 19 November 2023), I cited a recent study by Duan *et al.* (2023), which, although flawed because it fails to consider climate effects on reproductive parameters of tree species, presents simulations indicating that business-as-usual forestry on public lands in the Midwest will not prevent the transition to mesophytic forest. My prior comments also cited Dyer (2006), who argued that much of the presettlement forest in this area was mesophytic forest dominated by beech and maple.

On p. 3 of my prior comments, I stated “On p. 8, the SEA makes the claim that much of the Central Hardwoods region has been dominated by oaks for millenia, citing Abrams (2005). Even if this is true for most of the Central Hardwoods region (but see Dyer, 2006), it is not true for Indiana. Abrams (2005) presented a table of witness tree data from throughout the eastern United States, but none of the data in the table are from Indiana. Land Office data indicate that beech were as dominant as oaks, reflecting the historical prominence of mesophytic forest in southern Indiana (Dyer, 2006; Hanbury, 2018).“

The Final Environmental Assessment (Brownstown Ranger District, 2024) fails to consider these studies or address this concern. The Final EA still cites Abrams (2005) without acknowledging that this source does not include any data from Indiana. My remedy for this issue is not to implement the Proposed Action, since there is no need.

Objection 8. I object to this project because it would increase populations of deer and ticks. On p. 2 of my prior comments (Winslow, 19 November 2023), I stated “The SEA points out that oak and hickory trees produce mast. It is true that oak and hickory, as well as beech trees, produce mast. Acorns are a key food for many species, including white-tailed deer and white-footed deer mice, both of which are key hosts for deer ticks, which can carry Lyme disease and cause alpha-gal and thus contribute to public health hazards (Solomon et al., 2019). White-tailed deer, which are overpopulated in many areas, also damage native understory plants and reduce nest site availability for birds that nest in the shrub layer of mature forests. Along with the benefits that oak and hickory trees provide, cascading ecological effects also need to be considered. Nevertheless, mature oak trees should remain standing. Cutting them would increase the growth of shrubby thickets and lead in the short term to higher numbers of deer and deer ticks.”

The Final Environmental Assessment (Brownstown Ranger District, 2024) fails to address these concerns. Increasing prevalence of tickborne diseases is an emerging public health issue that should not be ignored. My remedy for these issues would be not to implement the Houston South project.

Objection 9. I object to this project because it would not allow species richness to increase with succession to mixed mesophytic tree communities. On p. 2 of my prior comments (Winslow, 19 November 2023), I stated “Quoting from the Forest Plan (Hoosier National Forest, 2006), the SEA [Brownstown Ranger District, 2023] intimates that species richness would decline as the forest transitions from oak-hickory dominance to mesophytic communities. However, species richness (i.e., number of species) will increase if the forest is allowed to continue succession and more species of trees are represented in the overstory.” The Final Environmental Assessment (Brownstown Ranger District, 2024) is not accurate in its description of anticipated changes in biological diversity. Mixed mesophytic forests are very diverse, and natural disturbance from wind events and gap dynamics would allow for spatial heterogeneity in habitat needs. My remedy for this concern is not to implement the Proposed Action.

Objection 10. I object to this project because it would disturb large areas of forest. On p. 2 of my prior comments (Winslow, 19 November 2023), I stated “This project would log 4375 acres, burn 13,500 acres, and apply herbicide on 1970 acres within the Lake Monroe watershed.” These numbers are the same in the Final EA (Brownstown Ranger District, 2024). My remedy for this issue is not to implement the Proposed Action.

Objection 11. I object to this project because ground disturbance from project activities would contribute to runoff, erosion, nutrient loss, and sedimentation. On p. 2 of my prior comments (Winslow, 19 November 2023), I stated “Ground disturbance from road construction, logyards, skidding, and cutting of vegetation would contribute to water runoff, erosion, nutrient loss, and sedimentation of streams and Lake Monroe. Lake Monroe serves as a source of drinking water for the city of Bloomington and other communities, so elevated sedimentation from these activities would increase water treatment costs.” The Forest Service discussed these issues at length in the Final EA (Brownstown Ranger District, 2024), as they were compelled to under a recent court ruling, but they failed to perform a cost-benefit analysis to calculate the change in water treatment costs resulting from the disruption in ecosystem services. My remedy for this issue would be not to implement the Proposed Action.

Objection 12. I object to this project because it includes even-aged management techniques such as clearcutting and shelterwood harvest. On p. 2 of my prior comments (Winslow, 19 November 2023), I stated “Clearcutting causes fragmentation of forest, erosion from wind and water, soil loss and nutrient loss, sedimentation of streams, harm to populations of aquatic organisms, soil compaction, runoff, flooding, an initial increase in microbial decomposition which reduces soil organic matter and releases greenhouse gases into the atmosphere, and reduced aesthetic value of landscapes (Friedland and Relyea, 2023). The silvicultural treatment map indicates that streams are present in some of the planned pine clearcuts. Not only would clearing of these stands add sediment to the streams, it would also increase water temperatures and thus lower dissolved oxygen content, which can harm fish and wildlife populations (Friedland and Relyea, 2023).” On p. 3 of my prior comments, I stated “The shelterwood harvest technique is essentially a two-stage clearcut, so many of the negative effects of clearcutting would also occur with the planned shelterwood harvests. Clearcutting and shelterwood harvest create even-aged stands, which are slow to develop the structural complexity seen in old growth

forests that is important for biodiversity conservation and carbon sequestration. “

The Final Environmental Assessment (Brownstown Ranger District, 2024) fails to consider all of these consequences of clearcutting. My remedy for this issue would be not to implement clearcutting or shelterwood harvest as proposed in this project.

Objection 13. I object to the proposed project because overstory removal of pines may be counterproductive and actually impair hardwood regeneration. On pp. 2-3 of my prior comments (Winslow, 19 November 2023), I stated “Many of the pine stands are succeeding naturally into hardwood forest, so overstory removal may not be necessary or desirable in many cases. In fact, there is evidence from Ohio that removal of pine stands can actually slow hardwood regeneration (see, for example, Artigas and Boerner, 1989). Indeed, the pines were planted to slow erosion, and the ground-disturbing operations involved in clearing them would undo the efforts of the Civilian Conservation Corps and result in erosion and soil compaction. Also, if they were cleared, there would again be a need for revegetation to stabilize the soil.” On p. 2 of my prior comments (Winslow, 19 November 2023), I pointed out that p. 5 of the SEA (Brownstown Ranger District, 2023), says “pines are not better at controlling erosion than native species but were planted because they are able to grow quickly on degraded sites...” I explained that the ability to grow quickly is exactly why the pines are better at controlling erosion after deforestation.

The Final Environmental Assessment (Brownstown Ranger District, 2024) fails to consider the evidence I pointed out that indicates pine overstory removal may slow hardwood regeneration. The Final EA has the exact same language on p. 5 as quoted in the previous paragraph, so my comments have not been considered. My remedy for this issue is not to clearcut the pines.

Objection 14. I object to this project because clearcutting pines would cause much accumulated carbon to be emitted to the atmosphere. On p. 3 of my prior comments (Winslow, 19 November 2023), I stated “In addition, white pine stands have been shown to accumulate carbon for many decades; clearing them would cause much of this carbon to go into the atmosphere (Leverett et al., 2021).” The Final Environmental Assessment (Brownstown Ranger District, 2024) fails to consider this issue adequately. My remedy for this issue is not to clearcut the pines.

Objection 15. I object to this project because thinning and fuel reduction treatments are unnecessary in the project area, where wildfires are infrequent and low intensity. On p. 3 of my prior comments (Winslow, 19 November 2023), I state “In the Central Hardwood Region where wildfire is infrequent and low intensity, thinning or other fuel reduction treatments are unnecessary and undesirable.” The Final Environmental Assessment (Brownstown Ranger District, 2024) fails to address this comment. My remedy for this issue is not to implement the vegetation management activities described in the Proposed Action.

Objection 16. I object to this project because pine thinning would cause remaining pines to grow with increased vigor. On p. 3 of my prior comments (Winslow, 19 November 2023), I stated “Pine thinning would seem to be counterproductive, releasing the remaining pines to grow with increased vigor.” The Final Environmental Assessment (Brownstown Ranger District, 2024) fails to address this issue. My remedy would be not to conduct pine thinning.

Objection 17. I object to this project because it includes crop tree release. On p. 3 of my prior comments (Winslow, 19 November 2023), I stated “The use of “crop tree release” is misguided; we should not consider our public forests to be crops of trees but rather integrated functioning ecosystems. Private lands serve as a source of timber; public lands in Indiana should be managed primarily for biodiversity protection and carbon storage.” The Final Environmental Assessment (Brownstown Ranger District, 2024) fails to address this issue. My remedy would be not to conduct crop tree release.

Objection 18. I object to this project because it includes midstory removal. On p. 3 of my prior comments (Winslow, 19 November 2023), I stated “Midstory removal is similarly misguided. A complex forest profile with diverse layers of vegetation is a characteristic of old growth forests that is considered valuable for biodiversity and carbon storage (Fraser et al., 2023). Removing the midstory would reduce this complexity and slow the progression toward old growth forest. Many of the midstory trees are native climax species such as American beech and sugar maple. These trees should be allowed to grow old.” The Final Environmental Assessment (Brownstown Ranger District, 2024) fails to address this issue. My remedy would be not to conduct midstory removal.

Objection 19. I object to this project because it is predicated on the notion that oak trees become over mature after 80 years of age. On p. 3 of my prior comments (Winslow, 19 November 2023), I stated “At the bottom of p. 6, the SEA states that many of the stands exceed 80 years of age and makes the claim that ‘Oak trees on the project area are considered over mature when they are at an age where they have reduced productivity and begin to naturally senesce and become more susceptible to mortality from pests and pathogens.’ Oak trees can live for two or three centuries (Fraser et al., 2023; Duan et al., 2023) or more, so an eighty-year old oak is not over mature. Productivity is not reduced; indeed, most species of trees accumulate biomass more rapidly as they age (Stephenson et al., 2014).”

The Final Environmental Assessment (Brownstown Ranger District, 2024) has not been substantially revised to reflect these concerns. My remedy for the issue is not to implement the Proposed Action.

Objection 20. I object to this project because activities proposed might introduce sudden oak death into the Central Hardwood Region if foresters or contractors have recently traveled from the West Coast or China. On p. 3 of my prior comments (Winslow, 19 November 2023), I stated “Old trees can be susceptible to pests and pathogens, but implementation of the Houston South project would only increase the spread of pests and pathogens. For instance, *Phytophthora ramorum*, the pathogen that causes sudden oak death, can be transported unintentionally by humans to forest sites (Cushman and Meentemeyer, 2006), perhaps in mud on shoes and tires. Spread of pests and pathogens could occur during implementation of the Houston South project by foresters and contractors or afterwards due to increased access resulting from new road construction and skid trails.” The Final Environmental Assessment (Brownstown Ranger District, 2024) does not mention sudden oak death or consider adequately the potential for project activities to promote the spread of tree diseases. My remedy for this issue is not to conduct the project.

Objection 21. I object to this project because it would not allow all the trees to grow old and for the forest to progress to attain old-growth characteristics. On p. 3 of my prior comments (Winslow, 19 November 2023), I stated “There are conservation benefits that can be achieved by allowing trees to grow old, die, exist as snags for some time, and fall naturally. Some living and dead trees will be uprooted by natural forces, which creates conditions beneficial for wildlife that do not occur when a

tree is cut by a saw instead (Schaetzl et al. 1988/1989). Therefore, oaks should not be cut as proposed in the Houston South project simply because they are perceived to be old. In fact, there are directives from the Office of the President (Biden, 2021; Biden, 2022; USDA Forest Service, 21 April 2023) and the Secretary of Agriculture (Vilsack, 2022) that instruct the Forest Service to protect mature and old growth forests for their value in carbon sequestration and biodiversity conservation. Figure 3 in the SEA demonstrates that there are almost no stands in the 160-169, 170-179, 180-189, 190-199, 200-209, 210-219, 220-229, 230-239, 240-249, 250-259, 260-269, 270-279, 280-289, and 290-299 year age classes. Clearly the entire project area is under mature.”

The Final Environmental Assessment (Brownstown Ranger District, 2024) still states that oaks are over mature after 80 years of age. My remedy for the issue is not to cut the oaks or other trees in the project area.

Thank you for considering my objection,

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