

Thank you for this opportunity to submit comments regarding “Land Management Plan Direction for Old-Growth Forest Conditions Across the National Forest System” and the U.S. Forest Service’s Notice of Intent (Notice) to prepare an environmental impact statement. I read the proposal with great interest and am glad that public input from many thousands of stakeholders, including myself, regarding the Agency’s previously published “Climate Resilience Advance Notice of Proposed Rulemaking” (April 2023) has helped inform the proposed action.

I strongly support the Forest Service’s proposal to amend all National Forest System (NFS) land management plans “to create a consistent approach to manage for old-growth forest conditions with sufficient distribution, abundance, and ecological integrity . . . to be persistent over the long term, in the context of climate amplified stressors” (Notice, p. 2). I was especially glad to note the emphasis not only on maintaining current limited areas of old-growth forest but also on management of maturing forest for development of old-growth conditions. For example, the proposal mentions “plan direction that provides for a succession of young and mature forests into old-growth forests” (Notice, p. 3); “improving and expanding” the occurrence of old-growth forest conditions (Notice, p. 3); and proactive stewardship to “foster an increasing trend in the amount, representativeness, redundancy, and connectivity of old-growth forest conditions” (Notice, p. 6).

Concerns and recommendations regarding current/proposed projects in Hoosier National Forest:

The Forest Service’s statements regarding an increased focus on mature/old-growth forest retention and recruitment are encouraging. However, at the local level (I live near Hoosier National Forest), I received a very different impression when reading the Forest Service’s draft Supplemental Environmental Assessment (SEA) (Houston South Draft Supplemental Environmental Assessment.pdf, attached) for the Houston South Vegetation Management and Restoration Project Supplement prior to submitting public comments on November 20, 2023 (Houston South Draft SEA_K.Smith comments.pdf, attached). The SEA does mention Agriculture Secretary Vilsack’s June 23, 2022 memorandum directing the Forest Service to “inventory and protect mature and old-growth forests to aid in climate resilience and carbon stewardship” (SEA, p. 16) and also development of the report *Mature and Old-Growth Forests: Definition, Identification, and Initial Inventory on Lands Managed by the Forest Service and BLM* (SEA, p. 17). Confusingly, though, regarding Houston South it states: “Although much of the project area is characterized by mature hardwood stands in silvicultural terms, it is not considered old growth forest. Rather, the entire project area is defined as low mature/low old growth” (SEA, p. 17). The lack of further discussion led me to inquire on page 2 of my comments: “Is the Forest Service suggesting that mature forest on its way to attaining older growth characteristics does not merit consideration in terms of conservation? Secretary Vilsack’s directive calls for protection of *both* mature and old-growth forest, so why does the SEA seemingly dismiss (or leave unstated) any implications for Houston South?”

As you know, there are currently three large-scale logging projects either ongoing (Uniontown North), challenged in Federal District Court and on hold (Houston South), or proposed (Buffalo Springs) for Hoosier National Forest (HNF)—the largest such projects in its history. Since December 2018 I’ve submitted extensive public comments on Forest Service documents pertaining to both the Houston South and Buffalo Springs projects. As a longtime Bloomington, Indiana resident, I’ve been particularly concerned about potential negative impacts of extensive logging, prescribed burns, and road-building

within the greater Lake Monroe watershed, especially as the lake supplies drinking water for over 130,000 people. I'm also dismayed by Forest Service plans to log in mature forest areas already developing older growth characteristics and increasing in carbon storage capacity with continued tree growth (Stephenson et al., 2014, <https://www.nature.com/articles/nature12914>).

While proposed management plans for HNF tout logging and prescribed burns to promote regeneration of oak-hickory forest (by far the most abundant type in HNF and throughout the state) in areas where beech-maple forest is naturally succeeding, I have pointed out that Indiana's forests were historically much more diversified. As stated in the USDA publication *Indiana Forests, 2013*: "The forest composition and size structure in Indiana (and throughout the Central Hardwood region) are dynamic and are a product of past disturbances. Sixty years ago forests in Indiana were dominated by oaks (Winters 1953), but the original land surveys prior to widespread European emigration indicated **a balanced mix of oak and beech-maple forest**" (*emphasis mine*) (<https://www.in.gov/dnr/forestry/files/fo-IN-Forests-2013.pdf>, p. 13). I have also argued that "in our current context of changing climate patterns, it seems prudent to allow natural succession of beech-maple forest in areas well-suited to this type. With so many uncertainties, the Forest Service needs to be cautious and flexible, allowing the forest's own adaptive strategies to work" (Houston South Draft SEA_K.Smith comments.pdf, p. 6).

The Forest Service has also proposed logging/burning in mature forest areas of HNF for creation of early successional habitat. However, as 240 Indiana scientists cautioned in their November 2, 2017 letter to Governor Eric Holcomb:

Our forest ecosystems cannot be sustainable if the only old growth forest is in nature preserves and state parks, which contain only one third of one percent of Indiana forest land. Our state forests and **Hoosier National Forest** (*emphasis mine*) are the only publicly owned forest acreages extensive enough to conserve biological diversity on a viable landscape scale (<https://drive.google.com/file/d/1x1i3pm5z9jEWZuPNvsUKf8JVnkJkfjbp/view>).

Regarding the Houston South project, I noted:

The SEA also stresses creation of early successional habitat, stating that "stand data in the proposed silvicultural treatment area shows no stands in the 0 to 9-year age class" (SEA, p. 4), and uses this as a partial rationale for large-scale harvesting and up to 20 years of repeated prescribed burns. But what about the early successional habitat on privately owned acreage—440,000 acres, or approximately 68 percent of the total HNF purchase area? The Forest Service would do better to promote creation and maintenance of young forest habitat on these tracts rather than carve up large areas of mature forest that are far more valuable for their carbon storage capacity and as habitat for interior forest species (Houston South Draft SEA_K.Smith comments.pdf, p. 6).

I consider the Forest Service's proposed use of multi-year prescribed fire regimes in HNF both unnecessary and needlessly destructive, especially as the Central Hardwood Region, including southern

Indiana, faces little risk from wildfire (2022 United States Fire Risk Map, First Street Foundation, <https://www.usgs.gov/media/images/united-states-fire-risk-first-street-foundation>). According to the Notice, “the proposed action recognizes the role of old-growth forest conditions in contributing to ecological integrity. It also recognizes that there are significant ecosystem and geographic differences that would require the development of geographically informed adaptive management strategies” (Notice, p. 2). I urge the Forest Service to apply such an adaptive strategy and support ecological integrity in HNF through the following actions:

1. Refrain from logging in mature or older growth forest stands and allow these areas to undergo natural succession and progress toward old-growth status. This is in line with the Forest Service’s concept of “proactive stewardship” that includes “recognition of when natural succession processes can support achievement of desired conditions” (Notice, p. 4), i.e., conservation of existing and recruitment of future old-growth forest conditions, as stated in the proposal.
2. Refrain from conducting prescribed burns in HNF, as wildfire risk is minimal. While the Forest Service maintains that “without prescribed burns, forest succession would continue contributing to the loss of fire dependent oak/hickory ecosystems” (SEA, p. 22), I fear “the Forest Service overestimates the fragility of oak-hickory forest, which dominates in HNF and throughout the state, and undervalues the importance of less well-represented forest types such as beech-maple, which provide equally valuable habitat for a different or sometimes overlapping ranges of species” (Houston South Draft SEA_K.Smith comments.pdf, p. 7). Since we don’t know for certain how different forest types will respond to climate-related changes, it only seems prudent to avoid active management that could disrupt the forest’s own adaptive responses. For example, the process of mesophication in eastern forests may prove to be a successful strategy.

Forest Service goals and monitoring of plan effectiveness:

The Notice states that “within ten years, at the unit level, at least one landscape prioritized within an *Adaptive Strategy for Old-Growth Forest Conservation* will exhibit measurable improvements in old growth desired conditions as a result of retention, recruitment, and proactive stewardship activities and natural succession” (Notice, p. 6). This seems a modest goal, though I understand it will be more challenging in certain regions due to current forest conditions. However, what about units like Hoosier National Forest, with its abundance of mature forested stands that could be set aside from active management, allowed to undergo natural succession, and achieve old-growth status within a relatively short time span? Will the Forest Service encourage all its units to prioritize multiple landscapes for plan implementation and monitoring where this is appropriate? We urgently need the climate-mitigating action of mature and old-growth forest NOW. We can’t wait 100 years for it to grow from scratch. Consequently, I urge the Forest Service to aim high and ask its units to manage as many areas as possible for old-growth characteristics, studying how these stands develop and any associated impacts on wildlife abundance and diversity, occurrence of non-native species/diseases, water quality, etc. I fully support the Forest Service’s aim to “foster the long-term resilience of old-growth forest conditions and their contributions to ecological integrity across the National Forest System” (Notice, p. 1). I also agree

that “consistent and effective monitoring of current and future old-growth forest conditions over time would better inform adaptive management” (Notice, p. 3).

Thank you again for this this opportunity to provide feedback.