Randy Moore, Chief

USDA Forest Service

Washington, DC

Tracy Stone-Manning, Director

Bureau of Land Management

Washington, DC

**RE: Request for Information: Fed. Reg. 42493-42494 Vol. 87, No. 135 2022-0055**

August 18, 2022

Dear Chief Moore and Director Manning:

The National Wild Turkey Federation, represents over 200,000 member conservationists across the United States. We have a 40-year partnership with the USDA Forest Service, and have worked collaboratively with several DOI agencies, including the Bureau of Land Management and the US Fish and Wildlife Service, on a number of habitat projects across the country. We respectfully provide these comments with regard to the USDA’s and DOI’s efforts to define old growth and mature forests (Fed. Reg. 42493-42494 Vol. 87, No. 135 2022-0055).

**The questions posed to stakeholders:**

*“The USDA Forest Service, USDA, and the Bureau of Land Management, DOI, are seeking input on the development of a definition for old-growth and mature forests on Federal land, and are specifically requesting input on the following questions:*

* *What criteria are needed for a universal definition framework that motivates mature and old-growth forest conservation and can be used for planning and adaptive management?*
* *What are the overarching old-growth and mature forest characteristics that belong in a definition framework?*
* *How can a definition reflect changes based on disturbance and variation in forest type/composition, climate, site productivity and geographic region?*
* *How can a definition be durable but also accommodate and reflect changes in climate and forest composition?*
* *What, if any, forest characteristics should a definition exclude?”*

There is a lot of public interest in old growth forests, for a variety of reasons. The NWTF recognizes the importance of old growth forests as an iconic feature on the landscape, as well as in providing wildlife habitat, diversity, connectivity, ecosystem services, and other values. The NWTF is a wildlife conservation organization and has healthy habitats as a cornerstone in our mission. Active management is often necessary to achieve healthy habitats, given our expanding populations, new land use patterns and changing climate. It is critical to consider that many wildlife species are dependent on early seral stage forests. Early successional stages require disturbance. Disturbance and early seral, however, do not equate to fragmentation. The USFS and DOI should manage for a diversity of seral stages - as all seral stages have wildlife, water, and recreational value.

One of the primary values of old growth forests is carbon storage. Large trees are storing large amounts of carbon. When those trees die – the decomposition process will emit carbon. Smaller, fast growing trees sequester carbon at a faster rate and are also important for long-term carbon storage. Management needs to account for the full carbon cycle. Additionally, research shows that grasslands provide significant carbon storage (mainly underground). Carbon sequestration and storage can be compatible with understory management for wild turkeys and other wildlife.

The NWTF is concerned about lumping mature forests and old growth into the same definition, limiting management options when our forests are already facing a variety of challenges. Mature forests do not necessarily exhibit old growth characteristics. Dense, mature forests, may not even necessarily have the potential to display old growth characteristics. For example, even-aged, dense stands of mature trees generally do not have old growth characteristics. Additionally, some landscapes do not support old growth forests due to routine disturbance, such as fire, wind throw, flooding, etc. Mature stands can provide opportunities for silviculture and forestry practices, local economic development, provide wildlife habitat, carbon sequestration, etc.

The NWTF also realizes that appropriately managing old growth is a challenging and potentially dangerous exercise for a variety of reasons and requires balancing the values of all forest seral stages. Developing one framework for the wide variety of forest types, geographies, topography and management regimes, could potentially have unintended consequences. Any definition or ecological framework, therefore, should be broad enough to allow management flexibility.

A lot of consideration has been given to and significant protections are in place for old growth through forest planning efforts. Existing protections for old growth include late successional reserves, wilderness, roadless, remote landscapes, etc. We should consider how much old growth and mature forest is currently protected by existing designations and conditions. To balance all the values of healthy forests, it is critical to have a goal or target for the amount, or percentage, of the landscape that needs to be comprised of old growth for stand diversity, wildlife habitat, ecosystem services, etc. Forest Planning examples have suggested a balance with an old growth component of approximately 15%.

Public information and education on the important and balanced aspects of old growth is essential. The NWTF, as a conservation partner, stands ready to help with the important task of engaging and informing the conservation-minded public.

**What criteria are needed for a universal definition framework that motivates mature and old-growth forest conservation and can be used for planning and adaptive management**?

The definition of old growth has changed over time and as new science became available. With the increased risk and presence of wildfire, climate change, and beetle infestations, the definition of old growth may need to continue to adapt. Old growth should be defined as a component within a healthy forest rather than a forest type. In some cases, previous definitions may have created the forest health conditions that we are observing today.

An ecological framework/definition should be values-based, and strive to preserve the unique ecological values and functions of our nation’s forests. A late-successional forest is a mixed-species community characterized by great age, uneven-aged population structure, domination by long-lived species, and complex physical structure, including multiple horizontal layers and gaps in the canopy, large trees, and many large standing dead trees (snags) and dead logs. These habitat features are absent or uncommon in younger natural forests. In intensively managed forests these features are created through forestry.Managing for age class diversity versus a late seral monoculture is essential for wildlife.

The NWTF appreciates this opportunity to provide input on this effort to define old growth, yet remains apprehensive about taking a one-size-fits-all approach. Old-growth might be best defined at a forest or regional level, where a lot of variables can be taken into consideration, including tree species, site index, etc. Such a framework should include and/or support existing data and ecological frameworks, of which there are many, e.g., Forest Inventory and Analysis, Natural Range of Variability (NRV), Historical Range of Variation (HRV), etc.

Patch size is an important consideration within the ecological framework. Currently, the USFS has two late successional reserves: a 100-acre and landscape scale, that include a target percentage of old trees in the stand, is a mixed species composition, late-successional community, with the broad characteristics above.

Mature forests can be adaptively managed for forest products, the benefit of local communities, and to store carbon and perform some functions of old growth.

The USFS is currently using late successional reserves in forest plans. How will old growth and mature forests affect existing protections, like late successional reserves or endangered species protections, e.g., spotted owl habitat? There is growing evidence that spotted owls nest in old trees, and require more open, early seral habitats for foraging.

**What are the overarching old-growth and mature forest characteristics that belong in a definition framework?**

It is crucial to manage mature forests from a healthy forest perspective. We must take into account the impacts of a warming, drier climate, and current stand conditions, resulting from more than 100 years of fire suppression and a lack of active management. The presence of old trees within a stand does not intrinsically create old growth values.

Instead, a definition or framework should include broad, ecological values. Include the presence of these old growth associated species. Old growth- associated species might include those which are not associated with younger forests, e.g., spotted owl, red-cockaded woodpecker, Pacific yew, etc. The framework should also recognize that the patch size and proximity to other habitat types should be included in the definition. Old growth associated species may have complex habitat requirements that cannot be fully accommodated for in old growth, such as the example of Northern Spotted Owls that nest in old growth and forage in openings.

**How can a definition reflect changes based on disturbance and variation in forest type/composition, climate, site productivity and geographic region?**

This question is central to the NWTF’s concerns about a rigid ecological framework and/or definition. Active management is often necessary to achieve healthy habitats, given our expanding populations, new land use patterns, and changing climate. Limiting the ability of forests to actively manage forest threats could be detrimental, not only to forest-dependent wildlife species, but also our nation’s water supply, clean air, access to our public lands, and even the abilities of our forests to sequester and store carbon.

With that concern in mind, we encourage the USFS and DOI to consider disturbance history and allow flexibility to manage around environmental changes – e.g., fuels reduction, fire prevention and mitigation management regimes, and post fire treatments including reforestation.

The definition applies to Federal lands while environmental changes, disturbance, and forest type variation has impacted both public and private lands. Please consider the importance of private lands in providing old growth values across the landscape. Particularly in the Eastern U.S. and other areas with less public land, private landowners are principal to sustaining old growth conditions.

Public land forest management should demonstrate the best forestry practices. Public land management agencies need to have the flexibility to adaptively manage forests, given changing local land use patterns, fire risk, needed post-fire restoration work, etc.

**How can a definition be durable but also accommodate and reflect changes in climate and forest composition?**

Old-growth forests are rarely managed by foresters as a renewable, natural resource. We encourage the USFS and DOI to look at the possibilities of building in this management strategy to create a more durable definition for old growth forest resiliency.

Additionally, building an old growth definition that considers both natural and human-caused impacts (wildfire caused by humans) to forest condition is essential. When we address natural and human impacts, we are better able to manage forests adaptively and create a sustainable and durable old growth definition.

To be durable, an old growth definition must be applicable to a diversity of forest types at the forest level rather than across a variety of landscapes, forest types, and geographies.

**What, if any, forest characteristics should a definition exclude?**

Any definition should exclude reference to “lack of human disturbance,” pre-European conditions, etc. Earlier definitions and discussions around old growth suggested that the “lack of human disturbance” is a defining characteristic. This does not account for indigenous traditional ecological knowledge and ignores the fact that people affect the landscape by virtue of being on the landscape. A durable definition must include future conditions with people on the landscape and under a changing climate.

Any definitions should exclude any reference to species that are predominantly shade-tolerant or dependent on closed canopy forests. Some old growth forests are open savannahs and some shade dependent species are indicators that a forest has been managed away from old growth conditions, e.g., fir in dry coniferous forests.

Definitions should exclude rigid measurements, such as diameter at bole height (DBH), age, etc. Rigid stand characteristics may lend themselves to including stands to being classified as old growth, that might be old, but do not function ecologically as old growth. Further, including rigid measurements or characteristics assume that one size fits all, and fail to account for individual site conditions, tree species, and other natural variables.

Thank you again for this opportunity to provide comments on this important rule. The NWTF is committed to our partnerships and to working with you to provide the best outcomes for wildlife. For the sake of our forests, we need to get this right. Definitions are often simple, but they also promote rigidity over management flexibility. The unintended consequences of land designations may contribute to the wildfire crisis in the West, limit the land management agencies’ ability to thin dense forests, and create opportunities for counterproductive litigation.

For questions or additional information, please contact:

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**Resources:**

Numerous Regional Documents, examples:

Estimates of Snag and Live-Tree Densities for Eastern Montana Forests in the Northern Region based on FIA Hybrid 2011 Analysis Dataset, Region 1

Regional Ecosystem Office Late-Successional Reserve Project-Level Consistency Reviews, August 5, 2009, (contact info updated March 2022), Region 6

Mature and Old-Growth Forests: Define, Identify, Inventory Executive Order 14072 Section 2(b), Partner Engagement Session – Conservation/Advocacy Focus, August 2, 2022

Numerous General Technical Reports and other Federal Guidance Documents, examples:

Information About Old Growth for Selected Forest Type Groups in the Eastern United States, GTR NC - 19

Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth, Forest Related Species Within the Range of the Northern Spotted Owl, Attachment A to the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl

BEYOND OLD GROWTH, Older Forests in a Changing World, A synthesis of findings from five regional workshops, conducted by National Council for Science and the Environment

Forest Management Guidelines for Wildlife Management Areas, Massachusetts Division of Fisheries and Wildlife (DFW)

White Paper F14-SO-WP-Silv-10 November 2012, A Stage Is A Stage Is A Stage…Or Is It? Successional Stages, Structural Stages, Seral Stages, David C. Powell; Forest Silviculturist

Umatilla National Forest; Pendleton, OR