

To: Jamie Barbour, Assistant Director, Ecosystem Management Coordination, USFS

From: Oregon Wild

Re: Request for Information (RFI) on Federal Old-Growth and Mature Forests

Date: August 30th, 2022

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We are writing on behalf of 20,000 members and supporters across the state of Oregon to comment specifically on how you should define mature and old-growth trees and forests to provide the greatest climate, biodiversity, and drinking water benefits for our state.

While the first phase of public outreach is narrowly focused on defining mature and old-growth forests, and determining how to inventory them across federal lands, it is important that the definitions and inventory process continues to account for the long-term policy goals outlined in Executive Order 14072. A one size fits all definition of mature forest ecosystems may be scientifically challenging, but protecting the majority of carbon stores, old forest habitat, and essential drinking watersheds across federal lands from continued industrial logging practices is not. It is one of the simplest, and most cost-effective climate solutions the U.S. can implement immediately.

President Biden correctly identified mature and old-growth forests as critical to addressing the climate and biodiversity crises in Executive Order 14072. As these crises continue to have far reaching impacts on communities across the country, it is essential for the Biden administration to do everything it can to address them. The FS and BLM should immediately begin implementing the clear policy established in the EO, to conserve mature and old-growth forests. “It is the policy of my Administration, ... to ... conserve America’s mature and old-growth forests on Federal lands ...”<sup>1</sup>

Scientists recognize that carbon sequestration and storage strategies must be implemented alongside cutting greenhouse gas emissions. While technological solutions may be feasible in the future, natural climate solutions like mature and old-growth forest conservation are the only options we can deploy at scale in the near-term. Several studies demonstrate that logging generates as much and likely more climate pollution than forest fires, while also degrading drinking watersheds and essential wildlife habitat. The threat logging poses to mature and old-growth must be addressed as part of any durable policy solution. As demonstrated by numerous

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<sup>1</sup> Biden, J. 2022. Executive Order 14072 on Strengthening the Nation’s Forests, Communities, and Local Economies. APRIL 22, 2022. PRESIDENTIAL ACTIONS <https://www.whitehouse.gov/briefing-room/presidential-actions/2022/04/22/executive-order-on-strengthening-the-nations-forests-communities-and-local-economies/>

projects across Oregon's Forest Service and Bureau of Land Management Lands, mature and old-growth trees and forests are still being logged for commercial timber production, and they require additional protections.

For example, the Flat Country Project in Willamette National Forest includes 1,000 acres of clearcut-style logging in Douglas-fir and hemlock stands 98-170 years old. Although the project review states that legacy trees will be protected in some of the proposed units, multiple areas contain legacy trees with complex old growth that are not listed to be protected in the Record of Decision. The Poor Windy Project in BLM's Medford District would "potentially remove 4,573 acres of nesting and foraging habitat" for the northern spotted owl, which by definition is mature and old-growth forest. The Integrated Vegetation Management Project (IVM) in BLM's Medford District aims to log 10,000 acres — including old-growth forests — in southwest Oregon over the next 10 years. The IVM project is being done under the guise of creating wildfire "resilience" and without adequate environmental analysis.

As demonstrated by these projects, under the Northwest Forest Plan in Oregon, and across BLM forests in the Coast Range, old-growth, and especially mature trees and forests, are not adequately protected. The Northwest Forest Plan left a million acres of mature and old-growth forests unprotected in the matrix, where they can still be logged to produce timber volume. Under the BLM's Western Oregon Resource Management Plans of 2016, provisions for conserving old forests were changed to allow more logging of mature and old-growth forests. For example, the 2016 RMP removed the 80-year limitation on logging in Late Successional Reserves. There are some guidelines in the Plan about maintaining nesting habitat for threatened spotted owls and marbled murrelets, but multiple exemptions allow logging of trees of any age and size, even if it results in downgrading or removing northern spotted owl habitat. Logging in riparian reserves, reduced in size from the Northwest Forest Plan, is also allowed under the 2016 RMP. The Spotted Owl Recovery Plan, Recovery Act 32, recommends (but does not mandate) conservation of a subset of the highest quality suitable owl habitat, but owl scientists say that spotted owl recovery warrants conservation of a much more inclusive range of suitable habitat because it would help the spotted owl co-exist with the invading barred owl. Biden's E.O. on mature and old-growth can finally give the spotted owl the protection it deserves.

In the diverse forests of Eastern Oregon, long-standing, science-based, and effective protections for the largest 3% of trees on over 14,000 square miles of National Forest were rolled back under the Trump Administration. Conservation of large and old trees in these forests remains paramount because such trees remain rare on the landscape after decades of over-logging. They serve many important functions: including conservation of at-risk fish and wildlife, habitat connectivity, water quality and quantity, fire resistance and resilience, active carbon storage, soil health, as well as scenic, recreational, tribal and other cultural values.

For purposes of addressing the climate and biodiversity threats posed by logging, we recommend that you define old-growth and mature forests to include all stands and trees 80 years or older, as the Northwest Forest Plan currently calls for. These collectively contain the bulk of the carbon already stored in FS and BLM forests, and they continue to sequester carbon at high rates. They also provide, across forest types, vital habitat and biodiversity benefits.

The mature and old-growth forest definition should also include stands with a quadratic mean diameter of  $\geq 20$  inches. This is the most commonly used size of “large trees” recognized in the scientific literature. After decades of unsustainable logging, large trees remain rare on the landscape and federal lands play a unique role in conserving them, especially as private industry does not protect them. Large trees provide disproportionate values for fish, wildlife, carbon storage, and climate resilience. Large trees also tend to be fire resilient with thick bark and canopy held high above the reach of surface fires.

The mature and old-growth forest definition should include any stands with more than 5 large ( $\geq 20$ ” dbh) or old ( $\geq 80$  years) trees per acre. This is important because it addresses the situation where a stand has more than one age-class, and we want to ensure the agencies are not tempted to give stands a misleading age label based on a younger cohort, when older cohorts are also present. We have seen this problem on western Oregon BLM lands. Even when they are not dominant, older cohorts within mixed age stands still provide mature and old-growth structure, function, and process, and deserve protection.

The mature and old-growth forest definition should include stands containing some or all of the major features of old-growth, including large trees, old trees, snags, dead wood, variable density/clumps-and-gaps, diverse species composition, diverse sizes/ages of trees. Mature and old-growth trees and forests are deserving of conservation even if they do not exhibit all of these features.

It is particularly important to recognize that mature and old-growth forests develop from a combination of biophysical features influenced by natural processes such as succession and disturbance. Therefore, the definition of mature and old-growth forest must include stands that have experienced natural disturbance events, such as wildfire, especially when mature and old-growth features such as large trees and snags remain present, and when other features such as vegetation diversity are likely to develop and recover over an ecologically appropriate timeframe.

Mature and old-growth forest should be defined (and conserved) with the ecosystem services they provide in mind. These include: climate change mitigation, climate change resilience, biodiversity conservation (both terrestrial and aquatic), water quality, water quantity, scenic value, recreation, quality of life, tribal cultural goals, soil conservation, slope stability, and others.

The agencies should also develop protections for individual mature and old-growth trees located outside of mature and old-growth stands. Individual, large trees on the landscape act as ecological anchors and provide vital habitat for wildlife. Given the deficit of large, old trees across forest ecosystems, the largest trees on the landscape should not be logged for commercial value on federal lands.

In defining and mapping mature and old-growth forests, the agencies may find that tree height (as determined by LiDAR) is a useful indicator of mature and old-growth trees and forests in some regions. However, height should not be used as a standalone indicator for age. The definition of mature and old-growth should consider unique species such as Pacific yew that can

grow old without growing very large. Clonal species such as quaking aspen may also need special consideration.

A rule protecting mature and old-growth trees and forests can be readily structured to leave room for appropriate management that addresses fire and other non-commercial objectives, in particular because logging older, larger trees increases, rather than decreases, fire hazard.<sup>2</sup> Conserving all large and old trees helps maintain forests that are resistant and resilient to wildfire. Large trees not only have thick bark and high canopies, but their dense canopies help maintain a cool, moist, less-windy microclimate and help suppress the growth of surface and ladder fuels.

As the Biden administration looks to show international leadership in meaningful climate policy, these changes have to be memorialized in binding regulations that will endure in future administrations, much as the 2001 Roadless Rule has done. To ensure a rule can be adopted on the necessary urgent time frame, with time for robust public engagement and environmental review, it is critical for your agencies to initiate a rule-making process quickly.

In summary, we urge you, for purposes of permanently ending logging threats to the climate and biodiversity values of federal trees and forests, to adopt a definition of “mature and old-growth” that includes all trees and forests and trees older than 80 years or >20” dbh. Older, bigger trees offer numerous climate and ecological benefits and it is critical that your agencies move quickly to propose a rule that would protect these trees and forests from logging, with whatever exceptions can be shown to be necessary to preserve their values, allow for necessary wildlife management, honor government commitments, and safeguard the public.

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<sup>2</sup> Lesmeister, D. B., S. G. Sovern, R. J. Davis, D. M. Bell, M. J. Gregory, and J. C. Vogeler. 2019. Mixed-severity wildfire and habitat of an old-forest obligate. *Ecosphere* 10(4):e02696. 10.1002/ecs2.2696. <https://esajournals.onlinelibrary.wiley.com/doi/pdf/10.1002/ecs2.2696>. Harold S. J. Zald, Christopher J. Dunn. 2018. Severe fire weather and intensive forest management increase fire severity in a multi-ownership landscape. *Ecological Applications*. *Online Version of Record before inclusion in an issue*. 26 April 2018. <https://doi.org/10.1002/eap.1710>.