



**Resolution of the Mendocino County
Climate Action Advisory Committee**

Recommending that Jackson Demonstration State Forest

Be Preserved Through California Natural Resources Agency's 30X30 strategy

WHEREAS, [Executive Order N-82-20](#) established a state goal of conserving at least 30 percent of California's land and coastal waters by 2030 and directed CNRA to develop, by February 2022, a strategy to achieve 30x30 in a manner that:

1. Safeguards our State's economic sustainability and food security.
2. Protects and restores biodiversity.
3. Enables enduring conservation measures on a broad range of landscapes, including natural areas and working lands, in partnership with land managers and natural resource user groups.
4. Builds climate resilience, reduces risk from extreme climate events and contributes to the State's effort to combat climate change.
5. Expands equitable outdoor access and recreation for all Californians.

WHEREAS, the immediate reality of anthropogenic climate change is now accepted by all reputable scientists worldwide and presents an immense threat to humans and the natural world;

WHEREAS, forests are key to our ability to achieve the Paris Climate accord and Executive Order N-82-20, to build climate resilience, and to re-absorb carbon from other economic sectors:

1. Forests are critically important in our fight against rising CO2 levels and concomitant climate change. Despite covering only 9% of the earth's surface, forests are responsible for sequestering 25% of anthropogenic carbon emissions, which is approximately equal to the carbon sequestered by the global oceans ([Pan et al., 2011](#)).
2. To achieve Paris goals, enhancement of forest-based carbon storage is critical to mitigate emissions in other sectors, especially as **no alternative carbon-sink technologies** have yet been proven at scale. (Houghton, et al, 2015).
3. Increasing forest protection is the lowest cost and the single most effective tool we have in meeting emission reduction targets ([Moomaw, et al., 2019](#)).

WHEREAS, Jackson Demonstration State Forest is well positioned to help implement Governor Newsom's October 7, 2020 executive order that directs state policymakers to conserve 30% of the state's land and coastal water by 2030.

35 **WHEREAS**, as the state's largest demonstration forest, Jackson State Demonstration Forest includes 48,652 acres of Mendocino's coastal Redwood (*Sequoia Sempervirens*) forest that provides a unique opportunity for the State to establish a state-owned forest dedicated to carbon sequestration. The benefits of the dedication of this forest to carbon sequestration are detailed below:

- 40 1. Redwood forests of the North Coast sequester more carbon than any other forest type in the world ([Hudiburg et al., 2011](#); [Sillett et al., 2020](#)). Redwood Forests are the best carbon sequestration and climate change mitigation opportunity in California ([Jones and O'Hara, 2012](#)). Coast Redwood trees can sequester up to 250 times more carbon than the average tree during a typical tree lifetime. Jones and O'hara found in their analysis
45 "Carbon Storage in Young Growth Coast Redwood Stands" that mature Redwood sequestered more carbon than young Redwood and that both sequestered more carbon than historical default values used in carbon budgeting.
- 50 2. "Over time old-growth forests store approximately twice as much carbon as forests managed on a 100-year rotation, and forests managed on a 50-year rotation store about 38% as much as old growth" ([Harmon et al., 1990](#)).
- 55 3. Studies show that trees continue to grow and absorb carbon throughout their lives ([Luyssaert et al., 2007](#); [Stephenson et al., 2014](#), [Lutz et al., 2018](#); [Mildrexler et al., 2020](#)), therefore premature mortality through harvesting is associated with both immediate carbon releases and decreased sequestration potential over time ([Battles et al., 2014](#)).
- 60 4. Some may argue that cutting down trees and converting them to wood products sequesters carbon, however the redwood products that become decks, fencing and trim in homes typically end up burned or in a landfill within 30 years ([O'Connor, 2004](#)). That time frame is a fraction of the sequestration potential of old-growth forests, particularly Redwoods that can sequester carbon for millennia ([Harmon et al., 1990](#); [Iberle et al., 2020](#); [Sillett et al., 2020](#)). Additionally a majority of the wood from a harvested redwood tree ends up as waste products that release their CO2 to the air much more quickly.

WHEREAS, wildfire size and intensity are magnified by climate change, threatening homes, lives, our economy and the natural world, and state-of-the-scientific research has found that
65 commercial logging practices do not reduce wildfire danger, but instead exacerbate it, that real wildfire risk reduction must be a publicly-funded effort focused first on mandating and creating defensible space on private properties as follows:

- 70 1. [Cruz et al., 2014](#) found that thinning in all scenarios increased fireline intensity and in the most likely scenario also increased in-stand wind speeds and the associated crowning potential of the fire. In a retrospective post-fire study of three management types, uncut (no treatment of natural fuels) and partial-cut stands (treated and untreated slash), the uncut forest had the least fire damage while the region's partial-cut stands with the untreated slash suffered the most severe damage ([Weatherspoon and Skinner, 1995](#)).
- 75 2. Weather and climate are the most important predictor of wildfire intensity with logging intensity being the second most important factor ([Zald and Dunn, 2018](#)).
3. Across the entire western U.S., fires burned with less intensity on lands that had the highest protections from logging ([Bradley et al., 2016](#)).
- 80 4. Logging the largest trees opens the forest canopy allowing more solar radiation to reach the forest floor thereby drying out the underbrush and soils creating hotter, drier, and more flammable understory microclimates ([Weatherspoon, 1996](#)). It results in greater in-canopy and in-stand wind speeds that fuel higher intensity fires

([Banerjee, 2020](#)). It also reduces summer fog drip which greatly decreases the vapor content and increases wildfire risk.

85 **WHEREAS**, the current logging activities in Jackson Demonstration State Forest are specifically problematic because:

1. The forested areas that are currently being logged include some of the largest remaining redwood groves of old second growth.
2. The eight areas currently slated for logging are close to hundreds of residences, border three State Parks and thereby increase fire risk in these areas.
3. These areas currently offer miles of beautiful hiking and biking trails in Mendocino, Caspar, and Fort Bragg's back yards and are visited by tens of thousands of people annually.

95 **WHEREAS** the Climate Crisis has contributed directly and indirectly to the loss of biodiversity and the destruction of critical biomes and JDSF is uniquely positioned to help retain biodiversity in our region and the state as follows:

1. Under the 30x30 vision laid out in the Global Deal for Nature, lands are classified according to their GAP status code, which indicates the gap between their biodiversity and their current level of protection. Jackson Demonstration State forest, as GAP3 land, is recognized as having, "particular potential to advance biodiversity and climate protections more quickly through administrative mechanisms." [The Global Deal for Nature](#) notes that, to avoid an irreversible wave of mass extinction, 90% of biodiversity hot spots globally must have the highest level of protection by the year 2030.
2. JDSF is home to a minimum of 1,266 species, not counting insects.

NOW THEREFORE BE IT RESOLVED that the Mendocino County Climate Action Advisory Committee does hereby recommend that California Department of Natural Resources should:

1. Halt approval of new Timber Harvest Plans and/or the sale of timber harvests in Jackson Demonstration State Forest while a new Management Plan, which incorporates the principles in this resolution including maximizing carbon sequestration, is formulated for JDSF;
2. Include Jackson Demonstration State Forest in the CNRA 30X30 strategy to achieve 30x30 goals.
3. Support the rights of Indigenous Pomo tribes to engage in Government-to-Government consultation regarding management of Jackson Demonstration State Forest.

This foregoing Resolution introduced by Committee Member Ellen Drell, seconded by Committee Member Randy Macdonald, and carried this 20 day of July, 2021 by the following vote:

120 AYES: 7

NOES: 0

ABSENT: 3

Marie Jones Date 7/20/2021

Marie Jones
Committee Chairperson