Forest Management for Water, Climate and Production in the Face of Wildfire

Catherine Thomasson, MD

For over a century, forest policy has been primarily that of clear cut logging and replanting single-species tree plantations. In the 1990's federal forests set aside more areas for regrowth to multi-species, riparian protected stands for habitat and water protection. Tree plantations of same-aged trees are much more likely to create intensely hot, scorched earth fires. Climate change is making droughts last longer, stressing trees and increasing insect infestations with more tree death. We need to prepare.

Solution #1 Bolster community resilience by retrofitting homes and defensible space, developing disaster plans and educating public to be more fire-wise.

- New building codes for fire-resistant roofing, ember-proof vents and work with owners to retrofit to code. (This was lobbied against by homebuilders Assn in 2020);
- Regularly thin small trees/shrubs within 100 feet of buildings;
- Prevent human-caused fires during fire season:-early in fire season prohibit campfires outside
 of campgrounds and prohibit in campgrounds when risk is high;
- Limit new development in fire-prone areas, and
- Designate or build smoke shelters; encourage installation of air filters for those at risk.

Solution #2 Reduce clearcut logging and densely packed tree plantations by modernizing Oregon's weak logging laws.

We know fires in stands with multi-layered canopy, diverse and older trees like the Eagle Creek fire that forests are more likely to burn in a mosaic pattern with faster recovery.

- Extend no-cut buffers around all rivers and streams to a minimum of 80-100'. (This also protects temperature levels for salmon/trout and protects summer stream flows).
- Let trees grow for longer before logging (e.g. 80 years instead of 30-50) This grows more valuable trees and draws in more carbon. (Diaz, 2018.Science).
- Ban clearcut logging-on state and federal lands and in drinking watersheds. On private industrial forest lands promote variable density thinning and require more trees be left standing after logging.

Solution #3 Timber companies should be paying their fair share for counties' essential local services. (see figure below)

- Large timber owners (>5000 acres) pay only 25 percent of taxes on timber harvests compared to Washington.
- 80% of large timber owners are Timber Investment Management Operations (TIMO's) or Real Estate Investment Trusts (REIT's) and pay no corporate taxes in the state.

Solution #4 Are there forest treatments that work?

• Thinning is a shot in the dark (see figure below), costly, and should therefore be focused near communities and address tree plantations.

- "Thinning" often involves commercial logging of medium to large trees which degrades wildlife habitat and emits far more carbon than wildfires of the same size.
- Use of prescribed burns in ecologically appropriate settings. (Especially in eastern OR).
- Concentrate fire fighting near homes and communities.



