

To: Senator Golden and Members of the Natural Resources and Wildfire Recovery Committee

From: Debby Garman

Date: April 7, 2021

Re: SB 762 – Wildfire Response and Recovery

I write to ask you to take advantage of best science *(please see appended 2019 key findings from scientists from OSU and U. Idaho) as you decide wildfire policy for Oregon forests. We are on notice with experience from recent years that fire cycles in the Pacific Northwest are changing as a result of climate change with hotter summers and drier conditions – one spark from any number of sources can lead to catastrophic fires.

With what we know will be coming as our climate catastrophe deepens, please acknowledge that we can no longer afford to procrastinate or utilize past practices with regard to forest management. I hope you will listen to our scientists and to respect nature. Fire is part of the natural cycle in our forest and has been since time immemorial. We need to act first and foremost to protect homes and communities at risk of climate driven wildfires. This means focusing on specific things to manage “bang for our tax-dollars buck” in protecting life and property while allowing forests to follow their natural cycles.

Based on best science, wildfire policies priorities must include:

- Adopt fire-wise programs across the state and ensure defensible space close to homes by reducing fuel loads within a 100 feet of homes.
- “Harden” homes to ensure they are more likely to not burn as a result of sparks.
- Strengthen land use regulation where fire risks are high and just as we restrict development in areas prone to flooding so too limit new construction in highly fire prone areas.

Thinning and logging our forests are not the direction we need to go. As someone concerned with climate consequences, I hope you are aware of evidence that forest thinning generates about the same amount of atmospheric carbon release that wildfire does. So, please don’t spend money to thin large areas of forest, but rather work to protect only areas where people interface with the forest. We need to focus our limited resources on those strategies that have the highest payoff as detailed above. We can use prescribed burns when/where it makes sense. We do not need to suppress all fires in our wildlands – indeed we should not try, as these fires are part of the natural cycle. Rather we need to focus on those wildfires that become a risk to our communities.

This will ensure we use our limited financial resources in a wiser, less costly and more efficient ways. Implementing these policies will also reduce risks to those who choose to live in forest areas, and even more so, our fire-fighters.

Sincerely,

Debby Garman, Hillsboro, Oregon 97124

***Key Scientific Findings on Forests, Fire, Carbon and Climate (April 26, 2019)**

Dr. Beverly Law, Professor Global Change Biology & Terrestrial Systems Science, Oregon State University
Dr. Mark E. Harmon, Emeritus Professor, Forest Ecosystems & Society, Oregon State University
Dr. Tara Hudiburg, Assoc. Professor, Dept. Forest, Rangeland and Fire Sciences, University of Idaho

Carbon in forests is carbon that is not in the atmosphere:

- Young forests do not take up more carbon from the atmosphere annually than older forests (Luyssaert et al. 2008). The first 10 to 20 years after harvest or stand-replacing disturbance, young forests are a net emission to the atmosphere (Amiro et al. 2010, Law et al. 2001).
- Forest harvest results in net carbon emissions versus leaving forests unharvested. Significant amounts of carbon are lost at each stage of timber harvest, manufacturing, and the end of useful product life (Hudiburg et al. 2011, Law et al. 2018). Whereas, forests actively withdraw carbon from the atmosphere and store and conserve it more effectively and for longer periods of time than do products derived from harvested trees (Hudiburg et al. 2009, 2013, Law & Harmon 2011, Harmon et al. 1990). Forest carbon can be increased by reducing harvest, i.e. increasing harvest cycle, forest carbon reserves (Law et al. 2018).

Fires:

- **Wildfire is an essential ecological process.** The dominant fire regime is mixed severity (Law & Waring 2015). Such burned landscapes have shown prolific recovery and diversity of species (Tingley et al. 2016, Fontaine et al. 2009).
- Most Oregon fires release a small fraction (~5%-10%) of the biomass carbon (Law & Waring 2015). Fire emissions are
- **Broad-scale thinning of forests conflicts with carbon sequestration goals** and would result in higher emissions (Law et al. 2013, Hudiburg et al. 2011). The amount of carbon removed is often much larger than that saved, and more area is harvested than would actually burn (Mitchell et al. 2009, Rhodes et al. 2009, Law & Harmon 2011).
- Post-fire logging frequently damages ecosystems, particularly on steep slopes. Impacts include soil erosion and degraded river hydrology (Karr et al. 2004).

Summary:

- First priority is to protect the public in the wildland-urban interface (Radeloff et al. 2005). Studies suggest focusing on residential loss in the home ignition zone rather than treating the larger WUI, because home materials, design and maintenance in relation to surroundings were main factors in residential losses (Calkin et al. 2014).
- **To meet climate mitigation goals and conserve forest carbon and the co-benefits to forest ecosystems,** there is the potential to keep carbon in existing forests and store more carbon in forests by reducing harvest and afforestation of areas that used to be forests long ago. Forests play an important role in offsetting fossil fuel emissions.