## Land Management Plan Direction for Old-Growth Forest Conditions Across the National Forest System #65356. Comments

I support the statement by The Coast Range Association that, "We request that the DEIS be amended to include language directing each national forest to be transparent about forest stand inventories and GIS based data relevant to mature and old growth stands. Forest inventory data must be readily and easily accessible to the public. And the FEIS must direct the 12 Forest Service to not obscure forest-level data in massive cloud-based inventories and confusingly assembled datasets. "

In addition, the health of our forested lands must rest on the "latest" body of scientific work underlying the importance of the multi dimensional life saving nature of mature and old growth forests in this era of climate crisis. The current level of forestry must therefore incorporate the studies involving the relatively new area of soil microbiology and rhizophagy – where plants consume microbes via their roots, gaining almost a **third** of their nutrients that way. Microbe remains are then launched back into the soil and reform into living microbes, off to gather more nutrients and participate in the functioning of the rhizosheath. This is the rhizophagy cycle. That cycle is harmed by modern timber harvesting methods, which not only wipe out vast tracts of forested land but then poison them by spraying poorly studied herbicides. Studies have also pointed to more carbon being stored in forest soils than the trees! Links to that study and others mentioned here, are listed below. The trees above and soil below along with the understory of diverse plants around them are all part of a vital system that has worked in mutually supportive harmony for millennia until modern harvesting has damaged that important carbon cycle. All this must be factored into the quality of your amendment process.

We on the Oregon Coast have a unique opportunity to save the old and mature growth forests in the Siuslaw National Forest. As Coast Range Association President Chuck Willer has pointed out, "On a per-acre basis, we now know the Siuslaw is the number one carbon storing national forest in the country. I repeat first out of 154 national forests!"

The fallacies promoted by the timber industry and their friends in the chemical industries, to justify their clear cutting and thin cutting of private forested land and to lesser degree, federal and state owned land, are fueled by outdated and in some cases corporate generated science, by the federal government and timber supported centers of higher learning, as is the case with the College of Forestry - Oregon State University here in Oregon.

Corporations have proven over the decades that the science they fund, both internally and externally, is biased in favor of their main objective which is profit. We've seen this in the tobacco, automotive, and chemical industries. This isn't any different in the timber industry.

Many courageous and devoted people, have spent years and decades fighting the timber industry in the Pacific Northwest and they do so into the present. The fight focuses around opposing the use of toxic herbicides in re-planting operations, protecting mature and old growth forests from clearcutting and protecting important waterways from both these activities. The fight is way out of balance because the timber and chemical industries have enormous wealth to fight their opponents and influence politicians and universities, who beckon to their call and are beholden to their dollars. 31% of the Nation's forested lands are National. We need the Forest Service to take a stand for We The People!

"Two thirds of the total carbon sink in temperate forests [Siuslaw] can be attributed to the annual increase in "live biomass", or the yearly growth of living trees within the forest. This makes the protection of mature and old-growth temperate forests paramount, since older forests add more carbon per year than younger ones and have much larger carbon stocks. Timber harvesting represents one of the most significant risks to the carbon stocks in temperate forests, particularly in the United States where 76% of mature and old growth forests go unprotected from logging. Fire and insects are also significant threats to temperate forests particularly in areas of low rainfall or periodic drought." -Woodwell Climate Research Center.

Understanding how a forest works is more than studying the growth of trees. It's about the entire carbon cycle that involves the climate, the type of land, the soil and the living plant diversity that makes a healthy forest. Below are a series of links I urge you to study that support this goal.

The majority of Earth's oxygen is produced by the oceans, with estimates suggesting that around 50-70% of oxygen comes from marine plants like phytoplankton, while forests contribute a smaller portion, usually around 28% of total oxygen production. In the words of environmentalist and ocean wildlife protector Paul Watson, "The oceans are dying". About 80% of the world's natural forests have been destroyed! This is the air we breathe! These are the gifts we need to cherish and nourish. This is vastly more important than the profits of a few giant corporations. The US Forest Service can and must lead the way for healthy forest systems and spectacular carbon retention.

https://www.woodwellclimate.org/protect-us-mature-and-old-growth-forests/

https://www.woodwellclimate.org/global-forest-carbon-storage-explained/

https://www.woodwellclimate.org/study-soil-carbon-fails-to-recover-in-cleared-forests/

https://www.scienceinschool.org/article/2024/trees-and-soil-microbes/

https://www.biocast.com.au/lessons-from-dr-christine-jones/

Here's how herbicide application after clear cutting harms the soil microbiome Most of the herbicides cited in this report are approved by the EPA!

https://www.sciencedirect.com/science/article/pii/S0169534722002294#:~:text=Global %20contamination%20with%20herbicides%2C%20initially,functioning%20and%20have %20evolutionary%20consequences.

-John Parulis, Waldport Oregon September 19, 2024