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First name: Theresa

Last name: Clark

Organization:

Title:

Comments: Nature does not need us, as much as we believe it does. Humans numbers are expanding exponentially with eventually 10 or 11 billion people. Our current "management" of nature is not working. Actually, it has been quite a disastrous failure when you look at how we, and our grains and livestock spread ever outward. We are converting jungles, tundra, prairies, forests and everything else into farms, ranches, factories, roadways, natural resource extraction sites, and cities.

Of the mammal biomass on Earth today, less than 10 percent is wild. The rest of either us or the mammals we eat: cows, pigs, sheep, and goats. Without their habitats, most wild animals can not survive. Animals are going extinct at an alarming rate, but we humans continue to focus on "progress", growth, greed, and profit.

We the taxpayers, pay you, US Forest "Service", to "manage" our forests and natural resources. Climate change is real. Extinction of animals is happening. Our forests are burning and being cut down at alarming rates.

We need healthy forests to generate the oxygen we breathe. We need pollinating insects to bring us fruits and vegetables. We need ice at the poles to regulate temperatures. We need the right amount of rain at the right time to grow our crops. These are things we know and yet we don't want to look at the basic solution that is simple, but not easy: we must save the vast tracts of habitat NOW to stabilize the planet's life support systems.

Einstein said, "In order to save the world, we must have an entirely new way of thinking". That new thinking must be NOW. We can not continue to manage our forests with large-scale burning, clear cutting, only managing for oaks (aka most profit), disturbing the inner connectivity of our forest floor, causing disturbance for invasives to enter our forests, and providing incentives only for those who timber their land.

In your draft plan, you showed the concerns about all the insects, disease, and invasives that are threatening the future health of our forests. We have already seen the devastating impacts of the loss of our chestnuts and ash trees, with the potential loss of many other types of our trees. The protection of our forests against these threats must be the primary focus of the "management" plan.

As the data also shows, our forests are ever-more fragmented with destructive timbering being done on many pieces of private forest lands. With the 15% that is owned by WE the people in Ohio, it must be a model and education for private forest owners who don't understand the threats that our forests are under and the importance of protecting them.

There need to be new laws put in place that completely rethink how to protect our remaining forests. If there is, in fact, a need for "young forests", then we need to restructure our tax laws to give incentives to allow people to let their massive lawns, grow up into new forests. This will reduce the massive amount of chemicals put on lawns and the carbon burned to keep them mowed and manicured. Allow farmers the opportunity let fallow pieces of farmland return to forest.

There need to be rewards for people preserving their forests "sustainably" or even letting them grow into mature forests in order to sequester more carbon. Since we are finally acknowledging that climate change is real, another essential point of the management plan must be to give carbon sequestration credits. Carbon sequestration or carbon dioxide removal is the long-term removal, capture or sequestration of carbon dioxide from the atmosphere to slow or reverse atmospheric CO2 pollution and to mitigate or reverse climate change.

The Harvard Project on International Climate Agreements gave a report on Institutional Support for an

International Forest Carbon Sequestration Agreement which begins, "Because forests play a critical role in the global carbon cycle, the international community is actively pursuing policies and programs to increase the amount of carbon stored in forests. Recent estimates suggest that forestry could contribute an average 6.7 billion tons of emissions reductions annually... Making full use of the forest carbon sink is appealing to both the developed and the developing world. Developed nations see forest carbon projects as a low-cost option for mitigating climate change. For the developing world, forest carbon payments could provide a sustainable source of much-needed income."

There also needs to be a complete ban on any oil and gas infrastructure on our public forested lands. We already have forests fragmented with pipeline, electrical, and other oil and gas "right-of-ways", which are full of invasive plants due to the constant disturbance in those parts of the forests. The impacts of fracking have been felt around the state, particularly in southern and eastern Ohio. An easy step to protecting our forests from future damage, is easily to ban all extraction activities in our public forests.

Along with climate change comes severe weather storms, excessive rain and/or drought which have resulting impacts on forests. These impacts include a variety of damages to trees because of excessive stresses caused by high winds, ice storms, soil slump with excessive rain, and snow accumulation. In addition to immediate uprooting and stem breakage, heightened tree mortality can continue over time as a result of substantial crown loss. Even trees that recover may have suffered permanent internal damage that impacts the health of the trees. In addition, damaged stands are more prone to secondary damages from fire, disease, insects, and invasive plants and insects.

Our forests are largely NOT fire-tolerant, especially when used on a large-scale. Burning impacts, damages, and even kills box turtles, snakes, our herbaceous layer, fungi, many tree species and other living forest components, including the soil. Our forests can not just be managed for oak production just because it produces the greatest "profit". Forest fires increase carbon dioxide levels in the atmosphere, contributing to the greenhouse effect and climate change. In addition, ashes destroy much of the nutrients and erode the soil, causing flooding and landslides.

How do we calculate the incalculable when considering the value of our Ohio forests? What would human life be without forests? We all intuitively know that forests are invaluable, not only for the health of our planet, but for all living things. People, who are more depressed, stressed, and divided than ever in our history, need the common bond of our forest land and all the living creatures that call it home. There is an indescribable peace when walking through a forest and hearing a rare warbler that can only survive with certain conditions,

The incompatibility and cross-competition of arbuscular and ectomycorrhizal networks is something else that must be considered in forest management. They generally don't support out-of-network species, and they have been shown to suppress the seedlings of out-of-network species: Oaks vs. Maples.

Ectos (oaks, hickories, beech) are far better at sequestering soil carbon and far more sensitive to logging and soil compaction than arbuscular networks (maple, tulip, cherry).

It's a crime that more research on mycorrhizal networks isn't happening in the eastern forest. Please read the following link:

<https://mail.google.com/mail/u/0?ui=2&ik=e5208c5c4b&attid=0.1&permmsgid=msg-f:1657121664511785683&th=16ff475fc2d43ad3&view=att&disp=safe>

So please, US Forest Service, reconsider your "board feet" mentality about trees and carefully consider how you are managing these priceless forests. The time for change is now. We cannot wait until things get worse because we are already at the breaking point.

"The tree which moves some to tears of joy is in the eyes of others only a green thing that stands in the way.."
William Blake