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Proposed National Forest Plan Amendment to Conserve and Steward

Old Growth Forests

Whenever men look for something solid on which to base their lives, they have chosen not the facts in which the world abounds, but the myths of immemorial imagination.

Joseph Campbell (The Masks of God: Primitive Mythology)

President Biden ought to be complimented on the intent of Executive Order 14072 - Strengthening the Nation's Forests, Communities, and Local Economies. The Executive Order seems to imply old-growth forests, and the conditions that maintain them are somehow "preferred". "Preferred" by what criteria? Forest landscapes are composed of highly complex systems in which Nature knows no single preferred state. Be it prairie, old-growth forests, or significantly perturbed areas, Nature is continually changing and keeps nothing constant. Further,

- 1. Forest life evolved with, creates and adapts to change, and
- 2. Chance plays a huge role in the direction of that natural change.

How will the USDA-Forest Service interpret its portion of the Executive Order in the design and application of the amendments to the many national forest plans it administers? Can the huge amounts of unknowns and uncertainties associated with America's complex forest systems be incorporated into these plans without misinterpretation during their implementation by the USDA-Forest Service? What will be the non-scientific assumptions embodied in the amendments? How much myth - cultural explanations of natural phenomena like day/night, earthquakes or climate- and folklore - which is a body of myths and beliefs relating people to a particular place - or just poor science that could be derived from the Order be applied in the application of the amendments to the various national forests?

Just exactly what is the relationship between old growth forests, climate and carbon storage? Like anything in Nature, forest ecosystem carbon sequestration is not going to be predictable or permanent. It can be reversed by climate change which is not a uniform force but rather a dynamic agent with region-specific influences on productivity. Climate change seems to be moving some forests over a tipping point. A few Western forests are already approaching or surpassing climate thresholds which change them from sinks that remove carbon from the atmosphere to sources of carbon.

Forest-dependent human communities

Being a resident of a variety of forest dependent communities, I am quite aware of their inability to adapt to change as a major cause of their current plight. I have walked down main streets of timber towns with their boarded-up shop fronts, decaying infrastructure and witnessed scenes of dispossession, homelessness and acute domestic violence brought on by an economic insecurity resulting from changes in state and federal policies in the administration of public forest lands. Many of these communities are, or were, nestled in alcoves of a tremendous national forest public assets reserved under the Organic Administration Act of 1897 which intended

to provide favourable conditions of water flows and to secure a continuous supply of timber in the American West. But the objectives of this act and the subsequent Weeks Act of 1911 that created Eastern national forests, often from heavily logged and agricultural private lands, were changed with the arrival of the Multiple-Use Sustained Yield Act of 1960 and growth in power of the environmental movement after 1970.

Sustained Yield of what and for whom? Definitely not for the benefit and sustainability of forest dependent communities of the West.

I have been studying, working, and playing in forests for more than seventy years. I worked with forests in five states in the United States and in the province of British Columbia, Canada. The only constant forest attribute I observed during this time was change. Most of this change was positive. All society had to do was adapt with or to the changes when recognized. Up until the waning years of the Twentieth Century, it did a credible job. As the power of environmental movement increased, it flexed its muscles, culminating in 1993, using a mixture of science, myth and politics, the Northwest Forest Plan, a large federal multi-agency approach to conserve biodiversity while preserving the northern spotted owl and other species associated with old-growth forests.

Is this amendment process going to follow a similar path? Hasn't Executive Order 14072 already made the determination as to the preferred alternative? Why bother with the expense and time required to develop an environmental assessment if the intent is to make a scientific ecological assessment sympatric with myth and folktales?

Proposal

The USDA-Forest Service is proposing to conserve and steward old growth forest conditions across the whole United States including Alaska. What will become of those plants and animals adapted to early seral stage conditions? How many endangered plants and animals is enacting going to create? Since there are no national forests in Hawaii and more that 50% of its natural forest has been replaced, is special consideration going to be given to this state?

I feel that the current scientific understanding of old growth is still in its infancy. Without clear definitions and standards on which to base management decisions, avoiding ecological catastrophes will be difficult. Although it will eventually be essential to consider the social and economic views associated with the conservation and stewardship of old-growth forests and their necessary conditions, an ecological approach would seem to be the logical first step. A flexible and adaptive approach is warranted where there are so many unknowns that will be encountered in developing this assessment. To establish objectives for the development of this amendment, a scientifically accepted ecological definition of what constitutes an old-growth forest in different ecosystem types should to be developed.

From an ecological point of view, the concepts of old growth, old growth stewardship, and management of oldgrowth conditions are relatively new, evolving about the same time as the environmental assessment process in the 1970s. The concepts probably require more research and redefinition when they are used in this assessment. The rationales for any new definitions as well as any uncertainties need to be clearly stated. They should not be arbitrary

My experience with environmental assessment processes is dated but consisted of four steps:

- 1. Scope and determine key questions, set goals and determine the methodology.
- 2. Gather information and create alternatives.
- 3. Evaluate and select preferred alternative.
- 4. Monitor, monitor, monitor.

A major question for each national forest has to revolve around the natural range of variation as to species, age and site class. There seems to be eight rationales for the conservation and stewardship of old-growth forests: recreational, ecological, cultural, utilitarian, spiritual, inspirational, aesthetic and moral. Why are the old-growth forests and their conditions are being conserved and stewarded in a specific area? Once the reason for their conservation is established, the follow-up question has to be the manner in which the USDA-Forest Service going to implement the requirements of the Executive Order?

Implementation would seem to require the establishment of old-growth landscape-level objectives prior to exploring their stewardship on a local or stand level. This ought to be accomplished in the context of adaptive management, a monitoring plan should be established to determine the effectiveness of any established objectives at the site level. The incorporation of adaptive management suggests preliminary methods, theories, and goals are known and available. The literature on old-growth suggest that they are. Unfortunately, many federal and state laws, policies, and activities are often misaligned with many possible stewardship regimes because of the confusion that exists between real science and myths, folklore, and cultural beliefs. There is a strong need to clear the confusion between scientific - based facts, mythology, folklore and downright misinformation. The incongruencies identified in the assessment would need to be resolved if the goals of the executive order are to be achieved.

An important component of this assessment would be to deal with the reality of these forests. As far as I can see, the best way to lower the casualty count of implementing the proposed amendment is constructing the amended forest plans on firm moral and scientific foundations with a mandatory requirement to involve, rather than just consult, the affected First Americans in the negotiations and design of the goals, objectives and governance of these old-growth conditions.

Concluding Remarks

In our dealings with forests of the future, a major obstacle will be the dominance of prescientific beliefs about Nature that continue to form the basis for our laws, policies, and actions and attempts to conserve biological diversity. We must also change how we characterize stability in non-steady state systems. Our love of forests gets confused with our attempts to understand them.

Paraphrasing Daniel B. Botkin, 2017 (25 Myths that are Destroying the Environment)

The reality of forests seems to be overlooked in the Executive Order:

* Forests are dynamic, always changing and requiring change. Carbon storage varies greatly as forests lose or gain productivity through changes in growth or even death through fire, disease and insects. Further, carbon forecasting methodologies are often statistically invalid and, where reliable, show that in some important forest types in the West, maximum biomass and carbon storage occurs in much younger stands than old-growth or does not occur at all.

* Pressure to retain and steward old-growth and old-growth conditions will result in a loss of biodiversity as habitats for species as well as the species that require young forests will decline.

* Other multiple-use management options for forests, especially in their commercialization, will decline.

I started this submission by suggesting President Biden, a leader that I both respect and support, ought to be complimented on signing the Executive Order, but on consideration, I have to qualify that observation. I believe his heart was in the right place but his mind was clouded by what he believed and wanted Nature to be in its relationship with humans.

Life has existed on this planet for some 3.5 billion years without any input from humans. President Biden and his 'science' advisors may not believe it, but life is both robust and quite adaptable. It did quite well without humans.

If we keep on in the current sociopathic direction, established by our beliefs and mythologies, while ignoring our opportunity to develop a positive understanding and relationship with Nature, human life may very well join the ranks of the passenger pigeon.

In the final analysis, we can only affect but not control our forest heritage. Infrequently have forestry problems been resolved from a strongly scientific and rational basis. Instead, we resort to myths, fairytales and beliefs that are not scientifically proven and often contradictory to scientific observations. Too often, our rules, policies and laws are derived from these non-scientific sources and used to guide our relationships with Nature. Let us not repeat the mistakes of the past in this assessment of the environmental impact of implementing this Executive Order.

Attachment: Submiss to USDA-old growth.docx - Consists of letter text added above.