Data Submitted (UTC 11): 1/23/2024 7:08:54 PM First name: John Last name: Marshall Organization: Title:

Comments: I am 72 years old and live in Wenatchee, Washington. I have a B.S. in Fishery Science OSU 1974 and an M.S. in Wildlife Resources from the U of Idaho 1984. In the early 1990s I worked on a crew surveying northern spotted owls on the Wenatchee National Forest. Although for much of my career I worked as a photographer, over the past thirty years, I have been studying fire ecology and management of east-side forests. I am perhaps best known for my historic photo comparisons with the Osborne Panoramas.

While I appreciate the northern spotted owl, I view the NW Forest plan as implemented over the past thirty years as unfortunate both for humans and nature. The reserve system does not take into account that forests are dynamic and are not frozen in time. The Endangered Species act has been repeatedly used to stop or make ineffective measures that otherwise would make east-side forests more resilient to insect epidemics and wildfire. We are less prepared for climate change than we might have been were it not for the Northwest Forest Plan as implemented.

Going forward, we need to shift away from a single species focus to emphasizing landscapes and ecosystems, and to be aware of dynamic processes. Our forests need to be re-structured to allow fire to pass through as it once did without leaving most of the trees dead over large areas. We need to cut an enormous number of trees with a strategy of leaving behind fire resilient species in a stand structure that will survive most wildfires. We should leave behind the finest specimens of all tree species, but be mindful of the changes in species composition that have occurred in the era of fire exclusion. A simple diameter limit will not facilitate the best decision making. Economics should not be the focus, but economics will be important to the success of this endeavor. Not every acre needs to be treated, but enough acres need to be treated that the landscape as a whole can survive fires and insect epidemics under climate change.

Cutting alone will not solve our fire problem. We must follow cutting with regular prescribed fire. Smoke management agencies need to get out of the way, and citizens need to accept smoke. Similarly, people with homes nested in wildlands need to accept that fire will come sooner or later, but accident or design.

Not every acre that is capable of growing trees should have trees on it. Non-forest is important to the survival of forests. The patch-work of herblands, shrublands, grasslands, young forest, mature forest, and old-growth are all important both to wildlife and for aesthetic reasons. Rather than a fixed reserve system, we need to think about this patch-work shifting across the landscape over time.

Forest management and fire awareness should not be limited to east-side forests. West-side forests have been misunderstood. Only in the wettest of the wet has fire and disturbance been infrequent- See Tepley et al 2013 and Johnston et al 2023. We cannot act as if fire is not a factor in the ecology of west-side forests.

If the spotted owl goes extinct, I will be sad, but I will be sadder if our forests go away. An analogy of what we have been doing for the past 35 years or so is this:

(A large boat with 50 people on-board is floundering off the Columbia River bar. Large waves are crashing over the boat, which is over-loaded and leaking. One person has fallen over-board. The captain repeatedly circles the boat and a crew member throws a life ring, but due to the drift of the boat and the chop, repeatedly misses. The moral question is how many times should the captain keep circling to save the one person instead of going to shore to save the other 49?) That is where we are with the northern spotted owl.

I have studied forest change extensively through over 200 comparisons of Osborne Panoramas taken in the

1930s and compared with present day. Our forest have grown denser and more contiguous than historic conditions, and plantations are included in that. Viewing the changes between 1935 and 2020 is only half the story. There was equal or greater change in the period of 1770 to 1935. Changes in NW forests started even before European settlement through the dwindling of native populations to disease. Indigenous peoples intelligently used fire, we chose to suppress every fire we were able to, and instead aggressively cut the finest trees with no understanding of the ecology.

With climate change lapping out our heels, we need our forests to be more drought and fire tolerant than they were in 1800, instead they are far less. I read about people wanting to move redwoods north, and maybe it makes sense, but not if we don't manage our forests. Trees of no species will survive if they grow too close together.