August 8, 2022

Gretchen H. Bishop P.O. Box 210836 Auke Bay, AK 99821

U.S. Forest Service Tongass National Forest Juneau, Alaska 99801

Dear U.S. Forest Service Land Managers:

I am a retired Alaska Department of Fish and Game, Commercial Fisheries Division, Marine Fisheries Project Leader. As such I do not have extensive knowledge of the criteria necessary to determine which of the old growth forests in the Alexander Archipelago that constitutes Southeast Alaska that should be protected under President Biden's Executive Order. I can tell you that logging adversely affects the salmon and shellfish fisheries of Southeast Alaska and these effects will only worsen with the increases in stream temperature that we will see with climate change. I have seen first hand the effects of bark sloughing in marine log storage facilities in Port Frederick on red king crab, and in Prince of Wales bays on spot shrimp and in the Petersburg area on Dungeness crab. All of these marine fisheries will also be increasingly imperiled with climate change and protecting the upland old growth forests will decrease stress on them.

On a personal level, I enjoy foraging for berries and mushrooms and hunting deer in our old growth forests. The interactions between fungi and old growth trees is an extremely interesting new research area and it appears from my somewhat casual following of this line of research that there are some very serious benefits to forests of these fungal associations and many medicinal effects of fungi are also being discovered. Around the world these fungal associations are being destroyed as old growth forests are destroyed before their benefits can be fully understood. It is not a given that these fungal associations will be replaced even if young clearcut forests are allowed to age if there are no adjacent stores of intact fungi. Furthermore, we have a burgeoning artisanal mushroom, berry and plant harvest industry developing on the Tongass that is possible because we have old growth forests. We will need to continue to diversify our economy in Alaska to remain resilient as climate change wreaks havoc on our existing industries. Subsistence deer hunting will become increasingly important as climate change affects our supply chains as we are a very isolated area. Old growth forests are very important to overwintering deer populations.

Tourism is rapidly becoming the largest industry in Southeast Alaska. Tourists enjoy boating through our beautiful intact old growth forests in cruise ships large and small and on our ferries. Clearcuts are not beautiful and do not support the wildlife that tourists enjoy seeing.

We once had a logging industry in Southeast Alaska but there was very little value-added to our lumber. It was mostly either turned into pulp for paper or shipped overseas as raw log which were sunk and stored in Japanese harbors. Some amount of ongoing harvest might be desirable but given that our climate is too cold for rapid and productive regrowth it should be reserved for such things as instrument-grade wood being hand-logged.

We have had a very warm summer in Southeast Alaska this year. Everywhere we look we see evidence of spruce needle rust fungus in our Sitka spruce and Western hemlock trees. It is really scary. Our forests are

likely to be placed under continued stresses like this as we continue have warm summers. Multi-age, old growth forests are likely to be more resistant to the diseases they will encounter under climate change.

Sincerely,

Gretchen H. Bishop