Data Submitted (UTC 11): 2/10/2023 7:52:39 PM First name: Phillip Last name: Merrick Organization: Title: Comments: Letter Regarding Telephone Gap

I have read the Telephone Gap Integrated Resource Project Proposed Action documents.

My initial reaction having walked the northern woods since the late 60s is to be amazed at how far we have come. The attention to detail, the thoughtful planning, and the knowledge of natural systems has advanced greatly. And I want to start off by saying Thank You.

Leaders of ecological understanding in the 1970s would applaud your efforts. It takes a long time for insight of the few to reach the masses. But slowly the myths generated by industry fade and science can make headway. It's been a long battle. And the battle continues.

Unfortunately, we no longer have 50 years for policy to catch up with the latest insights and data. We no longer have the luxury of waiting for legislation from Washington, or direction from regional headquarters that relies on science from the last century.

It is time for individuals like you, like me, to react to the most up-to-date information, like it was an emergency, with whatever power we have.

The objections that I have to this project are these. 1) Don't cut the mature and old forests. Mature and old forests are rare. They are carbon sequestration power houses. They are high capacity carbon storage facilities. 2) Don't do any single-age, or double-age, shelterwood or similar harvesting. These methods are extreme in their contributions to atmospheric carbon.

New analysis of old forests have been shown worldwide to be one of the greatest storage and absorption tools of carbon dioxide. As foresters, you know this. Old forests, contrary to industrial forestry beliefs and teachings, continue to absorb new carbon at rates equal or greater to young forests while storing far more than a young forest both above and below ground. When we harvest the big old trees we are removing the greatest source of carbon storage and new carbon sequestration in the entire region. Not cool when the Earth has a fever. The rationale that some of that carbon will be stored in the lumber is the latest myth pushed by industrial science. Half the carbon is in the roots, limbs, tops, and twigs, another quarter is in sawdust, slab, and cut-offs. Is it worth the loss of this giant CO2 absorbing organism? Is it worth the fact that it will be 30, or 75, or 100 years before it is fully replaced? When a giant is removed, the capacity of a forest to absorb carbon is reduced for years.

Undisturbed old forests are a treasure besides. They are rare. What will a 300 year old forest be like? At the rate we're going, no one will ever know. We will continue to make excuses. We will say that the economy demands it. We will say that we were just following orders. But our great grandchildren will wonder why we just kept cutting, and cutting, as the earth burned.

Besides the old trees, there are the clear cuts. "Even age forests". In 60-80 years when that "even age forest" is ready to harvest again (2080-2100) do you think the foresters of the future will commend you for your forethought, or be enraged that you didn't do more for the climate? Clear cuts and hybrid cuts (two-age, etc.) of any kind are massive carbon generators. Soils that are cool, moist carbon storage facilities are exposed to sun(heat) and drying(oxygen), and fed dead organic matter(food). It's like gasoline on a fire as the tops, old roots, and existing soil organic matter are metabolized. You know that. That's what doesn't make sense to me. You are treating these harvests like it is 1975. Back then we only had to be concerned with soil erosion and habitat and

how quickly we could harvest again.

I know about the habitat excuse for heavy cutting. I have been on many large cuts. I have watched early successional growth slowly mature. And I have watched the slow recovery infested with non-native species that these conditions attract. I have watched new gullies grow deeper by the year and sheet erosion expose the roots of saplings. I have watched turkey populations locally explode and their activity negatively impact surrounding forest soils. The unnatural consequences of misguided habitat development are many. But the biggest issue facing us all is carbon in the atmosphere. Creating new habitat for common species such as white tail and turkey cannot continue to overshadow the climate crisis.

And what about the habitat excuse for old forests that harbor their own set of diverse species? Species such as the pine martin, which has all but disappeared, are dependent on older forests. Older forests don't just sequester carbon. They also sequester diverse pools of macro and micro-organisms not found in younger forests. Rare habitat for rare species should be the kind of habitat that we're concerned with, not common habitat for common species.

It is just a trading of habitats, not habitat development. And the trade is that you want to make more habitat for common species while reducing habitat for endangered and less common species.

In the overall plan, these are little asks. But they have huge consequences. No old trees, no single age or two age, no shelterwood cuts. Simple. I think you'll be able to stay within guidelines. The percentages are still there. Except for "regenerating" forests, I believe that doing nothing would keep your mix within 2006 guidelines. And based on the vulnerability assessment mentioned below, there is adequate reason to amend your plan to current science.

Other Resource Considerations, Section 15, on Page 42 of the proposed action mentions the New England and Northern New York Forest Ecosystem Vulnerability Assessment. So it is obvious that you have read this material. But it doesn't seem to be applied in any consistent manner. Some glaring oversights include the increase in temperature and precipitation extremes which would preclude any clear cuts, or even shelterwood cuts. Opening up the forest in this way has never been good for soil health, and is an excellent way to increase invasive species and a increase atmospheric carbon. With the additional increases in extreme weather events it multiplies the negatives. Exposure to water erosion, gullying events are likely to increase. I have seen this on many heavily cut areas. Probably you have too. Another consideration that seems to be ignored is the proliferation of common species such as whitetail deer and turkey that will increase with shorter winters, and longer warmer falls. Creating more habitat to increase these common species is highly irresponsible when it comes at the expense of established carbon sinks that are supporting a diverse habitat that may support many of our more threatened species if given the time to age.

Regenerating and young forests have been studied and touted for generations. But they are not uncommon. And the species that they support are not uncommon. The habitat argument that is so often used to justify cutting is based on a few common species. They are species that are not in decline, not in trouble, and are becoming pests just south of us. They will become pests here as well as the climate shifts occur. Creating new habitat of this type invites invasives and supports common species to the detriment of native species such as the pine martin that requires the older, undisturbed habitats. And no matter what you do on our public lands, there will be plenty of regenerating and young forest created every year on privately held lands to support the invasives and common species if that's what you want.

As far as carbon storage goes, northern hardwood forests may not be perfect. But a hundred year old maple tree beats the heck out of a stand of 10 year old spruce. We can't change what we have in time to make a difference. But we can preserve what we have, and that will make a difference.

Climate change is an all-hands-on-deck climate emergency. It's not exactly what you signed up for as an employee of the US Forest Service, so I understand if you don't feel like it is your responsibility. But you have access to the best tool available for fixing atmospheric carbon, and you have been given the care of the largest carbon sink in the region. How YOU proceed WILL have an impact. Interestingly, the less you do, the greater the positive impact. And having a neutral impact is no longer enough. Everything that can be done to limit atmospheric carbon, should be done.

Just stop cutting.