

5 September 2024

Jessie Howard, Project Coordinator
Southern Appalachian Subregion
United States Department of Agriculture, Forest Service

Re: Red Spruce Restoration Project

Dear Ms. Howard:

The Nature Conservancy (TNC) appreciates the opportunity to comment on the USFS's scoping letter for the Red Spruce Restoration Project addressing red spruce-fir ecosystem restoration opportunities on the Cherokee National Forest, George Washington and Jefferson National Forests, Monongahela National Forest, and the National Forests in North Carolina. Red spruce ecosystems are a unique component of the central and southern Appalachians which host some of the highest concentrations of biodiversity in the United States. Once vast old-growth forests with thick organic soils red spruce forests were largely lost to unsustainable logging and fires and are now located at the highest elevations providing critical cooler and wetter climate refugia. Restoration of spruce influenced ecosystems addresses the dual crises of biodiversity loss and climate change so that the diversity of plants and animals that depend on these landscapes can not only survive, but thrive, in the region.

Collaboration is a core value at TNC, and our path forward to an equitable, sustainable future for nature and people. The Nature Conservancy has long been a dedicated restoration partner of the Southern Appalachians Spruce Restoration Initiative (SASRI) and the Central Appalachians Spruce Restoration Initiative (CASRI) across the Project Area. Through partnerships TNC has led and contributed to the 1000s acres already restored in the last 2 decades. In order to advance restoration at the pace required to address climate impacts we believe that we should be assessing conservation need and restoration solutions at the landscape-scale, such as through a regional Environmental Assessment. To support collaborative partner-led recommendations for the USFS Red Spruce Restoration Project TNC staff convened and facilitated the Red Spruce Technical Advisory Board (RSTAB) to gather input from scientists and restoration practitioners from SASRI, CASRI, and other interested partners. **We fully support the consensus-based recommendations produced by RSTAB participants and urge the USFS to consider the recommendations when drafting the EA and the final Decisions.** In addition, we recommend considering the following.

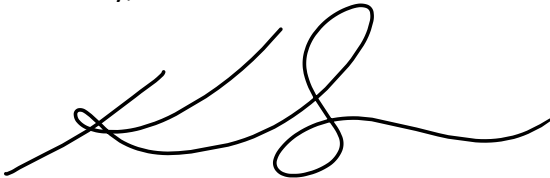
- 1. Combine restoration strategies on project sites.** We recommend incorporating flexibility for managers to appropriately combine multiple spruce restoration strategies on the same site. For example, on sites historically dominated by spruce but currently lacking adequate spruce regeneration, release the existing midstory spruce and underplant spruce seedlings across the site to quickly establish the next cohort of spruce.

2. Clarify “Old Forest Management”. As currently written, the goals of the section “Old Forest Management” are better defined as enhancing structural complexity and resiliency in even-aged spruce stands, such as in plantations. These management goal can be applied to middle-aged and older homogenous forests to accelerate traits found naturally in older forests. The stated outcomes such as creating downed woody debris and snags, and patches of spruce regeneration can be achieved via non-ground disturbing methods such as currently employed by TNC West Virginia’s Ecological Restoration Team. We recommend including non-ground disturbing methods such as chainsaw felling, hack and squirt herbicide injection, and tree planting to improve the long-term resilience, structural complexity, and uneven agedness of these stands in a variety of age classes.

3. Prioritize ecological goal setting and monitoring. Without clear and measurable ecological goals at the outset of a project we cannot assess restoration success. The EA should state specific, measurable interim and final goals (e.g., 5, 10, 20 year goals, not just long-term final desired conditions) for all relevant components of the ecosystem (hydrology, soils, understory and canopy vegetation, wildlife, etc.) not solely spruce growth, that define the range of desired ecological outcomes. Monitoring restoration projects will enable partners to improve practices and prescriptions through adaptive management and should be planned for and resourced accordingly. While our knowledge of spruce influenced systems and the impacts of restoration activities is improving, this EA will massively scale up restoration efforts, potentially out pacing our current understanding of restoration outcomes associated with specific treatments in different settings.

We appreciate the USFS initiative for landscape-scale planning and restoration that will ultimately enrich and expand the unique spruce forest communities that provide a stronghold of biodiversity and climate refugia throughout the region, as well as numerous ecological services for nearby communities.

Sincerely,



Katy Shallows
Forest Restoration Manager, Appalachians Program, The Nature Conservancy

cc: James Melonas, Forest Supervisor, National Forests in North Carolina
Cynthia Sandeno, Forest Supervisor, Monongahela National Forest
Joby P. Timm, Forest Supervisor, George Washington and Jefferson National Forests
Michael Wright, Forest Supervisor, Cherokee National Forest