June 15, 2015

Pat Sheridan, District Ranger
Warm Springs Ranger District
422 Forestry Road
Hot Springs, VA 24445

re: Lower Cowpasture Restoration Project

Dear Ranger Sheridan,

Please accept these comments on the draft Environmental Assessment (EA) for the Lower Cowpasture Restoration and Management Project (LCRMP) on behalf of Wild Virginia and Heartwood. We wish to incorporate our comments of February 6, 2014 and June 13, 2014 and the scientific peer-reviewed articles submitted with them by reference. Therefore, copies of those referenced articles are not included here.

We are chagrined to note that the level of biomass harvest (and therefore incineration) has increased nearly 3x over the levels specified in the earlier scoping notice. This level is, in our estimation, clearly unjustified, considering it benefits a single user yet has significant impacts on human health, forest values and climate. We are not in favor of creating single-user, single beneficiary resource streams in the GWNF, especially one that requires no return to the agency, treasury or the public.

We also note that the fact that the USFS dedicates overt $2 million (pg. 204) to the creation of wildlife openings and almost half-a million dollars to the prescribed burn program demonstrates a financial bias towards he hunting industry that is both unwarranted and unjustified given the fact that hunting, as represented by the number of hunting licenses issued is on the decline in VA statewide and therefore the demand for hunting is also declining. As we noted in our 2011 comments on the Draft GWNF Land and Resource Management Plan, there is already a very high density of deer on the Forest, recently estimated at 31 per square mile. In Virginia, the White-tailed Deer population has increased 400% over the last decade. In 2013, 244, 440 deer were killed in Virginia, and last year over 190,000 deer were killed... The number killed have been relatively constant over the last 10 years, despite efforts to increase the hunting of female deer in hopes of stabilizing or reducing deer populations. http://www.dgif.virginia.gov/wildlife/deer/harvest/index.asp. The Virginia DGIF says that wild turkey populations remain healthy and that the 2014 August Brood Survey reported seeing near record numbers of broods and total numbers of turkeys.
http://www.dgif.virginia.gov/wildlife/turkey/fallharvestsummary.asp

Please note our subsequent comments (#12) on the failure to allocate funds for monitoring. A more equitable and sensible economic proposal would be to reallocate some of the wildlife and fire funds, up to ½, for monitoring research.

We also find that the draft fails to address some very significant concerns we have made in previous comments that have resulted in a draft that is in need of additional analysis. Specifically we find that the draft EA

1. Fails to implement key findings in Plan Revision/Ecosystem and Species Diversity Analysis concerning **Brook Trout.**

The draft EA states that *Aquatic species (such as brook trout) that are non-tolerant of warmer water that is a projected climate change trend may find their habitat reduced. High priority actions would be protection of good habitat, improving connectivity and access to existing habitat. Protect and restore riparian forests to moderate changes in stream temperature, maintain stream bank stability, and provide instream habitat. Remove migration barriers and re-establish habitat connectivity so that species can move to more suitable habitat, or move to or from refugia.* (pg. 9) The project, however, contains insufficient actions that restore brook trout habitat; while culvert replacement and removal is indeed necessary, the proposal for dam removal has been dropped and all of the cutting and fire management activities will tend to create conditions that increase stream temperatures and continue the downward slide of the brook trout populations throughout the project area.

2. Fails to consider **natural disturbance events** that contribute to achieving Desired Conditions for Ecological Systems Diversity.

Conditions in the forest are the result, not only of past management practices, but also of natural disturbances that need to be considered in analysis. Natural disturbances are significant contributors to the creation of desired future conditions. Monitoring should consider these when such an event occurs to meet goals and objectives as this will reduce the necessity for some of the active management over the term of the project. Therefore some aspects of the project as currently conceived may be unnecessary to achieve Desired Future Condition (DFC). Monitoring should reevaluate and review desired structural conditions for cove, oak forests and woodlands, and pine forests and woodlands to meet goals for ecosystem diversity. This analysis can be done spatially over the project area and be reviewed yearly to potentially reduce the need for management. This may include tree mortality or canopy removal from insect predation, drought, windthrow, ice storm, flood, drought (Anderegg, 2015) or naturally occurring fire.

In addition, it appears that only historic stand treatments and past management activities within the project area since 1989 were considered in computing the Desired Structural Conditions (DSC)--Early Successional Habitat, Mid Successional Closed Canopy, Mid Successional Open Canopy and Late Successional Open Canopy. This fails to give an accurate picture of the existing forest as it is and creates a bias in favor of management over natural processes to achieve DFC.

3. Fails to accurately implement Landscape Analysis both within and beyond the project area.

Although there is mention of 850 acres of timber harvest (which) has occurred on private lands in the vicinity of the project area within the last 20 years (pg 19.), it is unclear if this has found its way into the project analysis in terms of the computation of Desired Structural Conditions analysis. It is also unclear if the analysis includes the 40,000 acres not considered part of the of project although being within the project area. In addition a true landscape analysis would include private inholdings and those private lands and areas adjacent to and in proximity to the project area. These would include, but may not be limited to, all of the DSC acreage in

- Douthat State Park
- Nature Conservancy Warm Springs Mountain Preserve
- Lake Robertson Recreation Area
- The Homestead
- Clifton Forge and Cliftondale Park
- Warm Springs
- Mitchelltown
- Hot Springs
- Iron Gate
- Selma
- Covington
- Longdale Furnace

It is likely that a true landscape analysis would demonstrate that wildlife openings, ESH and immature forests with open canopies occupy a greater role than the EA analysis would demonstrate.

4. Places an overemphasis on logging and fire to achieve desired future conditions as a result of situations and management mentioned in #2 and #3 above.

5. Fails to include **climate change** as a project issue and to consider a desired condition for climate mitigation as objectives in restoration analysis and activities despite ours and other's comments to this effect. We submit that this omission prevents necessary analysis on
    - Reductions in rates and volume of carbon sequestration (McDowell, 2015)
    - Projected loss of carbon released from soils, roots, and foliage as a result of fires and logging activities (Niemi, 2015)
    - Projected forest dieback from climate change variables (Anderegg, 2015)

6. Fails to recognize forest carbon as a significant public resource and to establish forest carbon and climate change-centered goals for this project. The EA should recognize that forest carbon is a natural resource that is as important as timber, water, biodiversity, recreation, and other multiple uses and should be consistent with the carbon emphasis in the 2012 planning rule, President Obama's 2013 Executive Order on Climate Change, and the 2014 Climate Action Plan. The

project has failed to consider an alternative that would implement policies and procedures and choose management activities that would maintain or increase carbon stores in the project area beyond the 10 year duration of the project. he mid-term (i.e. 20-40 years)

7. Fails to consider an alternative or provide analysis that would minimize carbon flux from forest thinning based on a comprehensive carbon life cycle analysis that accounts for upstream (on-site/landscape) and downstream (offsite such as transport and manufacture of wood products) reductions in carbon stores from management.

8. Fails to restrict temporary road construction and dozer lines in all Potential Wilderness Areas and Wilderness Study Areas.

9. Fails to analyze the effects on air quality from the incineration of woody biomass extracted from the project area as a cumulative impact of its removal. The effects on air quality are a direct result of this project making biomass available for incineration. It therefore must be considered in the environmental analysis along with the effects of prescribed burning. (pg. 45)

Table #A1-1 (pg 51) fails to consider the percentage of particulate emissions from the burning of biomass from the Lower Cowpasture Project that would be included in the Fine Particulate Emissions in Tons per Year. This would clearly change the percentage of emissions that the project would contribute in total to the air quality of the geographic areas considered.

The EA should evaluate proposals to extract woody biomass for energy production and to harvest timber for wood products using a comprehensive carbon-life-cycle analysis that that includes project related emissions associated from management activities through emissions associated with processing and transport of wood products.

10. Fails to analyze the effects of greenhouse gas emissions and particulates from prescribed burning and biomass incineration. The fact that "the EPA has not begun regulating greenhouse gases from activities such as prescribed fires" does not release the agency from considering these impacts in their environmental analysis. (pg 46)

11. Fails to adequately protect the ecological integrity of potential wilderness and wilderness study areas by allowing temporary road construction and dozer lines in these area. Dozer lines and temporary roads leave medium-long-term scars on the land that compromise these areas by fragmenting (Haddad, 2015) and creating characteristics that are inconsistent with the intention to maintain the ecological values over the term of the current forest plan.

12. Fails to commit any monies to implement monitoring throughout the project area for the duration of the project.

13. Fails to analyze any of the economic costs for the loss of ecosystem services in the project area due to implementation of the project. This would include, but not be limited to
    - Increased healthcare cost due to increased particulate and air pollution from prescribed burning or incineration of biomass removed for the express purpose of incineration
    - Lost opportunity cost for water table recharge, soil loss, erosion and sedimentation and carbon storage as a result of management activities
    - Economic cost of loss of Brook Trout habitat
    - Carbon storage cost impacts to climate from management activities

The EA should evaluate the quantity and quality of the supply of all ecosystem services on the forest, including soil enhancement, water quality and flows, habitat, and other services compatible with maintaining and increasing the carbon stored on the forest.

14. Fails to set clear priorities and parameters for biomass research. We would like to recommend that all research be conducted by teams consisting of agency and non-agency resource scientists with backgrounds, not only in forestry, but also soil and climate researchers. Before and after research and ongoing monitoring of conditions would be vital to this analysis. Recommendations for study would include impacts to:
    - Carbon storage and loss estimates based on
        - volume of biomass removed
        - soil impacts,
        - root structures
    - Soil and air temperature, moisture and humidity
    - Plant communities
    - Amphibians
    - Small mammals
    - Decomposer diversity, distribution and populations

15. Fails to set clear priorities and parameters for effective monitoring of management activities. These should include, but not be limited to,
    - Active monitoring of forest conditions and the ongoing contribution of natural processes and disturbances to forest conditions
    - Research priorities mentioned in #12 above for all management activities
    - Analysis to assess if management activities have achieved management goals and objectives
    - Air quality and particulate monitoring in actively managed areas
    - Effects on Old Growth and Potential Old Growth communities
    - Brook Trout distribution and populations in project area

- Water temperature

We request that the final Environmental Assessment and the District Ranger, whose decision it will be to "conduct management activities…and…decide any relevant mitigation measures and monitoring actions" adopt our recommendations in order to fully realize the ecological restoration opportunities for the Lower Cowpasture Restoration and Management Project.

Thank you for the opportunity to submit these comments on the draft Environmental Assessment for the Lower Cowpasture Restoration and Management Project.

Sincerely,

Ernie Reed, Conservation Director
Wild Virginia
P. O. Box 1065
Charlottesville, VA 22902
lec@wildvirginia.org
www.wildvirginia.org

Ernie Reed, Council Chair
Heartwood
P. O. Box 1926
Bloomington, IN 47402
info@heartwood.org
www.heartwood.org

References

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