Data Submitted (UTC 11): 5/28/2021 4:00:00 AM
First name: Spencer
Last name: Gall
Organization: Southern Environmental Law Center
Title: Associate Attorney
Comments: Dear Mr. Garten,

Thank you for the opportunity to comment on the Draft EA for the proposed Ewing

Mountain Vegetation Project. We offer the attached comments on behalf of The Clinch Coalition, Virginia Wilderness Committee, and the Southern Environmental Law Center.

LETTER TEXT:

Dear Mr. Garten,

Thank you for the opportunity to comment on the Draft EA for the proposed Ewing Mountain Vegetation Project. We offer the following comments on behalf of The Clinch Coalition, Virginia Wilderness Committee, and the Southern Environmental Law Center.

It was nice to catch up a few weeks ago and we look forward to meeting new staff members on the District. With regard to the Ewing Mountain project, we recognize and appreciate the work that District and Forest staff members have put into developing the project thus far. As you will read below, we believe the District needs to modify some aspects of the project and address incomplete analysis of others. We hope these comments are helpful as you refine the project, and we look forward to continued work together.

At the outset, it is very disappointing that the District did not issue a revised scoping notice to provide the basic information that is needed for the public to give meaningful feedback. We were not the only members of the public frustrated by the lack of information in the scoping notice, with others commenting that "[t]he Scoping Letter is far too general," and "[m]ore information needed before comment." By refusing to issue an expanded scoping notice, the District lost the opportunity to shape this project based on meaningful scoping comments.

"The process of scoping is an integral part of environmental analysis,"and "[e]ffective scoping depends on . . . presenting a coherent proposal." This includes the "where" and "when" of the proposed action. "The 'where' refers to the geographic location of the project," and the Forest Service Handbook directs the agency to "describe the location as specifically as possible." The "'when' refers to the timeframe in which the project will be implemented and completed." The scoping letter for the Ewing Project did not provide meaningful information about where or when treatment would occur, so this "integral part of [the] environmental analysis" process was hobbled from the start.

The District clearly understands the utility of specific information, having instructed commenters to "share any specific concerns and /or alternatives that you feel need to be considered within the context of this proposed action." But how would commenters have specific concerns without knowing even basic information like what management is being proposed where?

The District further stressed the importance of specificity in its Commenting Guide that accompanied the Draft EA:

First, there are a few important points you need to know about how we respond to comments and how we can both get the most out of your review of these documents. If you are going to take time to comment, you want it to count.

Specific comments on how to improve the project, what you prefer in another alternative, or important things you think we missed in the proposed action, are very helpful. We can better respond to your comments if you are as specific as possible and if you cite the location(s) in the document of the section to which you are directing your comments. . . .

Substantive comments are specific, comparative, or solution oriented. A substantive comment provides the reasons why and goes beyond just expressing an opinion. Comments such as, "The proposed action looks good" is not substantive. We want to know why the proposed action looks good.

As you will read below, we believe there are problems with several aspects of this project. Many are issues that we would have flagged if the District had provided basic information like what it was proposing to do and where. Instead, the District has now spent two more years developing a project with issues that could have been avoided by better communication and more transparency at scoping.

Moreover, because we are just now learning basic information about the project, e.g., the location of proposed treatments, we have only this chance to provide meaningful comments.

And the District has only one chance to get it right. If issues are not adequately addressed in the Final EA, filing an administrative objection would be the only option for commenters. In the future, we urge the District to take advantage of the opportunities that scoping provides when adequate information is shared in the scoping notice.

A. Inconsistencies between draft EA and Specialist reports.

There are several inconsistencies between the Draft EA and Specialist reports. NEPA requires the Forest Service to take a "hard look" at the potential environmental consequences of its actions. This "hard look" consists of "thorough investigation into environmental impacts and forthright acknowledgment of potential environmental harms," and giving "careful scientific scrutiny and respond[ing] to all legitimate concerns that are raised" by the agency's own experts.

1. The Geologist Report recommends dropping the proposed clearcut in the Pellbridge pasture allotment.

The District proposes to clearcut 12 acres of white pine on a slope directly uphill of the abandoned detention dam in the Pellbridge pasture allotment. While converting white pine plantations to more characteristic forest is often a net benefit to forest health, the Draft Geology Report details the extreme hazards of doing so here[mdash]including risks to public safety, infrastructure, and resources. In light of these risks, the report recommends dropping any ground disturbance in this area. The draft EA, however, continues to propose this unit for clearcutting without addressing the contradictory findings and recommendations in the Geology report.

The proposed logging unit and detention dam are situated uphill of the community of Cripple Creek. This area is already vulnerable to erosion and increased sedimentation from the cattle that graze on the sediment-filled reservoir. Furthermore, the dam has not been maintained or monitored for decades, and gullies have already eroded and removed part of the dam.

The Forest Geologist for the GWJNF found that clearcutting in this already-vulnerable area could have catastrophic cumulative effects. The proposed road construction, log landing, skid trails, and logging operation itself would cause further ground disturbance. The slope of the proposed clearcut is steeper than the grazing

pasture, so this additional disturbance would make storm runoff more rapid and voluminous. The increased stormwater flow would persist long-term given the type conversion from forest to Early Successional Habitat. Based on these impacts, the report concluded that the clearcut would "add incrementally to the existing hazards such as a potential breach in the berm on the crest of the dam, overtopping the dam, downcutting into the dam, and failure of the dam embankment and sediment behind the dam." A failure of the dam embankment specifically could cause flooding and a debris flow/mudflow that "would put lives and infrastructure at risk" in the Cripple Creek community.

Based on these many risks, the geology report recommends that the "proposed action drop the proposed clearcut and other proposed ground disturbance in the watershed containing the dam and sediment-filled reservoir." The report further recommends a geotechnical investigation of the dam and sediment reservoir. Based on those findings, the Forest Service could then conduct a comprehensive assessment of hazards and risks and develop alternatives through a separate NEPA analysis to "abate, mitigate, and remediate the hazards." This analysis would require collaboration with other governmental agencies and ample opportunity for public involvement.

The EA, however, fails to grapple with any of this. It does not mention the litany of risks identified by the Forest Service's own geologist. It does not mention the recommendation to drop any proposed ground disturbance and logging in this area. Nor does it address the need to first cooperate with other agencies, interested parties, and the public to develop a multi-stage plan of action. Without doing so, the District fails to satisfy its duties under NFMA to protect forest resources and its duties under NEPA. The District cannot simply brush aside the analysis in the Geology report and issue a finding of no significant impact. It must grapple with these serious issues.

Even if the above were not the case, the District cannot proceed with the proposed plan to clearcut white pine in unit 4970-87 (Pellbridge pasture allotment) because the Forest Plan standards for management prescription 7G-Pastoral Landscapes provide that "[t]hese non-forest areas are unsuitable for timber management" and only "occasional tree removal or herbicide use [that] may be necessary to manage forest encroachment, provide scenic view, improve visitor safety, or encourage the presence of certain watchable wildlife species" is allowed. This proposal is not "occasional tree removal"; rather, it is a 12-acre clearcut to achieve total forest type conversion, which the Plan does not allow.

2. Geology and Soil & Water Reports detail the many impacts of temporary roads.

The Draft EA does not adequately consider risks posed by temporary roads. The project proposes 5.1 miles of new temporary road construction. The District concluded in the Draft EA that the expected soil disturbance from temporary roads is "not significant" and would be mitigated through the RPMs described in Appendix A. It also found that water quality "may be marginally affected by sediment loading over the short-term," but finds that the RPMs will mitigate or avoid long-term sedimentation.

The Geology Report conflicts with these conclusions. As the Forest Service geologist observes, "[t]here is nothing so permanent as a temporary road." This is in part due to the fact that after the roads are closed following the timber sales, the roads will be considered "non- system." "The Forest Service does not spend funds to maintain non-system roads, and the concomitant lack of maintenance increases the "potential for slope instability and slope failures (landslides)." Compounding the problem, even if the temporary roads are closed, revegetated, and restored to their original contour after the project's completion[mdash]which, to be clear, is not proposed here[mdash]they would "result in permanent, irreversible alterations of geologic conditions affecting slope stability, surface drainage, subsurface drainage, and storm water runoff." The report notes that "there is no way to avoid long term, permanent, and irreversible effects of temporary roads." Yet the Draft EA fails to discuss these permanent and irreversible long-term concerns, and the RMPs do not address them.

The Soil & Water Report confirms the substantial impacts that temporary roads can have on sedimentation and water quality. For example, as originally proposed, temporary roads would have caused a 190% increase in sediment loading in Cove Branch and 20% in Cold Run. Although these specific temporary roads were rightly re-routed or dropped from the project, the projected impacts highlight the severity of impacts that temporary roads can cause.

The Draft EA fails to acknowledge or respond to the long-term concerns about temporary roads discussed in the geology report. Unless and until the District resolves these conflicts between the EA and Geology Report, the EA cannot support a finding of no significant impact.

B. Sedimentation and erosion

1. Spatial understanding of potential high-risk sites and site-specific mitigation

Site-specific analysis (and mitigation) demand a spatial understanding of where erosion and sedimentation risks overlap, i.e., where steep slopes within units overlap soil types with moderate to severe erosion hazards based on soil types. While these two sets of data are analyzed individually in the Draft EA, they are not combined spatially to identify where potential high-risk sites exist. And while the Draft EA and accompanying reports contain a good deal of information regarding sedimentation, erosion, soil types, and associated erosion hazards, the analysis does not join up this information spatially so that site-specific impacts can be analyzed.

To give an initial impression of what the District's soil and slopes analysis may reveal, we gathered and analyzed GIS information to identify potential high-risk sites in the proposed harvest units that have slopes over 35% and/or moderate to severe erosion hazards based on soil types. As explained in the attached Additional Information Regarding Soil Erosion Hazard Data Used in Maps Ewing Mountain Vegetation Project and maps, we relied on the following data:

* To identify the project stands, we used data received from the Forest Service in response to our request for GIS shapefiles for the project stands.
* We identified potential erosion risks from the construction and use of forest roads and trails using soil data and interpretations from the National Resources Conservation Service (NRCS). Virginia BMPs recognize that the NRCS maps "with interpretations" are useful resources in planning logging projects, and recommend consideration of steep slopes and highly erosive or hydric soil types.
* To determine slopes within the proposed harvest units, we relied on the U.S. Geologic Survey's National Elevation Dataset (10-meter resolution) and identified slopes of 35% or greater because the Forest Plan prohibits ground- based logging on sustained slopes of 35% or greater.

These maps indicate that many of the proposed harvest units contain some areas with both soils of moderate to severe erosion risk and steep areas with slopes over 35%. The District should examine this information to help identify site-specific issues modifications to the proposal that would diminish the risks of erosion and sedimentation and mitigation.

Indeed, the EA contemplates that "site specific design criteria" will be needed. Specifically, it will be developed "for the road system or logging plan features for any watersheds that the modeling shows a potential increase of >10% sediment delivery above background. This would apply to, for example, the Brush Creek and Little Brush Creek watershed, in which a 12% increase is estimated. This increase is significant because (1) Brush Creek is already rated "Functioning At Risk" due to "'fair' ratings related to water quality, aquatic habitat, road/trail density, and invasive species and 'poor' ratings for soils and fire conditions;" (2) the model seems not to include several existing sedimentation sources, as discussed below; and (3) the model is a "minimum estimate of erosion and sedimentation" from the project. As such, reducing sedimentation through project modification or mitigation is critical to a potential finding of no significant impact for this project. The District must develop its proposed

mitigation now[mdash]for Brush Creek and Little Creek watershed, as well as all other implicated watersheds[mdash]and disclose the mitigation to the public for review. Otherwise, there is no basis to conclude there will not be significant impacts and the District will not have met its NFMA obligations or its duties under NEPA to provide the public with adequate environmental data and "a basis for evaluating the impact" of the proposal.

2. Questions about the GRAIP Lite Erosion and sediment modeling

We are concerned that the sediment modeling leaves out several existing sources of sedimentation, further underestimating sedimentation in the project area. It seems that the model did not include impacts of ATV and equestrian trails[mdash]both authorized and un- authorized. These existing sources of sedimentation should be built in because as the EA acknowledges, "[b]oth official Forest Service Trails (FST) and unauthorized routes are abundant in the project area." Moreover, several known unauthorized trails "have resulted in resource damage such as trail gullying, loss of riparian vegetation, and stream channel impacts through trampling and hoof action, and chronic erosion off certain portions of trail." Nor does the model seem to include landings and non-bladed skid trails, further calling into question the "minimum estimate" the model purports to provide.

3. Outstanding requirements in allotment plans that affect soil and water

The Forest Plan provides that grazing allotments within the East Iron Mountain Management Area should "showcase sound range management practices that maintain and restore vegetated riparian areas and stable streambanks[.]" This is important because, as the Soil report acknowledges, livestock grazing can degrade soil and water resources in multiple ways, including bank destabilization and sedimentation from trampling of stream banks or springs. To avoid negative impacts, there are allotment plan requirements. The Soil Report indicates, however, that some of these requirements are not being met, and states that such requirements "should be implemented prior to timber harvest operations" to reduce cumulative impacts on soil and water. Fencing a spring in the Cold Run watershed is one such example provided. Yet the EA contains no mitigation requiring such actions. The District needs to analyze and disclose all outstanding unmet allotment plan requirements that damage soil and water resources. And similar to how it handles the Killinger Creek Mine Restoration and Mitigation project, the EA should include an RPM that "No units will be sold within a watershed until all outstanding allotment plan requirements related to protecting soil and water quality within that watershed are completed." Without doing so, the District cannot properly protect soil and water resources.

4. Importance of implementing road maintenance and reconstruction

The Soils Report recognizes that "[s]edimentation from forest roads can adversely affect water quality and habitat." To avoid such damage, the draft EA includes an engineering field report detailing roughly $200,000 of road reconstruction and maintenance work associated with this project. We are pleased to see this report and appreciate the opportunity to comment on it.

Is the District completing all work described in the engineering report? To the extent these road improvements are assumptions supporting analysis in the EA and potential finding of no significant impact, the agency must ensure that they are included in the decision notice and implemented.

C. Threatened, Endangered, and Regionally Sensitive Species

We question whether the project will unlawfully harm threatened, endangered, and regionally sensitive (TES)

species. As an initial matter, the draft EA and accompanying reports provide very little information about impacts that the proposed action may have on TES species, and the limited information given chiefly comprises conclusory assertions. We understand this is a draft EA only and additional analysis may be forthcoming. But based on what little the draft EA discloses, we have serious concerns about impacts to the endangered candy darter and its critical habitat.

1. The BE/BA should be publicly available, even in draft form, during the comment period.

We understand from the draft EA that the Forest Service has prepared a biological evaluation/biological assessment (BE/BA) for the project, which will be made available with the final EA. We emphasize that it would have been useful for the Forest Service to make the BE/BA available on the project website during the comment period, even if in draft form. The ability to review and comment on the BE/BA is necessary to provide an opportunity for well- informed, meaningful public comment on the project, which NEPA requires and the Forest Service says it wants. Withholding the BE/BA until publication of the final EA just repeats the problem that the Forest Service already engendered with its woefully inadequate scoping notice: withholding from the interested public information that could help the Forest Service identify and avoid crucial problems before the agency invests any more of its limited resources.

We also wish to note that withholding the BE/BA is contrary to the usual practice among national forests in the Southern Appalachians. Elsewhere in the region, forests routinely post the Draft EA, with BE, to the website during the public comment period (e.g., the Cherokee National Forest in Tennessee and the Nantahala-Pisgah National Forest in North Carolina). The BE is then included as an appendix to the Final EA.

Since we have not seen the BE/BA in any form, we cannot conclude that the Forest Service has satisfied its obligations under NFMA, NEPA, or the ESA.

2. The endangered candy darter and its critical habitat need robust analysis and special consideration lacking in the draft EA

The draft EA does not adequately address the potential impacts to the candy darter and its critical habitat, even setting aside the problems that arise from withholding the BE/BA during the public comment period.

Much of the logging proposed in the draft EA would occur above tributaries to Cripple Creek, which is designated as critical habitat for the endangered candy darter. In fact, candy darter critical habitat extends from two miles upstream of the State Route 94 Bridge downstream to the confluence of the New River and Cripple Creek, which means it is just two miles downstream from the project area. Despite the clear potential for impacts, the draft EA and accompanying reports do not provide meaningful analysis of how the project is likely to impact the candy darter and its critical habitat.

Sedimentation from timber harvest and associated ground disturbance in the Cripple Creek watershed is a significant threat to the candy darter because "[c]andy darters are intolerant of excessive sedimentation and stream bottom embeddedness (the degree to which gravel, cobble, rocks, and boulders are surrounded by, or covered with, fine sediment particles)." Temperature increases from warmwater runoff due to diminished forest cover is also a concern. Furthermore, the Species Status Assessment Report for the candy darter states that the presence of coliform bacteria may be an indicator of "generally degraded conditions that make the habitat marginal for the species."

The Fisheries and Aquatic Habitat Specialist Report for the project identifies five tributaries to Cripple Creek as the geographic scope of the cumulative effects analysis within the project area:

* Francis Mill Creek down to its confluence with Cripple Creek;
* Rock Creek down to its confluence with Cripple Creek;
* Cold Run down to its confluence with Cripple Creek;
* Cove Branch down to its confluence with Cripple Creek; and
* Unnamed Tributary east of Cove Branch down to its confluence with Cripple Creek.

This list and the accompanying discussion suffer from several problems undermining the draft EA's candy darter impacts analysis.

First, why is Cripple Creek itself not included in the geographic scope of the cumulative impacts analysis? If sediment in Cripple Creek is sufficiently important to require cleanup at the Killinger Creek Mine Restoration and Mitigation before allowing any logging in these watersheds, why is Cripple Creek not important to look at when considering impacts to the candy darter[mdash]particularly when the 5 above-listed tributaries associated with this project are much closer to candy darter critical habitat than the Killinger Creek site?

Yet it appears the Forest Service has not performed (much less disclosed) an analysis of impacts to the main stem of Cripple Creek itself from the proposed action. Perhaps the Forest Service means to justify this analytical boundary because "it is estimated that effects below this point would be insignificant and immeasurable," but the agency has not provided any data to substantiate the assertion that impacts to the main stem of Cripple Creek will be "insignificant and immeasurable."

Relatedly, we note that all of Cripple Creek downstream from the project area is listed as impaired for e. coli. The Soil and Water Resources Report acknowledges this status, but the Fisheries and Aquatic Habitat Specialist Report does not mention it, address how candy darter may be affected, or analyze whether project activities may exacerbate existing conditions.

Second, the Fisheries and Aquatic Habitat Specialist Report discusses impacts to Cove Branch and Cold Run, but does not address the other three Cripple Creek tributaries: Francis Mill Creek, Rock Creek, and the Unnamed Tributary East of Cove Branch.

Third, the Fisheries and Aquatic Habitat Specialist Report's discussions of Cove Branch and Cold Run do not satisfy the agency's hard look obligation. Both suffer from the same basic infirmity: the report discloses the results of sediment modeling that the agency deemed unacceptable, which prompted changes to the proposed action in those watersheds. But the report does not disclose any sediment modeling results based on those changes. The public is left to wonder whether the reduced sedimentation brought about by these changes is enough.

* The report states that the proposed action in the Cove Branch watershed originally returned sediment modeling results showing a "189 percent increase in sediment" in the watershed.65 What result does the model indicate based on the referenced changes?
* The report states that the proposed action in the Cold Run watershed originally returned sediment modeling results showing a "21 percent increase in sediment" in the watershed.66 What result does the model indicate based on the referenced changes?

The public has good reason to wonder, not least because the agency apparently believes the changes will be more effective in the Cold Run watershed than in the Cove Branch watershed.

Finally, the cumulative effects boundary excludes several actions in other nearby watersheds that may have a

cumulative impact on the candy darter, including the Eastern Divide Phase II project on the Eastern Divide Ranger District and the Gauley Healthy Forests Restoration Project on the Monongahela National Forest.

Depending on how the final EA resolves these gaps in information, some units in the Cripple Creek watershed may need to be dropped from the project. Critically, the Forest Service cannot count on best management practices (BMPs) to protect the candy darter. When USFWS listed the candy darter as endangered, it found that BMPs did not ameliorate the risk of extinction:

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to the candy darter. Our analysis of this information indicates that . . . [e]xcessive sedimentation and increased water temperatures degraded once-suitable habitat . . . and likely caused historical declines of the candy darter. We also analyzed existing regulatory mechanisms (such as . . . the increased implementation of forestry and construction "best management practices" designed to reduce erosion and sedimentation) . . . to reduce or eliminate sedimentation and found that these mechanisms were not sufficient to protect the species from extinction as excessive sedimentation and increased water temperatures continue to affect some of the remaining populations.

The USFWS Candy Darter Recovery Outline specifically recognizes that ordinary BMPs are not sufficient because it recommends "utilizing enhanced best management practices . . . designed to reduce sedimentation, erosion, and bankside destruction when implementing construction and forestry projects."

3. The Forest Service cannot tier its candy darter analysis to the Conservation Plan.

The draft EA asserts that the project is not likely to adversely affect the candy darter and not likely to adversely modify its critical habitat, apparently because it "will be in compliance with the George Washington and Jefferson National Forest Federal Listed Threatened and Endangered Mussel and Fish Conservation Plan [(Conservation Plan)]." The Conservation Plan is a good start, but it is not enough on its own. Did the Forest Service rely on any other guidance to reach its determination that the project is not likely to adversely affect the candy darter? It is not sufficient for the agency to rely on the Conservation Plan because the Conservation Plan was published in 2004[mdash]14 years before the candy darter was listed as endangered[mdash]and necessarily does not account for the candy darter specifically. Likewise, the Conservation Plan does not consider whether specific conservation measures are necessary for threatened and endangered fish species in the New River drainage; when the Conservation Plan was published, it accounted only for fish species in the upper Tennessee, Cumberland, and Roanoke drainages. The requisite conservation measures may be similar or identical for fish species in the New River drainage, but the Forest Service cannot reach that conclusion without analysis. Finally, the Conservation Plan does not account for increased water temperature as a threat to endangered fish species, but increased water temperature is a threat to the candy darter. The draft EA cannot tier to the Conservation Plan without additional analysis about the potential impacts of water temperature increases from the project.

4. Even if the Forest Service could rely on the Conservation Plan, it is not clear that the proposed action complies.

The requirements of the Conservation Plan apply to 6th level watersheds. There are two 6th level watersheds that the Forest Service must account for. The Fisheries and Aquatic Habitat Specialist Report correctly recognizes that the Conservation Plan applies to the Cripple Creek- Slate Spring Branch watershed (HUC: 050500010803). In addition, the harvest units draining to Francis Mill Creek (and then to Cripple Creek) appear to fall within the Cripple Creek-Francis Mill Creek watershed (HUC: 050500010802) and should also be subject to the measures in the Conservation Plan.

The Conservation Plan identifies goals, objectives, and standards that should apply to both 6th level watersheds, and certainly apply to the Cripple Creek-Slate Spring Branch watershed at a minimum. Objective 1.01 is that the Forest Service will "[m]aintain or restore temperature, balance of water and sediment, chemical resilience, and biological integrity." Likewise, Objective 3.01 states that "[s]treams are managed in a manner that results in sedimentation rates that stabilize or improve the biological condition category of the stream as monitored using aquatic macroinvertebrates." The Forest Service acknowledges that the project will introduce increased sedimentation to streams in these 6th level watersheds. The Forest Service must explain how this projected sedimentation will "maintain or restore [the] balance of water and sediment" and "stabilize or improve" the condition of Francis Mill Creek, Rock Creek, Cold Run, Cove Branch, and the Unnamed Tributary east of Cove Branch. In addition, because the Conservation Plan applies to the entire 6th level watershed, the Forest Service must explain how the Conservation Plan's objectives will be satisfied with respect to sedimentation in the main stem of Cripple Creek. Similarly, Objective 1.01 states that the Forest Service will maintain or restore the temperature of streams within the watershed. Has the Forest Service analyzed the impact on water temperature in the project area from warmwater runoff?

Finally, the Forest Service must commit to implementation monitoring throughout the watershed as required by the Conservation Plan. The Forest Service must also coordinate with the Virginia Department of Game and Inland Fisheries to monitor the candy darter.

5. More information about the Killinger Creek Mine Restoration and Mitigation Project is required.

The draft EA provides that "[n]o units will be sold within the Cripple Creek watershed until after the Virginia Department of Mines, Minerals, and Energy; Division of Mineral Mining Glade Mountain Reclamation Project [which the Forest Service calls the Killinger Creek Mine Restoration and Mitigation Project,] is completed and has been determined effective at reducing the risk of erosion and sedimentation into Killinger Creek. This determination will be made by the appropriate [GWJNF] staff in consultation with the Forest Fisheries Biologist, Forest Hydrologist, and/or Forest Soil Scientist."

What standards will the agency apply to determine whether the remediation project "has been determined effective?" Given the importance of protecting candy darter habitat and the potential for significant cumulative impacts, we believe the public should have an opportunity to comment on whether this critical condition precedent is satisfied before any units in the Cripple Creek watershed are advertised for sale.

D. Austinville drinking water

We are glad that the District recognizes the importance of protecting Austinville's municipal drinking water watershed. Does the District know why this was not recognized during plan revision so that the watershed could be placed in 9A1- Source Water Protection Watershed? At any rate, in order to adequately protect drinking water for the Austinville community, all standards of 9A1, not just Standard 9A1-001 should apply in units 4978-13, 4978-17, 4978-19, 4979-4, and 4979-8.

The Jefferson National Forest Management Plan's requirements for 9A1 areas "reflect . . . the higher priority of protecting drinking water."83 Only "low intensity commercial timber harvest" is appropriate in these areas. "Low intensity" is characterized by "[r]elatively longer rotation ages and a lower percentage of early successional forest," and requires any timber harvesting to "focus on what is retained in the stand, not on wood fiber production." Vegetation management is likewise limited only to purposes that "are focused on protecting drinking water sources" by "maintaining healthy watersheds containing healthy forests."

The current proposal appears to violate several standards for drinking water protection areas. First, regeneration harvest (using the clearcut with reserves method) of 127 acres in units 4978-19, 4979-4, and 4979-8 is not "low intensity." Related, proposals to use the clearcut with reserves method (a two-aged regeneration method) in units

4979-4 (65 acres) and 4979-8 (54 acres) appear to violate Forestwide Standard 114, which limits the maximum opening size created by a two-aged regeneration cut to 40 acres in Virginia. In addition, 9A1-013 requires 80-100 year rotation ages for regeneration harvests of white pine and 120-180 years for upland hardwoods. These three stands include both white pine and upland hardwoods, aged 86-96 years. This may satisfy the white pine component, but falls well short of the required upland hardwood rotation age.

Furthermore, Standard 9A1-008 only allows vegetation management for a few specific purposes, including to:

* Maintain and restore stand structure and native species composition that is resistant to large scale disturbance that could affect drinking water including . . . insect and disease epidemics;
* Reduce insect and disease hazard; or
* Control non-native invasive vegetation.

The Draft EA does not discuss how vegetation management in units 4978-13, 4978-17, 4978-19, 4979-4, and 4979-8 might be suited to these purposes. The proposed timber harvest in these areas would increase ground disturbance, traffic, and light into these areas, which risks exacerbating non-native invasive plant infestations. The Draft EA likewise does not discuss how clearcutting these stands would make these areas "resistant to large scale disturbance that could affect drinking water" as 9A1-008 requires. The risk of increased non-native invasive species could reduce forest health, which would contravene the 9A1 purpose of "maintaining healthy watersheds containing healthy forests."

The Draft EA also does not adequately analyze erosion and sedimentation risks specific to the watershed Austinville relies upon. The Draft EA recognizes that logging operations will cause increased risk of sediment entering streams during rain events, but does not consider the specific risk to the Austinville community's drinking water. The EA must address how significant ground disturbance from logging in these units will impact water quality in the watershed.

If the District fails to consider information relevant to compliance with the Plan standards discussed above, it risks violating the National Forest Management Act (NMFA), which requires that forest management decisions be consistent with the Forest Plan. NEPA further mandates these considerations to adequately assess the impacts of the proposed logging on drinking water resources: "NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA."

Additionally, the District must determine in the EA whether Units 4971-1, 4971-2, and 4978-2 have extended riparian buffers present. Given the risk to drinking water, the District must make this determination prior to deciding whether to move forward with the project to comply with NEPA's requirement that the public have adequate opportunity for review and comment.95 If extended riparian buffers are identified in these stands, the District should apply all 9A1 standards as discussed above. The proposed clearcuts in 4971-1 and 4978-2 would contravene 9A1 standards in any riparian buffer areas.

E. Cumulative Impacts

The Draft EA and accompanying reports claim to analyze the cumulative impacts of the project, but the relevant analysis is perfunctory and, at times, perplexing. NEPA requires more than the agency has provided.

In the NEPA context, a cumulative impact is "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." Evaluating

cumulative impacts "requires some quantified or detailed information that results in a useful analysis, even when the agency is preparing an EA and not an EIS." Furthermore, "general statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided." And in order for "the public and agency personnel to adequately evaluate the cumulative effects of past timber harvests," this EA must provide "adequate data of the time, type, place, and scale of past timber harvests and should . . . explain[] in sufficient detail how different project plans and harvest methods affected the environment."

The Draft EA pays lip service to cumulative impacts without producing useful analysis, instead opting for the type of general statements that fall short of the agency's "hard look" obligation. The Draft EA itself provides four paragraphs describing examples of potential cumulative impacts, but these paragraphs are highly general; one simply describes direct impacts from type conversion in unit C4970 S87 that the agency claims have been mitigated. Elsewhere in the Draft EA and reports, the agency provides a cramped, and sometimes confusing, approach to drawing its cumulative effects boundaries. For example, the Forest Communities Report asserts that "[c]umulative effects for the forest vegetation were analyzed at the stand level." What does this mean?

Relatedly, it appears the agency has not taken a hard look at the cumulative impact of the project in conjunction with its own past actions. The Forest Communities Report identifies the 2015 Fry Hill timber sale, but states in conclusory fashion that this sale and other prior treatments "are sufficiently isolated temporally and geographically that they will not have a cumulative impact with the expected effects of the Ewing project." Again, NEPA requires "adequate data of the time, type, place, and scale of past timber harvests and should . . . explain[] in sufficient detail how different project plans and harvest methods affected the environment."

Moreover, it appears the Forest Service has not assessed whether this project will have a cumulative impact in conjunction with private action happening nearby. The Draft EA and accompanying reports focus exclusively on actions over which the Forest Service has some control. But NEPA is not so limited: it requires a cumulative impacts analysis that considers past, present, and reasonably foreseeable future actions "regardless of what agency . . . or person undertakes such other actions."

One key problem is that the Draft EA fails to scrutinize the likelihood that adding new temporary roads and skid trails for harvest access will increase unauthorized use in the project area. The District recognizes that the pre-existing prevalence of unauthorized use in the area is contributing to erosion and sedimentation. The Forest Plan likewise observes that within the East Iron Mountain Management Area, "[i]llegal all-terrain vehicle use . . . is a serious problem that continues to grow annually. The Bournes Branch, Jones Knob, and Ewing Mountain areas are hot spots for this illegal use." And the Geology Report recognizes that use of the many miles of unauthorized roads already existing in the area is causing erosion and increased sedimentation. Given these conditions and past experience, it would be na[iuml]ve to assume that unauthorized OHV/ATV and equestrian use will not occur on the temporary roads, even assuming the roads are closed and signage is implemented. The EA must discuss the inevitability that, even with mitigation measures, at least some unauthorized use will occur on any new temporary roads. Before adding more temporary roads, the District should show it can control the unauthorized use already present. Without a "forthright acknowledgment" of these existing and likely future environmental harms, a finding of no significant impact cannot be supported.

Finally, as discussed elsewhere in these comments, the Draft EA's climate change analysis does not account for the cumulative impacts from actions across the forest and the world. As courts have held, the "impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct."

In sum, the Draft EA and accompanying reports recognized the Forest Service's obligation to discuss cumulative impacts, but did not live up to that obligation. NEPA requires this type of analysis, and the Forest Service cannot reach a defensible FONSI without providing it.

F. Non-native invasive species (NNIS)

NNIS are considered to be one of the most critical threats to Forest Service-managed lands and conservation of biodiversity. We are glad the Draft EA and accompanying reports acknowledge the presence of NNIS in the project area and aim to address it. We remain concerned though that the logging, roadbuilding, canopy opening, and ground disturbance associated with this project will result in the spread of NNIS.

The District needs to consider pre-treatment of existing infestations, which is generally recognized as an effective first step to mitigate spread. NNIS that is present in a travel corridor or at a central work site (landing) provides a reliable and consistent seed source, and there is no way to prevent introduction into other areas. There is no indication in the Draft EA, however, that the District is planning to pretreat existing infestations, or that a time period is set aside for pretreatment measures. Nor does the Draft EA include a full timeline for proposed NNIS treatment. Will proposed NNIS treatments occur prior to initiation of any timber harvests? How will timing be coordinated with disturbance? The District must address these details now, or a FONSI is not supported.

We are also confused by the theory that "the potential spread and establishment of NNIS would be mitigated by requiring logging equipment to be inspected and free of soil, seeds, and other attached material before entering onto National Forest ownership." Does the District envision loggers conducting a visual inspection for NNIS seeds? Surely not. At a minimum, the mitigation measures in the EA should require that all timber sale contracts for this project contain a requirement for loggers and agency staff to clean trucks and equipment before entering national forest lands. Absent this, there is no basis to conclude that visual inspections will prevent significant impacts related to NNIS.

For the reasons we outline above, we believe that the adverse impacts from NNIS species may outweigh the benefits of the Project, at least in some areas. Given the fast-moving, tenacious nature of NNIS and the difficulty in eradicating them once established, there seems a serious risk that the project, as a whole, could increase NNIS. In light of the severity of the risks associated with NNIS, the Forest Service must more fully and adequately analyze NNIS to make a valid determination of the project's impact.

G. Recreation and Scenic Resources

It goes almost without saying that recreation must be a primary consideration in planning any project on the Mount Rogers National Recreation Area. The area was established "in order to provide for the public outdoor recreation use and enjoyment of the area in the vicinity of Mount Rogers, the highest mountain in the State of Virginia, and to the extent feasible the conservation of scenic, scientific, historic, and other values of the area."

The Forest Service must ensure that this project does not degrade the recreational experience in the Area, and we encourage the Forest Service to pay close attention to the concerns of recreation groups. Indeed, in management prescription 7E2 (which comprises over 60% of the project area and over 60% of the proposed logging), timber harvest is permitted so long as "timber harvest methods used are compatible with the recreational and aesthetic values of the lands." The Recreation Report indicates that several trails will be impacted by logging traffic and, in some cases, indicates that trails will be used as haul roads. The Forest Service must take care to ensure the proposed management is not incompatible with recreational uses. In the short term, this means avoiding or mitigating logging traffic on and across trails. In the medium to long term, this means ensuring that trails in the area are restored or improved after harvest, including by ensuring that trails are returned to a state that is friendly to foot travel by hikers and horses (e.g. by resurfacing with small gravel rather than large gravel).

And while we are pleased to see the Forest Service include resource protection measures to mitigate harm to recreational values, we are concerned that one important resource protection measure obscures the agency's

responsibility to repair damage: REC RPM-2 states that where "damage is possible, post-treatment standard and responsibilities for mitigation of damage will be identified." To be clear, the responsibility to repair any such damage falls upon the agency and the final EA should acknowledge as much.

The Forest Service should also strive to maintain the aesthetic value of popular trails, and these concerns should be adequately addressed in the EA's mitigation measures. At present, however, several recommendations from the draft Scenery Analysis Report are not included in the Project Resource Protection Measures for Visual Quality (VQ) in Appendix A of the Draft EA. To ensure compliance with Forest Plan scenery standards and avoid adverse impacts on scenery, the following measures should be added to Appendix A:

* To protect the WSW view from Brush Creek Road (SR 602) near Coon Branch, bare mineral soil areas such as log landings and bladed skid trails will be located out of view where practical (FW-193). If impractical, other measures will be taken to reduce the visibility such as maintaining a low visual barrier of slash less than 2' high along areas of bare earth visible from the road, and revegetating landings and skid trails at the completion of the project. Cut and fill soil slopes for temporary roads must be revegetated per FW-197.
* In units C4971 S14 and C4971 S8 and the High SIO portion of C4971 S17, a buffer of trees along Ewing Mountain Trail will be retained such that management actions are not evident to trail users. Additionally, compliance with FW-190 and FW-191 will reduce visual impacts of the temporary road during project implementation, and compliance with FW-197 will reduce post-project visibility. Additional measures, including covering the road slash, will be taken to reduce the post-project visibility.
* In unit C4979 S22, the landing will be relocated out of sight of the horse trail (FW-193). The skid trail may cross the trail at a right angle but then turn to go out of sight, and must be restored and revegetated where visible from the trail upon completion of the project.
* In addition to the mitigation steps already proposed in VQ measure 6 (Draft EA at 36), treatment in units (C4972 S36, Map 5); (C4973 S15, Map 6); (C4973 S25, Map 6) (C4974 S5, Map 7); and (C4977 S9, Map 9) should leave higher basal areas.
* The VQ section should also make clear that sufficient vegetative screening will be retained along private property boundaries in addition to trail and road corridors.

Furthermore, the District should explain any remaining differences between the Scenery Analysis Report and the VQ Measures in Appendix A of the Draft EA.

H. Climate Impacts

The Forest Service has not provided any meaningful analysis of the project's climate impacts. The Draft EA states the agency has prepared a "full detailed analysis" called the "Ewing Mountain Vegetation Project Project-scale Carbon Effects Report" but no such report is available on the project website. Why was this report not posted to the project website along with other Specialist reports? The District should so immediately; few issues are as important and compelling for many members of the public. We look forward to reviewing this document and will likely have additional comments once we do.

Even without seeing the missing project-scale carbon effects report, however, it is clear that the agency has not taken climate change seriously. The Draft EA repeats many of the same business-as-usual generalities about climate change we have seen time and again, dismissing the climate impacts of this project by pointing to its relatively small scale compared to the entire GWJNF. This myopic approach is out of date. Executive Order 14008 directs the federal government to "organize and deploy the full capacity of its agencies to combat the climate crisis to implement a Government-wide approach that . . . increases resilience to the impacts of climate change; protects public health; [and] conserves our lands, waters, and biodiversity." The Forest Service has a clear role to play in this government-wide approach to climate change. In fact, Southern national forests store

over 900 megatons of carbon and have tremendous potential to store additional carbon if left to age. The Mount Rogers NRA cannot just hand- wave away its obligation to take this issue seriously.

Moreover, the Forest Service itself acknowledges that climate change merits consideration of factors beyond carbon storage and uptake. For example, the Draft Geology Report for the project acknowledged a strategy developed by The Nature Conservancy for climate change adaptation, with geologic diversity as the foundation for biological diversity and resiliency to climate change. Yet the Draft EA discusses carbon exchange while hardly even acknowledging that the agency has a role to play implementing an adaptation strategy, beyond simply "assum[ing]" that that a "restoration focused project" will provide an "increase in the health and resilience of the targeted ecosystems." If the agency has tools at its disposal like those referenced in the geology report, it must use them. And it is far from clear that this is the kind of "restoration focused project" that might increase resiliency, much less that the agency's assumption is even true writ large.

I. Old Growth

We are pleased that the draft EA commits to excluding from harvest those areas qualifying as old growth under the GWJNF survey protocol. Have any old growth surveys been completed already? The Forest Service must identify and disclose old growth during project planning. This is critical to satisfying the agency's duties under NFMA and NEPA. Old growth is a precious resource: old growth communities "are rare or largely absent" in Southeastern forests, perhaps occupying about one half of one percent (0.5%) of the total forest acreage. For that reason, the Forest Service is making efforts to address the restoration of old growth, which is a "missing portion of the southern forest ecosystems." Old growth forest takes centuries to develop, so it is irreplaceable on a human time scale if it is replaceable at all. Given the rarity and importance of old growth forest in the Southern Appalachians and the little existing old growth forest that has been identified in the field, the stakes are high. Avoiding old growth is critical to the agency reaching a defensible FONSI for this Project, and identifying old growth on the ground is critical to avoiding it.

Thank you for your consideration, and please let us know if you have questions. We look forward to continuing to participate and providing additional comments as the project moves forward. We hope to have opportunities to discuss the project further with you and your staff during that process.

Sincerely,

Kristin Davis, Senior Attorney

Spencer Gall, Associate Attorney

Southern Environmental Law Center

201 West Main Street, Suite 14

Charlottesville, VA 22902-5065

(434) 977-4090

kdavis@selcva.org

sgall@selcva.org

Mark Miller, Executive Director

Virginia Wilderness Committee

P.O. Box 1235

Lexington, Virginia 24450

(540) 464-1661

mmiller24450@gmail.com

Steve Brooks, Associate Director

The Clinch Coalition

Post Office Box 2732

Wise, Virginia 24293

(276) 479-2176

clinchcoalition@mounet.com