Data Submitted (UTC 11): 5/24/2024 4:00:00 AM
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Title: Director
Comments: Comments attached.
Re: Jellico Integrated Resource Management StrategyMay 24, 2024212 Greenleaf St Chattanooga TN 37415 423.877.4616www.tennessseeheartwood.orgDaniel Boone National Forest 1700 Bypass Road Winchester, KY 40391 859-474-5093 comments-southern-daniel-boone@fs.fed.usDear Forest Supervisor:On behalf of Tennessee Heartwood, I wish to submit the following comments on the Jellico Integrated Resource Management Strategy (JIRMS) of the Daniel Boone National Forest. Members of t Tennessee Heartwood use the Daniel Boone National Forest (DBNF), including the forest that encompasses the Jellico analysis area, for a wide range of uses, including hiking, fishing, hunting, camping, wildlife watching, and other recreation activities. We take an active interest in the management of this forest and offer the following comments in the spirit of good management of our public lands.Scope and Timeframe of This ProjectWe are greatly concerned about both the sheer scale of this project and a timeframe that long exceeds the careers of any of the staff. A 40-year project covering 10,000 acres is new in the agency, all the more concerning with the way in which the process has unfolded in the last few years, with poor communication with the public and sometimes inadequate information.To be frank, a project that is essentially three times the lifespan of a nominal forest-wide Land Resources Management Plan (LRMP) would call for an Environmental Impact Statement (EIS), rather than an Environmental Analysis (EA). Has this district truly thought out how it will essentially transfer a commitment like this over what could be multiple LRMP[rsquo]s and agency careers- something that we have not seen before in this agency? Has this agency worked out the following:[bull] Consultation with the regional and national offices on how to proceed with a project of this scope and duration?[bull] Looked for guidance on any long-term projects within the agency? The only examples that we have encountered are somewhat preliminary papers and presentations on various [ldquo]adaptive management[rdquo] strategies on a few forests like the Cherokee and the Allegheny.[bull] Worked out protocols so that the monitoring and evaluation of this project, let alone its implementation, can be managed successfully as personnel cycle out over 40 years?[bull] Have protocols that have been worked out to ensure that the district will have adequate funding for such a long-term projected project?As an agency that has sometimes complex and unstable funding streams, high personnel turnover, and is in the midst of significant institutional mission shifts, these concerns should be addressed before this or any project claiming a possible 40-year timeframe can happen.Old Growth and Forest DiversityWhile a small area of the Jellico is under an [ldquo]Old Growth Management[rdquo] criteria, a portion of the eastern part has several stands that have excellent character under the standards of the Guidance for Conserving and Restoring Old-Growth Forest Communities on National Forests in the Southern Region (https://www.fs.fed.us/outernet/r8/planning/R8%20Old%20Growth%20Report.pdf). We were truly impressed not only in the ample number of 140+ year trees (as catalogued in the FSVEG GIS maps acquired in our FOIA request), but how they had a composition that was more diverse than is typically seen in the Cumberland, with a mix of upland trees with more lowland and calcareous soil-associated species (walnut, butternut, bitternut, and many others). It is a shame that the Jellico area lacks a real trail system in such an impressive forest community. The agency must make significant, meaningful attempts to search for, identify, and protect stands like these-indeed, this has been called for repeatedly by the public since the bg. It is also very likely that some of these older stands have trees that are significantly older than the classed age.While there is a basic understanding that the concept of an old growth forest is more than just [ldquo]big old trees[rdquo], there are still significant gaps un understanding about these forests, including:[bull] Their structure and function[bull] Means for effectively finding and inventorying previously uninventoried old growth remnants.[bull] Some forest communities that may develop tree and understory characteristics that may not resemble typical/ [ldquo]classic[rdquo] old growth characteristics that are more familiar.[bull] Carbon sequestration. The [ldquo]decay[rdquo] that puts old growth as less-than optimal carbon storage has been robustly challenged.[bull] The symbiotic relationships that require long (200 y +) temporal scales to develop that relatively undisturbed old growth and older recovering second growth forests provide, including, but not limited to mycorrhizal networks, nutrient and water cycling, resilience to environmental

stress,Eastern Old Growth Forests have been identified to have complex forest structures that go well beyond, the [ldquo]big old trees[rdquo] concept- typically having characteristics such as multiple tree ages, a proliferation of course woody debris (often in contrast to many Western forests whose higher intensity, more frequent fire regimes can consume more readily these materials, presence of standing, leaning, and fallen dead trees that function as important habitat, and pit-and-mound topography (particularly in many northeastern forests) 12. There is also an increasing awareness of how many species of trees and shrubs exhibit clonal behavior that may take centuries to develop. A lack of disturbance by large machinery is presumed to be essential to the continuation and spread of these complex networks that we are only beginning to understand. These species include a diverse array of eastern species ranging from vaccinium species to sourwood, sassafras, and hill cane.3 It is estimated that 40 percent of temperate tree species produce collar sprouts which are sprouts from the base of the trunk. The ability of seedlings and saplings to sprout may allow an individual to survive the stress of shading and competition until environmental conditions improve 4- yet another example of how our conception of forest regeneration and development- and that of the structure and importance of old growth forests- must undergo a refinement in everything from temporal scales to the identification of old growth itself. It also brings up the matter of giving some protection to maturing stands that need a lack of heavy anthropogenic disturbance to truly develop.The recent MOG (Mature and Old Growth) Executive order by the Biden administration underscores even further the ill-advised nature of this project. For over two years, area citizens have been identifying stands that have significant old growth components that meet the existing Region 8 Guidance standards as well as what is being put forth by the Biden administration. The agency[rsquo]s response has been insufficient to address what is clearly becoming a topic of national significance and profile. This project cannot go forward in the face of these developments.Invasive Species and Biodiversity Decline from Past LoggingIt is unfortunate that there are stands in the Jellico that show the effects of clearcutting and other heavy-volume logging practices of the last few decades, with a number of stands that initiate in the 1980[rsquo]s and 1990[rsquo]s. The difference between the maturing stands we have mentioned and these are stark. A significant contrast can be seen here in this video (https://www.dropbox.com/s/8hoezsls56s8y4t/20220319_154316.mp4?dl=0 )on the edge of1 "The vascular flora of an old-growth mixed mesophytic forest." McEwan et al. Journal of the Torrey Botanical Society 132(4), 2005, pp. 618-627.2 "External Characteristics of Old Trees in the Eastern Deciduous Forest". Pederson, Neil. Natural Areas Journal, 30(4):396-407. 2010.3 [ldquo]Ecological Genetics of Hill Cane.[rdquo] Plant Ecology and Conservation Lab-Sewanee Herbarium.htps://www.evanslab.org/hillcane Date accessed: July 13, 20234 Del Tredici, P., 2001. Sprouting in temperate trees: A morphological and ecological review. Bot. Rev. doi: 10.1007/BF02858075.stands 333/1 and 94/4. While in the distance are the diverse 140+ year old stands we have described earlier (333/1), the younger stand that dates from 1984 is a degraded mixture of poplar and invasive tree of heaven. Also, a walk down the landslide found that much of the surrounding area was a similarly degraded site from the same period that was largely princess tree. While several forests in the region (the Cherokee, the Nantahala, and the Pisgah) have a similar regression of post-logging sites to poplar dominance, the encroachment of tree of heaven is particularly concerning. This is underscored with the way that some of these stands are inventoried in the FSVEG database as [ldquo]poplar-white oak-northern red oak[rdquo] forest types. Any meaningful analysis must address these issues. Invasives are increasingly a significant management issue across the agency and is certainly so in this analysis area.Since the 1990[rsquo]s and particularly since HFRA[rsquo]s passage, much of the work done on the deciduous forests of the East has often been to either restore fire-adapted upland pine and oak-dominant forest communities, or to promote [ldquo]advanced oak regeneration[rdquo].The agency has tried a suite of silvicultural techniques in various combinations (fire; herbicides; mechanical release; clearcuts, seedtree, shelterwood, group selection, and thinning) on commercial and noncommercial projects to address the various supposed ills of recovering second-growth forests that are maturing and are even reaching the age thresholds for old growth as defined by the agency. 5With many of these projects 10, 20, and 30 years old or more, conservationists across the region report a lack of success in the goals of these projects, whether they were for restoring shortleaf pine in the Southern Appalachians, oak-hickory forests in the Ohio River valley, or promoting advanced oak regeneration in the northeast. The combination of forest regeneration failure and invasive species encroachment across countless stands through the region should give the agency pause.[ldquo]Control[rdquo] of selected speciesGrape controlThis project would [ldquo]control[rdquo] an area of up to 9,537 acres for not only invasives, but native grape. This is a native, fruit

bearing species. There[rsquo]s lot of large grape vines in the Jellico- so what? Why is this a problem?5 "Guidance for Conserving and Restoring Old-Growth Forest Communities on National Forests in the SouthernRegion Report of the Region 8 Old-Growth Team June 1997." United StatesForest Service. www.fs.fed.us/outernet/r8/planning/R8%20Old%20Growth%20Report.pdfGrape, of course, is a key food source for dozens of vertebrates. Indeed, a key component of the DBNF[rsquo]s LRMP is to assist in cerulean warbler recovery. It is unfortunate that even though a study on a cerulean forest habitat in Ohio shows the presence of grape in the forest structure as beneficial,6 the counterintuitive goal of [ldquo]controlling[rdquo] an important native food species will only make warbler recovery more difficult.Indeed, Forest wide Objective 1.1.B in the Forest Plan directs the Forest Service to [ldquo]Create and maintain at least one approximately 7,400-acre area of cerulean warbler habitat in the Licking River Management Area, Upper Kentucky River Management Area, and the Jellico Mountains of the Cumberland River Management Area.[rdquo] Specifically, it states that each 7,400-acre area be [ldquo]composed of tracts at least 618 acres in size connected by corridors of either upland hardwood forest or riparian areas. Surely, a project of this scope would try to implement an important restorative objective such as this.What is the problem with the strong presence of large grape? There is nothing [ldquo]unnatural[rdquo] about this. Besides the above example we photographed within the project area, there are plenty of forests in the Eastern United States that have a plenty of large grapevine we see all the time, including the Delta, the Cherokee, the Tombigbee, the Pisgah and more. You provide no rationale as to why this species needs to be herbicided. Rather, its presence makes the6 Wood, P.B., J. Sheehan, P. Keyser, D. Buehler, J. Larkin, A. Rodewald, S. Stoleson, T.B., Wigley, J. Mizel, T. Boves, G. George, M. Bakermans, T. Beachy, A. Evans, M. McDermott, F. Newell, K. Perkins, and M. White. 2013. Management guidelines for enhancing Cerulean Warbler breeding habitat in Appalachian hardwood forests. American Bird Conservancy. The Plains, Virginia. 28 pp.Jellico tract, along with its less-than-common upland old growth walnut and shagbark hickory, an example of the heterogeneity that one would wish our largely recovering second-growth forests to evolve into. This goal must categorically be dropped from this and future projects.Tree of HeavenTree of heaven is unquestionably one of the fastest expanding invasive species in our region. We can go on for some time listing the forests we have seen undergo an explosion of this species. Unfortunately, all too often do we see land managers across local, state, and federal lands not address TOF[rsquo]s proliferation in proactive way.Unintentionally funny interpretive sign at Standing Stone State Forest/TN - [ldquo]habitat[rdquo] became a Tree of Heaven/Poplar communityIn our visit to the Jellico we saw what is becoming an unfortunate new [ldquo]forest type[rdquo] in Appalachia: the Poplar-Tree of Heaven community, typically well-established thirty years after a clearcut. Rather than making a serious attempt to control the spread of TOH contingent on timber volume, we recommend that the agency undertake TOH as a project to itself.Effects to SoilsIn our scoping comments in 2022, we outlined our initial concerns with the need for this fragile area to have serious analysis and consideration of the unstable soils that are found in this district:The DBNF has had many notable problems with post-logging effects on soils over the years, particularly on the Redbird district, including mudslides and erosion. If nothing else, these precedents would certainly warrant that the agency undertake significant soils analysis for this project.Other forests have taken proactive steps to minimize logging damage to soils after experiencing repeat mitigation failures. The South Zone of the Cherokee, after evaluating problems on theIsland Creek/Hogback Sale in 2015, undertook significant Logging Effects to Soils in 2015 and 2016. The results, which are found in the Monitoring and Evaluation Reports from those years (https://www.fs.usda.gov/main/cherokee/landmanagement/planning), has worked to develop new sideboards and restrictions in future projects in the South Zone, including:[bull] New mitigation techniques.[bull] New restrictions on logging techniques[bull] New standards that further limits the slope of logging. Operations on slopes greater than 35% should be considered a special circumstance and will require additional analysis.[bull] Reformulating BMP standards.While not perfect, these sideboards demonstrate that a district is willing to acknowledge past issues with post-logging sites and make some commitment to avoid further instances.Our recent visit to the Jellico showed how this is an issue that is not confined to other units of the Boone. On our way into the unit, we encountered an unfortunate landslide on Wolf Knob Road at a culvert point that extended well down the slope (https://www.dropbox.com/s/84mcep9ovod1non/20220319_110930.mp4?dl=0). This should serve as a caution to the agency that the soils in the Jellico are vulnerable.These citations were meant to underscore how it is possible for a district to do the right thing and acknowledge systemic problems from steep and sensitive soils and make

some programmatic improvements. We also can say that even with the damage that we have seen from clearcutting and other heavy logging regimes from the Cherokee and other forests, we can honestly say we have never encountered the kind of landsliding that we have witnessed in the Boone.We have also discussed the regionwide problem of increased flooding and attendant landslide/mudslide events in Appalachia with Kentucky Heartwood and the Appalachian Citizens' Law Center over the last year and wholeheartedly recommend that the agency consult the recently published Recommended Best Management Practices to Minimize the Likelihood of Sediment Delivery to Streams by Logging Induced Landslides in Eastern Kentucky, prepared by respected geologist William C. Haneberg. It is an important geospatial look at assessing risk from logging and other heavy-disturbance activities, and included recommended Best Management Practices for reducing harmful effects from logging on the landscape.RestraintThe uplands forests in Region 8 have experienced significant difficulties with restoration and oak -regeneration logging in the last quarter century. Our presentation here (https://www.dropbox.com/s/pmfxphld74qxn4a/The%20Three%20R%27s%20in%20Eastern%20Forest%20Management%20%281%29.pptx?dl=0 ) details how districts across the East have faced unintended consequences from using silvicultural practices to achieve various goals inforest regeneration, restoration, and structure. The agency should look at how this is becoming a systematic problem and that a reevaluation of some of the assumptions about [ldquo]ecological logging[rdquo] are in order.Please consider these comments. We request that we be informed of any developments in the Jellico IRMS. Thank you for your consideration.Sincerely,Davis MoungerOn behalf of Tennessee Heartwood