

Data Submitted (UTC 11): 12/5/2022 2:39:48 AM

First name: Andrew

Last name: Meadors

Organization:

Title:

Comments: Jellico Vegetation Management Project (the Project)

GENERAL STATEMENT: I object to any form of clear-cutting as presented in the Project as well as some treatment methods, i.e. grapevine control and unidentified other vine like plants. This broad objection and concerns are addressed as follows in this public comment.

Reading through the US Forest Service plan for the Daniel Boone National Forest, the "Forest Plan" and this proposed Project, I have come to the conclusion that the agency's assumption is that the area is not unlike a cornfield in Iowa or the local bottom land in the general area. Example: each 10 square foot area is identical in fertility, moisture retention ability, underlying geology, etc. This is not true by any stretch of the imagination. These characteristics change significantly across any given area (small or large) and is typical throughout the Project. My contention is well documented in the Soil Survey, McCreary-Whitley Area, Kentucky, issued, June, 1970, by the United States Department of Agriculture, Forest Service and Soil Conservation Service, in conjunction with the Kentucky Agricultural Experiment Station (Soil Survey).

Although the Soil Survey is over 50 years old, it is still extremely accurate and should be acknowledged as such. By the Soil Survey's in depth detailed narrative, references, findings, and qualifications of individuals involved, as well as topographic map format, it is obvious that extensive research and analysis was conducted to formulate the final product. Thus, as I indicated above, I do not find evidence that the US Forest Service is taking these local conditions into consideration with the Project.

The methods/procedures to implement the Project, are Clear Cut, Two Aged Shelterwood, Deferment Harvest, Thinning, and Salvage. The Project plan goes on to include Intermediate Vegetation Treatments (Pre/Post Site Preparation, Midstory Removal, Grape Vine Control, and Invasive Species Control). I'll attempt to address each of these "project implementation" methods and procedures in that order referencing back and forth as may be necessary.

#### HARVEST METHODS

CLEAR-CUTTING: The Project speaks of Retaining Basal Areas in these cuts, specifically 15 BA per acre in areas designated for Clear cutting. Well, that's among the reasons why I object to Clear-cutting. Leaving only 15 BA per acre is virtually nothing, The designated areas to be Clear-cut will basically be decimated throughout by both tree removal (logging) and road building to obtain access. It is highly likely the "designated" IRTs will be abandoned by the Bats or any other wildlife that occupies them due to the loss of surrounding trees and the disturbances during the operations. Clear-cutting removes basically all of the other trees, which includes those trees that are occupied by wildlife not included in the definition of an IRT (commonly called den trees of any species). Owls, squirrels, flying squirrels in particular, birds (woodpeckers, i.e., Downy, Red-bellied, Hairy, Pileated, Yellow-bellied, Red-headed, etc.) and Nuthatch. It takes years and years for trees to be naturally transformed into suitable use by wildlife for refuge, foraging and use as dens. Both live and dead hollow trees provide excellent places for rearing young and providing dens for wintering. They are apartments for wildlife, if you will. Also, honeybees have begun to reestablish in the wild. I've been a beekeeper since 1975, until recently. This past summer my garden corn was covered in honeybees early each morning and there are no beekeepers within three miles of my location which is generally beyond the distance bees will travel to forage. Further, wildlife inhabitants of these trees will be forced to move into uncut/undisturbed areas possibly causing crowding and disease, including the Bat populations. The Indian Bat has been suffering from the white-nose syndrome for years. They need not be stressed with disturbances caused by logging operations, particularly Clear-cutting.

Clear-cutting will basically wipe-out the wild huckleberry "patches" which are well suited for the designated Clear-cut areas in the Project. There are eight species of huckleberries native to North America. The varieties in the Project include the Black Huckleberry and to some degree the Box Huckleberry as well as other varieties. Due to habitat destruction, the existence of many of these ancient survivors of the Ice Age is threatened. The box huckleberry has suffered significant incursion on its territory in several eastern states. It's in danger in Virginia and West Virginia and is becoming rare in Kentucky. Small mammals and birds, including songbirds, ruffed grouse, quail and turkeys depend on huckleberry fruit. The berries are a delicacy to bears, as well.

Clear-cutting will basically leave the affected areas in the Project fully disturbed by the operations, particularly road building by the loggers and the follow-up work as set out in the Pre/Post Harvest Site Preparation as described in the Intermediate Vegetation Treatments. Basically all of the area of the Project consists of mountain tops. There is virtually no area in the Project that doesn't drop off very steeply once leaving the mountain tops and ridges. Simply put, the Project area is extremely rugged land. The drainage patterns from these mountain tops and ridges have developed over the eons. Logging operations will interrupt them and in some cases permanently. Down in the lower reaches of the Project area is private lands that have been strip mined, practically all within the last 45 to 50 years. Although the areas disturbed by mining were re-claimed per regulations, their drainage patterns will be prone to damages by excess water from any sources higher on the mountains, especially from the interrupted drainage patterns due to logging operations in the Clear-cuts. This is of great concern to many folks which was noted extensively at the public meeting on November 17, 2022 at the Whitley County Extension Office. Many folks sited the totally unexpected recent flooding in eastern Kentucky that destroyed homes and businesses costing hundreds of millions of dollars as well as the loss of numerous lives. Folks that identified as former loggers attested to these concerns and sited several local examples.

Erosion from Clear-cuts will no doubt be a problem that will be difficult, if not impossible to contain on the steep slopes. There are several documented endangered as well as protected aquatic species in several of the streams in the Project area. This alone should dictate a step back to evaluate the impact of the Project. Hopefully, this issue will be strongly considered during the Environmental Impact phase of the Project.

During the past 40 to 50 years, both county governments in McCreary and Whitley Counties have gradually converted practically all of their county roads from dirt to gravel and on to either chip & seal or blacktop. No doubt these endeavors have improved road conditions and the quality of life for the local residents within and adjacent to the area of the Project. These governments used locally generated taxes, state program funding as well as federal funding, when available, which has taken up to half a century to achieve. Heavy log trucks on these roads will set them back, well, 50 years. Also, chip & seal and blacktopped roads have had a positive affect on water quality in the local streams of which most are blue line designated. These improved roads have reduced the amount of silt and associated detrimental erosion run-off during rains that contribute negatively to the turbidity of the local streams. This reduction of silt has had tremendous positive benefits to aquatic life, particularly the endangered species as documented in many surveys and studies.

The City of Williamsburg obtains its raw water source from the Cumberland River down stream from the confluence of the Clear Fork River. There are several streams in the Project drainage basins that discharge into the Clear Fork River. Any increase in flooding and silt from the Project operations, particularly Clear-cut areas, could have a negative affect on their potable water treatment facilities. The Williamsburg Water System Operations also provide treated potable water to the Whitley County Water District making up over 50% of their needs which serve residents adjacent to the Project area, including the Jellico Creek Community commencing in late 2024.

Well, this concludes my comments on the Clear-cut aspect of the Project. As stated previously, as I address the other methods proposed in the Project, I will refer the reader back to these comments from time to time.

TWO AGED SHELTERWOOD: by definition in the Forest Plan, Two Aged Shelterwood (TAS), is an even-aged regeneration method involving the cutting of "most" trees, leaving those needed to produce sufficient shade to produce a new age class in a moderated micro-environment, residual trees left to provide shade for a new cohort.

The word "most" is obviously more than half. Depending on the condition of the trees, it could be as much as 75% after leaving the Basal Area trees and other selections relating to ITRs in the designated TAS of the Project. Thus, I see the same detriments that I described in the Clear-cut harvest method option. Examples: road building will be necessary to reach all the territory within the designated TAS harvest method. The same vegetation will be disturbed. The same wildlife will be disturbed. The areas will be subject to the same threat to erosion and flooding.

I do not believe that 15 BA is adequate for any scoured ephemeral stream zone. That number seems to be the bare minimum. How does a huge IRT in the zone effect the calculation for the BA? What if there are several IRTs in any given zone? Will the deep ravines lower down on the mountains benefit from such examples involving IRTs in the scoured ephemeral stream zone? It seems to me that protecting any scoured ephemeral stream zone lower on the mountain should involve far more than a 15 BA designation. If a TAS harvest method involves a mountain side, loaded with numerous ravines, and a Clear-cut is designated higher on the mountain or on top, can a 15 BA provide its intended purpose?

The result of a TAS cut may leave an "even aged" stand but the size and growth will vary across all species. Many of them will grow much faster than their surrounding counterparts (cohorts) when the competition is reduced based on the Iowa cornfield scenario referenced previously. The Daniel Boone Forest, and particularly the Project area, cannot be treated like a flat land pine plantation in Georgia or a forest in Wisconsin. The Project area is almost a 100% deciduous forest having very varied soil conditions with extremely rugged terrain as reasoned previously in the Clear-cut comments as set forth in the referenced Soil Survey.

DEFERMENT HARVEST: I see the Deferment Harvest (DH) method as a modified TAS harvest method that requires re-entry to the designated areas in the Project every 10 to 15 years. The affects on the areas involved will be basically the same as those expressed previously for Clear-cutting and the TAS harvest methods.

Again, the DH harvest method (logging) and its projected outcomes will not work in the Project area as previously reasoned by the pine plantations in Georgia or forests in Wisconsin.

THINNING: Tree Thinning will have the same road building requirements as all the other harvest methods. Thus, scoured ephemeral stream zones cannot be excluded or ignored.

I see the purpose of this harvest method (logging) as a means to encourage fast growth to ready the Project area for one of the other proposed methods, primarily Clear-cutting during some future rotation. Who and how will the method(s) be determined?

SALVAGE: By definition in the Forest Plan, Salvage is the harvest of dead trees or trees being damaged or killed by injurious agents other than competition, to recover economic value that would otherwise be lost.

Salvaging trees due to these reasons on the surface appears to be a good thing. But, is there a real economic gain for such operations? How much road building will it require? What will be the methods employed? It is my understanding there was a huge loss of "resources" during the Southern Pine Beetle infestation about 20 years ago and a decision was held up until the trees no longer had value. Who and how will the Project area be searched for trees that could be harvested by the Salvage method?

INTERMEDIATE VEGETATION TREATMENTS

**CROP TREE RELEASE:** the Crop Tree Release (CTR) method of vegetation management (a form of Thinning), not unlike Harvest Methods (logging), will require road building to some degree to access the defined areas in the Project. Surely, workers are not going to pack in chain saws, etc., to conduct this sort of vegetation management. Again, the Project area, as previously reasoned by the pine plantations in Georgia or forests in Wisconsin where access is via flat land, is far from being the same. So, I see the need to build roads in the defined Project area to accomplish this task. If so, all the concerns cited previously relating to Harvest Methods hold true with addressing the CRT method of vegetation management in the Project area.

**PRE/POST HARVEST SITE PREPARATION:** Pre harvest site preparation, not unlike CRT intermediate vegetation treatments, it will require road building to access the designed areas in the Project. Again, surely workers are not going to pack in the necessary tools to do the tasks at hand.

Viewing previous Clear-cut operations, I can understand the Forest Service's desire to eradicate the Red Maple. I've seen the "stump" growth of maple trees throughout Clear-cuts. And, together with other undesirable species, they actually have out grown the desired trees that were left standing. In my opinion, cutting down undamaged desired trees less than 8 inches is a big mistake. An undamaged established desired tree as small as 4 inches will grow tremendously fast once Sun light is allowed in and will be significantly competitive with the Red Maple.

The Red Maple contributes tremendously to the beauty of the forest in the Fall season. People love to go out and see the forest when the colors begin to pop. I cannot imagine people (tourist) accepting the eradication of their favorite tree colors in the Northeast, for example. So, a problem or not, as seen by the US Forest Service, I don't think such an effort will be acceptable by the public if they are fully aware of the consequences. The Red Maple is a very popular tree in Kentucky.

**MID STORY REMOVAL:** In the Project, I see this method of vegetation management/treatment to be so similar to CRT Intermediate Vegetation Treatment that the two should be combined. Either way, I see road building as a major necessary endeavor to access the areas in the Project. Thus, my comments and concerns here are the same as with those involving Clear-cutting as previously stated.

**GRAPE VINE CONTROL:** Clear-cutting will decimate numerous vining plants, such as wild grape and poison ivy. Wild grape vines will grow a maze in the upper canopy of trees and not to the detriment of the tree. The maze created by the vines are used by squirrels and other wildlife for nesting and refuge as well as food from the grapes. My definition of wild grapes includes the common native muscadine grapes. Also, of considerable importance is poison ivy. Poison Ivy vines grow high into trees just like the wild grapes (imagine a 150 tall poplar tree with poison ivy in the top). Poison Ivy is a staple of the Pileated Woodpecker. The American Wildlife and Plants: "A Guide to Wildlife Food Habits" Says that Poison Ivy berries can comprise 25% of the food of some types of woodpeckers in fall and winter. In the link below is a photo of a Pileated Woodpecker eating Poison Ivy berries. The photo does have a copy right notice on it.

<https://photocontest.smithsonianmag.com/photocontest/detail/pileated-woodpecker-eating-poison-ivy-berries/>

Although Clear-cutting will totally eliminate established Grape Vines and Poison Ivy as well as any other vining plants, the other methods of Intermediate Vegetation Treatments should only be achieved by protecting these valuable wildlife plants. All non-tree vegetation in the Project contributes to the ecosystems there as well as the diversity. It should be treated as such and protected as much as possible during any of the Harvest Methods or over the duration of any such Project.

**INVASIVE SPECIES CONTROL:** Not unlike the other proposed methods of Intermediate Vegetation Treatments, access to the areas will generally require road building. Thus, practically all of my reasoning and concerns associated with Clear-cutting and associated road building applies to this proposed method of Intermediate

Vegetation Treatment.

I agree that some invasive species need to be controlled and totally eradicated from the Forest, such as the Kuduz Vine. Although Kuduz was introduced to private land owners by the federal government many years ago with a well intended good purpose, which may have been accomplished in some places, today it is of no benefit, especially in the Forest. I'm on the fence with respect to efforts to eradicate the Red Maple. It is everywhere in the Project area. It will take a tremendous effort in both manpower and chemicals to eradicate and/or control it. I really don't know about this proposed endeavor. As I stated in the Pre/Post Harvest Site Preparation comments previously, the Red Maple is very popular and contributes to the Fall colors tremendously. Think tourism.

Also, several individuals voiced concerns about the use of Herbicides of any kind in the Project. As I recall, Forest Service personnel said they would be using the same chemicals as the highway department with no specific mention of the name of the chemical. This is 2022, what Herbicide(s) will be available for such use in say, 2030 and so on? Will there be monitoring for possible negative impacts of what Herbicides may have outside of the Project? Jellico Tennessee's primary raw water source is ground water. And, as mentioned previously, the City of Williamsburg obtains it's raw water source from the Cumberland River. And, as stated, several streams in the Project area drain into the Clear Fork River which is a tributary of the Cumberland River.

SUMMARY (with questions)

As I read and studied the proposed actions in the Jellico Vegetation Management Project, as well as many parts of the Forest Plan, I've come to the conclusion the endeavor boils down to a 40 year plan to Clear-cut the entire designated area of the Project. Also, during those 40 years how many acres will be added is of concern. How many times will the "plan" be modified to achieve the intended outcome? At what cost will the intended outcome be? There is no absolute way to predict that the intended outcome will or can be achieved without great cost to the forest and taxpayers. It will likely be a rather huge net loss with a strong potential of private and public (non-USFS) property destruction due to the reasons I have presented.

The Daniel Boone National Forest and the Project area in particular is a natural beauty including the surrounding mountains. The term or words "visual resource" as set out in the Forest Plan, comes to mind. The visual resource that's there now will never be the same if this Project is implemented. The scars of the various stages of Clear-cutting will be lasting throughout the duration of the Project. The colors of fall will be negatively impacted by the implementation of this Project.

The proposed Jellico Vegetation Management Project is based on the Forest Plan that was adopted in 2004 with a projected 10 to 15 year service. So, it appears that the basic guide is almost four years outdated. Have there been any considerations made to update the plan? If so, has there been a date set to commence the process? Will the public be informed of the update process?

I do not believe there has been enough emphasis placed on preserving the bio-diversity of the Project area. The emphasis seems to be achieving maximum timber production requiring intense logging over the duration of the Project. Things I see all but missing include preserving mast producing trees. Trees not mentioned, such as persimmon, paw paw, black gum, black locust (think bees), walnut, beechnut, and mulberry, just to mention a few. No live hollow beechnut should be cut down regardless of its location. They are both an animal shelter and a food source as well as a provider of an excellent place for owls to rear their young owlets.

I did not see anything about identifying existing natural slides and they do exist. Nor did I see anything about evaluating the Project area for potential slides due to the obvious need to build roads whether temporary or permanent.

I did not see anything about re-introducing the American Chestnut. There are resistant varieties that seemed to

be quite successful. The history of the demise of the American Chestnut is quite astonishing. Hemlocks are becoming a thing of the past. Although there has been considerable research directed toward controlling the Hemlock Woolly Adelgid, at this time there doesn't seem to be a lasting solution to the invasion. I'd like to see the Daniel Boone National Forest actively involved in collaborative efforts to re-introduces these two species in any planting program. Also, another tree that is native to Kentucky and considered rare to endangered is the Yellow Wood Tree (*Cladrastis kentuckea*). Efforts should be made to find and preserve them in the Project area. There were known scattered Yellow Wood Trees in the Bon Hollow forest area that was traded off by the US Forest Service in 1989. So, considering the vastness of the Project area, it is possible that a few of the Yellow Wood Trees still exist there.

Throughout my comments, I have tried to stress concerns about how the Project area as not suitable to such drastic measures required by Clear-cutting due to its varied and rugged geographic features as well as it's unique bio-diversity. If the Project is implemented as set forth, it is my opinion it will be a colossal failure. At what point this will be determined is anyone's guess. Who will be the future planners and shakers within the US Forest Service and our communities to make that determination?

In closing, I suggest that the US Forest Service strongly consider re-evaluating the Project and reduce it in both time and area. In doing so, I suggest that, 1) No new roads be constructed, temporary or permanent. 2) That no timber harvesting be conducted on the steep slopes or in the deep coves & ravines. 3) That herbicide use be limited to eradication of Kudzu and similar non-native invasive species only. 4) That provisions be made to encourage the use of local loggers. And, 5) That any contract for logging have a provision that allows any down trees, log piles, etc., to be salvaged if the logger goes bankrupt or out of business to prevent resource loss.

It is my trust that you (DBNF) will take my comments and use them wisely.

Thank you. (submitted this day, December 4, 2022 at 9:45 PM)