

Data Submitted (UTC 11): 3/21/2020 4:41:10 PM

First name: Elaine

Last name: Baer

Organization:

Title:

Comments: It's disturbing that the breadth of information contained in the supplemental reports was not included in the draft assessment if it countered too sharply from past U.S. Forest Service plans and goals. One hopes that, for the sake of the health and existence of the Wayne National Forest into the next century and beyond, those charged with writing the final assessment will heed the citizens, the scientists, and the "citizen scientists" who labored so diligently to compose the supplemental reports based on data, evidence, and concern for the challenges ahead due to climate change and poor management of forestland in the property boundary (both public and private) in recent decades. It's imperative that more time and effort should be expended by those finalizing the assessment that they incorporate as much of the "contrary" information and suggestions provided by the supplementary reports as they did the information and suggestions that support past practices.

If the comment period were longer, I would have time to provide more analysis of the gaps and lack of information in the draft assessment than I have done below. Excerpts from the draft assessment are in quotes:

(p. 15)

General comment on the "Biodiversity" section: The importance of a diversity of mast types should be explained and assessed, rather than emphasizing only oak and hickory as a source of mast for wildlife. Beech and maple are among the other tree species that produce mast important to a diversity of wildlife. The leaves of beech trees are a unique roosting spot for the Eastern Red Bat, and the hollowed spots in the trunks of beeches serve as "dens" for many smaller wildlife species. Beech nuts are a source of food for many fauna, including squirrels, deer, foxes, mice, and black bears, as well as several species of bird such as ruffed grouse, wood duck, wild turkey, and various woodpeckers. Since beech trees are under threat by several diseases in Ohio, existing mature stands should be protected, not logged or burned, to maintain forest diversity. Also, the age and diameter of trees that produce mast should be explained in the assessment, so that the future plan based on this assessment considers the importance of mature trees of all types in mast production.

(p. 17)

"The region has also experienced a 42% increase in the proportion of annual precipitation falling in heavy rain events (USGCRP 2018)."

Comment: The assessment should point out that many Ohio oak and hickory species are intolerant of flooding.

(p. 18)

"The volume of white oak in Southeast Ohio declined by nearly 25% between 2006 and 2016 (Albright et al. 2018). This decline is a function of harvest, natural mortality, and a lack of young regenerating oak to replace what is lost (Albright et al. 2018)."

Comment: The drastic decline of white oak over such a short period should be investigated more thoroughly before writing a final plan. The third factor would not explain such a sudden decline over a mere 10-year period. The first factor appears to be correctly cited, but the second factor warrants intensive investigation. If that factor should be from effects resulting from climate change, then the promotion of any kind of management to restore oak-dominated forests appears to be not science-based nor taking into account something which is out of the control of traditional management techniques of the U.S. Forest Service.

(p. 18)

"There is also an overrepresentation of forest age classes age classes in the 50 to 100 year old range, with a relative under-representation of younger (<20 year) classes, herbaceous vegetation, and oak woodlands when compared to historic conditions (USDA 2018h; Terrestrial Ecosystems Supplemental Report)."

Comment: Does this age class assessment take into account the proclamation boundary or the 17-county study area, or does this assessment only take into account the actual Wayne National Forest? If the latter, a landscape-scale plan would be more solid if it encompassed a larger geographic area, rather than the fragmented, non-contiguous forest presided over by the U.S. Forest Service.

(p. 20)

"Since 2008, the Wayne National Forest has applied prescribed fire to 22,216 acres (see Wildland Fire and Fuels Supplemental Report). The same land areas were burned on multiple rotations, so the actual acreage treated by burning was approximately 12,412 acres, or 5.1% of National Forest System land."

Comment: Data or any kind of assessment is absent here on the results of this prescribed burning. Since prescribed burning appears to be the U.S. Forest Service's main method of attempting to establish oak-dominated forest in Ohio, it's imperative to any science-based plan that the success or failure of such a method in Ohio forests today is demonstrated by evidence from prior burning events done on WNF land in recent years.

(p. 20)

"A comparison of forested stand data between 2006 and 2018 indicates young forests less than 20 years of age have declined on the Wayne National Forest by 93%, while mature forests 80 years and older have increased 46% during the same time frame (USDA 2018h)."

Comment: These numbers seem unusually high for both age groups, considering the data covers such a short time period (12 years). The final assessment should include some sort of theory or explanation for such a severe decline in young forest and such a large increase in older forest in order to decide on how or even whether to manage for certain age groups.

(p. 20)

"Roadside ruffed grouse (*Bonasa umbellus*) drumming counts indicate precipitous (47%) population declines since 1972, among other species that require shrub-dominated or young forest habitat (ODNR 2017a). Currently 0.1% of the total forest area within the Wayne National Forest falls under the 0 to 10 year age class that is critical for ruffed grouse."

Comment: There are many declining species in Ohio that require or prefer one kind of habitat or another, so it would be helpful to explain why ruffed grouse are one of the few species singled out in this draft assessment. If the ruffed grouse were an especially important species, even then this assessment lacks inventory of currently existing young forest habitat in the proclamation boundary or 17-county study area. Rather, it quantifies that habitat only for the Wayne National Forest.

Comment: The entire "Forest Products" section of the draft assessment lacks data on the effect of widespread timbering (both through good and bad practices) on the health and quantity of non-timber products in the forest ecosystem, and on the loss of value to neighboring landowners who intend to market their own timber.

(p. 31)

"Forests undergoing mesophication are signified by an aging, closed-canopy with an overabundance of shade-tolerant species like red maple in the mid-story and understory (Albright et al. 2018; Nowacki and Abrams 2008). Proliferation of a number of non-native invasive plants, insects, and diseases that increase tree mortality or add to crowding in the understory has compounded the challenge of mesophication (Albright et al. 2018; Oldland et al. 2013; Dukes et al. 2009)."

Comment: Most of the non-native invasive plant species mentioned earlier in the assessment (e.g., tree-of-heaven, Japanese stiltgrass, bush honeysuckle) are shade intolerant. Yet here it is suggested that an aging, closed-canopy is not desirable for the establishment of oaks. These two concerns can't easily be reconciled (opening the canopy may encourage certain tree species, but it would also encourage non-native invasives), so it seems that one concern or the other should be decided on in the final plan.

(p. 33)

Comment: In the "Finding and Supporting Data" subsection of the "Forest Products" section, no mention is made of climate change or herbivore depredation in the lack of oak regeneration. This leads to the false inference that fire suppression, non-oak understory, and mature oaks with closed canopies are the major factors in oak-dominated forest decline. The severe decline in white oak in the short 12-year time period cited earlier in the assessment would seem to belie those factors as being the primary ones.

(p. 33)

"Forest Inventory Analysis (FIA) size class trends indicate that timberlands in southeast Ohio are dominated by stands in the large diameter (greater than 11 inch diameter at breast height)."

A personal opinion: What a sad state a national forest is currently in when a tree greater than an 11-inch diameter is considered "large".

(p. 37)

"Of the 25 randomly selected sites monitored for BMP compliance between 2015 and 2018, BMPs were either implemented fully or almost fully at 15 locations (60%). BMPs were either fully or mostly effective at 7 sites (47%) (USDA 2018b)."

Comment: Since Best Management Practices are very important for the health of the forest following timber harvesting, it would be helpful to be clearer about the figures above, as the source cited isn't readily viewable. The first figure described as "implemented fully or almost fully" sounds confusingly similar to the second figure described as "fully or mostly effective".

(p. 44)

"The increase in oil and gas development (especially high-volume hydraulic fracturing, commonly referred to as fracking) across the study area (ODNR 2018a; DOI 2018b) will continue to be a potential source of impacts to water resources, either through increased risk of surface or groundwater contamination, or through increased water withdrawals. While projected water use through 2060 is not anticipated to result in any supply shortages (USDA 2012c; Warziniack 2018), water withdrawal operations with poor controls on timing could deplete minimum flows or shorten duration of inundation periods for aquatic ecosystem functions reliant on water (Poff et al. 1997)."

Comment: It's correct to point out the risk to water resources in the Wayne National Forest from oil and gas development, but it's dishonest not to mention that past Forest Service plans sought to lease national forestland for horizontal drilling and high-volume hydraulic fracturing. The risks to water resources and the entire forest ecosystem by permitting such industrial, pollutive, and destructive activity in the Wayne National Forest far outweigh any slight economic benefit, especially considering the recent decline in drilling production in the state and the generally accepted threat of global climate change from continued fossil fuel usage.

(p. 44)

"Stabilization of disturbed areas and riparian restoration can improve the natural watershed ability to absorb runoff. Under the 2006 Wayne Forest Plan, federal land managers have stabilized 40 acres of disturbed area and implemented streamside riparian habitat improvement across 1.59 acres (USDA 2018b)."

Comment: The assessment should include a quantification of the total amount of disturbed area, not merely the amount that was stabilized.

(p. 62)

"The potential for impacts to water resources from spills and other releases at a well site depend on how the chemicals and wastes are stored, the presence and nature of other types of containment, chemical and waste handling procedures, and the effectiveness of spill responses. The vast majority of well site spills are relatively small and contained before reaching a water resource (Thompson 2019a)."

Comment: It would be more authentic and effective for the planning process to detail the destructive effects of recent well spills and wellpad accidents that have occurred over the last 5 to 10 years in Ohio, during the upsurge

in horizontal drilling. The majority of spills and accidents might be relatively small and contained, but there have been a number that have had devastating consequences to aquatic flora and fauna and to the health of citizens living near the sites where these incidents took place. Whether or not horizontal drilling will still take place in the Wayne National Forest in the future, the Forest Service should detail the potential for future spills and accidents within its proclamation boundary and how it will respond to such incidents.