Comments re Wayne Forest Plan Draft Assessment, 3-17-20

The current Wayne forest Plan Draft assessment and supporting documents are an affront to science, USFS mandates, and public process. While the Wayne National Forest *should* be protecting our state's only national forest, it is instead intent on selling it off to the timber industry at prices that don't even cover the costs of such a loss, let alone *benefit* the people of Ohio as required of USFS by its original Congressional mandate. Ohio has one of the lowest levels of public forest per capita and among the poorest protections for forests in the nation, as recent Ohio Division of Forestry documents enumerate. The costs of turning our public forests over to the timber industry are incalculable, but even given rough outdated estimates of ecosystem benefits (air, water, biodiversity, and climate protection) at \$1800/acre *per year* (NJ State Dep't of Environment), it is clear that our federal government is giving away our wealth and destroying our forests and their ability to mitigate climate, clean our air and water, and host the species that only large un-fragmented tracts of forest can host. This is all in direct defiance of the USFS mandate from Congress that our National Forests provide economic benefit to the American people.

Further, 42 U.S.C. § 4332(C) requires National Forests and their agents to "include in every recommendation or report on proposals for ... major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on (i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's [sic] environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." And the Agency shall (42 U.S.C. § 4332 E) "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources."

NEPA requires the agency to take a hard look and make a reasoned decision based on thorough and meaningful evaluation of the significance or lack of significance of any new information, using the most up-to-date science, showing the public the basis for its reasoning, and evaluating alternatives and their comparative impacts in a substantive way. Yet, I haven't been able to find evidence of any of the research references that were submitted by the Ecological Forest Management working group or the Biodiversity working group even mentioned, let alone used or critiqued, in the Draft Assessment or supplemental documents I have read.

And yet there are statements in your documents that are contradicted by our *more recent peer-reviewed* references, submitted to you over a year ago. For example, the Assessment states that aging forests have declining rates of carbon stocks (for example, in the Carbon supplement p. 18: "biomass carbon stocks may be approaching maximum levels..."). This is false, as more current science in papers we submitted in January 2019 documents. For example, both of these working groups submitted references on the issue of the rate of carbon accumulation in trees, including Stephenson, N. *et al.* Rate of tree carbon accumulation increases continuously with tree size. *Nature*, 507, 90–93 (2014). Yet I could find no reference in your documents to this or the other up-to-date peer-reviewed scientific references we submitted, all consistent with Stephenson.

Likewise, the Fire Supplement does not cite Matlack, 2013 or Refsland and Fraterrigo, 2018, both of which we submitted over a year ago and which raise questions about the scientific basis and climate implications of your fire-oak management plan. These are just a few of the many glaring omissions from your documents of clearly relevant and important science studies previously submitted by the public that must be assessed by the Wayne, as required by NEPA, during this planning process. It is alarming that

the Assessment documents do not address such basic and central matters of importance to our community, our Forest, and our climate, which are *required to be evaluated*, *thoroughly and transparently*, *under NEPA*.

As the US District Court's March 13, 2020 Opinion and Order in Center for Biological Diversity et al. v. U.S. Forest Service et al., (link athttp://www.biologicaldiversity.org/w/news/press-releases/court-stalls-fracking-leases-in-ohios-only-national-forest-2020-03-13/) states in relation to the Wayne's and BLM's lack of adequate evaluations preceding leasing for fracking under the Wayne: "Just as required for an EIS, the EA must take a 'hard look' at the environmental consequences of the proposed action,...including its direct, indirect, and cumulative effects. ...An EA's analysis is insufficient "if it includes 'virtually no references to any material in support of or in opposition to its conclusions."" The US District Court order also states, "...if the agency does not show its work, the Court cannot evaluate whether its decision is reasonable. Yes, the Court must defer to scientific methods chosen by the agencies. But deference must be earned." (p. 67, emphasis added) And, "Federal agencies must comply with the requirements of NEPA and reach reasoned decisions on issues of environmental concern. Disclosure of information critical to decision-making is a primary function of NEPA." (p. 68. emphasis added)

Moreover, "NEPA is not designed to postpone analysis of an environmental consequence to the last possible moment. Rather, it is designed to require such analysis as soon as it can reasonably be done." (p. 68) While the Assessment draft is not a NEPA document, Plan Revision is a NEPA-based process to develop an EIS, so NEPA-based standards clearly apply.

To give another example of the Court's negative assessment of Wayne documents: "A USFS Regional Office review of an internal draft of the [Wayne NF Supplemental Information Report's] 2012 SIR's water source review is rife with comments pointing out how flimsy the 2012 SIR's and in turn the 2006 EIS's water resource review was. For example, when explaining that the Forest Hydrologist considered a 'vast amount of information related to oil and gas fracturing activities,' the reviewer noted that 'Sounds like the analysis of it in the Plan EIS was not adequate...[t]he fact that the hydrologist had to consider vast amounts of information leads to the conclusion that the 2006 Forest Plan and EIS did not sufficiently account for the issue of fracking.'..But instead of addressing the potential flaws raised by the comments, USFS removed the paragraphs at issue from the final 2012 SIR and replaced them with general language indicating that Ohio's laws adequately protect water usage....Indeed, as the USFS commentator point out, 'a lot of the material in the groundwater and surface water effects section is a restatement of standards, regulations, etc. rather than an actual effects analysis.' The Court could not have said it better. As is highlighted by the USFS reviewer's comments, what is lacking from USFS's review are the actual effects of the increased water needs for fracking in the Forest. What we have is basically a regurgitation of the 2006 EIS's water plan discussion for conventional drilling, but there is no analysis or reasoned discussion of how, or whether, the vast amounts of water needed for fracking will pose different environmental risks. The Court finds that the 2006 Forest Plan and EIS did not sufficiently address the new and different impacts of fracking on water usage, particularly how fracking would affect the Little Muskingum River. The 2012 SIR's cursory and conclusory review of the cumulative impacts on water depletion in the Forest from fracking did not cure the deficiency." (pp. 56-57) And "...conclusory justifications...are meaningless when the record is devoid of any analysis or discussion of how the Little Muskingum River would be impacted by fracking activities in the WNF." (p. 59) And the Court concludes, "The agencies made decisions based on a faulty foundation that the 2006 Forest Plan's and 2006 EIS's consideration of vertical drilling sufficiently accounted for the impacts of fracking. Each iteration of agency review built upon that faulty foundation – the 2016 EA relied on the 2012 SIR, which relied on the 2012 BLM letter, which relied on the 2006 Forest Plan and 2006 EIS – but neither USFS nor BLM stopped to take that 'hard look' that was required of them." The Order then states, "Specifically, the Court finds that at the decision-to-lease phase, USFS and BLM

failed to take a hard look at the impacts of fracking in WNF, including 1) surface area disturbance, 2) cumulative impacts on the Indiana Bat and the Little Muskingum River, and 3) impacts on air quality." (pp. 70-71)

Given rapidly accelerating climate change, coupled with rapidly increasing invasives, diseases, and insects in our woodlands, and the impact of contemporary logging practices on the soil and forest inhabitants (flora, fungi, micro invertebrates, amphibians, reptiles, birds, mammals, and more), our native forests are not renewable in a relevant timeframe. They must be preserved, not destroyed for short-term gain to fund salaries (or Ohio's schools) that should come instead from renewable sources – corporate taxes and taxes on the wealthy.

Your goals, based on the highest environmental values of the forest as required by NEPA and by Congressional mandate, must be to protect our native forests, and our old forests especially, which are much more important, rare, and valuable than young forests for their unique biodiversity not widely available on young forests or fragmented private lands, for their air and water purification, and for carbon sequestration, contrary to direct statements in your documents based on outdated science! (Stephenson, N., et al., Rate of tree carbon accumulation increases continuously with tree size. *Nature* 507, 90–93, 2014; submitted to you in January 2019; James A. Lutz et al. Global importance of large-diameter trees. *Global ecology and Biogeography*, 2018.) It is scientifically unsound and therefore unacceptable per NEPA that the Draft Assessment classifies our 40-80-year trees as old, when white oaks (among other tree species) live 200-400 years or more, and it is absurd and incorrect for you to claim that "carbon stocks are leveling off" in 40-80-year-old forests! This is pure timber industry spin and not scientific or true. Furthermore, logging can cause soil to become a source of carbon *emissions* for decades, thus dealing a double whammy to climate – with lost sequestration of trees removed and destruction of soil as a carbon pool.

The Wayne's promotion of fire at the expense of our climate and most of our Forest inhabitants other than oak is not based on sound science. The draft Assessment cloaks its industrial goals in a veneer of bad science, discussing only needs of fire-dependent species when our native deciduous woods, their herbaceous layer, and animals and fungi are largely fire-intolerant. (Glasgow L. and Matlack, G. Prescribed burning and understory composition in a temperate deciduous forest, Ohio, USA. Forest Ecology and Management, 2007, 238: 46-56; Matlack, G. Managing fire in the mesic deciduous forest when fire history is unknown. Conservation Biology 29, 3, 2015.) The Wayne's claims that there was extensive and frequent fire in SE Ohio and southern Ohio in pre-European-conquest times is described by several researchers I contacted as "flimsy science," with "cherry-picked results" "spun" from few and not necessarily relevant data points. Even if your cited historical analysis has any grain of truth, it is highly problematic to base widespread destruction of forests in the twenty-first century on any such history from an arbitrary time in a very different climate and world. The assessment either ignores or misuses recent research that supports other drivers of oak decline. In some cases, the Wayne assessment cites the contradictory research but uses its data to draw conclusions contrary to the conclusions of the study. See R. McEwan et al. Multiple interacting ecosystem drivers: toward an encompassing hypothesis of oak forest dynamics across eastern North America. Ecography 34: 244-256, 2011; Matlack, G.R. 2013. Reassessment of the use of fire as a management tool in deciduous forests of eastern North America. Conservation Biology, 27: 916-926; Pederson, N., et al. 2015. Climate remains an important driver of post-European vegetation change in the eastern United States. Global Change Biology, 21(6): 2105-2110; Dyer, J.M., and T.F. Hutchinson. Topography and soils-based mapping reveals fine-scale compositional shifts over two centuries within a central Appalachian landscape. Forest Ecology and Management, 2018, 433: 33-42.

Given the uncertainties and perils of potential climate change, disease, and insect impacts on individual species, the idea of promoting one species at the expense of all others as well as of soil, animal, understory, and fungal health is criminal insanity, especially since the Wayne does so with NO monitoring of impacts of its burning and cutting, no monitoring of other species and soil health before burning or cutting, and no monitoring of anything except oak seedlings afterwards. THIS IS NOT SCIENCE-BASED MANAGEMENT! It is not in compliance with NEPA. It is irresponsible, reckless, and an assault on climate, biodiversity, soil and forest health, air, and water quality. It is the ultimate in controversial and therefore, per NEPA, requires the *utmost* of scrutiny and scientific evaluation to be considered in the new Forest Plan. There is no indication of any such scrutiny in your Draft Assessment.

The Wayne's promotion of biomass as an energy source is highly problematic, since burning wood to produce electricity is less efficient and produces more CO2 than coal per unit of energy produced. (See references at http://www.pfpi.net/carbon-emissions). Only the subsidization of this industry with renewable energy credits makes this industry profitable, but at the expense of our climate, air quality, and our native forests, which lose the important carbon matter that makes forests both healthy for their inhabitants and protective of climate. Biomass burning is a triple whammy, depriving forests of trees that sequester carbon, destroying soils' ability to sequester carbon, and emitting vast amounts of CO2 into the atmosphere. I would like to see this assessment gap addressed by the Wayne by it quantifying impacts of potential extraction of Wayne resources for biomass burning, addressing factors such as outlined in pfpi's recent analysis of European Union forest and biomass status: http://www.pfpi.net/wp-content/uploads/2020/03/PFPI-comments-on-measures-to-reduce-impacts-to-forests.pdf

It looks to me like the Wayne is continuing to 1) use flimsy science and opaque and obfuscating methods to try to fool the public yet again into thinking that it is using science and complying with NEPA, and 2) it is doing this to cloak its industrial (timber and oil and gas), politically motivated, and fire-fund-driven goals with bad science that will not comply with NEPA. Furthermore, matters of extreme public environmental concern require, per NEPA, the utmost rigor and attention and *greatest* effort for public participation and scrutiny. Yet you have made the many hundreds of comments submitted during the pre-Assessment phase (2018-2019) unavailable, disappeared from your website and the public record, during this subsequent Assessment phase, such that the public cannot refer back to what others have commented during this process. This must be rectified and the public given a chance to comment on the Draft Assessment with these materials at hand.

You claim to want public input, yet you have ignored public input consistently since well before your highly flawed 2006 Plan was adopted, even though public input has consistently provided the up-to-date science and assessment of current threats that you MUST (but never do) evaluate with transparency and completeness. That's what public process means and requires and what thousands of members of the public have been demanding consistently for decades. It is welcome that the March 13, 2020 federal Court decision reflects what we (including I personally) have been saying for years. As Buckeye Forest Council, Heartwood, Sierra Club, and many community members said to you during development of your 2006 Plan (and in legal appeals and the Economic Analysis of the 2006 Plan, https://heartwood.org/wp-content/uploads/2016/07/Wayne Economic Analysis-.pdf after its adoption) and as many groups and individuals have said to you since you tried to lease for fracking in 2011, and now as you develop a new Plan, including the twenty people who attended your open house on March 3, many dressed as mushrooms, hoping that since you have never listened to the people of the community, maybe you will listen to the Forest's inhabitants: Stop the obfuscation and denial, do your duty to our forest and to your legal obligations under NEPA, pay attention to the most up-to-date peer-reviewed science that challenges your management decisions. The Judge has made clear - you DON'T get to just ignore the science because it conflicts with your agenda. You must analyze its implications with transparency and scientific rigor.

In a time of melting ice caps and many climate tipping points being met or imminent, our public officials have an obligation to the people and land of Ohio and to the federal law that governs FS activities to do all that FS can to protect climate, air quality, water resources, our native forests, and the biodiversity that only large tracts in protected status can host. Stop the logging, burning, and fracking, all poorly disguised as science-based and now revealed as such by a federal court. Protect our forests and our futures.

In closing, I reference and resubmit here for your thorough review and evaluation both Heartwood's 2008 Economic Analysis of the 2006 Wayne National Forest Plan (http://www.heartwood.org/wp-content/uploads/2016/07/Wayne_Economic_Analysis-.pdf) and, via link to the pdf in your Planning Reading Room (http://cara.ecosystemmanagement.org/Public/ReadingRoom?project=53485), the 117-page report submitted by the Working Group on Ecological Forest Management, Climate Protection, and Sustainable Economies on Jan. 28, 2019, much of which I wrote and compiled. These two documents contain extensive quantitative analyses of issues that *must* be addressed by the Wayne in its new Plan development. Among the many crucial issues in these reports that I have not previously mentioned in these short comments include ATV/ORV trail building, managing for early successional forest habitat, managing to prevent non-native invasive spread, and community economic impacts of Forest management decisions. These too must be fully evaluated prior to adoption of a new Plan.

Much of the material in the Ecological Management Working Group report are references that I had previously submitted during the Pre-assessment comment period, and most of those submissions, especially in relation to fracking impacts, are peer-reviewed references I had originally submitted to Anne Carey (2011-2012) and then to Tony Scardina and BLM (2015-2016). They are *yet* to be mentioned, let alone assessed, as clearly required by NEPA and now by the US District Court's March 13, 2020 Opinion and Order in *Center for Biological Diversity et al. v. U.S. Forest Service et al.* I look forward to seeing this happen.

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