



November 11th, 2019
508 main St. Boonton, NJ 07005

To: David Helmer, Executive Director
Morris County Park Commission
300 Mendham Rd.
Morristown, NJ 07960

NJ Highlands Coalition Comments on the Draft *Mahlon Dickerson Reservation Forest Assessment & Stewardship Plan*

Thank you for the opportunity to comment on this Draft Plan for Mahlon Dickerson Reservation. In addition to these comments we have attached for your reference; *Policy Recommendations for Forest Stewardship & Preservation on Public Lands* prepared by the New Jersey Highlands Coalition’s Natural Heritage Committee, and the Highlands Coalition’s response to the *Mahlon Dickerson Reservation Forest Stewardship Plan Objectives* submitted in 2015. It is not apparent that any of the concerns raised at that time were considered in the drafting of this Forest Plan, in particular those regarding deer management, and the proliferation of invasive species in the forest interior.

The New Jersey Highlands Coalition strongly encourages the Morris County Park Commission to reconsider the justification for forestry activities in Mahlon Dickerson Reservation. As a Coalition we represent 103 member organizations’ interests in the Highlands Region, and the protection of its natural and cultural resources. These resources, including state and county parks, contribute to the high quality of life in New Jersey, and assist with a sustainable economy in the Highlands. When adequately protected from the impacts of unjustified management, our parks and natural areas can continue to yield clean water and access to outdoor recreation for New Jersey residents, as well as important habitat for a variety of rare and endangered plant, and animal species.

In fact, we are only beginning to understand the full extent of the benefits provided by intact forested lands, and old-growth forests. Established scientific research indicates that one of the best management strategies is *proforestation*. Proforestation is defined in “Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good” as

“growing existing forests to their full ecological potential [...] maximizing [...] carbon sequestration and unparalleled ecosystem services such as biodiversity enhancement, water and air quality, flood and erosion control, public health benefits, low impact recreation, and scenic beauty.” (Moomaw, et al, 2019).

This assertion is supported by several other studies including “Rate of tree carbon accumulation increases continuously with tree size” (Stephensen, et al. 2014) published in *Nature*, referenced below.

We conducted several site visits to some of the stands identified for treatment accompanied by professional forest ecologists specializing in the Highlands region, in addition to reviewing the detailed inventory of species provided in the *Botanical Survey* by Wild Ridge Plants, LLC. We have concluded that the forests of Mahlon Dickerson are healthy and diverse, without any need for thinning at the scale recommended in the draft Plan.

An analysis of the maps included with each management description shows that the proposed thinning activity is concentrated along ridges. This raises an issue with the size classes of trees identified for cutting or removal since trees on dry, rocky ridges grow more slowly. Under the current prescription almost all of the trees characterized as Small Sawtimber in such a particular site could be cut, thus removing some of the oldest trees in the stand, and in the forest. We recommend that the size classes of trees targeted for thinning be reduced to nothing larger than 10" medial diameter.

Historic clearcutting of this landscape has left the entire forest with a somewhat uniform structure; however, the proposed rotation of thinning and burning will not change this. Instead, a lighter touch approach involving hand thinning, or girdling a limited number of trees in some remote areas, with all woody material left on site, might be more applicable to certain areas, with follow-up prescribed burns used to manage some of the chestnut oak ridgetops. This type of management would suffice for all open woodland species that would utilize the oak ridgetops, including rare herbaceous plants. Furthermore, no area that has been managed should retain less than 70% canopy cover.

Impact to recreation and visitors experience at Mahlon-Dickerson and the Highlands Trail:

Mahlon Dickerson Reservation is often described as a "near wilderness" park, and people go there to experience that type of setting. A number of areas within the stands identified for "stewardship" have popular trails running through them, including the Highlands Trail. Just recently the NJ Highlands Council awarded a contract to the NY/NJ Trail Conference to enhance user's experience of this trail and amplify local economic benefits from recreationists. This experience will be substantially degraded by any sort of mechanical or machine tree cutting, or motorized vehicles driving through the park on woods roads or trails.

It is impossible to see how visitors' experience on the trail and in other parts of the park will not be adversely affected by the proposed activity, given the proximity of the work areas to trails and the scale of the proposed treatments. A wilderness experience is an increasingly rare thing in New Jersey. The Park Commission should not jeopardize this opportunity for its visitors.

Impact of machinery on the surrounding environment:

Recent forestry activity undertaken on a nearby State Wildlife Management Area caused enormous damage to natural resources outside of the worksite as a result of heavy machinery being utilized on unpaved access roads, on fragile terrain, and on public trails. We recognize that the Plan for Mahlon-

Dickerson calls for “thinning”, not a “seed tree harvest” or “clear cut”; however, without a clear definition of what thinning entails. It is important to note how devastating the impact of these vehicles can be.

Likely impacts include widening of trails to make access roads, creation of new paths into the forest stands, and rutting along trails, all of which can result in severe disturbance to the soil, nearby wetlands, vernal pools, intermittent streams, and the forest floor. Unfortunately, established “best management practices” are not always adhered to when there is pressure to get the work done within a certain limited timeframe.

Introduction of invasive species and deer management:

The current draft of the Plan does not appear to recognize the likelihood of the Plan’s implementation introducing invasive species to the forest interior. The Plan asserts in one place that Mahlon Dickerson Reservation is currently largely free from invasive species and deer browse, but then in another section reveals that half of the stands surveyed on MDR have invasives present. The Botanical Survey conducted earlier on behalf of the Morris County Park Commission, repeatedly identifies invasive plant species and deer browse as principal concerns.

Further, the Plan suggests the Commission will be responsible, and should use herbicide treatments after the forestry is completed. Management activities are themselves often the cause of non-native species invasions. This is not the result of successful forest stewardship. We do not see any benefit to Mahlon Dickerson of undertaking stewardship activities shown to introduce invasives that the Park Commission would then have to treat and control.

Additionally, this Plan provides no consideration of understory development despite that being a critical component of successful stewardship. The Plan does not include any strategies to promote native tree regeneration or the reestablishment of understory shrubs, grasses and herbaceous species.

Management inside a State Natural Heritage Priority Site:

The proposed treatment site in Stand 6 is located entirely within a NJ DEP Natural Heritage Priority Site. Natural Heritage Priority Sites were identified as “critically important areas to conserve New Jersey’s biological diversity, with particular emphasis on rare plant species and ecological communities.” (NJ DEP Website). We had the opportunity to walk the length of this proposed worksite, and observed a very diverse, healthy, mixed age forest. Moreover, we also noted a number of tree blow downs, that created natural gaps in the canopy, and most interestingly, no evidence of invasive species around the base of the soil disturbance. We strongly recommend that Stand 6 be removed from any management prescription.

We are encouraged to see that some areas within the Reservation have been set aside from forestry activity. This Plan should expand on those and designate more areas as “off-limits”, to enable the natural progression into old-growth forest, which the Botanical Survey reveals is lacking within Mahlon Dickerson Reservation.

Conclusion:

A close reading of this Draft Plan for the forests of Mahlon Dickerson Reservation reveals that it is not borne out of promoting ecological health; rather it is a large scale forestry plan. Unjustified intervention in these public forests contravenes the intents and purposes for which these lands were preserved for the public.

The scale of the proposed forestry management is inconsistent with the data in the Plan itself, and with the supporting documents. It is our recommendation that the entire Plan be reconsidered, and fully revised with a focus on addressing the real threats to Highlands forests, based on the data contained in the Appendices provided to the Park Commission by ecologists, botanists, and experts in forest health.

We are certain that if the Morris County Park Commission were to implement this draft plan, public outcry would occur. Implementation of this Plan would negatively affect both one of Morris County’s most precious natural assets – Mahlon Dickerson Reservation, as well as the public’s perception of the Park Commission.

Thank you for the opportunity to participate in this process.

Comments prepared by the New Jersey Highlands Coalition, and the New Jersey Highlands Coalition’s Natural Heritage Committee.

Julia Somers, Executive Director
New Jersey Highlands Coalition

References:

- Moomaw, William R., et al., “Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good.”, *Frontiers in Forests and Global Climate Change* (2019)
- Stephensen, N. L., et al., “Rate of tree carbon accumulation increases continuously with tree size”, *Nature* (2014)