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**From:** Foster, David R. [mailto:drfoster@fas.harvard.edu]  
**Sent:** Monday, August 15, 2016 11:32 AM  
**To:** Paul Foley  
**Cc:** tboland  
**Subject:** Re: Ancient Woodlands & Solar Panels

Dear Paul

I am writing with regards to the revised proposal for a solar array on the Oak Bluffs Water District Lands. I apologize for the delay in responding but I am just back from Denmark and hope that my additional comments and maps arrive in time to contribute to the discussion.

My comments on March 6, 2016 (below) in response to the first proposal for the clearing of 20.5 acres hold for this revised proposal: the area proposed for clearance is covered with Ancient Woodlands that have been intact for some 10-12,000 years and, unlike much of the Vineyard, have never been cleared and farmed in the past; the proposition to destroy forests, which are one of nature's most efficient solar collectors, with a manufactured solar collector is counterintuitive and counterproductive; and, in an era in which nation's across the globe have committed to a policy of No Forest Loss in order to mitigate climate change, Martha's Vineyard should be a leader in safe-guarding its forests.

The attached maps illustrate the location of the proposed clearing in relationship to the remaining area of Ancient Woodlands on Martha's Vineyard and illustrate a few additional points.

1. The site is part of the largest block of Ancient Woodlands on the Island. Given the long history of fragmentation of these remaining unusual habitats we should strive to keep this large block intact.
2. The site abuts the largest permanently protected block of Ancient Woodlands on the Island (Manuel F Correllus State Forest) and adds significant buffering to this globally important conservation area.
3. Given the stated purpose of the tract—to protect water quality and protection—the best approach to its long-term management is to leave the forest intact.

Solar production of energy is a critical step for the Vineyard and broader society, but it should be sited on existing infrastructure or open sites where it does not conflict with and undermine the many benefits of the existing natural infrastructure.

Thanks very much,

David Foster

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David Foster, Director  
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<http://harvardforest.fas.harvard.edu/>

**From:** Tim Boland [<mailto:tim@pollyhillarboretum.org>]  
**Sent:** Sunday, March 06, 2016 4:04 PM  
**To:** Paul Foley  
**Subject:** Fwd: Ancient Woodlands & Solar Panels

Hi Paul,

I was planning on attending the meeting that was canceled last Thursday with many concerned and opposed islanders.

I wanted to send this along from Harvard Forest Director and PHA research associate, David Foster. These maps are the result of an extensive study on MV that David and his colleagues have carried out. A book on this study will be published this Fall by Yale University Press.

The maps here depict the Greenland's and the OB water district as ancient forests.

It's not hard to surmise that deforestation (which is in your brief) is incredibly counterintuitive to cleaner water but also to the mitigation of climate change.

The area and the extent of the clearing is so shortsighted when the land and vegetation is performing such a valuable function(s).

I will send more notes later.

All of this work is Dr. Foster's. He produced the State Forest study and is researching the turnover and succession of our oak forest at the PHA.

There is no one more knowledgeable on the value of forests, here and in New England.

Tim

Begin forwarded message:

**From:** "Foster, David R." <[drfoster@fas.harvard.edu](mailto:drfoster@fas.harvard.edu)>  
**Date:** 5 March 2016 at 7:03:28 am GMT-5  
**To:** "Tara J. Whiting" <[tarajw@yahoo.com](mailto:tarajw@yahoo.com)>, Prudy Burt <[prudyburt@gmail.com](mailto:prudyburt@gmail.com)>, tboland <[tim@pollyhillarboretum.org](mailto:tim@pollyhillarboretum.org)>, Ginny Dautreuil <[virginia.dautreuil@state.ma.us](mailto:virginia.dautreuil@state.ma.us)>, Brendan O'Neill <[boneill@vineyardconservation.org](mailto:boneill@vineyardconservation.org)>  
**Cc:** "Hall, Brian R." <[brhall@fas.harvard.edu](mailto:brhall@fas.harvard.edu)>  
**Subject:** Ancient Woodlands & Solar Panels

All

I am writing to follow up on the proposed solar development Oak Bluffs. I have been surprised that forest clearance was not raised as a major issue in the articles that I have read, but I gather that it may be strongly on some of your minds.

What I know of the project is based on the attached document, which includes the statements -  
Vegetation: 20.5-acres of a currently mostly wooded 45-acre site will be cleared.  
Habitat: The whole site is designated as NHESP Habitat for State Listed Rare Species

My major response would be that clearing forest should be minimized anywhere on the Vineyard due to its critical role in carbon sequestration, habitat, and the maintenance of water quality, but that intact forest on the Great Plain is particularly important due to its status as surviving ancient woodland. If you look at the attached set of maps showing the cover of ancient woodland (woodland that has never been cleared in history and so has a continuity extending back into prehistory) and refer to the report on the State Forest (reference & link below) the importance of these Great Plain forests becomes apparent.

The Vineyard has an unusual history in that about 40% of the land came through the peak of deforestation and farming in the 19th C as intact woodland. The bulk of these ancient woods is centered on the Great Plain (the areas extending up into West Chop and East Chop have been mostly lost since 1850). In the ensuing 150 years as much of the Island has reforested the remaining intact area of ancient woods has been perforated and gobbled up by individual houses, the installation of major infrastructure, and especially by the airport and a few large developments. The last map on the sequence shows remaining woods in green and all of the ancient woods that have been lost to development in red. The map of "Fate & status of ancient woodland" summarizes this.

These ancient woods are particularly important because their soils are intact, their vegetation has continuity on the landscape going back thousands of years, the resprouting trees on these sites are many hundreds of years old, and the habitat that they provide is globally rare and valuable to many unusual as well as common species.

To clear thriving woodland that is actively storing carbon and mitigating climate change in order to install solar arrays is counterintuitive. But, to further reduce an irreplaceable ancient ecosystem and a portion of the largest sand plain forest on the Island would be a travesty. Solar panels belong on roofs, at the bottom of gravel pits (there are many but more room remains) and on other sites in which the native vegetation has already been removed.

Ironically, I note that on our map of "The fate & status of ancient woodland on MV" it appears that we depict the proposed solar site as "protected" because it is owned by the town for water resources.

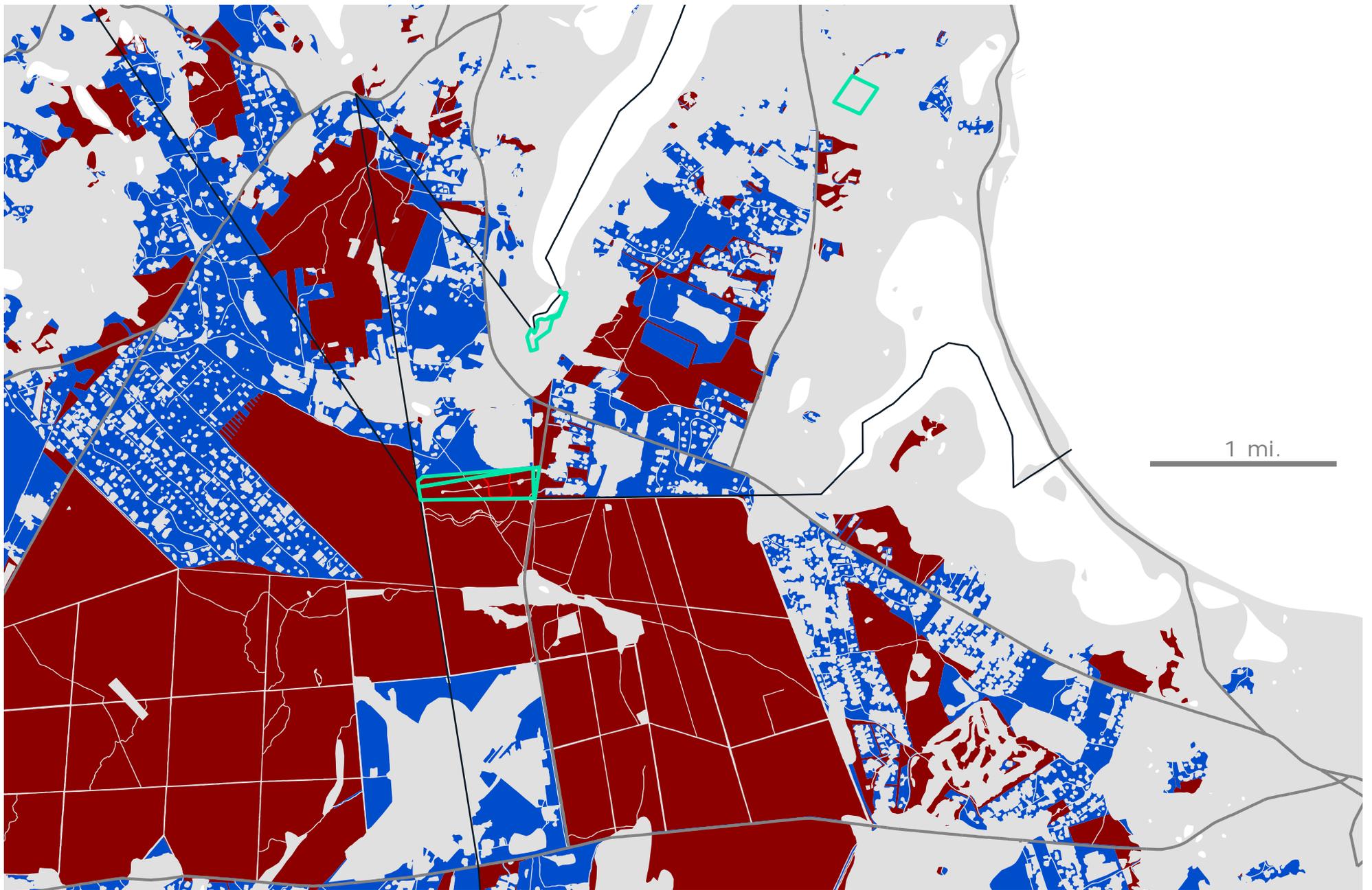
Best, David

Foster, D. R., Motzkin, G. 1999. **Historical influences on the landscape of Martha's Vineyard: perspectives on the management of the Manuel F. Correllus State Forest.** Harvard Forest Paper No. 23

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<http://www.wildlandsandwoodlands.org/>





 Oak Bluffs Water District Lands

 Proposed Clearing For Solar Field (June 2016)

Ancient Woodlands - Protection Status:

 Protected

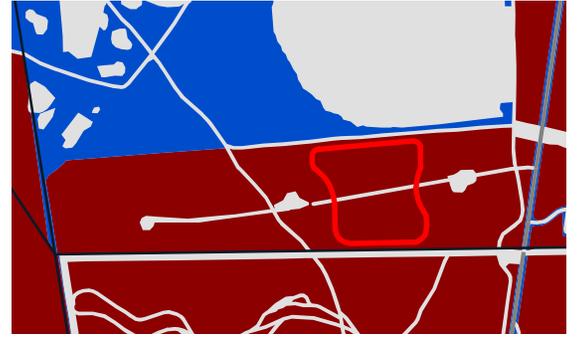
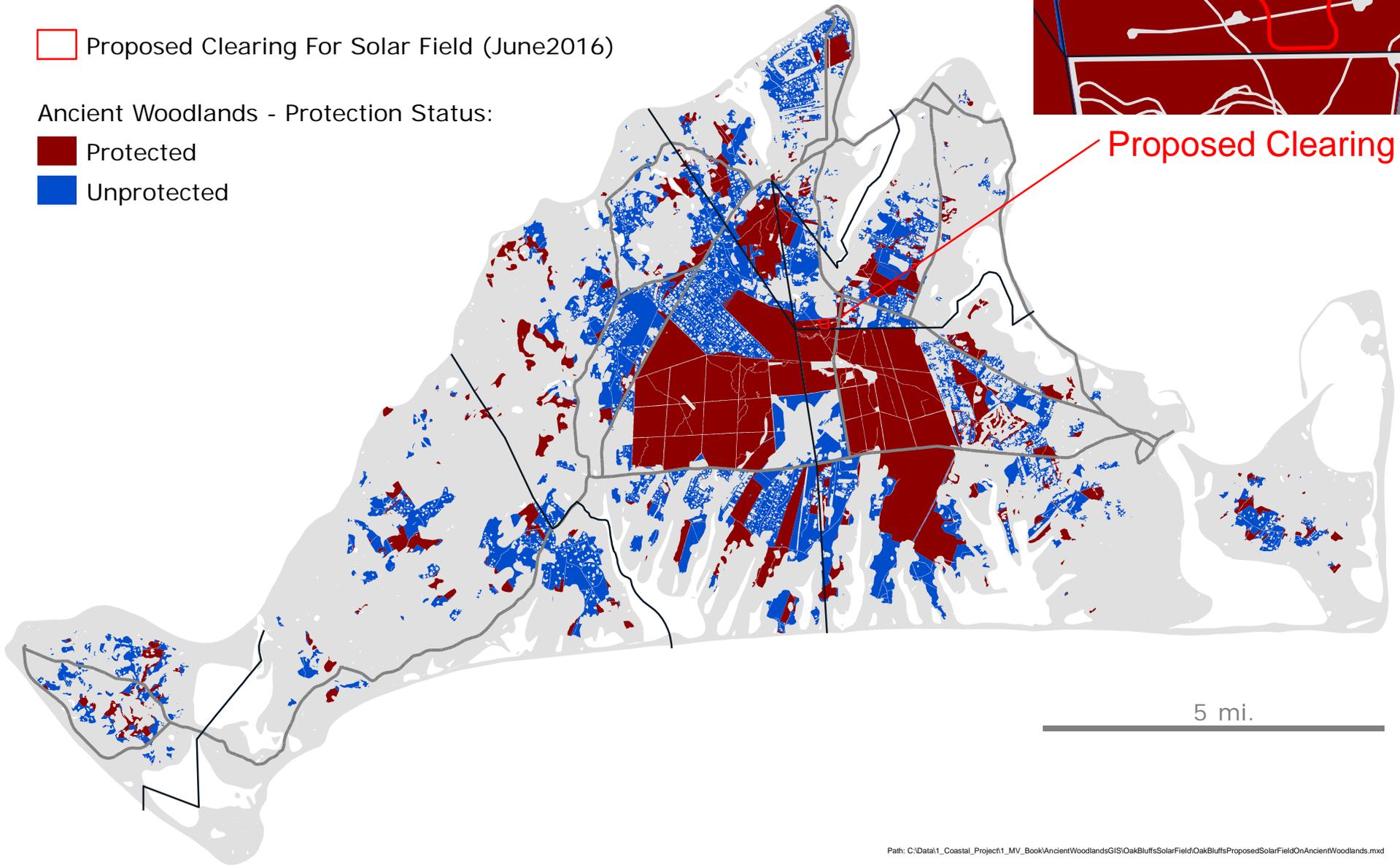
 Unprotected

 Proposed Clearing For Solar Field (June2016)

Ancient Woodlands - Protection Status:

 Protected

 Unprotected



 Proposed Clearing

5 mi.