

**Callahan, Beth**

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**From:** Cordes, Robert  
**Sent:** Monday, February 23, 2009 3:25 PM  
**To:** Callahan, Beth  
**Cc:** Pratte, John; Hulse, Charles; Timpano, Steve; Estabrook, Karen  
**Subject:** Comments regarding Record Hill Wind Project Public Hearing 2/18/09

Beth,

I wanted to send you a quick note to be included in record for the Public Hearing held last Wednesday (2-18-09) night for the proposed Record Hill Wind Project. There were 2 questions regarding the nesting pair of Bald Eagles on Roxbury Pond and several individuals who made references about me that I thought needed to be addressed.

One of the participants wanted to know to what extent the Bald Eagles, particularly fledglings, used the ridgeline associated with the proposed project on Record Hill? Her follow-up comment proposed that MDIFW should conduct an extensive study of the Bald Eagle use of this ridgeline.

MDIFW has conducted aerial surveys for many years to determine breeding/nesting status of eagles throughout the state, including the pair at Roxbury Pond. However, it is not the intent nor design of the surveys to determine individual habits of birds around the nest site, rather to determine breeding and nesting success. Currently, Maine has almost 500 nesting pairs of Bald Eagles, and the population continues to steadily grow.

A standard study MDIFW requests from applicants proposing wind projects is a daytime raptor survey during both the fall and spring seasons. This survey is designed to quantify which species and how many raptors migrate through the project area. Secondly, we can usually identify how these raptors fly relative to the ridgeline associated with the project. In another windpower project, this information was used to remove a proposed turbine location where raptors frequently passed over a saddle in the ridgeline. The applicant's consultant did an excellent job describing raptor use relative the ridgeline in their Spring 2008 survey report, and we have requested similar description for their Fall 2007 survey. The results from the spring survey did not indicate a clear pattern of Eagle use on this ridgeline. The consultant is currently working to provide MDIFW with a similar presentation of their Fall data. We will evaluate the results and provide additional comments to you if appropriate.

The Department did not request additional pre-construction studies from the applicant because this proposed project clearly presents a risk to the nesting eagles on Roxbury Pond. The extent of that risk is unknown and debatable. Additional pre-construction study would further verify that known risk. MDIFW believes a more appropriate study at this site would include a set of detailed post-construction studies that would potentially guide project mitigations (if necessary) and will improve our collective knowledge for future project reviews.

Several of the participants' comments included quotations purported to be made by me during a casual phone conversation I had with Steve Thurston (another participant) on January 24, 2009. I wanted to include in the public record and advise DEP that Mr. Thurston, without my knowledge or consent, distributed his interpretation and summary of our 30-minute conversation. Further, it was inappropriate for Mr. Thurston to not provide me with his summary for review to confirm that I agreed with it's content, nor allow me to ensure that I clearly articulated the salient information during our conversation.

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I was recently forwarded his summary by a third party. It is unfortunate that Mr. Thurston did not consult with me because I found several instances where his summary misrepresented or was inconsistent with our conversation. Also, it was evident from his summation that I did not clearly communicate several key points during our discussion. If Mr. Thurston had consulted me, I would have been able to rectify the misinterpretations. I would urge any person interested in wildlife information related to this project to contact myself or Steve Timpano (MDIFW's Environmental Coordinator) directly.

I hope this helps with your review and provide insight to questions/comments posed at last week's hearing,

Bob

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**Callahan, Beth**

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**From:** Cordes, Robert  
**Sent:** Tuesday, June 09, 2009 12:42 PM  
**To:** Callahan, Beth  
**Cc:** Timpano, Steve; Estabrook, Karen; Hodgman, Tom; deMaynadier, Phillip; DePue, John  
**Subject:** MDIFW response to public questions for Record Hill Wind Project

Beth,

Here are responses to most of the public questions for the Record Hill Wind Project.

**Question: There is a Bald Eagle rookery on French Island. There needs to be a thorough study of eagle behavior of Roxbury Pond to determine what extent the eagles use Record Hill ridge as an essential part of their habitat. RHW must do a further study on the bald eagle population or they should apply for a taking permit.**

**MDIFW Response:** MDIFW has monitored nesting of bald eagles at French Island since 1998. The nest and surrounding ¼ mile radius is designated an Essential Habitat under the Maine Endangered Species Act to enable reviews of projects which might significantly alter or unreasonably harm the immediate nest vicinity. That regulation has been key to mitigating potential disturbances near nesting eagles and bolstering species recovery.

A variety of landscape features can harm, injure or even kill eagles at greater distances than the ¼-mile radius of the Essential Habitat zone. The proposed windpower facility at Record Hill is yet another potential risk factor. Emerging policies under the federal Bald Eagle – Golden Eagle Act (administered by the U.S. Fish and Wildlife Service) advise windpower projects to examine national management guidelines and potential liability for prohibited “take” of eagles. For consistent flagging of potential concerns, USFWS provides windpower applicants within 3 miles of eagle nests that special scrutiny is advised. This is not a prohibition zone but a sphere of potential concern depending on site-specific circumstances. MDIFW does not have authority to interpret this policy or statute. Contact the U.S. Fish and Wildlife Service – Migratory Bird Office in Hadley, MA for further interpretations.

Most bald eagle activity is along the shores of lakes, rivers, streams and coastal waters although ridgelines like Record Hill do create updrafts favorable for soaring flights. The Record Hill applicant has conducted routine monitoring of raptor activity (including eagles) during fall and spring. Results from these studies showed relatively low of the ridgeline by bald eagles during the surveys. However, additional local eagle-specific behavior studies will likely be recommended for post-construction monitoring. Some proposed projects are now undertaking more focused surveillance of nesting eagles to assure that foraging flights, activities of fledgling eaglets, etc. are not focused at proposed turbine sites.

**Question: How will migratory birds be affected?**

**MDIFW response:** Avian migration through Maine (and theoretically bat migration as well) is fairly diffuse, typically referred to as “broad front” migration. In mountainous regions, high peaks such as those over 3,000 to 4,000 feet may influence bird movement locally by diverting passage of some individuals around, rather than over summits. Such behavior has not been seen for smaller mountains and ridgelines such as those associated with the Record Hill Wind Project. Studies conducted by the

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applicant (as well as studies done for many other projects in Maine) have shown that birds typically migrate well above the "rotor-swept zone." Nonetheless, there is still a potential risk that migrating birds and bats may collide with the turbines. The challenge is to determine what level of avian mortality is expected, and more importantly what level of mortality is acceptable. The post-construction studies from the operating windpower projects in Maine have not shown high mortality rates for either birds or bats. Post-construction mortality studies at this site are necessary and will aid in the effort to answer this question, and perhaps guide any mitigation strategy if necessary.

**Question: Creeper, a freshwater mussel, is present in the Ellis River in the Andover area. The outlet to Roxbury Pond is the start of the Ellis River. This should be considered.**

**MDIFW response:** The Creeper is a species of freshwater mussel listed as a species of special concern in Maine. Creepers are usually found in clean, flowing streams and rivers. Sometimes, Creepers are found in impounded stretches, and lake outlets can be productive habitats for this species. The creeper can tolerate a range of flow conditions, but is rarely found in high-gradient streams of mountainous regions. These mussels are listed as a species of special concern because they are rarely abundant where they occur and are vulnerable to major disturbances and degradations to their habitats. Some of the activities associated with the construction of the Record Hill Wind Facility will occur within the watershed that Creepers are known to occur. The applicant to has agreed to comply with DEP Best Management Practices for erosion and sediment control and road construction. As long as those BMPs are implemented MDIFW does not anticipate any negative impacts to this species.

**Question: What will the loon mortality be associated with the Record Hill Wind Facility?**

**MDIFW response:** There is a potential risk that loons may collide with a turbine associated with the Record Hill Wind Facility. However, we believe this risk is low since most of the loon flights would occur during daylight hours when they could see the structures. Preconstruction studies done by the applicant for this project did not show loons using the ridgeline at all. Similarly, none of the studies conducted at existing wind facilities in Maine have shown mortality events with loons. It is not anticipated that the local loon population, or migrating loons will be adversely impacted by the Record Hill Wind Project.

If you have any questions or would like further input, just let me know.

Thanks,

Bob

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6/9/2009

Callahan, Beth

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**From:** Cordes, Robert  
**Sent:** Wednesday, July 29, 2009 1:36 PM  
**To:** Callahan, Beth  
**Cc:** Timpano, Steve; Estabrook, Karen; Hodgman, Tom; Todd, Charlie; DePue, John; Stadler, Mark  
**Subject:** Wildlife comments: Project L-24441-24-A-N -- Record Hill Wind Project -- Roxbury  
**Attachments:** Microsoft Word - Evergreen Windpower, L21635 ORDER.pdf

Beth,

The findings presented in the application for development of the Record Hill Wind Project are consistent with other pre-construction studies conducted for wind power projects MDIFW has reviewed in Maine. MDIFW believes that additional pre-construction studies at this site are not necessary. This determination is based on state regulations and review policies. Considerations relative to federal law (Migratory Bird Treaty Act, U.S. Endangered Species Act, or Bald Eagle – Golden Eagle Protection Act) are under the jurisdiction of the U.S. Fish and Wildlife Service.

However, a detailed post-construction monitoring plan should be developed and approved as part of the Development Permit. MDIFW re-states our willingness to work with the applicant in developing this monitoring plan. The post-construction monitoring efforts should be at least as rigorous as the pre-construction efforts, and include an appropriate amount of radar studies allowing for comparison with preconstruction radar data. This monitoring plan should be conducted for a minimum of two years (preferably three) and can be distributed over a period of several years post-construction (i.e., years 1, 3, 5). We request that the post-construction monitoring plan is reviewed and approved by MDIFW and DEP prior to operation of any wind turbines

Post-construction monitoring protocols for wind projects are rapidly evolving. Many of the same techniques used at the Mars Hill Wind Power Facility should be used for the Record Hill Wind project and refined through consultation with MDIFW. This post-construction monitoring protocol should be adaptive as continued wind power projects shed new information on possible ways to minimize impacts on birds and bats. This may result in the modification of proposed studies through discussions among the applicant, MDIFW, and DEP.

MDIFW believes that post-construction monitoring protocols must incorporate a sampling effort at all turbine locations rather than a sub-set of turbines in order to determine impacts to wildlife at the individual turbine scale as well as the at the project scale. Sampling only a sub-set of turbines provides insight for the entire project and may overlook impacts at individual turbines. Sampling all turbine locations provides the opportunity to assess whether individual turbines pose an undo risk to wildlife. This sampling scheme will better guide MDIFW and the applicant in the implementation of appropriate and practical measures for avoiding or minimizing any unreasonable adverse impacts, recognizing that such measures will depend on the research and science as new technology is constantly developing. Such measures that should be considered, but are not limited to; modified lighting, modified operations, on-site habitat management, and habitat protection. For your reference I have included a copy of the Evergreen Wind Power L21635 Finding of Fact and Order, which outlines details of each of the previously mentioned amelioration measures.

The post-construction monitoring plan also should include a thorough survey of Bald Eagle activity associated with Roxbury Pond and the ridgeline habitats along the Record Hill Wind Project. This survey protocol should be developed in consultation with MDIFW and the U. S. Fish and Wildlife Service, and be inclusive of both migratory and non-migratory periods.

During the initial comment period, the applicant provided MDIFW with details about impacts to specific significant vernal pools (SVP). MDIFW was satisfied with the updated description of impacts. However, the applicant failed to provide the same level of detail for impacts to the SVP pool depressions in materials submitted for the amendment to the transmission line and collector substation. MDIFW requests a brief description of impacts to the SVPs in the recent amendments.

Thanks for the opportunity to comment, if you have any questions or would like further input, just let me know.

Bob

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