

9.0 UNUSUAL NATURAL AREAS

9.1 INTRODUCTION

Stantec Consulting (Stantec) completed evaluations to determine the presence of unusual natural areas within or in the vicinity of the Bingham Wind Project (project) area. Under the No Adverse Environmental Effect Standard of the Site Location of Development Law (06-096 CMR 375.12), an unusual natural area is defined as “any land or water area, usually only a few acres in size, which is undeveloped and which contains natural features of unusual geological, botanical, zoological, ecological, hydrological, other scientific, educational, scenic, or recreational significance.” For the purposes of this permit application, this section specifically addresses rare, threatened and endangered plants, and rare or exemplary natural communities.¹ State and federal agencies were contacted and Stantec reviewed other publically available data sources. In addition, Stantec conducted a series of environmental field surveys that included the identification and evaluation of the potential presence of unusual natural areas within the project area. Field surveys were conducted between the spring of 2010 and 2013.

9.2 METHODS

9.2.1 Agency Correspondence and Public Data Sources

The Maine Natural Areas Program (MNAP) was contacted to request information regarding known botanical features, including rare and exemplary natural communities, documented within the vicinity of the proposed project.

9.2.2 Field Surveys

Field surveys that identified and evaluated the potential presence of unusual natural areas, including rare plant species and rare and exemplary natural communities were completed concurrently with on-going environmental field surveys between the spring of 2010 and 2013. These field surveys included spring 2010 and 2011 vernal pool surveys and wetland delineations that were conducted from 2010 into 2013. During these field surveys, Stantec ecologists and scientists completed systematic surveys of the project area by walking appropriately spaced transects.

For additional details on the above-referenced surveys, refer to Section 7 of the permit application, including Exhibits 7A-7C.

¹ Details related to rare, threatened or endangered wildlife species and Significant Wildlife Habitat are provided in Section 7.

9.3 RESULTS

Neither agency correspondence nor field surveys identified any rare or exemplary botanical features within the ridgeline or electrical generator lead portions of the project area (Exhibit 9A). Correspondence from MNAP identified three sites in Brighton Plantation as having high potential to support rare botanical features; however Brighton Plantation is not part of the project area and is not impacted by the project. The ridgeline portion of the project area includes several low-elevation ridgelines and hills (i.e., below 1,800 feet in elevation) within a landscape now almost exclusively managed for commercial timber products. A network of unpaved logging roads occurs throughout this portion of the project area. Stonewalls, foundations, and small family cemeteries including the Adams and Clark cemeteries are evidence of former homesteads and previous agricultural use of the area. Much of the evidence of these former homesteads and agricultural use is located in Kingsbury Plantation north of Kingsbury Pond, surrounding Old Mountain Road. Evidence of a commercial slate mining operation is present north of Route 16 along the west side of Bigelow Brook. The electrical generator lead corridor crosses through an area of generally lower elevation; dropping to approximately 750 feet in elevation in southeastern Kingsbury Plantation to an elevation typically less than 600 feet across the remainder of the corridor. The landscape is primarily forested with areas of agriculture and timber harvesting as well as some sparse residential development.

The forests present within the project area include primarily second and third-growth mixed native forests, early successional and regenerating forest stands, and plantations of both native and exotic tree species, including red pine (*Pinus resinosa*), Jack pine (*Pinus banksiana*), red spruce (*Picea rubens*), and hybrid larch trees (*Larix* spp.). Several recent cuts that exceed 30 acres in size are scattered throughout the ridgeline area. The project area is dominated by Beech-Birch-Maple Forest and Spruce-Northern Hardwoods Forest in various stages of regeneration following timber harvesting. The MNAP ranks both of these community types as S4, apparently secure in Maine. Forested, scrub-shrub, and emergent wetlands, as well as small- to moderate-sized perennial and intermittent streams, are located throughout the ridgeline areas, and along the electrical generator lead corridor. Wetlands that occur on the ridgelines and hills are located primarily in topographic low points and drainages. Larger wetlands occur in areas of relatively moderate topography such as occurs between the northern end of Johnson Mountain and Route 16, and along the eastern portion of the electrical generator lead corridor. The electrical generator lead corridor crosses a few larger perennial streams such as Kingsbury Stream and Gales Brook.

9.4 SUMMARY: POTENTIAL IMPACT AND DESIGN CONSIDERATIONS

No sensitive botanical resources or natural communities were identified within the project area. Therefore, the project is not expected to adversely impact any unusual natural areas.

Exhibit 9A: Natural Resource Agency Correspondence

MNAP Response October 13, 2009

MNAP Response February 20, 2013



STATE OF MAINE
DEPARTMENT OF CONSERVATION
93 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0093

JOHN ELIAS BALDACCI
GOVERNOR

PATRICK K. MCGOWAN
COMMISSIONER

October 13, 2009

Sarah Barnum
Normandeau Associates, Inc
25 Nashua Road
Bedford, NH 03110

Re: Rare and exemplary botanical features in proximity to project area intersecting Bingham, Brighton Plt., Mayfield Twp., Kingsbury Plt., Blanchard Twp., and Wellington, Maine.

Dear Ms. Barnum:

I have searched the Natural Areas Program's Biological and Conservation Data System files in response to your request of September 25, 2009 for information on the presence of rare or unique botanical features documented from the vicinity of the Bingham project area you provided. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

Several areas within the project site have been identified in a landscape analysis conducted by our office as having high potential for supporting rare botanical features. Should the proposed project impact areas along the higher elevation slopes and summit of Foss Mountain, we would recommend that a botanical survey be conducted by a field biologist or consultant with demonstrated experience in identifying rare plants and natural communities associated with high elevation and peatland sites in central Maine. We would be glad to discuss this recommendation further should you need guidance in planning a survey.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

Letter to Sarah Barnum
Comments RE: Bingham, Brighton Plt., Mayfield Twp., Kingsbury Plt., Blanchard Twp., and Wellington,
Maine Project Site
October 13, 2009
Page 2 of 2

The Natural Areas Program is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. The Natural Areas Program welcomes coordination with individuals or organizations proposing environmental alteration, or conducting environmental assessments. If, however, data provided by the Natural Areas Program are to be published in any form, the Program should be informed at the outset and credited as the source.

The Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$150.00 for our services.

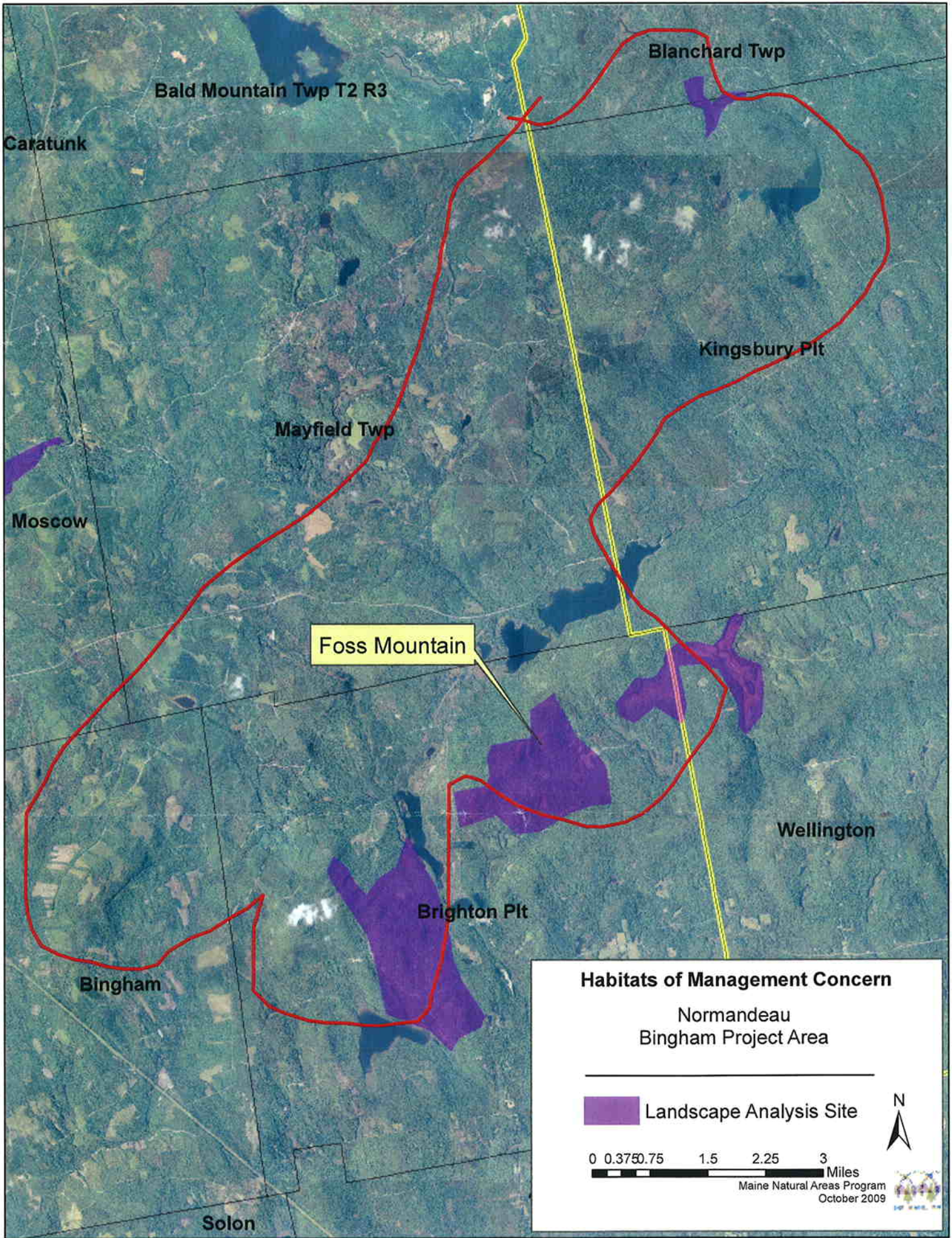
Thank you for using the Natural Areas Program in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,



Sarah Demers
Environmental Review Coordinator
Maine Natural Areas Program
207-287-8670

sarah.demers@maine.gov





STATE OF MAINE
DEPARTMENT OF CONSERVATION
93 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0093

PAUL R. LEPAGE
GOVERNOR

WILLIAM H. BEARDSLEY
COMMISSIONER

February 20, 2013

Dale Knapp
Stantec
30 Park Drive
Topsham, ME 04086

Re: Rare and exemplary botanical features in proximity to: Wind Project, Bingham, Maine

Dear Mr. Knapp:

I have searched the Natural Areas Program's Biological and Conservation Data System files in response to your request received February 19, 2013 for information on the presence of rare or unique botanical features documented from the vicinity of the project site in Bingham, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

The Natural Areas Program is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. The Natural Areas Program welcomes coordination with individuals or organizations proposing environmental alteration, or conducting environmental assessments. If, however, data provided by the Natural Areas Program are to be published in any form, the Program should be informed at the outset and credited as the source.

Letter to Dale Knapp, Stantec
Comments RE: Wind project, Bingham
February 20, 2013
Page 2 of 2

The Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$150.00 for two hours of our services.

Thank you for using the Natural Areas Program in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,



Don Cameron
Ecologist
Maine Natural Areas Program
207-287-8041
don.s.cameron@maine.gov