

VISUAL IMPACT ASSESSMENT
Saddleback Ridge Wind Project
Carthage, Maine

Prepared for

Patriot Renewables
Saddleback Ridge Wind, LLC

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October 2010

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1.0 EXECUTIVE SUMMARY

1.1 Overview

The Saddleback Ridge Wind Project (Project) is a 33 megawatt (MW) wind energy generation project proposed on approximately 1870 acres of land located in Carthage, Franklin County, Maine. The Project is being proposed by Saddleback Ridge Wind, LLC (SRW), an affiliate of Patriot Renewables, LLC.

The Project will consist of the following components:

- A total of up to 12 turbines, along with associated electrical interconnection infrastructure, will be installed along the 1.75-mile-long southern ridge of Saddleback Mountain in Carthage, which rises 1,700 – 1,900 feet above the surrounding landscape. Turbines will be located at elevations between 1,580± feet and 2,100± feet above sea level. All turbine components will be painted white.
- Synchronous red warning lights will be installed following Federal Aviation Administration (FAA) guidelines. The lights will be mounted on the top of some of the nacelles. The final lighting plan is determined by FAA approval but is expected to consist of lights on the two end turbines and on alternating turbines between them.
- Proposed access to the project site will be via a new road off Winter Hill Road in Carthage to the ridgeline of Saddleback Mountain (i.e. Saddleback Ridge). The new 8,880± foot access road will be 24 feet wide until it reaches the ridgeline, where the ridgeline road will expand to a width of 32 feet±, allowing for the crane needed to install the turbines. After construction is finished, some of the road will be re-vegetated and the road will be narrowed to a permanent width of 12± feet, with the exception of periodic turn-outs to allow for passing vehicles.
- Power from the turbines will be collected in a 34.5 kV underground collector line system buried along the ridgeline road. It will transfer to an aboveground line on the access road about 900 feet from where the access road meets the ridgeline road, and it will stay above ground until approximately the last 1,340 feet of the access road. From there it will move back underground to follow Winter Hill Road, then transition above ground where Winter Hill Road meets Route 2. It will cross Route 2 above ground and continue south-southeast through a private transmission corridor for approximately 7 miles, where it will connect to a new substation in Canton near CMP's 115 kV, 229 Line. A short 115 kV line will run approximately 1,000 feet south from the substation to the 229 Line.
- The Project also includes a 1,750± square foot (SF) Operations and Maintenance (O&M) building located southwest of the ridge near the base of the proposed project access road. The O&M building is designed to accommodate up to six employees and will include a 2,050± SF parking lot with nine parking spaces.

Within an eight-mile radius the Project would be visible from several scenic resources of state or national significance, as defined by LD 2283 *An Act to Implement Recommendations of the Governor's Task Force on Wind Power Development* (Maine Wind Power Law). These include the following:

- Mount Blue in Mount Blue State Park in Avon.
- Center Hill Overlook in Mount Blue State Park in Weld.
- The Perkins Lot on Bald Mountain in Perkins Township.
- Halfmoon Pond in Carthage and Mexico.
- Jay-Niles Memorial Library in North Jay.
- John G. Coburn House in Carthage.

1.2 Conclusion

As noted above there are six scenic resources of state or national significance within the viewshed of the Project. Within the 8-mile study area the most significant scenic resources are the views from the summit of Mount Blue, at distances of 7.4 to 8.8 miles, and from the Perkins Lot on Bald Mountain, at a distance of 1.8 to 3.3 miles. Halfmoon Pond is the only waterbody rated for its scenic resources¹ by the *Maine's Finest Lakes* study and is considered a scenic resource of state or national significance. However, the Project will be only slightly visible above the existing treeline and will not have an unreasonable adverse visual impact.

Throughout the majority of the study area, views of the Project are blocked by topography and roadside vegetation. Within the 8-mile study area, the Project will not be visible from any national natural landmarks, federally designated wilderness areas, national parks, scenic rivers, the Appalachian Trail, Maine DOT scenic turnouts on scenic byways, or scenic viewpoints located in the coastal area. The only publicly accessible property listed on the National Register of Historic Places with a view of the turbines is the Jay-Niles Library in North Jay, which will have filtered views at a distance of 7.8 miles. The John G. Coburn House, a private residence in Carthage with no public access, may have filtered views during the leaf-off months at a distance of 5.0± miles.

The assessment examined the following criteria for each scenic resource of state or national significance: context, significance, existing public use, viewer expectations, project impact, and potential affect on public use. This information was used to make a determination of whether the Project would significantly compromise views from these resources such that it would have an unreasonable adverse effect on its scenic character or the existing uses related to its scenic character. The visual impact on several of these resources is anticipated to be slight to moderate. The Project will not have an unreasonable adverse impact on scenic values and existing uses of scenic resources of state or national significance.

2.0 INTRODUCTION

2.1 Background

Terrence J. DeWan and Associates (TJD&A), landscape architects in Yarmouth, Maine, prepared this visual impact assessment (VIA) for the Project being proposed by SRW. The methodology used to assess the potential visual impacts of the Project involves research into potential scenic resources of state or national significance, computer mapping to determine the area that may be affected by the project, field evaluation of existing conditions, development of computer-based photosimulations to illustrate physical changes to the visible landscape, and evaluation of the visual impacts based upon criteria established in the Maine Wind Power Law.

The study area is focused on the Town of Carthage and includes all abutting towns and townships within eight miles of the project (see Figure 1: Expedited Windpower Permitting Areas in the Vicinity of the Saddleback Ridge Wind Project). The limits of the eight-mile study is based upon the Maine Wind Power Law, which instructs the Maine Department of Environmental Protection (Maine DEP) to “consider insignificant the effects of portions of the development's generating facilities located more than 8 miles, measured horizontally, from a scenic resource of state or national significance.” (§ 3452.3.)

¹ Scenic resources, as defined by the Maine Lakes Study, is an evaluation of the scenery of the lake as a whole, as seen from the edge or surface of a lake. *Maine's Finest Lakes, The Results of the Maine Lakes Study*. Maine Critical Areas Program Planning Report No. 90. October 1989.

This report is based upon mapping and design plans provided by Tetra Tech EC, Inc. and SRW. TJD&A created Figure 2: Viewshed Map of the Saddleback Ridge Wind Project Study Area with WindPro² software to help determine the limits of potential project visibility.

TJD&A used the three-dimensional resources of Google Earth Pro and WindPro to look at the study area from the air and on the ground. These digital tools give reviewers the capability to experience the overall physical characteristics of the landscape and thereby better understand the setting of the wind project relative to the surrounding topographic features.

2.2 Field Investigations

Field data was collected by TJD&A personnel during site visits on August 6 and 7, 2009, and August 6, and September 1 and 25, 2010. Fieldwork concentrated on evaluating and photographing scenic areas of state or national significance, as noted above, as well as viewpoints from public roads, ponds, and major publicly accessible hiking trails. The fieldwork assessed potential Project visibility, taking into account existing vegetation, buildings, and other physical features that were not incorporated into the WindPro analysis.

Photographs of the project area were taken with Nikon D70 and Nikon D300 digital cameras, recording at the highest resolution. The cameras were set to capture images equivalent to those taken by a film camera equipped with a 50 mm (i.e., ‘normal’) lens, which is comparable to a non-distorted image seen by the human eye.³ GPS coordinates were recorded with a JOBO PhotoGPS mounted on the camera’s hot-shoe to capture the exact location of each photograph. A selection of annotated representative views within the study area is included in Appendix A: Study Area Photographs. Photographs were also used in the preparation of the photosimulations included in this VIA. All photographs of the study area are available on CD upon request.

2.3 Photosimulations and Viewshed Mapping

A series of photosimulations (computer-altered photographs) have been prepared to illustrate the anticipated change to views from scenic resources of state or national significance, as well as from characteristic viewpoints within the viewshed, resulting from the construction of the Project. The following section describes the methodology used to develop these images:

- TJD&A prepared two viewshed maps of the eight-mile study area with WindPro software to determine where any part of any of the turbines, access roads, or transmission line may be visible. Viewshed Map A is very conservative in that it does not account for the screening effects of existing vegetation, buildings, or other structures that will block views of the Project from most roads and population centers. Viewshed Map B incorporates vegetation landcover data from the Maine GIS Data Catalog and accounts for the screening effects of vegetation.⁴

² WindPro software was developed for the wind energy industry and is used world-wide for planning, design, and visual representation.

³ The Nikon D300 was set to a focal length of 35 mm, based upon manufacturer’s recommendations and field tests conducted by TJD&A.

⁴ The assumed heights for existing vegetation are: Deciduous Forest - 40’, Mixed Forest - 40’, Wetland Forest – 30’, Light Partial Cut – 40’, Evergreen Forest – 40’, Heavy Partial Cut – 40’, and Regenerating Forest – 20’.

- Fieldwork by TJD&A verified the relative accuracy of the viewshed maps and determined the location of characteristic viewpoints to use for photosimulations. The locations were selected to illustrate visual impacts to scenic resources throughout the eight-mile study area, with an emphasis on those areas of greater visual sensitivity and viewer expectation. The photographs used in Appendix A: Study Area Photographs and Appendix B: Photosimulations were taken from publicly accessible locations to illustrate the wide variety of landscape types within the study area. Where possible, ‘worst-case’ photographs were taken (i.e., where the most number of turbines would be visible).
- Photosimulations were prepared by TJD&A using the Visual-Photo Montage WindPro module. A digital elevation model (DEM) of the Project area was created in WindPro from National Map, an online data source from USGS (nationalmap.gov). The specifications of the wind turbines (location, manufacturer, model number, base height, rotor diameter, and color) were entered into WindPro, which created three-dimensional images of the turbines and placed them in the proper location on the model. Digital photographs of the selected views were imported into the computer and merged with the DEM, matching the lens focal length, date and time of photograph, digital resolution, and lighting. The DEM was matched with the photograph using the known elevation, latitude, and longitude data from the PhotoGPS log.
- Post-production editing involved eliminating context data and other adjustments (e.g., removing parts of towers that are blocked by terrain, trees, or buildings). Final adjustments were made to account for weather conditions, haze, and other environmental factors that can change the appearance and visibility of the turbine components.
- The Project model was also inserted into Google Earth to check the registration of the photographs with the computer model, to determine the extent that existing vegetation blocks views of the turbines, and to verify the accuracy of the viewshed maps and photosimulations.
- Google Earth was used to determine the relative visibility of access roads, crane pads, and transmission lines. Where these associated facilities were found to be visible, the photosimulations were adjusted in Photoshop to illustrate changes in the texture and color of the surrounding forestland.
- The resultant photosimulations (presented in Appendix B: Photosimulations) were merged into panoramas using Photoshop to provide a more contextual view of the landscape. Each panoramic view is also accompanied by a ‘normal’ view to approximate what the human eye would see.

The legend in the panoramic views provides the following information:

- **Turbine Model:** the manufacturer and model number. The code indicates the rotor diameter in meters.
- **Hub Height:** The distance from the base to the center of the hub in meters and feet.
- **Rotor Diameter:** The diameter of the turbine blades in meters and feet.
- **View Coordinates:** Latitude and longitude of the photograph and computer model.
- **Viewer Elevation:** Approximate distance above mean sea level, in meters and feet.
- **Direction of View:** The compass direction of the photosimulation (indicated by a red dot and arrows on the Viewpoint Location Map).
- **Closest/Farthest Visible Turbine:** The horizontal distance in miles between the viewpoint and the closest and farthest turbines that may be visible from a particular viewing location at the time that the photograph was taken.

- **Turbines Visible:** The approximate number of turbines that would likely be seen from the specific viewpoint, considering the effects of vegetation and structures.
- **Date/Time:** When the photograph was taken.

The normal view also provides the distance (in inches) that the reviewer should hold the photosimulation from the eye to accurately replicate real-world conditions. This distance is determined by the following formula:

$$\text{Distance from viewer} = \text{Width of image} / (2 \times \tan(\text{HFOV}/2)).^5$$

Based upon this formula and the cameras used (Nikon D70 and Nikon D300), the distance from the viewer's eye is approximately 1.5 times the image width. For an image that is 13.75" wide, the proper viewing distance would be 20.36".

3.0 REGULATORY REQUIREMENTS

The Maine Wind Power Law created a process to expedite wind power projects in places where they are most compatible with existing patterns of development and resource values. As demonstrated in Figure 1, Carthage and many of the surrounding towns and townships are considered areas that meet these criteria.

The Maine Wind Power Law requires an applicant attempting to permit an expedited wind energy project to provide Maine DEP with a visual impact assessment. This assessment must address the aforementioned evaluation criteria if Maine DEP determines such an assessment is necessary. There is a rebuttable presumption that a visual impact assessment is not required for those portions of the development's generating facilities that are located more than 3 miles, measured horizontally, from a scenic resource of state or national significance. Maine DEP may require a visual impact assessment for portions of the development's generating facilities located more than 3 miles and up to 8 miles from a scenic resource of state or national significance. This may be required if the Maine DEP finds there is substantial evidence that the pertinent scenic resource of state or national significance is significant and there is the potential for significant adverse effects. In determining whether an applicant for an expedited wind energy project must provide a visual impact assessment, Maine DEP shall consider:

- A. The significance of the potentially affected scenic resource of state or national significance;
- B. The existing character of the surrounding area;
- C. The expectations of the typical viewer;
- D. The project purpose and the context of the proposed activity;
- E. The extent, nature, and duration of potentially affected public uses of the scenic resource of state or national significance and the potential effect of the generating facilities' presence on the public's continued use and enjoyment of the scenic resource of state or national significance; and
- F. The scope and scale of the potential effect of views of the generating facilities on the scenic resource of state or national significance, including but not limited to issues related to the number and extent of turbines visible from the scenic resource of state or national significance, the distance from the scenic resource of state or national significance and the effect of prominent

⁵ National Research Council. Environmental Impacts of Wind-Energy Projects. Washington. 2007.

features of the development on the landscape. A finding by Maine DEP that the development's generating facilities are a highly visible feature in the landscape is not a solely sufficient basis for determination that an expedited wind energy project has an unreasonable adverse effect on the scenic values and existing uses related to scenic character of a scenic resource of state or national significance. In making its determination, Maine DEP shall consider insignificant the effects of portions of the development's generating facilities located more than 8 miles, measured horizontally, from a scenic resource of state or national significance.

SRW conducted a visual impact assessment beyond the 3-mile minimum requirement in recognition of scenic resources of state or national significance within 8 miles of the project.

4.0 PROJECT DESCRIPTION

The following section describes the visible components of the Saddleback Ridge Wind Project and its associated facilities.⁶

4.1 Wind Turbines

The turbines used for the Project will consist of up to 12 General Electric (GE) 2.75-100 2.75MW turbines. Each turbine tower will be approximately 85 meters tall (approximately 278 feet) from the ground to the center of the hub, with a 100-meter rotor, resulting in a total height from ground to the tip of a fully extended blade of a maximum 135 meters (approximately 443 feet).

Each of the nacelles will be roughly parallel to the ridgeline, creating a sense of order throughout the project. The turbines are controlled electronically so they always face into the wind. The blades will spin very slowly in low wind and will begin producing power when the wind velocity reaches approximately 3 m/s (6.7 mph). If the wind maintains a certain high velocity (generally 25 m/s or 56 mph, but will vary with the intensity of turbulence) over a short period of time the machines will cut out. The turbines may not be operational at other times, such as when the turbines are in-line (wind direction is parallel to the string, which limits the number of turbines that can operate) or when they are taken out of service for maintenance.

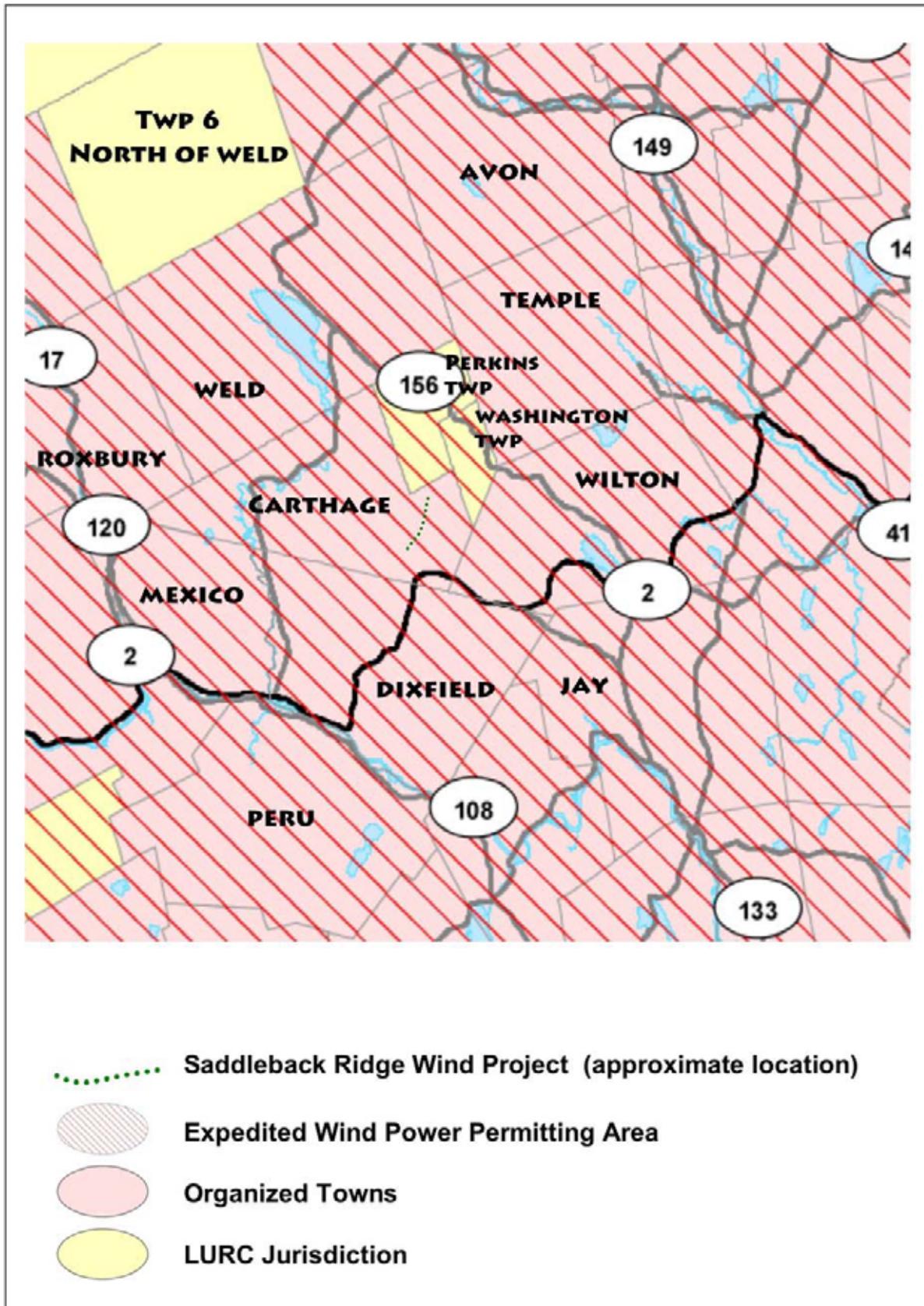
Depending upon the wind velocity, the blades will rotate at 5 to 14.8 revolutions per minute (RPM), which is equivalent to one revolution every 4 to 12 seconds. With unobstructed viewing conditions, individual blades will be clearly visible with virtually no detectable blurring while they rotate.

The turbines will be spaced a minimum of two rotor diameters apart (200 meters / 656 feet). Most of the turbines will be spaced 700 feet apart, with some over 1,000 feet apart. Turbine spacing is a function of meteorological considerations related to wind speed and direction, interference from adjacent turbines, and other technical factors. The final siting of individual turbines takes into account the wind resource, site-specific topography, access road siting, wetland proximity, wildlife habitat, and other site conditions.

The turbine components (base, nacelle, and blades) will be white to provide contrast for pilots. White turbines will allow the Project to only have red nighttime lighting. Turbine contrast and visibility is a highly variable phenomenon; turbines can appear to change from dark gray to a shade that almost matches

⁶ The Maine Wind Power Law defines 'associated facilities' as those 'elements of a wind energy development other than its generating facilities that are necessary to the proper operation and maintenance of the wind energy development, including but not limited to buildings, access roads, generator lead lines and substations'.

Figure 1: Expedited Wind Power Permitting Areas in the Vicinity of the Saddleback Ridge Wind Project



the background sky, depending upon the time of day, orientation of the viewer, atmospheric conditions, and weather. In midground and background viewing distances, where the Project will typically be seen, the turbines will appear as light gray due to the effects of atmospheric perspective, especially on hazy or overcast days.

4.2 Project Lighting

Exterior lighting for the wind turbines will follow the Federal Aviation Administration (FAA) marking and lighting guidelines for aviation safety. SRW plans on installing red LED L-864 or similar flashing hazard beacons, which will be mounted on the top of the wind turbine nacelles at the top of the tower in accordance with an FAA-approved lighting design. The number of turbines with installed lights will be based on FAA Marking and Lighting Guidelines (FAA Advisory Circular 70-7460-1K), which requires lighting turbines at the ends of each string and at half-mile intervals. Under normal operations, the lights will appear between sunset and sunrise as synchronous red strobes flashing at the longest interval allowed by the FAA. By using white towers and turbines, which offer a considerable amount of visual contrast for pilots, the FAA will not require lighting during the day. If an alternate color were used, the FAA would likely recommend white strobes for daytime lighting, which would make the Project considerably more noticeable. Turbine warning lights are designed to be brightest when viewed from above or at the same horizontal plane to make them most apparent to pilots. The intensity of the light diminishes below the top of the tower to minimize impacts on surrounding land uses.

The greatest visual impact from lighting on scenic resources of state or national significance will occur at Mount Blue and the Center Hill Overlook in Mount Blue State Park. Since there are no designated camping areas on the trail or summit of Mount Blue, there should be few people who would be affected by nighttime views of the lights from the east side of the state park. The Mount Blue State Park campground and beach areas on the west side of Webb Lake will not have views of the Project and will not be affected by nighttime lighting. The Overlook parking area does not appear to be gated to limit nighttime use.

4.3 Ridgeline Road

Access to the turbines along the ridgeline will be over a 9,625 foot ridgeline road that will connect the turbine foundations. Initially, the gravel road will be 32± feet in width and designed to provide the construction crane safe access to the structures throughout installation process. After construction the width of the ridgeline road will be reduced to 12 feet. In some instances the topography will dictate a circuitous route to accommodate the engineering requirements of the installation equipment and minimize site disturbance. In most locations the ridgeline roads will be screened by existing vegetation on either side of the road and would not be highly visible from outside the immediate area.

4.4 Access Road

The Project will include construction of a new 8,880± foot access road extending from the Winter Hill Road to the Saddleback ridgeline, where 12 wind turbines and an electrical collection infrastructure will be installed. The proposed road will be 24± feet in width in most locations to accommodate construction vehicles and delivery trucks used for the turbine components construction and delivery, including limited pullouts for the passing of large vehicles. After construction, the width of the access road will be reduced to 12 feet. The access road extends beyond the existing road to the Skye Theater and should not be visible to the general public beyond its immediate intersection with Winter Hill Road.

4.5 Electrical Collection System

Power from the turbines will be collected in a 34.5 kV underground collector line system buried along the ridgeline road. It will transfer to an aboveground line about 900 feet down the access road and will stay aboveground until the last 1,340± feet of the access road. From there it will move back underground to follow Winter Hill Road, then transition aboveground where Winter Hill Road meets Route 2. It will cross Route 2 aboveground and continue south-southeast through a private transmission corridor for approximately 7 miles, where it will connect to a new substation in Canton that will connect to CMP's 115 kV, 229 Line. At the substation, power will be converted to 115 kV and enter the regional market through transmission lines owned and operated by CMP.

Where the transmission line is below grade along Winter Hill Road, it will be located beneath the shoulder within the road right-of-way. Since there should be minimal tree clearing to accommodate the underground transmission line, the visual impact to Winter Hill Road will be minimal. The new aboveground transmission line, beginning at Route 2 and heading southward, will be located within a 60 to 100 foot⁷ wide cleared corridor. The transmission line will be visible as it crosses over Route 2, and the 60-foot-wide cleared opening will be visible from Route 2. The vegetation along this section of the road is generally 40 to 50 feet tall; the transmission crossing will be perpendicular to the road so views into the new clearing will be minimal for passing motorists. The transmission line should not be visible from the informal pulloff located 0.25± miles to the south on Route 2. The transmission line will not be visible from any scenic resources of state or national significance.

4.6 Substation

The proposed substation will be located off Ludden Lane, a woods road off Canton Point Road in Canton, and north of the existing CMP 115 kV Section 229 transmission line. The substation will be approximately 400 feet long by 200 feet wide and surrounded by an 8-foot high chain link fence. The tallest components of the substation will be 60 feet high, generally the same height as the surrounding vegetation. The substation will be connected to the Section 229 transmission line via a 1,000-foot long 115 kV transmission line. The existing Section 229 transmission line is briefly visible from a narrow opening at the intersection of Ludden Lane and Canton Point Road. The proposed substation and the 115 kV connecting line will not be visible from Canton Point Road (over 900 feet south of the substation) because of the heavy mixed vegetation along the north side of the road. The substation will not be visible from any scenic resources of state or national significance.

4.7 Meteorological Towers

The existing meteorological tower is temporary and may be relocated during construction and remain on site for up to 2 years. The Project will not include a permanent meteorological tower.

4.8 Crane Pads and Crane Assembly Area

A cleared and level pad area less than two acres in size will be required at the base of each turbine for staging, crane movement, and turbine installation. Additional clearing may be needed in some areas to account for cut/fill slopes. In addition, a crane assembly area will be required for turbine installation. Following construction the crane assembly area will be allowed to naturally revegetate.

⁷ Approximately the northern third of the proposed transmission line will be within a 60-foot wide cleared corridor, the middle third will be within a 60 to 100-foot cleared corridor, and the southern third will be within a 100-foot cleared corridor. Please refer to the electrical design drawings in Exhibit 2 of the application for more detail.

4.9 Operations and Maintenance Facility

The Project also includes an approximately 1,750-square-foot Operations and Maintenance (O&M) building located southwest of Saddleback Ridge and at the base of the proposed project access road. The O&M building is designed to accommodate up to six employees and will include an approximately 2,050 SF parking lot with nine parking spaces. The O&M building will be connected to the turbines through an overhead pole line for both electricity and fiber-optic cabling. The building will be served by on-site water and septic.

SRW will leave adequate forest cover to screen the view of the building from Winter Hill Road. The building will not be visible from any other public access road. This building will be sited harmoniously with the existing natural terrain and is being located at the back of the existing parking area for the Skye Theater, one of the abutting properties. It will have a dark roof and be painted a neutral color to minimize contrast with the surrounding vegetation.

The O&M building will have two standard sodium vapor flood lights with cutoff fixtures mounted on the building exterior and oriented to illuminate the adjacent parking area. These lights are not likely to be visible from any adjacent property. The O&M building will not be visible from any scenic resources of state or national significance.

5.0 PROJECT STUDY AREA

5.1 Existing Character of the Surrounding Area

The existing character of the surrounding area is described by its landforms, water resources, vegetative patterns, and cultural character. The potential viewshed within eight miles of the Project is illustrated on Figure 2: Viewshed Map and includes all of Carthage, plus all or portions of Weld, Perkins Township, Washington Township, Temple, Wilton, Dixfield, Mexico, Avon, Jay, Canton, Peru, and Roxbury.

Resources within the 8-mile study area that are considered scenic resources of state or national significance include Mount Blue State Park, viewpoints on the Perkins Lot in Perkins Township, and seven properties on the National Register of Historic Places (See Table 2: National Register of Historic Places within 8 Miles of the Saddleback Ridge Wind Project, in Section 5.1.4). These are all described in greater detail in Section 6. Characteristic photographs of these resources and the landscapes that are typical of the study area are provided in Appendix A: Study Area Photographs.

5.1.1 Landform

The study area is located at the southern end of the Western Maine Foothills biophysical region.⁸ This part of the state is characterized by relatively low, rounded mountains that rise 700 to 1700 feet above the surrounding river valleys and lowlands. Rocky outcrops and bold escarpments are found on several of the mountains, especially on south-facing slopes. Small streams in steeply sloping channels are common.

Saddleback Mountain is part of a series of distinct landforms that extend in a northeast/southwest direction between Holman Mountain in Dixfield on the south and Spruce Mountain in Avon on the north.

⁸ McMahon, J.S. *The Biophysical Regions of Maine: Patterns in the Landscape and Vegetation*. M.S. Thesis. University of Maine, Orono. 1990. Bailey, R.G. *Description of the Ecoregions of the United States*. Miscellaneous Publication No. 1391, U.S. Department of Agriculture, Forest Service, Washington, DC. 1995.

Other notable mountains include Bald Mountain in Washington Township (el. 2,360), Kinneys Head in Temple (el. 2,101), and Mount Blue in Avon (el. 3,180).

Saddleback Mountain consists of two very distinct ridgelines. The northern ridge, which faces Bald Mountain, extends for approximately 4,000 feet in an east-west direction. Most of this portion of the mountain is owned by the Town of Carthage. This part of the mountain is characterized by steep side slopes with a relatively flat ridge.

The ridge that will be used for the project (i.e., Saddleback Ridge) extends 10,000 feet in a northeast-southwest direction, starting at the high point on Saddleback Mountain (el. 2,580).

5.1.2 Water resources

The land on the northwest side of the Saddleback Ridge site drains to Webb River, a meandering waterbody which flows from Webb Lake to the Androscoggin River in Dixfield, a distance of 14± miles. On the east side of the ridge, the land is drained by several small streams (Wilson Stream, Anderson Brook, Seven Mile Stream) that ultimately flow into the Androscoggin River in Jay.

The closest turbine would be 3.2 miles from the closest point of Webb River and 6.0 miles from the Androscoggin River; however, the Project will not be visible from either river, due to intervening topography and riparian vegetation. Neither the Webb River nor this section of the Androscoggin River (from Rumford to south of Auburn) are included in the *Maine Rivers Study*. The *Study* does identify the segment of the Androscoggin River north of Rumford as a Class C River, which means that it does have some river resources of statewide significance (i.e. canoe touring and critical/ecological), but not unique or significant scenic resources.

Table 1. Lakes and Ponds within 8 miles of the Saddleback Ridge Wind Project

| LAKE/POND | TOWN | SIZE (acres) | DIST (miles) | # OF TURBINES VISIBLE | SCENIC RATING | OVERALL RATING |
|---------------|-------------|--------------|--------------|--|---------------|----------------|
| Halfmoon Pond | Carthage | 53 | 5.4 | Small portions of blades from 6 turbines | O | 1B |
| Podunk Pond | Carthage | 51 | 1.7 | 12 | None | 2 |
| Hills Pond | Perkins Twp | 22 | 3.2 | Portions of 4 | None | 3 |
| Webb Lake | Weld | 2,173 | 4.0 – 9.0 | 12 | None | 1B |
| Varnum Pond | Wilton | 331 | 5.7 | 0 | None | 2 |
| Wilson Pond | Wilson | 563 | 5.2 | 2–5 | None | 1B |

Scenic Resource of State or National Significance.

SIZE: Area of waterbody in acres.

DIST: Distance to the nearest turbine.

TURBINES VISIBLE: The approximate number of turbines within eight miles that may be visible from the lake/pond.

SCENIC RATING: S: Significant O: Outstanding.

OVERALL RATING:

1A: Lakes with multiple outstanding values or 1 outstanding and 4 or more significant values.

1B: Lakes with a single outstanding natural value.

2: Lakes with no outstanding values but at least one significant resource value.

3: Lakes with no known outstanding or significant values.

There are 6 lakes and ponds within the 8-mile study area. These range in size from Webb Lake (2,173 acres) northwest of the project in Weld, to Hills Pond (22 acres) in Perkins Township (see Table 1: Lakes and Ponds within 8 miles of the Saddleback Ridge Wind Project). Halfmoon Pond in Carthage and Mexico is the only waterbody rated for its scenic resources⁹ by the *Maine's Finest Lakes* study and is considered a scenic resource of state or national significance. See Section 6.4 D for a description of Halfmoon Pond and the potential visual effect of the Project.

While Webb Lake is not considered a scenic resource of state or national significance, it is adjacent to the western portion of Mount Blue State Park. *Maine's Finest Lakes* rates its shoreline¹⁰ and fisheries¹¹ resources as significant, and its wildlife resources¹² as outstanding; however, it did not consider the scenic resources of the lake to be significant. The lake is used by people in the park and the surrounding camps for fishing, boating, and swimming. A photosimulation has been prepared to illustrate the impact that the turbines would have on Webb Lake (see Appendix B).

5.1.3 Vegetative patterns

Most of the current land use in the project area consists of undeveloped forestland and active commercial forestry operations. The upper portions of Saddleback Ridge are dominated by Red and Black Spruce mixed with smaller amounts of Balsam Fir and Gray Birch. The lower elevations are primarily hardwoods, with an extensive series of logging roads and skidder trails leading to log yards at the base of the mountain.

5.1.4 Cultural character

Cultural features within eight miles of the project include:

- **Town centers** of Wilton (7.0± miles east southeast of the nearest turbine) and Dixfield (5.2± miles southwest). In Wilton several of the turbines will be seen from portions of Wilson Pond, (specifically at the town beach, park, and boat launch at the southern end of the pond), west of the town center. Approximately 3 turbines will be visible from Kineowatha Park on the east shore of Wilson Pond, northwest of the town center. In Dixfield, the Project will be blocked by vegetation and intervening topography and will not be visible from the town center.
- **Small villages** of Carthage and Berry Mills (5.0 miles and 4.0 miles, respectively, west of the nearest turbine), Weld (6.0 miles north northwest), and East Dixfield (4.4 miles southeast). In most of these places the Project should be blocked by vegetation and intervening topography. The exception is in East Dixfield, where portions of all 12 turbines will be visible at the Route 2/17 intersection.

⁹ Scenic resources, as defined by the Maine Lakes Study, is an evaluation of the scenery of the lake as a whole, as seen from the edge or surface of a lake. *Maine's Finest Lakes, The Results of the Maine Lakes Study*. Maine Critical Areas Program Planning Report No. 90. October 1989.

¹⁰ Shoreline character refers to those factors that make the shore area of a lake suitable for recreation pursuits such as swimming, diving, wading, camping, picnicking, fishing, and boating. *Maine's Finest Lakes, The Results of the Maine Lakes Study*. Maine Critical Areas Program Planning Report No. 90. October 1989.

¹¹ Fisheries are any lake containing one or more cold water or warm water sport fish species in sufficient abundance to be regularly pursued by anglers, any lake that has the potential for supporting such a fishery, or any lake that contains non-sport fish species of significant economic, ecologic, or scientific value. *Maine's Finest Lakes, The Results of the Maine Lakes Study*. Maine Critical Areas Program Planning Report No. 90. October 1989.

¹² Wildlife resources refers to lake-related game and non-game species, found within 250 feet of a lake. *Maine's Finest Lakes, The Results of the Maine Lakes Study*. Maine Critical Areas Program Planning Report No. 90. October 1989.

- **Waterfront cottages** are found on several of the lakes and ponds within eight miles of the Project. The largest concentration is found on Webb Lake in Weld, where cottages line the northern half of the lake. On the west side of the lake, most of the cottages are oriented to the north northeast toward Mount Blue and will not have views of the project. On the east side of the lake, most of the cottages are oriented to the southwest, toward Spruce Mountain and other nearby mountains. A few of the cottages at the northern end of the lake may see turbines to the south, at distances of 7 to 8 miles.

Varnum Pond in Wilton has a dozen cottages scattered throughout the waterfront. However, a series of intervening hills and mountains (Derby Mountain, Dean Mountain, Varney Mountain, Old Bluff, Crockett Mountain, Kinneys Head, Gleason Mountain, and Center Hill) will block the view of the turbines from the surface of the lake and its shoreline.

Wilson Pond has approximately five dozen cottages on its shoreline, mostly concentrated at the southern end near Wilton. Groups of 2 to 5 turbines may be visible from various locations on the lake at distances of 5.2 to 7.1 miles. The string of turbines on the west side of Wilson Pond will be blocked by Law Mountain in Wilton. Where turbines are visible they will appear in a notch formed by Law Mountain and the peak of Saddleback Mountain.

There are no cottages on Hills Pond in Perkins Township, or on Podunk Pond or Halfmoon Pond in Carthage.

- **The Flag Wildlife Management Area** is located to the southwest of Mount Blue State Park in Weld. The 172± acre parcel is wooded and does not have any designated trails or parking areas managed by Inland Fisheries and Wildlife. The lot was donated to the state 30 or 40 years ago and may be managed as a woodlot in the future. There are no current management guidelines for the parcel.¹³
- **Historic Resources.** Seven properties within eight miles of the Project are on the National Register of Historic Places, as noted in Table 2: National Register of Historic Places within 8 Miles of the Saddleback Ridge Wind Project¹⁴. The historic resources include a private residence (Coburn House), municipal libraries, a town hall, a school, a grange store, and a former boarding house. Two of these properties may have views of the Project. The Coburn House (a private residence not open to the public) is heavily screened, and turbines would only be visible from the house and property (if at all) through dense mixed vegetation during the leaf-off seasons. The turbines would be partially visible through vegetation from the Jay-Niles Memorial Library at a distance of 7.8 miles. The remaining historic resources are all screened by existing vegetation and/or topography and would not be affected by the Project. The impacts on the Coburn House and the Jay-Niles Memorial Library are discussed in Section 6 below.

¹³ Chuck Hulsey, Region D Wildlife Biologist, Maine Department of Inland Fisheries and Wildlife. Personal communication 10/5/10.

¹⁴ The VIA and Historical Architecture Reconnaissance Survey (HARS) were undertaken using different study parameters. The VIA looked at all listed historical resources within 8 miles of the Project. The HARS was limited to those areas within five miles of the nearest turbine that the TJD&A Viewshed Map (Figure 2) indicated would potentially have a view of the Project. Because of these different study parameters, the VIA examined the seven resources listed above, while the HARS analyzed the effect of the Project on only the John G. Coburn House, indicated in **bold** in Table 2.

Table 2: National Register of Historic Places within 8 Miles of the Saddleback Ridge Wind Project

| HISTORIC PLACE | TOWN | NPS REF # | DISTANCE (miles) | TURBINES VISIBLE |
|-----------------------------|---|-----------------|------------------|--------------------------|
| John G. Coburn House | Carthage | 02000347 | 5.0 | up to 12 filtered |
| Goodspeed Memorial Library | Wilton | 88003019 | 7.0 | 0 |
| Bass Boarding House | Wilton | 88000396 | 7.0 | 0 |
| North Jay Grange Store | North Jay | 74000150 | 7.8 | 0 |
| Jay-Niles Memorial Library | North Jay | 87000414 | 7.8 | 8± filtered |
| Temple Intervale School | Temple | 85000240 | 7.8 | 0 |
| Weld Town Hall | Weld | 07000597 | 5.8 | 0 |
| | National Register of Historic Places where turbines will be visible | | | |
| Boldface Type | Places evaluated by Historical Architecture Reconnaissance Survey | | | |

- **Low density rural residential development** is found in scattered locations throughout the study area. The closest concentration of homes from which there will be views of the turbines and transmission line is at Tainter Corner in Carthage, where a group of 24± homes is located on the north side of Route 2. The proposed 34.5 kV transmission line will be located underground along Winter Hill Road until it reaches Route 2 at Tainter Corner. The transmission line will be visible as it crosses over Route 2 and traverses a hill to the east of the road within a new 60’ wide cleared corridor.
- **Recreational areas** include the beach, campground, boat launch, overlook and trails at Mount Blue State Park in Weld; the swimming beach, town park, boat launch, and picnic area at the south end of Wilson Pond; the Wilson Lake Country Club and Golf Course; and the Kineowatha Park in Wilton; the Kawanhee Inn (private) on the east side of Webb Lake in Weld; Camp Kawanhee, a non-profit boys camp on the east side of Webb Lake in Weld; Dummer’s Beach Campground (private) on Webb Lake in Weld; the Whistle Stop Trail from Jay to Farmington (about one mile of the 13-mile trail is located in woodlands within eight miles of the Project); and the Rocky Mountain Terrain Park on Winter Hill Road in Carthage, a 700-acre private facility that offers a variety of opportunities for off-road enthusiasts (4-wheelers, dirt bikes, dune buggies, mountain bikes, and snowmobilers etc.). The majority of these areas will not have views of the turbines; recreational resources with views of the Project are discussed in Section 6 below.
- **Scenic Byways:** There are no state or federally designated scenic byways within eight miles of the Project. The closest scenic byway is Route 17 in Roxbury, which is part of the state-designated segment of the Rangeley Lakes Scenic Byway. This State Scenic Byway becomes a National Scenic Byway at the Byron/Township D line, as it heads toward the Rangeley area.
- **Hiking Trails:** The *Maine Atlas and Gazetteer* notes two hiking trails in the study area: the Bald Mountain hiking trail (on private land) in Washington Township, and the Mount Blue Trail in Mount Blue State Park in Weld and Avon. The study area has many other opportunities for hiking on jeep trails and logging roads throughout the mountains, although most are on private property.

The Bald Mountain trail crosses privately owned land and leads to the Perkins Lot, a 166.7-acre parcel of Maine Public Reserve Land in Perkins Township, designated as a scenic viewpoint of

state or national significance. The Mount Blue Trail is likewise a scenic resource of state or national significance since it is located within a state park. Both of these trails are described further in Section 6 below.

The closest point on the Appalachian National Scenic Trail is 18.8± miles to the north near Long Pond in Sandy River Plantation. There will be no impact on the Appalachian Trail.

- **Snowmobile Trails:** Interconnected Trail System (ITS) 82, which connects the Rumford/Mexico area on the west with Wilton on the east, traverses the lower slopes of Saddleback Mountain.
- **ATV Trails:** Designated ATV trails are found in portions of the study area. The Webb River Valley ATV Club maintains a trail system that includes the Winter Hill Road south of the Project.¹⁵ The Temple trail riders also maintain trails throughout the Town of Temple.
- **Existing Structures:** There are no existing structures on the majority of the Project site other than two temporary meteorological towers erected by SRW. The Skye Theater and a private home are located near the base of the access road.

5.2 Distance Zones

The concept of distance zones is based upon the USDA Forest Service visual analysis criteria for forested landscapes and on the amount of detail that an observer can differentiate at varying distances.¹⁶ Given the size of the wind turbines that are being used throughout Maine, the distances that have been used to evaluate scenic impacts may have different significance for wind power projects. Nonetheless, the evaluation of foreground, midground, and background distance zones provides a useful framework for evaluating the presence of wind turbines and their related facilities in the larger landscape. The distance zones used for the study of the Project are defined as the following.

- **Foreground: 0 to 1/2 mile in distance.** Within the foreground, the observer would be able to detect surface textures, details, and a full spectrum of color. For example, the details of the turbines (blades, nacelles, support towers) would be readily apparent. There are no scenic resources of state or national significance within the foreground of the Project.
- **Midground: 1/2 mile to 3-5 miles in distance.** The midground is a critical part of the natural landscape. The Maine Wind Power Law presumes that a visual impact assessment will be required to evaluate potential scenic impacts to scenic resources within three miles. Within this zone the details found in the landscape become subordinate to the whole: individual trees lose their identities and become forests; buildings are seen as simple geometric forms; roads and rivers become lines. Edges define patterns on the ground and hillsides. Development patterns are readily apparent, especially where there is noticeable contrast in scale, form, texture, or line. Colors of structures become somewhat muted and the details become subordinate to the whole. This effect is intensified in hazy weather conditions, which tend to mute colors and blur outlines even further. In panoramic views, the midground landscape is the most important element in determining visual impact.

¹⁵ *Maine ATV Trail Map*. Maine Department of Conservation, Bureau of Parks and Lands, ORV Division/ATV Program. May 2010.

¹⁶ USDA Forest Service, *Landscape Aesthetics: A Handbook for Scenery Management*, Agricultural Handbook Number 701. December 1995.

Since wind turbines are very large and relatively simple objects, their form and color remain readily distinguishable within the midground and well beyond into the background (up to eight miles from the observer).

The only scenic resource of state or national significance within the midground is the Perkins Lot on Bald Mountain. See Section 6 for further discussion of the visual impacts on this property.

- **Background: greater than 3-5 miles.** Background distances provide the setting for panoramic views that give the observer the greatest sense of the larger landscape. However, the effects of distance and haze will obscure surface textures, detailing, and form of project components. At this distance objects will be highly visible if they present a noticeable contrast in form or line and if the weather conditions are favorable. Due to the thinness of the design, the ends of the turbine blades will be minimally visible at distances greater than eight miles. The Maine Wind Power Law has recognized that turbines beyond eight miles will be relatively indistinct and will not have a significant impact on scenic resources of state or national significance.

Scenic resources of state or national significance with background views of the wind project include viewpoints within Mount Blue State Park, the John G. Coburn House, the Jay-Niles Library, and Halfmoon Pond.

6.0 VISUAL IMPACTS ON SCENIC RESOURCES OF STATE OR NATIONAL SIGNIFICANCE

As noted in Section 5, there are several scenic resources of state or national significance within eight miles of the wind project. The following section evaluates each of these resources, using the criteria in the Maine Wind Power Law:

- **Context.** The existing character of the surrounding area and the context of the proposed activity. (§ 3452.3.B and 3452.3.D).
- **Significance.** The significance of the potentially affected scenic resource of state or national significance (§ 3452.3.A).
- **Public Uses.** The extent, nature and duration of potentially affected public uses of the scenic resource of state or national significance. (§ 3452.3.E).
- **Viewer Expectations.** The expectations of the typical viewer who would be using or enjoying the scenic resource of state or national significance. (§ 3452.3.C).
- **Project Impact.** The scope and scale of the potential effect of views of the Project on the scenic resource of state or national significance, including but not limited to issues related to the number and extent of turbines visible from the scenic resource of state or national significance, the distance from the scenic resource of state or national significance, and the effect of prominent features of the development on the landscape. (§ 3452.3.F).
- **Potential Effect on Public Use.** The potential effect of the generating facilities' presence on the public's continued use and enjoyment of the scenic resource of state or national significance. (§ 3452.3.E).
- **Conclusion.** A determination of whether the development significantly compromises views from a scenic resource of state or national significance such that the development has an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the scenic resource of state or national significance. (§ 3452.1).

6.1 A. A national natural landmark, federally designated wilderness area or other comparable outstanding natural and cultural features, such as the Orono Bog or Meddybemps Heath.

There are no designated national natural landmarks, federally designated wilderness areas, or other comparable outstanding natural or cultural features within eight miles of the Project.

6.2 B. A property listed on the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966, as amended, including, but not limited to, the Rockland Breakwater Light and Fort Knox.

As noted in 5.1.4 above, there are seven properties on the National Register of Historic Places within eight miles of the Project. Of these, only two – the John G. Coburn House in Carthage and the Jay-Niles Memorial Library in North Jay – would have views of the turbines.

John G. Coburn House

Context. The John G. Coburn House is a private residence on River Road in Carthage designed in the Greek Revival style. The property consists of a main house and several outbuildings, set back from the road and heavily landscaped. The periods of significance are from 1800 to 1924. The Coburn House was added to the National Register in 2002. See photographs of the property in Appendix A.

Significance. The John G. Coburn House is on the National Register of Historic Places. However, it is a private residence and not open to the public.

Public Uses. The public has no access to the property.

Viewer Expectations. The current owners of the Coburn House are expected to have high expectations of scenic quality.

Project Impact. The upper portions of several of the turbines, approximately 5 miles away, may be visible from the property through dense roadside vegetation during leaf-off conditions. Mixed hardwood/softwood trees on the opposite side of the road would further screen the Project from view.

Potential Effect on Public Use. The Project should have no impact on the public's use of the property, since there is no public access.

Conclusion. The Project should not compromise views from the John G. Coburn House or its setting. The Project should not have an unreasonable adverse effect on its scenic character or the uses related to the scenic character of the historic property.

Jay-Niles Memorial Library

Context. The Jay-Niles Memorial Library is a public library on Route 4 in North Jay, designed in the Colonial Revival style by Prescott and Sidebottom, Architects. The period of significance is from 1900 to 1924. The Memorial Library was added to the National Register in 1987. See photographs of the property in Appendix A.

Significance. The Jay-Niles Memorial Library is on the National Register of Historic Places. According to its Mission Statement, the Jay-Niles Memorial Library serves as a learning and educational center for

all residents of its community. According to its website, Memorial Hall was intended to be a community gathering place.¹⁷

Public Uses. The library is open to the public six days a week (except during July and August when it is closed on Saturdays).

Viewer Expectations. The community takes a great deal of pride in the building, as evidenced by its current condition and the descriptions on their website. Viewer expectation of scenic quality is presumably high.

Project Impact. Views from the library would be filtered by vegetation and include up to eight turbines at a distance of 7.8 miles away during leaf-on conditions, seen in the context of nearby residential development and electrical distribution lines. Up to 12 turbines may be visible during leaf-off conditions, but at that distance, they would not be a dominant element in the landscape. See photographs of the surrounding landscape in Appendix A.

Potential Effect on Public Use. The Project should have no impact on the public's use of the property, since the primary function of the library occurs inside the structure. There are no designated outside reading areas.

Conclusion. The Project should not compromise views from the Jay-Niles Memorial Library or its setting. The Project should not have an unreasonable adverse effect on its scenic character or the uses related to the scenic character of the historic property.

6.3 C. National or State Parks

The closest unit of the National Park Service is the Appalachian National Scenic Trail (AT), which is 18.8 miles away at its closest point south of Long Pond in Sandy River Plantation, Maine.

The closest state park is Mount Blue State Park, 4 – 5 miles north in Weld and Avon. In addition, the State of Maine owns the Perkins Lot, a 166.7-acre parcel of land on the west side of Bald Mountain in Perkins Township. The impact of the Project on this property is described in Section 6.6 below.

Mount Blue State Park

Mount Blue State Park is comprised of two major land holdings. The western portion (770± acres) is developed with a campground (180 sites), a beach and boat launch on Webb Lake, hiking trails, and a nature center. The focus of the eastern portion of the park (approximately 7,400 acres), which includes multipurpose trails and picnic areas, is the distinctively conical Mount Blue (elev. 3,192).

The Maine Department of Conservation website offers the following description of Mount Blue State Park:

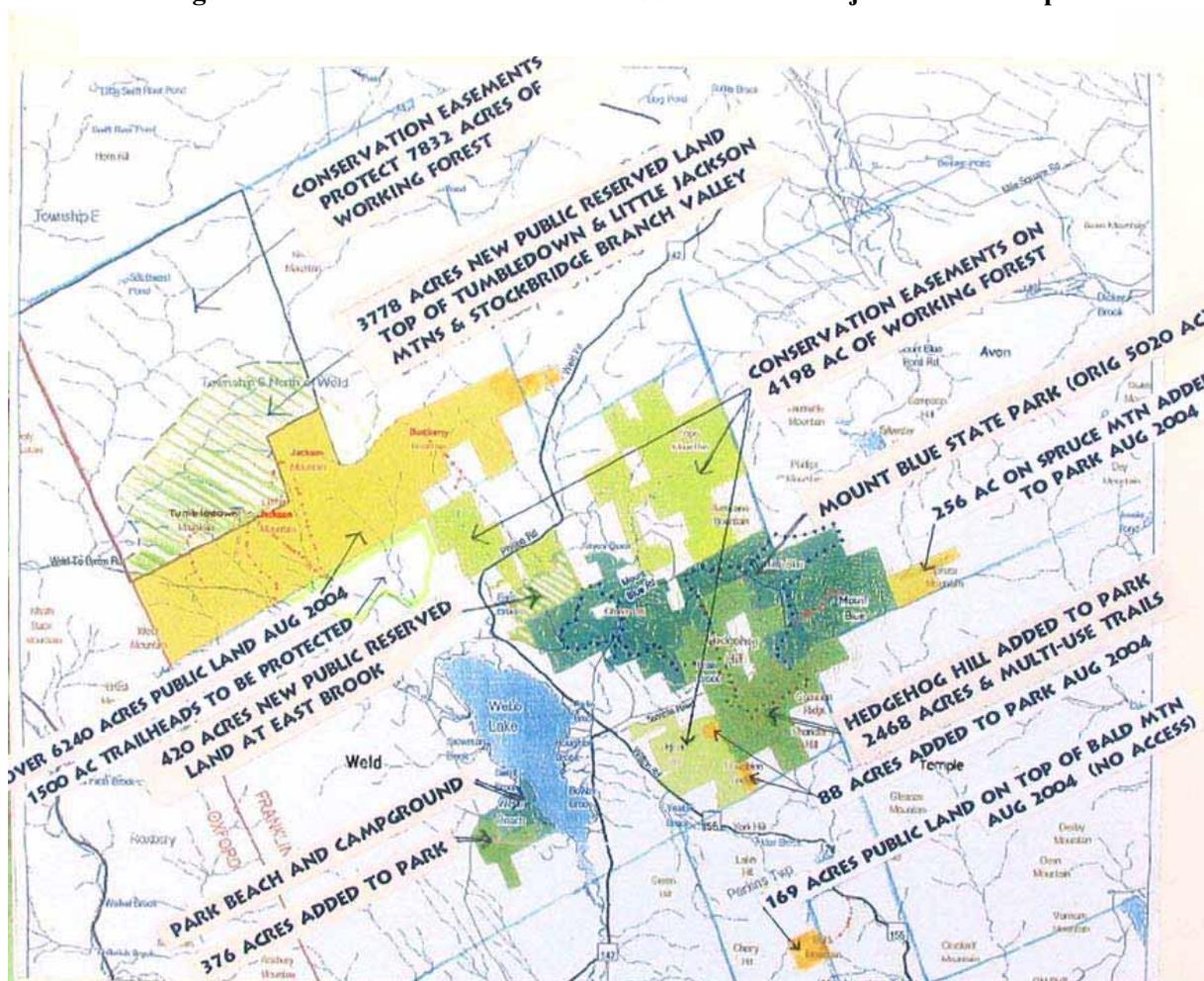
Spectacular views of Mount Blue and surrounding mountains ring this lakeside park that boasts a wide variety of activities for park visitors year-round. Located in the mountainous region of western Maine, Mount Blue State Park offers visitors an extensive network of trails, a sandy beach, popular camping area, boat launch and picnic area.

¹⁷ www.jaynileslibrary.com/

Picturesque Webb Beach is an ideal location for beach-going enthusiasts. Nearby Center Hill Area is a scenic picnic spot that provides access to nature trails and extensive multiple use trails that are open to hikers, mountain bikers, and ATV and horseback riders. Children enjoy a visit to the park's Nature Center where hands-on exhibits and displays provide entertainment on rainy afternoons. Evening programs for campers take place in the park's amphitheater. Moose and other wildlife live in and around the park. From the common grey and red squirrels to the more elusive black bear and coyote, a host of other animals also frequent Mount Blue State Park.¹⁸

The *Maine Atlas and Gazetteer* describes Mount Blue State Park as a “Lakeside park amongst magnificent mountain scenery. Camping, great fishing, swimming, hiking, picnicking, multiuse trails, nature center, boat launching and rentals, showers, dumping station, cross country skiing, snowshoeing, skating, snowmobiling.”¹⁹

Figure 2: Mount Blue – Tumbledown Conservation Project Process Map



¹⁸ www.maine.gov/cgi-bin/online/doc/parksearch/search_name.pl?state_park=18

¹⁹ *Maine Atlas and Gazetteer*, 29th edition. DeLorme. Yarmouth, Maine. 2006.

Mount Blue State Park is part of an expanding network of conservation lands that comprise the Mount Blue – Tumbledown Conservation Project (see Figure 2). This effort is designed to protect working forests and popular hiking trails in the vicinity of Jackson Mountain, and to expand Mount Blue State Park. The area in the vicinity of Mount Blue State Park is heavily visited for its range of recreational opportunities.²⁰

There are two specific areas within Mount Blue State Park that will have views of the Saddleback Ridge Wind Project, i.e., portions of the summit of Mount Blue and the Center Hill Overlook and picnic area, both in the eastern portion of the park. Each of these resources is described below.

Mount Blue Hiking Trail

In order to better understand public use of Mount Blue and the effect that the Project may have on use patterns, Patriot Renewables engaged Market Decisions, a market research and survey firm in South Portland, Maine, to develop and conduct a survey of hikers on Mount Blue, and to evaluate the results. Market Decisions interviewed 22 hikers during Labor Day weekend 2010, and administered a relatively short (17-question) survey. Respondents were asked to rate the scenic value of the view from Mount Blue, then to rate a photograph of the view looking toward Saddleback Ridge. They were then asked to rate the same view, but this time with a photosimulation of the SRW project in place. The results of the survey are appended to the application as Appendix C.

Context. Mount Blue is one of many mountains that encircle Webb Lake within a five-mile radius. The others include Tumbledown Mountain, Little Jackson Mountain, Jackson Mountain, Blueberry Mountain, Hurricane Mountain, Houghton Ledges, Bald Mountain, Saddleback Mountain, Spruce Mountain, and Walker Mountain. Hiking trails are found on Mount Blue, Tumbledown Mountain (western summit 12.7 miles from the Project.), Little Jackson Mountain (12.4 miles from Project), and Jackson Mountain (12.3 miles from Project), according to the Maine Atlas and Gazetteer.

Significance. Mount Blue is the focal point of Mount Blue State Park. With its distinctive profile and proximity to Webb Lake, Mount Blue is a significant part of the western Maine landscape. It offers both serious hikers and family groups an opportunity to enjoy the mountainous terrain in relative close proximity to many population centers.

The following description of the area is from the Land for Maine's Future website:

Visitors from throughout Maine and beyond have enjoyed hiking up Tumbledown Mountain (3,068 feet) and surrounding peaks for the better part of a century, most of them never knowing that they were crossing private land. Hikers assumed that the land was part of nearby Mount Blue State Park in Weld, a highly popular park that receives roughly 70,000 visitors each year. Tumbledown's summit--with three peaks, an enormous cliff face and an alpine pond--was accessible only through the forbearance and generosity of the landowners. Recognizing the public value of this exceptional resource, State officials negotiated with multiple landowners to acquire Tumbledown and other key lands in the vicinity (linking to and expanding Mount Blue State Park). Efforts were spurred on by the sale of a parcel adjacent to the Park that was subsequently cut heavily and cleared for development.

Many groups and individuals lent support to this complex and far-reaching project, which received three Land for Maine's Future (LMF) Program grants. The LMF contributions helped to raise matching funds from the federal Forest Legacy program and private foundations. The Trust for

²⁰ Map from the Tumbledown Conservation Alliance website (www.tumbledown.org).

Public Land's Maine Field Office worked closely with the Tumbledown Conservation Alliance (a coalition of dedicated local groups and individuals) and the Maine Department of Conservation on the project, supported by many other valuable partners.

In addition to securing the summit and northern slopes of Tumbledown Mountain, the State and its partners acquired a 2,468-acre tract with a deer-wintering yard and multi-use trail; parcels bordering the Webb Lake Campground and East Brook; all of Jackson and Blueberry mountains; the entirety of Jackson Pond; and easements on an additional 12,030 acres in the vicinity. The project partners are working to conserve the southern slopes on Tumbledown as well (including several popular trails).²¹

Public Uses. The Mount Blue trail is described in the Maine Atlas and Gazetteer as a "Steep, steady climb through mixed woods to wooded summit (abandoned fire tower), with very fine views of western mountains from several ledges. Well-traveled trail. Road to summit, 1.75 miles; elev. gain 1800 ft."²²

The lower portion of the trail up Mount Blue is heavily vegetated with mixed hardwood/softwood, with no views beyond the immediate foreground. Once the spruce/fir line is reached at higher elevations there are a few brief views, but none toward Saddleback Mountain. The first significant panoramic view (approximately 180°) includes a filtered view of Saddleback Mountain. The summit is wooded and contains a shed and the lower steel structure of an abandoned and now-inaccessible fire tower. (According to Alan Stearns, Maine Department of Conservation, the fire tower was recently approved for replacement.)

From the summit there are three signs guiding hikers to 'scenic vistas'. The widest (about 170°) just below the fire tower appears to be the most visited. The view is south toward Saddleback Mountain, and the viewer would be 7.4 to 8.8 miles from proposed turbines. Saddleback Mountain is not visible from the two other scenic vistas, which look southwest and west toward Tumbledown Mountain and to the north-northeast. (See Appendix A Study Area Photos.)

Viewer Expectations. People interviewed in the intercept survey had many reasons for hiking Mount Blue. Many considered it to be a good day hike, suitable for family groups. People who hike Mount Blue are expected to have high expectations of scenic quality, given the relatively undisturbed nature of the surrounding mountains and the setting on Webb Lake. Respondents to the intercept survey rated the current scenic value of the view from Mount Blue as a 5.5 on a 7-point scale (where 7 is the highest scenic quality).

Project Impact. All of the SRW turbines will be visible from the summit on Mount Blue. The five turbines located on the upper part of Saddleback Ridge will be seen at a distances of 7.4 to 8.0 miles. The remaining seven turbines are all greater than 8.0 miles from the Mount Blue viewpoint, and located up to 8.8 miles away. The upper five turbines will be seen over a 1° arc, or approximately 0.5% of the horizontal view from the summit. The entire string of turbines will be seen across an arc of 4°, or 2% of the horizontal view.

For hikers, the view of the five wind turbines within eight miles will present a contrast in form, line, and color in a largely natural landscape. However, the turbines will appear to be relatively small when compared with the surrounding mountains and should not present an unacceptable contrast in scale. Photosimulation 1, Appendix B from Mount Blue illustrates the change in visual character resulting from the construction of the Saddleback Ridge Wind Project.

²¹ Land for Maine's Future website. www.informe.org/spo/lmf/projects/project_detail.php?project=1554

²² *Ibid*

Potential Effect on Public Use. The addition of the wind project to the view dropped the respondents' rating of the scenic value of the view from Mount Blue from 5.5 to 4.2 on a 7-point scale (where 7 is the highest scenic quality).

Most respondents to the intercept survey indicated that the addition of a wind farm to the view from Mount Blue would have no effect on their enjoyment of the hike. Expectations for negative and positive effects were nearly balanced; seven thought that the wind project would negatively affect their enjoyment, while five thought it would positively affect their enjoyment.

Most respondents thought that the addition of a wind project to the view from Mount Blue would not affect their likelihood of returning to the mountain. The likelihood of returning was nearly balanced: five thought that the wind project would make them less likely to return while six thought that it would make them more likely to return.

Conclusion. The Saddleback Ridge Wind Project will be visible from the summit of Mount Blue. Of the 12 turbines being proposed, seven are located at distances greater than eight miles, and therefore are considered insignificant by the Maine Wind Power Law. The five turbines within eight miles are seen over a relatively minute portion of the total viewshed. Their presence should not cause a change in use patterns on the Mount Blue hiking trail.

The Project should not significantly compromise views from Mount Blue, nor should it have an unreasonable adverse effect on its scenic character or the uses related to the scenic character of the State Park.

Center Hill Overlook, Mount Blue State Park

Context. The Center Hill Overlook is a designated picnic area on the east side of Mount Blue State Park, offering a 150°± panoramic view of Webb Lake and the surrounding mountains to the west and southeast.

Significance. This is one of the only views within Mount Blue State Park (other than from Mount Blue itself) that offers a panoramic view of the surrounding landscape.

Public Uses. The Center Hill Overlook contains several picnic tables in a mown field overlooking the lake and distant mountains. The public uses the facility primarily for picnicking, berrypicking, and as a trail head for nature hiking.

Viewer Expectations. People who use the Center Hill Overlook are expected to have high expectations of scenic quality.

Project Impact. All 12 turbines will be visible from the Center Hill Overlook at distances ranging from 6.9 to 8.0 miles. The entire string of turbines will be seen across an arc of 9°, or 6% of the horizontal view. Photosimulation 2 illustrates the change in visual character at the Overlook resulting from the construction of the Project.

Potential Effect on Public Use. The Project should have a relatively minor impact on the public's use and enjoyment of the Center Hill Overlook, since the turbines are seen at a distance that is at or near the limit that the legislature considers visual impacts to be 'insignificant' (i.e., eight miles).

For picnickers and other users, the view of the wind turbines will present a contrast in form, line, and color in a largely natural landscape. The turbines will be seen as distinct, though minute objects on

Saddleback Ridge. The presence of the turbines may have a negative effect on some peoples' enjoyment of the views from the overlook or the picnic area. However, it is likely that an equal number may be drawn to the site for the express purpose of seeing the turbines.

Conclusion. All 12 of the turbines will be visible from Center Hill Overlook at a distance of 6.9 to 8.0 miles. At that distance, they will appear to be relatively small objects in a wide, expansive landscape that is defined by rolling to mountainous terrain. The Project should not significantly compromise views from the Center Hill Overlook. The Project should not have an unreasonable adverse effect on the scenic character or the uses related to the scenic character of the picnic area / overlook.

6.4 D. A great pond that is:

- (1) One of the 66 great ponds located in the State's organized area is identified as having outstanding or significant scenic quality in the "Maine's Finest Lakes" study; or**
- (2) One of the 280 great ponds in the State's unorganized or deorganized areas designated as outstanding or significant from a scenic perspective in the "Maine Wildlands Lakes Assessment."**

Of the six lakes and ponds within eight miles of the Project, only Halfmoon Pond in Mexico and Carthage is identified as having significant or outstanding scenic resources in either the *Maine's Finest Lakes* study or the *Maine Wildlands Lakes Assessment*.

6.4.1 Halfmoon Pond

Context. Halfmoon Pond (el. 496 ft) is a 53-acre, undeveloped pond southwest of Carthage on the Carthage/Mexico town line. It lies to the northwest of Carr Mountain (elev. 1,542 ft) and southeast of Lake Mountain (elev. 1201 ft). The pond is fed from the south by Edmunds Bog Brook, which originates in the northern portion of Mexico. Water from the pond eventually flows through a series of bogs into the Webb River. *An Evaluation of Lake Scenic Quality in Maine's Organized Towns* contains the following description of Halfmoon Pond: "Fifty-three acre Halfmoon Pond has a high complexity of surrounding relief and a partially bouldered shoreline. One small pocket beach occurs on the undeveloped Pond. White Pine and northern hardwood forest are adjacent to the pond."

The Maine Atlas and Gazetteer notes the presence of a hand-carry boat launch site on the eastern shoreline. Aerial photos indicate that the area immediately surrounding the pond has been heavily cut in recent years, with extensive patterns of skidder trails and log yards evident. In some areas (i.e., the northwestern shoreline) cutting has occurred within 100 feet of the pond. The 1968 USGS topographic quad map indicates a structure on a point of land on the west side of the pond. However, conversations with local residents and field observations showed that the structure no longer exists.

Significance. The *Maine's Finest Lakes* study notes that Halfmoon Pond has significant scenic resources. Prior to the publication of the *Maine's Finest Lakes*, the State Planning Office issued *An Evaluation of Lake Scenic Quality in Maine's Organized Towns*, which evaluated the scenic characteristics of all 963 lakes and ponds (with a surface area greater than 10 acres) in Maine's organized towns. The *Evaluation* was based on six criteria: relief, physical features, shoreline configuration, vegetation diversity, special features, and inharmonious development. A point system was developed to assign a rating to each of the criteria, depending upon their presence in the landscape. The following table provides a short description of each of the criteria and summarizes the findings for Halfmoon Pond²³:

²³ Maine State Planning Office. *An Evaluation of Lake Scenic Quality in Maine's Organized Towns*. May, 1986.

| FACTOR | DEFINITION | MAX. PTS. | SCORE |
|--------------------------|---|-------------------|-----------|
| Relief | Complexity of relief Dramatic relief | 30 | 30 |
| Physical Features | Cliffs, vertical ledges, slab ledges, rockslides, boulders, islands, beaches. | 25 | 10 |
| Shoreline Configuration | Relative complexity of the shoreline. | 15 | Unknown |
| Vegetation Diversity | Four possible types were identified: mixed hardwood/softwoods; softwoods; marsh; super-story trees. | 15 | 10 |
| Special Features | Water clarity Opportunities for wildlife viewing | 15 | 10 |
| Inharmonious Development | Residential development, visible roads, powerlines, etc. | -20 ²⁴ | 0 |
| TOTAL | | | 60 |

Public Uses. Recreational use of the pond includes boating, fishing, ice fishing, swimming, hiking, berry picking, hunting, snowmobiling, and ATV riding. The primary access to the pond is via Poplar Hill Road, off Route 17 in Mexico. A series of well-defined dirt roads are found on the west side of the pond. Portions of the access road are very rough and may tend to discourage active use.

Viewer Expectations. People who visit the pond are expected to have high expectations of scenic quality due to the views of the surrounding mountains to the north, west, and south. Viewer expectation may be tempered, however, by the presence of recent commercial logging operations in the area near the pond.

Project Impact. There are small areas of potential visibility on the western edge of the pond where the tops of up to six turbines may be visible above the treeline at a distance of 6.4 miles. Photosimulation 5 illustrates the minor change in visual character resulting from construction of the Project.

Potential Effect on Public Use. Where visible, the view of blades from up to six turbines will present a minor contrast in form, line, and color to a landscape that is currently natural. The turbines would be visible to the east, away from the views of the surrounding mountains that give the pond its scenic character. The Project should have a relatively minor impact on the public's continued use and enjoyment. Users will still be able to enjoy the same type of recreational activities they now participate in.

Conclusion. The Project should not significantly compromise views from Halfmoon Pond. The Project should not have an unreasonable adverse effect on its scenic character or the uses related to the scenic character of the pond.

6.5 E. A segment of a scenic river or stream identified as having unique or outstanding scenic attributes listed in Appendix G of the "Maine Rivers Study."

There are no designated scenic river segments within eight miles of the Project.

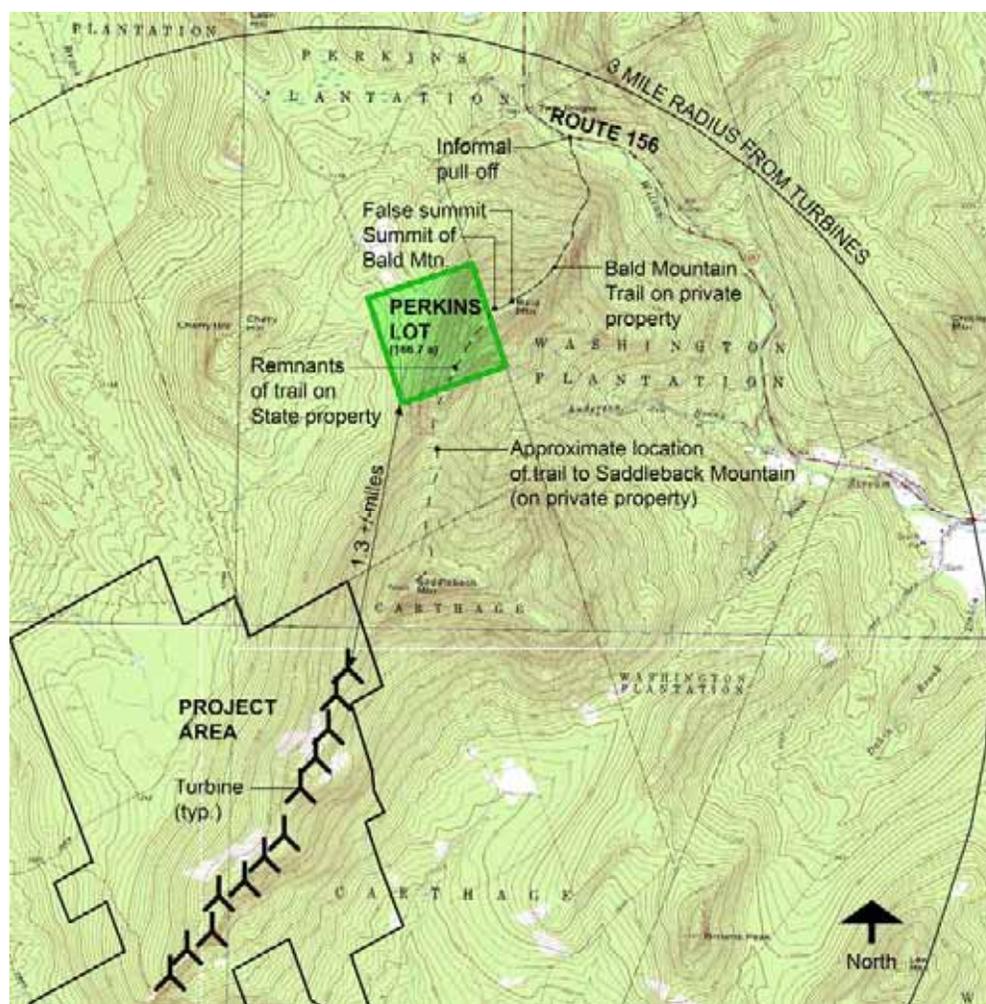
²⁴ Maine State Planning Office. *An Evaluation of Lake Scenic Quality in Maine's Organized Towns*. May, 1986. 20 Points were deducted for lakes with drastic changes in water levels; 10 points were deducted if inharmonious development was rated as 'high'; 5 points were deducted if inharmonious development was rated as 'medium'.

6.6 F. A scenic viewpoint located on state public reserved land or on a trail that is used exclusively for pedestrian use, such as the Appalachian Trail, that the Department of Conservation designates by rule adopted in accordance with section 3457.

6.6.1 Perkins Lot

Context. The 166.7± acre Perkins Lot was acquired in 2004 by the Department of Conservation from MeadWestvaco through the Trust for Public Land. It was one of six parcels in a 6,874-acre acquisition that was part of an ongoing protection effort in the Mount Blue / Tumbledown area. The Perkins Lot appears to be a ‘stand alone’ parcel that was not in close proximity to the other acquisitions.²⁵ The Lot is on the west side of Bald Mountain (elev. 2,340) in Washington Township. There is no formal public access to the property. Access is over a hiking trail up Bald Mountain, on privately held woodland on the south side of Route 156. Access via this trail has been prohibited in the past, and there is no formal agreement currently allowing public access to the Perkins Lot.

Figure 3: Perkins Lot Area Map



This trail traverses private property and leads to the false and true summits of Bald Mountain, both on

²⁵ Tom Dinsmore, Planning & Research, Bureau of Parks & Lands, Maine Department of Conservation. Personal communication, September 28, 2010.

private property. Beyond the summit, an overgrown and seldom-used trail descends the opposite side of the mountain, moving out of private land and onto the Perkins Lot, through which it crosses the ridgeline between Bald Mountain and Saddleback Mountain. (See Figure 3, Perkins Lot Area Map.)

Significance. The Perkins Lot is included in Chapter 3 *Listing of Designated Scenic Viewpoints of State or National Significance, Located on Public Reserved Land Or on a Publicly Accessible Trail Used Exclusively For Pedestrian Use, For Consideration In The Permitting Of Expedited Wind Energy Development*, dated March 29, 2010, signed by Alan Stearns, Maine Department of Conservation. The Rule specifically lists “All viewpoints in the Perkins Lot which is located in Perkins Township in Franklin County.” The Lot was added following public testimony from Rufus E. Brown, Esq. of Brown & Burke on behalf of the Friends of Webb Lake and Rand Stowell at the public hearing on 01/12/2010 and by e-mail on 01/25/2010, and from Penn Gray, who commented by e-mail on 01/04/2010. These individuals noted the presence of the Bald Mountain hiking trail and the views from its summit. As a result of this testimony the Department of Conservation included the public reserved lot in Perkins Township in the *Listing of Designated Scenic Viewpoints*. As a result of this listing an applicant for a wind project must prepare a visual impact assessment if the project is within three miles of the public lot. (The proposed Saddleback Ridge Wind Project is 1.3 miles, at its closest point, from the boundary of the Perkins Lot.)

Public Uses. Recreational use of Bald Mountain is concentrated on private property; public recreational use of the Perkins Lot appears to be very limited, due to the absence of well-marked or well-maintained trails, signage, or boundary markers. Remnants of a trail on the Perkins Lot are found in places on the ridgeline between Bald Mountain and Saddleback Mountain, but it appears to be used very infrequently by hikers. There is ample evidence of moose use, however. The AMC Maine Mountain Guide notes “A faint trail may be followed 2.0 mi. farther to the summit of Saddleback Wind Mtn., which is slightly higher (than Bald Mountain) but attracts fewer visitors.”²⁶

The Bald Mountain trail starts at an informal pulloff on Route 156 in Washington Township and extends through private property to the summit of Bald Mountain, which is also on private property. This trail appears to be heavily used and is well marked with painted blazes and occasional rock cairns. As noted in the photographs in Appendix A, the upper portion of the trail below the summit offers panoramic views looking northwest, north, and northeast. Webb Lake and Jackson Mountain appear as the focal point in the view.

The summit of Bald Mountain has two distinct components, both on privately owned land. The false summit (60'± vertically below the true summit on the trail) provides the first panoramic view of Saddleback Mountain, 1.4 miles to the south. The trail proceeds another few hundred yards to the true summit, where it ends in a series of open ledges that slope north toward Webb Lake. Views of Saddleback Mountain from this vantage point are over and through evergreen trees. Views from the top include a number of cultural modifications to the landscape, including Route 156, a gravel road on Kinneys Head, several homes, cutting patterns, and cottages on Webb Lake.

Viewer Expectations. Hikers on the Perkins Lot will have an expectation of high scenic quality, given the nature of the surrounding visible landscape. However, their expectations will be diminished by the presence of gravel pits, logging yards, and access roads in the valley between Bald Mountain and Cherry Hill to the west.

Project Impact. From forest openings on the Perkins Lot, the upper portions of eight turbines on Saddleback Ridge will appear on the side slope at distances of 1.6 to 3.2 miles. None of the turbines will

²⁶ Appalachian Mountain Club, *Maine Mountain Guide*, 9th Edition.

appear to rise above Saddleback Mountain. The turbines will be visible in a relatively tight cluster occupying approximately 4° of the filtered view toward Saddleback Mountain. The base of the highest turbine in the string is located approximately 480' in elevation below the summit. As seen in Photosimulation 4, the turbines will be visible but will not dominate the landscape.

Potential Effect on Public Use. Since there is so little apparent public use on the Perkins Lot it would be difficult to predict with any certainty how the Project would affect use patterns. The presence of the turbines will not prohibit people from hiking the two miles from Bald Mountain to the summit of Saddleback Mountain. Some may not want to see the turbines and will return to the base of Bald Mountain. However, others who are curious about the turbines may be inclined to extend their hike from Bald Mountain onto the Perkins Lot for a somewhat better view.

Conclusion. The Project should not significantly compromise views from the Perkins Lot. The Project should not have an unreasonable adverse effect on its scenic character or the uses related to the scenic character of the scenic viewpoints on the Lot.

6.7 G. A scenic turnout on a scenic highway constructed by the Department of Transportation.

There are no scenic turnouts on scenic highways constructed by the Maine DOT within eight miles of the Project.

6.8 H. Scenic viewpoints located in the coastal area.

The Project is over 60 miles from the coastal area and well outside its zone of visibility. There will be no visual impacts on scenic viewpoints located in the coastal area.

7.0 CONCLUSION

The Saddleback Ridge Wind Project has been sited in an area of relatively few scenic resources of state or national significance. Within the 8-mile radius study area the most significant scenic resources are Mount Blue State Park (the views from Mount Blue and Center Hill Overlook); the tract of Maine Public Reserved Land on the west side of Bald Mountain in Perkins Township (the Perkins Lot); and Halfmoon Pond. The visual impact on all of these resources should be slight, due to the effects of distance, intervening vegetation and topography, and the scale of the surrounding landscape.

Throughout the majority of the study area, views of the wind turbine generators (“generating facilities”) are blocked by topography and roadside vegetation. After analyzing several potential locations for wind turbine placement on Saddleback Mountain, the applicant has selected sites on the southerly ridgeline that meet the primary energy generating objectives while minimizing potential visual impacts to scenic resources, particularly at distances less than three miles.

The associated facilities for the Project (i.e., the access road, ridgeline road, underground electrical collection system, aboveground electrical transmission line from the ridgeline down the access road, the O&M facility, the approximately 8-mile transmission line from the base of the access road to the 229 Line in Canton, and the substation) will have minimal impact on views from scenic resources of state or national significance. The associated facilities will not be of a location, character, or size to cause an unreasonable adverse visual affect on the scenic character of the study area.

Within the 8-mile study area, the Project will not be visible from any national natural landmarks, federally designated wilderness areas, national parks, scenic rivers, the Appalachian Trail, Maine DOT scenic turnouts on scenic byways, or scenic viewpoints located in the coastal area.

The Project should not have an unreasonable adverse impact on scenic values and existing uses of scenic resources of state or national significance.

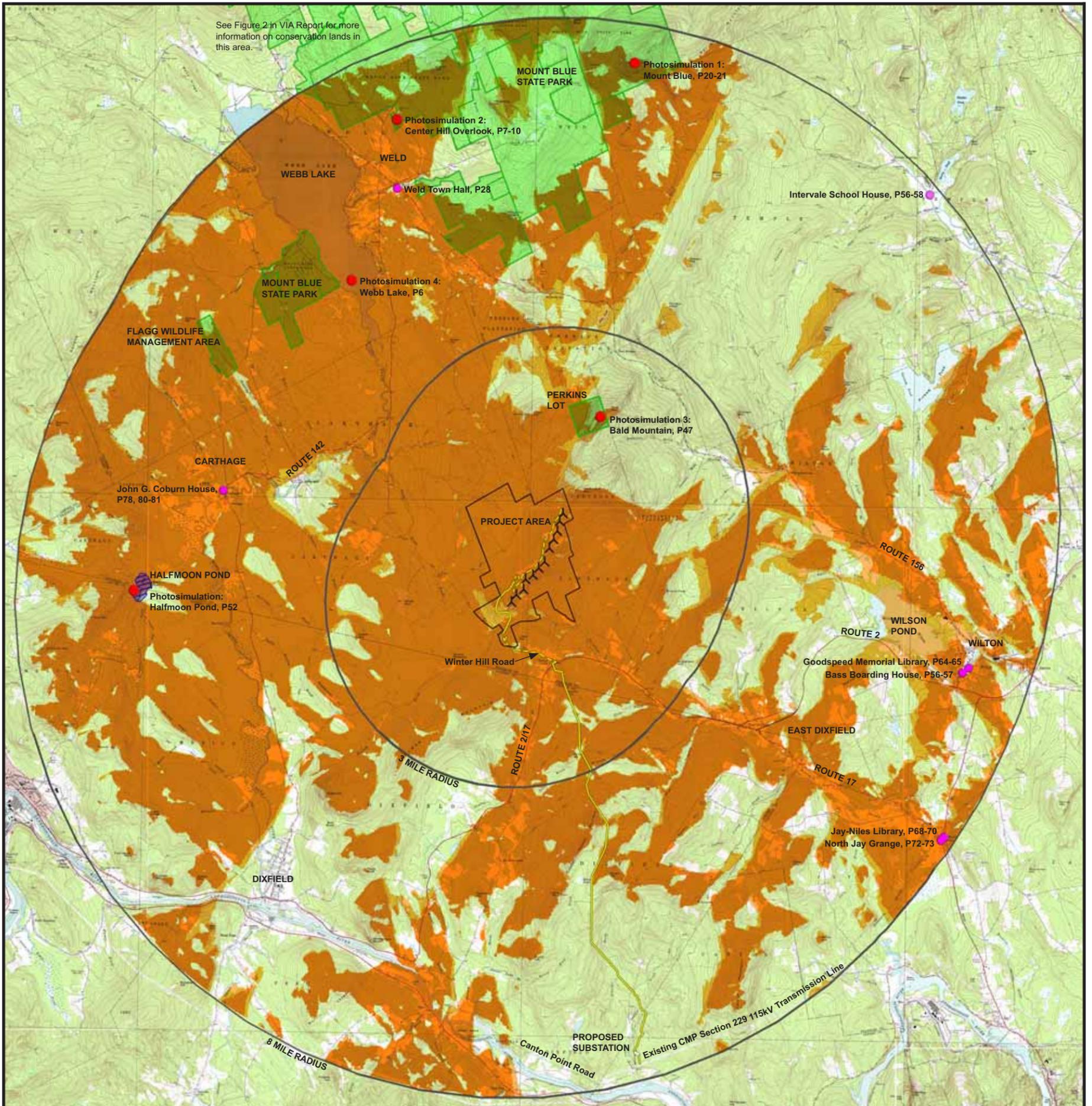


FIGURE 4

VIEWSHED MAP A

LEGEND

-  PROPOSED TURBINES
-  PROPOSED TRANSMISSION LINE
-  PROPOSED UNDERGROUND TRANSMISSION LINE
-  CONSERVATION LAND AREAS FROM ME OGIS
-  SCENIC POND
-  PHOTOSIMULATION LOCATION (SEE APPENDIX B)
-  STRUCTURE ON NATIONAL REGISTER

NUMBER OF TURBINES VISIBLE

-  1-6 VISIBLE TURBINES
-  6-12 VISIBLE TURBINES

NOTES

The viewshed map does not account for the screening effects of existing vegetation, buildings, or other structures that will block views of the Project from most roads and population centers and scenic resources of state or national significance.

**Saddleback Ridge
Wind Project**



tjd&a

NORTH



1 MILE

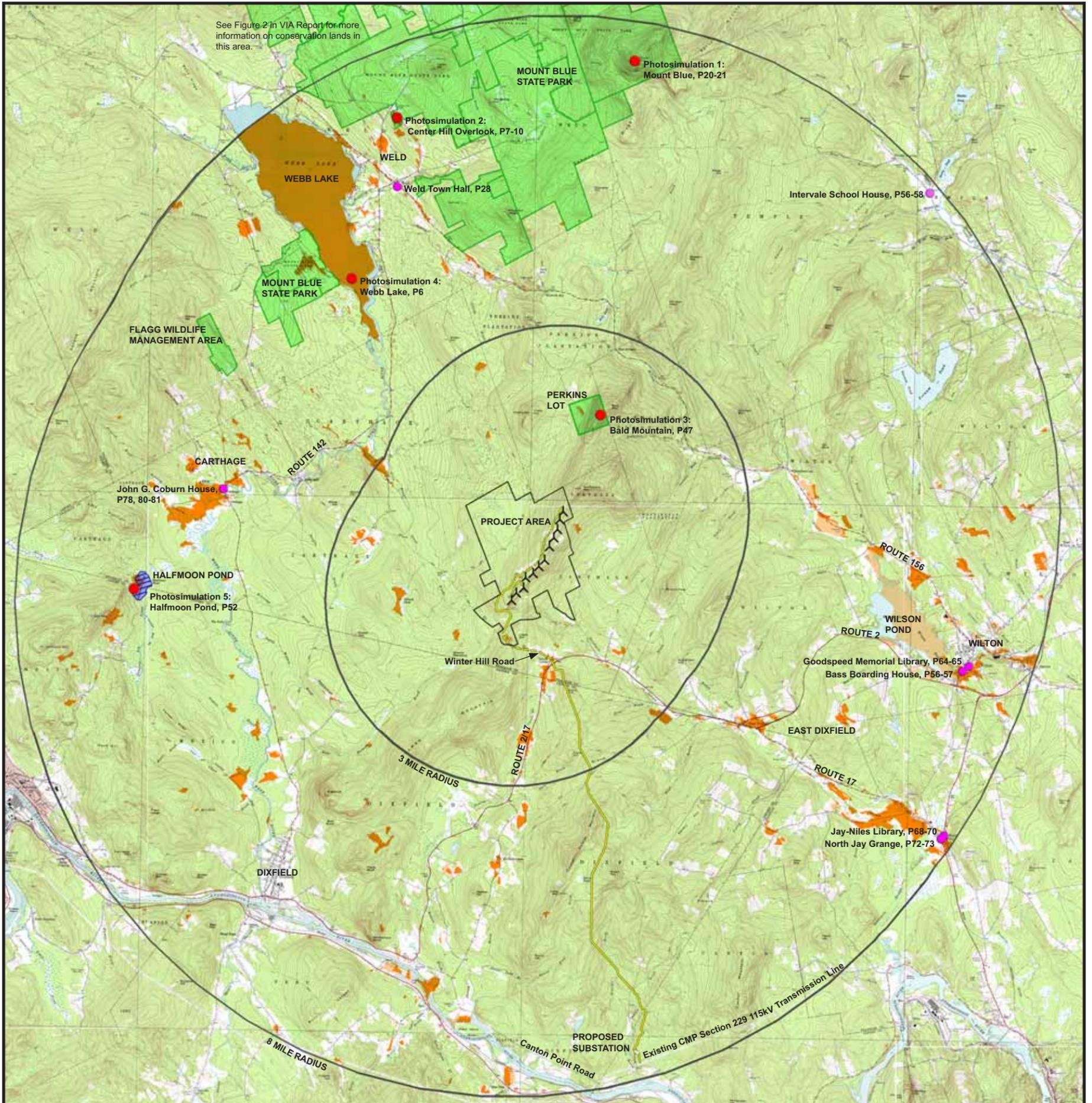


FIGURE 5

VIEWSHED MAP B

LEGEND

- PROPOSED TURBINES
- PROPOSED TRANSMISSION LINE
- PROPOSED UNDERGROUND TRANSMISSION LINE
- CONSERVATION LAND AREAS FROM ME OGIS
- SCENIC POND
- PHOTOSIMULATION LOCATION (SEE APPENDIX B)
- STRUCTURE ON NATIONAL REGISTER

NUMBER OF TURBINES VISIBLE

- 1-6 VISIBLE TURBINES
- 6-12 VISIBLE TURBINES

NOTES

Viewshed Map B accounts for the screening effects of existing vegetation as well as topography. Landcover data from the Maine OGIS

**Saddleback Ridge
Wind Project**



tjd&a

NORTH

1 MILE

PAGE 29

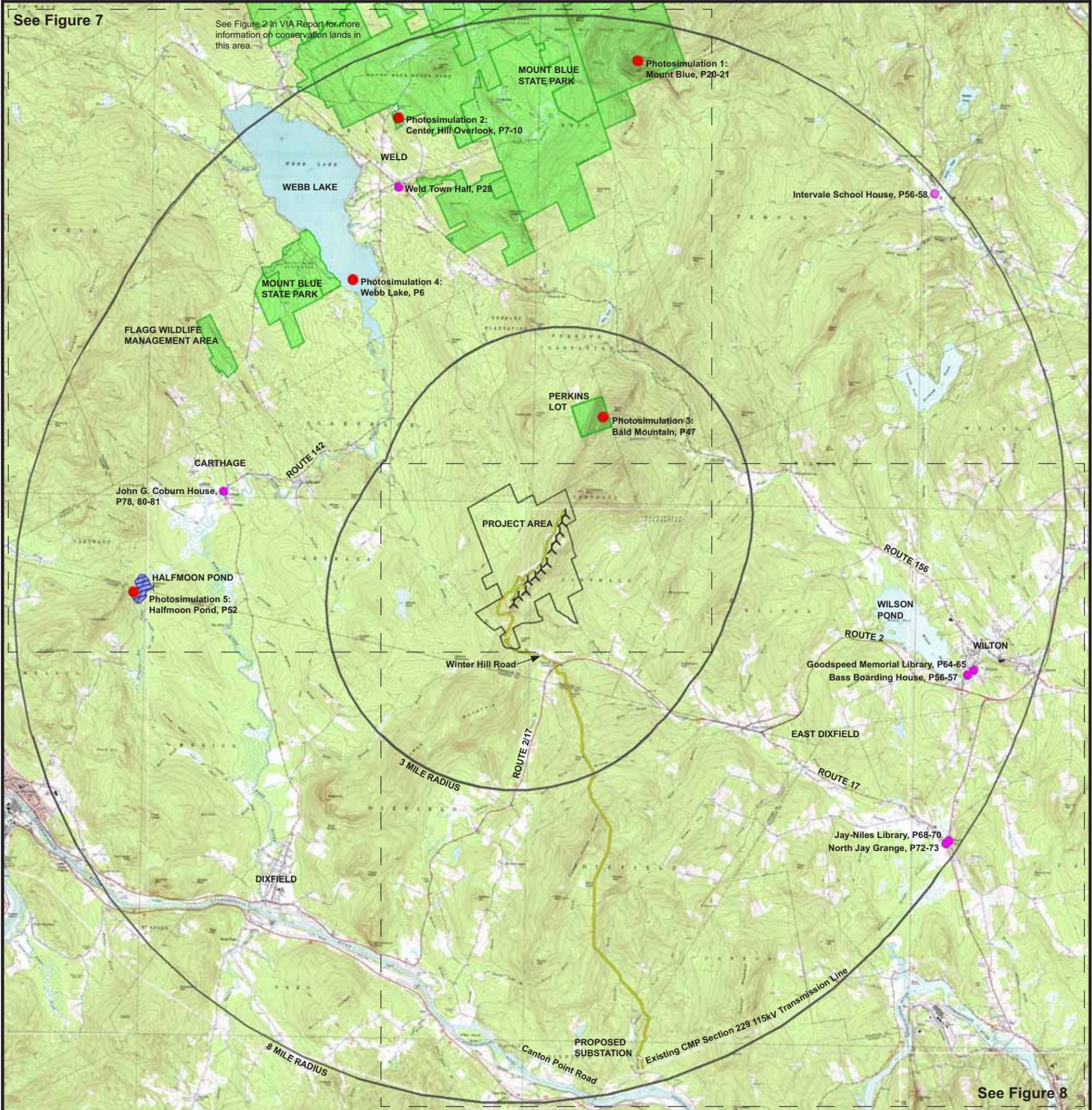


FIGURE 6

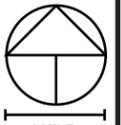
STUDY AREA MAP C

LEGEND

-  PROPOSED TURBINES
-  PROPOSED TRANSMISSION LINE
-  PROPOSED UNDERGROUND TRANSMISSION LINE
-  CONSERVATION LAND AREAS FROM ME OGIS
-  SCENIC POND
-  PHOTOSIMULATION LOCATION (SEE APPENDIX B)
-  STRUCTURE ON NATIONAL REGISTER

tjd&a

NORTH



1 MILE

PAGE 30

**Saddleback Ridge
Wind Project**



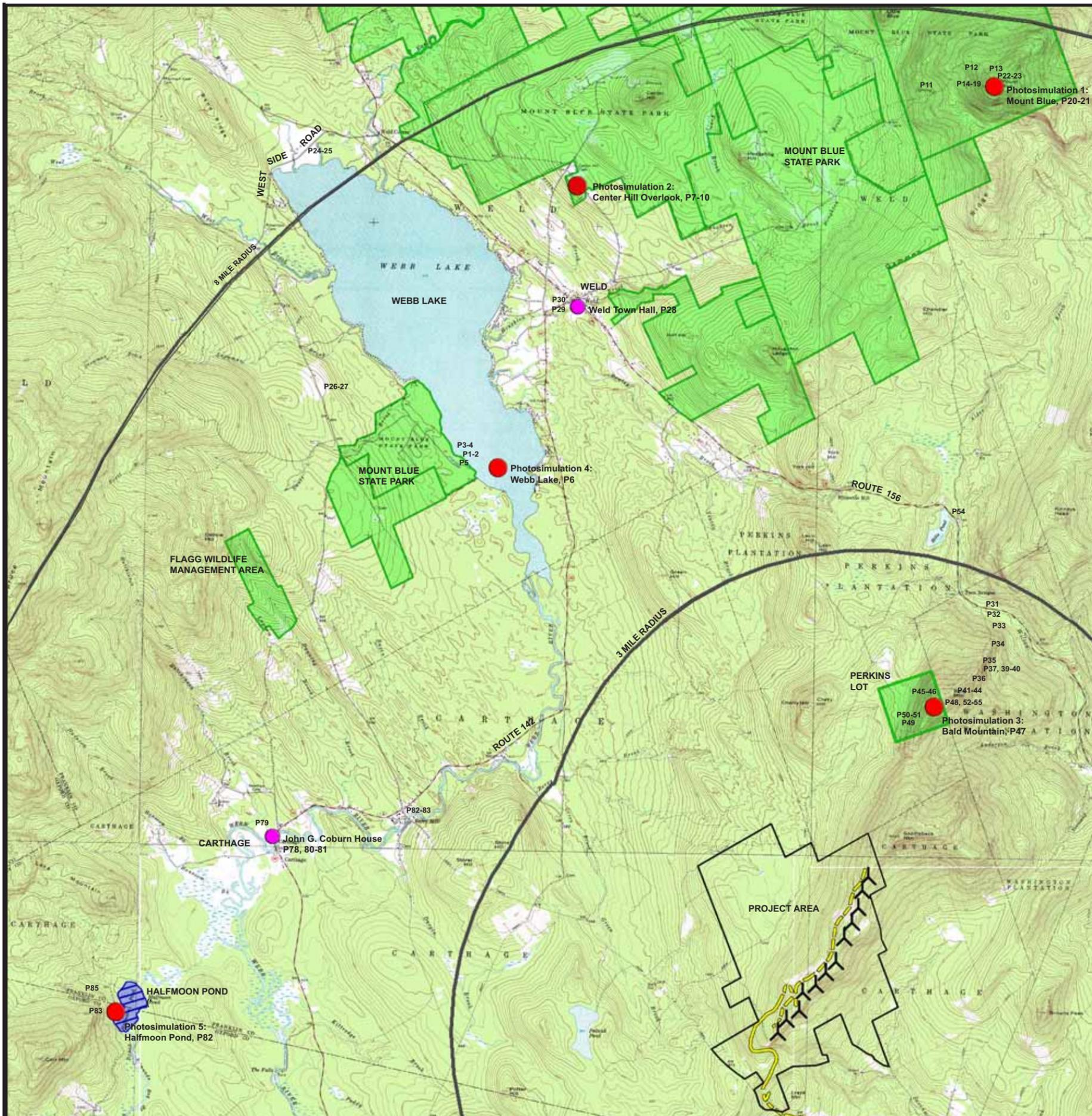


FIGURE 7

LEGEND

-  PROPOSED TURBINES
-  PROPOSED TRANSMISSION LINE
-  PROPOSED UNDERGROUND TRANSMISSION LINE
-  CONSERVATION LAND AREAS FROM ME OGIS
-  SCENIC POND
-  PHOTOSIMULATION LOCATION (SEE APPENDIX B)
-  STRUCTURE ON NATIONAL REGISTER
-  PHOTOGRAPH LOCATIONS (SEE APPENDIX A)

STUDY AREA MAP D
Northwest portion

Saddleback Ridge
Wind Project



tjd&a



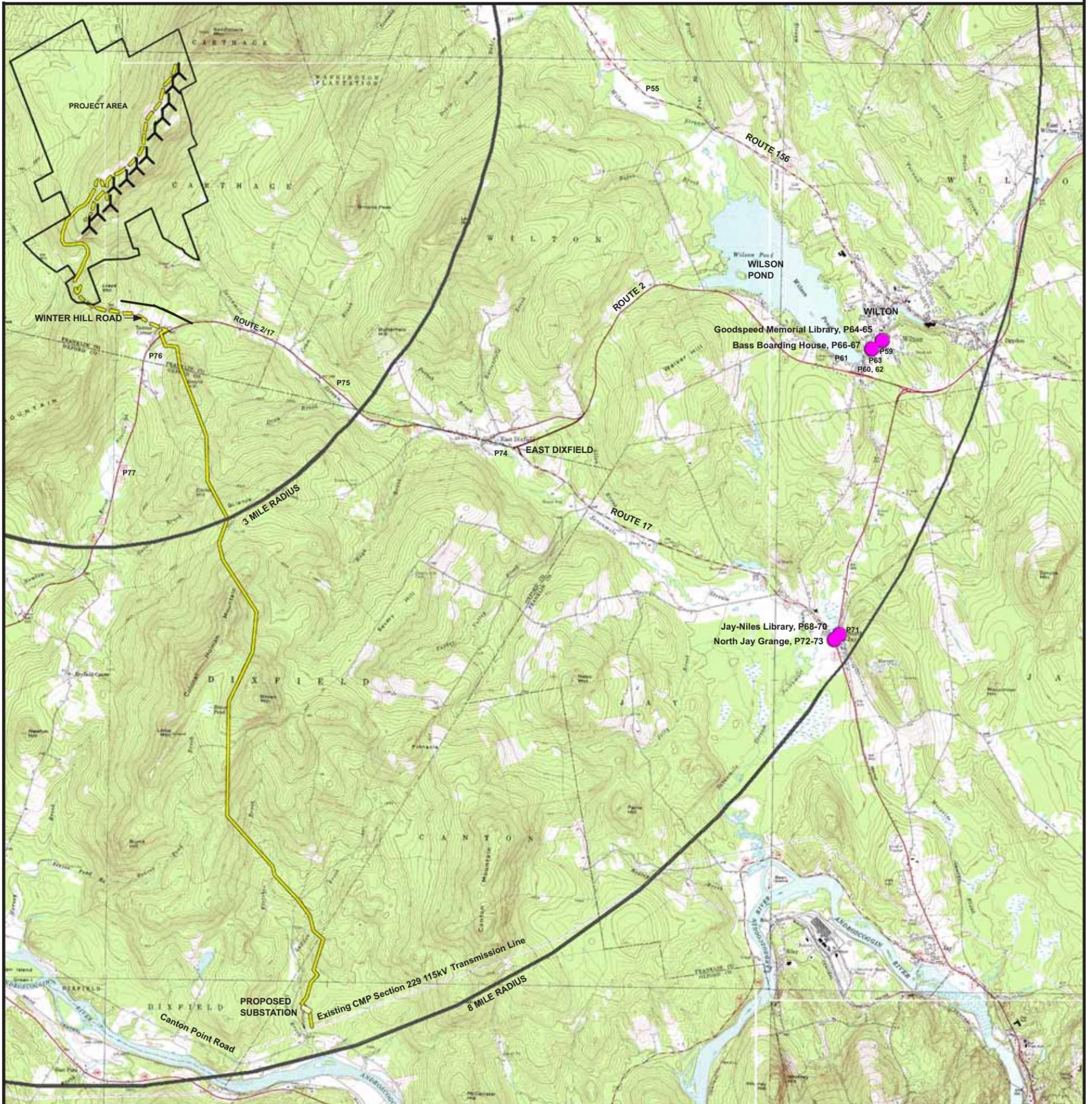


FIGURE 8

STUDY AREA MAP E

Southeast portion

**Saddleback Ridge
Wind Project**



LEGEND

-  PROPOSED TURBINES
-  PROPOSED TRANSMISSION LINE
-  PROPOSED UNDERGROUND TRANSMISSION LINE
-  CONSERVATION LAND AREAS FROM ME OGIS
-  SCENIC POND
-  PHOTOSIMULATION LOCATION (SEE APPENDIX B)
-  STRUCTURE ON NATIONAL REGISTER
-  PHOTOGRAPH LOCATIONS (SEE APPENDIX A)

tjd&a

NORTH



1 MILE

Appendix A

Study Area Photographs



P1: Panoramic view looking northeast to east toward Mount Blue from the beach at Mount Blue State Park in Weld.



P2: Continued panoramic view looking east to southeast from the beach at Mount Blue State Park. The Saddleback Ridge Wind Project would be hidden by trees from this location.



P3: Panoramic view looking north to northeast toward Mount Blue from the boat launch at Mount Blue State Park in Weld. The Project would not be visible from this location.



P4: Continued panoramic view looking southeast from the boat launch at Mount Blue State Park. The Project will not be visible from this location.



P5: View looking east from the parking lot at the beach at Mount Blue State Park. The Project will not be visible from the parking lot.



P6: Panoramic view looking south from Webb Lake. All twelve turbines would be visible from this location at distances of 5.0 to 5.8 miles. See Photosimulation 3 in Appendix B.



P7: Panoramic view looking south to west from the Center Hill Overlook in Mount Blue State Park in Weld. Turbines visible from this location would be 6.9 to 8.0 miles south. See Photosimulation 2 in Appendix B.



P8: Continued panoramic view from the Center Hill Overlook. Portions of Webb Lake are visible from this viewpoint.



P9: Continued panoramic view from the Center Hill Overlook. Tumbledown Mountain is visible to the west from this viewpoint.



P10: The farmhouse at the Center Hill Overlook in Mount Blue State Park. The farmhouse and outbuildings house the park office and maintenance facilities.



P11



P12: Views of the lower trail to the Mount Blue summit.



P13: First distant view from trail to Mount Blue summit looking north towards Mount Blue Pond. The Project will not be visible from this viewpoint.



P14: Panoramic view ($120^{\circ}\pm$) from the second overlook on the trail to the summit of Mount Blue looking south to west. Twelve turbines would be visible from this location at distances of 7.3 to 8.9 miles.



P15: Continued panoramic view from the second overlook on the trail to the summit of Mount Blue. Webb Lake is visible on left. Tumbledown and Jackson Mountains are visible to in the center of image.



P16: View of the wooded summit of Mount Blue. From this viewpoint a hiker can see a shed and an old fire tower. Three 'scenic vista' signs lead the visitor to different viewpoints.



P17: Continued panoramic view of the wooded summit of Mount Blue.



P18: Continued panoramic view of the wooded summit. The fire tower visible is not accessible to the public. One of the scenic vistas is below the fire tower. See photos P20 and P21 on page 10.



P19: Panoramic view (90°±) looking east from the summit of Mount Blue. The Project would not be visible from this viewpoint.



P20: Panoramic view (150°±) looking southeast to south toward Saddleback Ridge from the summit of Mount Blue. This viewpoint is from the scenic vista closest to the fire tower base. Twelve turbines would be visible from this location at distances of 7.4 to 8.8 miles. See Photosimulation 1 in Appendix B.



P21: Continued panoramic view looking south to southwest toward Saddleback Ridge.



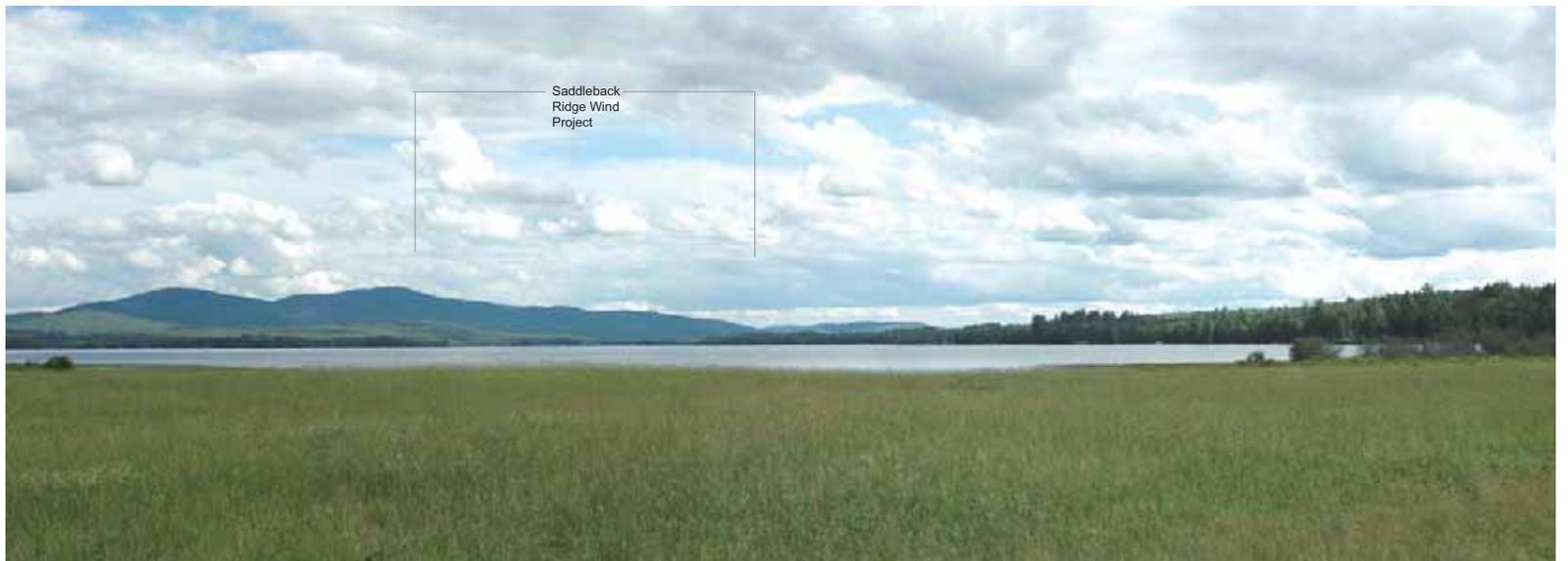
P22: Panoramic view (90°±) looking west to northwest from the summit of Mount Blue. The Project would not be visible from this viewpoint.



P23: Continued panoramic view looking north from the summit of Mount Blue.



P24: Panoramic view looking southeast toward Saddleback Ridge over Webb Lake from West Side Road in Weld. Turbines would be visible at distances of 8.4 to 9.1 miles.



P25: Continued panoramic view looking south toward Saddleback Ridge over Webb Lake from West Side Road in Weld. Turbines would be visible at distances of 8.4 to 9.1 miles, outside of the 8 mile threshold.



P26: Panoramic view looking northeast to east from West Side Road in Weld.



P27: Continued panoramic view looking east to southeast from West Side Road in Weld. Approximately five turbines would be visible from this viewpoint at distances ranging from 6.8 to 7.0 miles.



P28: View of the Weld Town Hall on the National Register of Historical Places. The Project will not be visible from this structure.



P29: View of the Weld Historical Society across from the Weld Town Hall. The Project will not be visible from these structures.



P30: View looking southeast from the village of Weld. The Project will not be visible from the village of Weld due to intervening vegetation.



P31: View of Bald Mountain parking area and trail head on Route 156.



P32: Lower trail to Bald Mountain.



P33: Mid trail



P34: First glimpse of distant view of Mount Blue.



P35: Typical trail on ledge



P36: Typical trail on ledge



P37: Typical trail below first overlook.



P38: First panoramic overlook on trail to Bald Mountain, below summit. See page 16 for view.



P39: Panoramic view looking north from the ledges below the summit of Bald Mountain in Washington TWP.



P40: Continued panoramic view looking north from an overlook below the summit of Bald Mountain. The Project would not be visible from the ledges.



P41: Panoramic view looking south toward Saddleback Ridge from the false summit of Bald Mountain in Washington TWP. This viewpoint is approximately 65' in elevation below the true summit, which is located approximately 300' to the north. The blades of up to 11 turbines would be visible from this viewpoint at a distance of 1.8 miles. The blades would be seen against the backdrop of the distant hills and would not appear above the horizon.



P42: Continued panoramic view looking west from the false summit of Bald Mountain.



P43: Continued panoramic view looking north from the false summit of Bald Mountain in Washington TWP.



P44: Continued panoramic view looking east from the false summit of Bald Mountain.



P45: Panoramic view looking southwest toward Saddleback Ridge from one viewpoint on the summit of Bald Mountain in Washington Township. Portions of up to twelve turbines will be visible from various points on the summit at distances of 1.8 to 3.5 miles.



P46: Panoramic view looking northwest from the summit of Bald Mountain. The open ledges at the summit of Bald Mountain are inclined to the north. Webb Lake is visible to left in image and Hills Pond, Route 156 and Mount Blue are visible on the right.



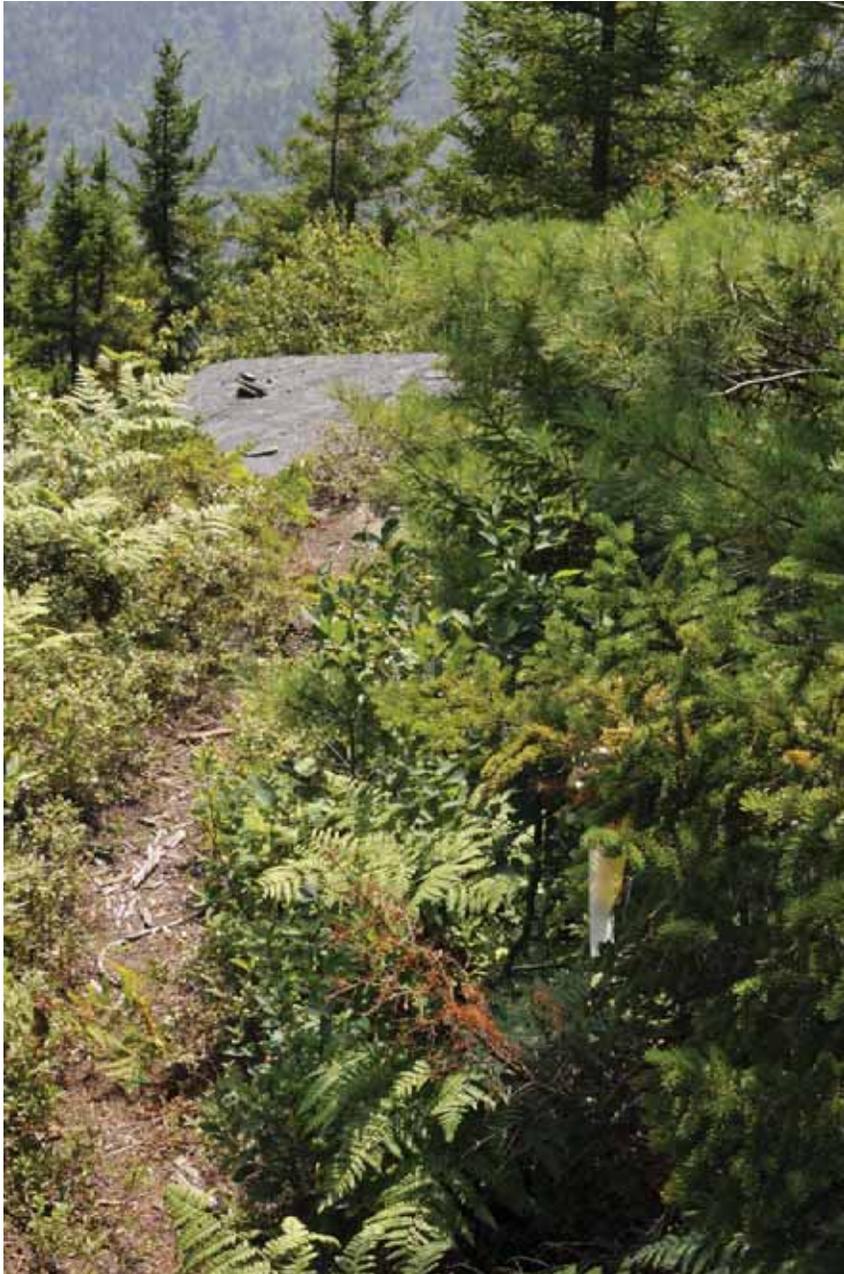
P47: Panoramic view looking south toward Saddleback Ridge from a viewpoint on the state owned Perkins Lot in Perkins Township. Portions of 8 turbines would be visible at distances of 1.6 to 3.2 miles. See Photosimulation 4 in Appendix B.



P48: Panoramic view looking east from a viewpoint on the Perkins Lot.



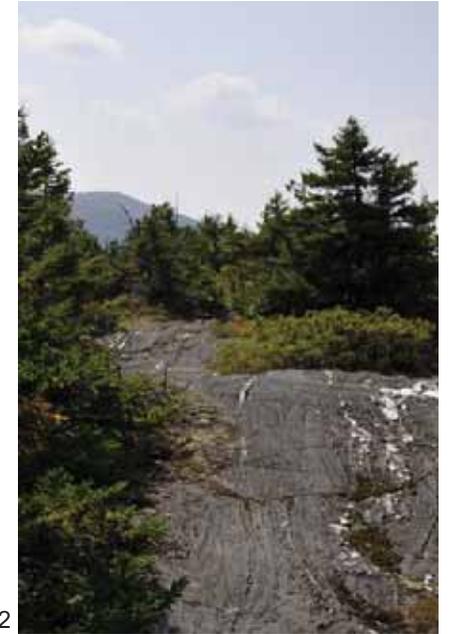
P49: Panoramic view looking west from a viewpoint on the Perkins Lot.



P50



P51



P52

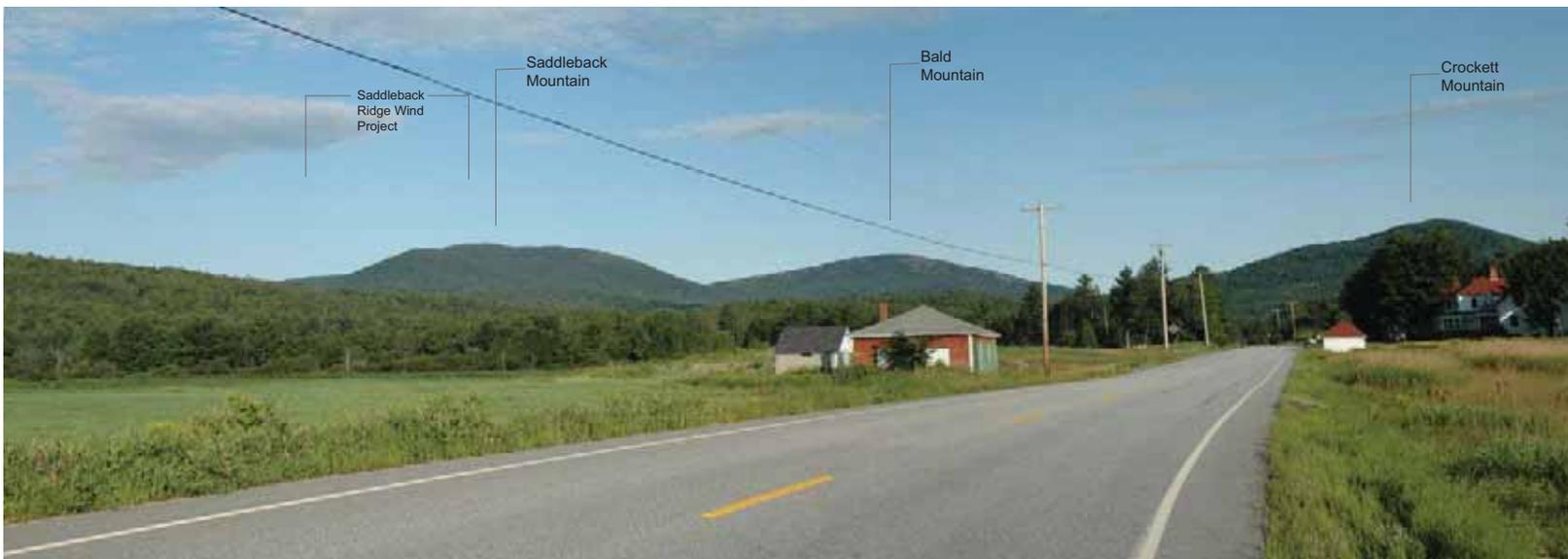


P53

P50-53: Typical views from the Perkins Lot on Bald Mountain. The trail is faint to nonexistent in places. Use appears to be very light.



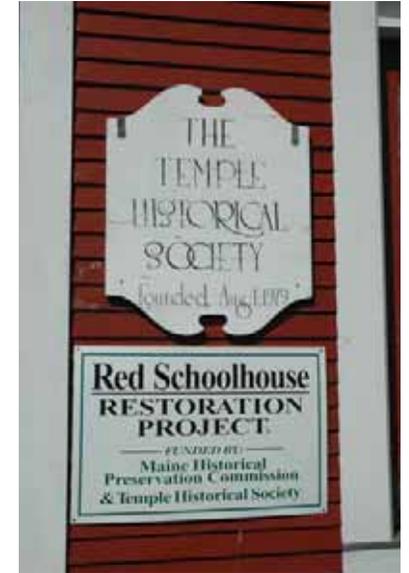
P54: Panoramic view looking south from Hills Pond off Route 156 in Perkins TWP. Portions of two +/- turbines may be visible to the right of Bald Mountain.



P55: Panoramic view looking west from Route 156 in Wilton. Portions of three turbines will be visible to the left of Saddleback Mountain at distances of 4.3 to 4.4 miles.



P56: Panoramic view of the Temple Intervale School on Intervale Road, which is listed on the National Register of Historic Places. The school house is being renovated in collaboration with the Maine Historic Preservation Commission. The Project will not be visible from this viewpoint due to intervening foreground vegetation and topography.



P57: Sign on school house



P58: Panoramic view looking southwest from the Temple Intervale School. The Project will not be visible due to intervening vegetation.



P59: Panoramic view looking northwest from near the boat launch on Wilson Pond in Wilton. Portions of 4 to 5 turbines would be visible at a distance of 7 miles.



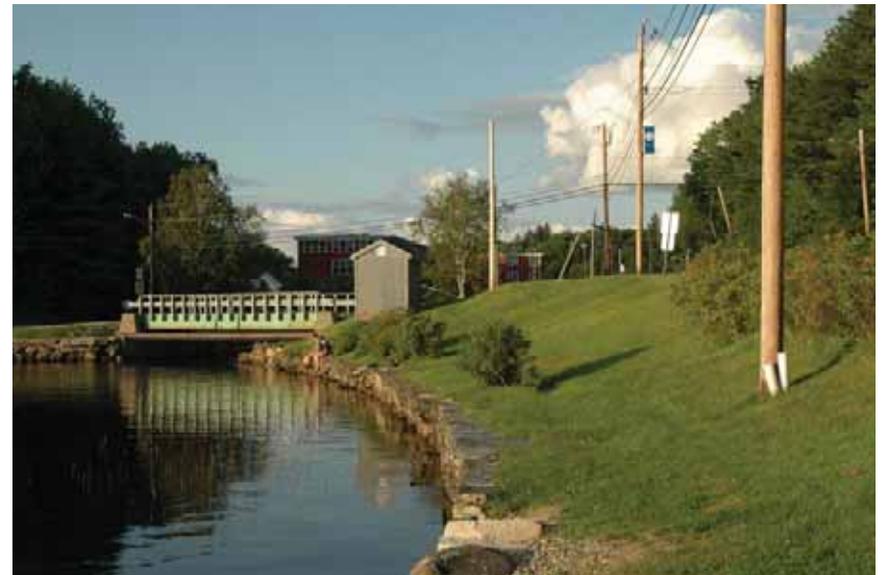
P60: Panoramic view looking northwest from the swimming area on Wilson Pond off Lake Road in Wilton. The Project would not be visible from this viewpoint.



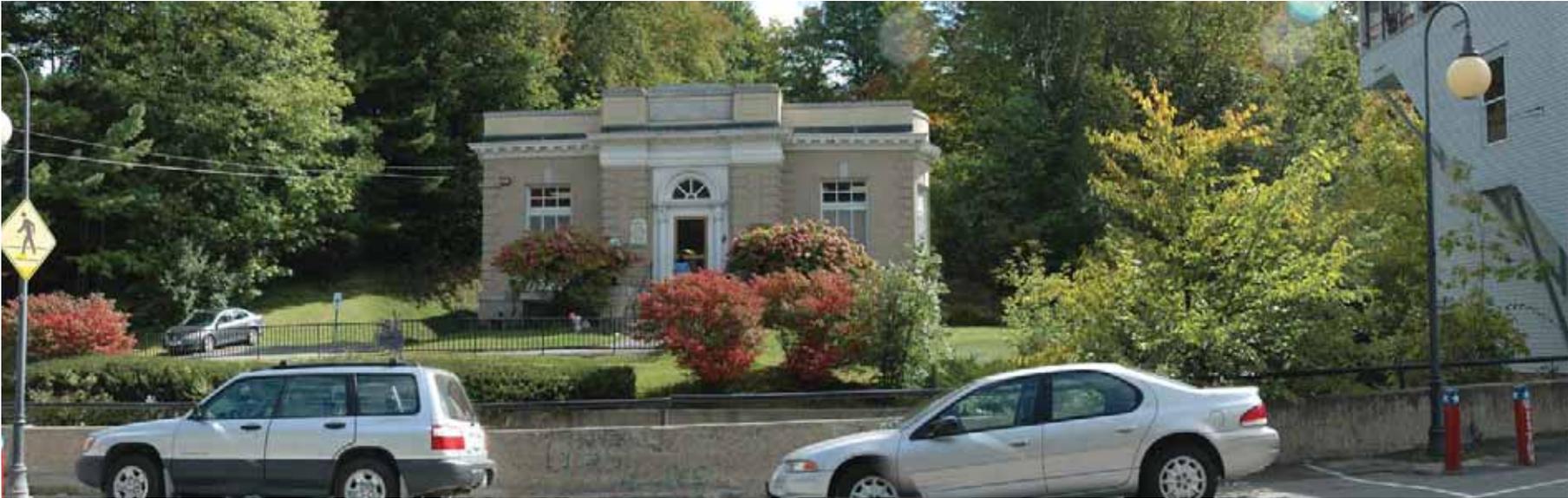
P61: Panoramic view from Bass Park in Wilton. The Project would not be visible from the Park.



P62: View towards the Bass Factory and Boat Launch on Wilson Pond in Wilton.



P63: Southern edge of Wilson Pond adjacent to Lake Road.



P64: View of the Goodspeed Memorial Library in Wilton which is on the National Register of Historical Places. The Project would not be visible from the library.



P65: View looking west on Main Street in Wilton. The Project would not be visible from the village.



P66: View of the Bass Boarding House in Wilton, now the Wilton Farm and Home Museum. This structure is on the National Register of Historic Places. The Project would not be visible from this structure.



P67: View from Canal Street, near the upper entrance of the Bass Boarding House, looking west.



P68: View of the Jay-Niles Memorial Library in North Jay, on the National Register of Historic Places.



P69: View of the upper parking lot and side entrance to the library.



P70: Panoramic view looking northwest from the front steps of the Jay-Niles Memorial Library. Portions of approximately eight turbines would be visible from this viewpoint at a distance of 7.8 miles.



P71: View of the North Jay Grange Store in North Jay. This publicly accessible grange is on the National Register of Historic Places and is approximately 7.8 miles from the project. The turbines would not be visible from this location due to intervening vegetation and structures.



P72: There is an abandoned gas station and other commercial buildings adjacent to the Grange.



P73: View looking east from the Grange toward the Jay Niles Memorial Library and the Jay Fire Department.



P74: Panoramic view looking northwest from near the intersection of Routes 2 and 17 in East Dixfield. Portions of eleven turbines would be visible at distances of 4.5 to 4.7 miles.



P75: Panoramic view looking northwest from Route 2, south of Gordon Road, in Wilton. Portions of six turbines would be visible at distances of 2.6 to 3.2 miles.



P76: Panoramic view looking north from the pull-off on Route 2 in Carthage. Portions of twelve turbines would be visible from this viewpoint at distances of 1.3 to 2.6 miles. The transmission line from the project will cross Route 2/17 1,400 feet north of this location.



P77: Panoramic view looking north from Route 2/17 in Dixfield. Portions of twelve turbines would be visible from this viewpoint at distances of 2.5 to 4.0 miles.



P78: Panoramic view of the John G. Coburn House on River Road in Carthage, on the National Register of Historic Places. This is a private residence with no public access. Up to twelve turbines may be visible from portions of the property during leaf-off conditions. The heavy vegetation along River Road would screen the Project during leaf-on conditions.



P79: Additional panoramic view of the Coburn House.

photos by James Sexton, Tetra Tech



P80: Panoramic view looking northeast to east from in front of the Coburn House. The Project would be screened during leaf-on season due to the heavy mixed vegetation between the House and Project.



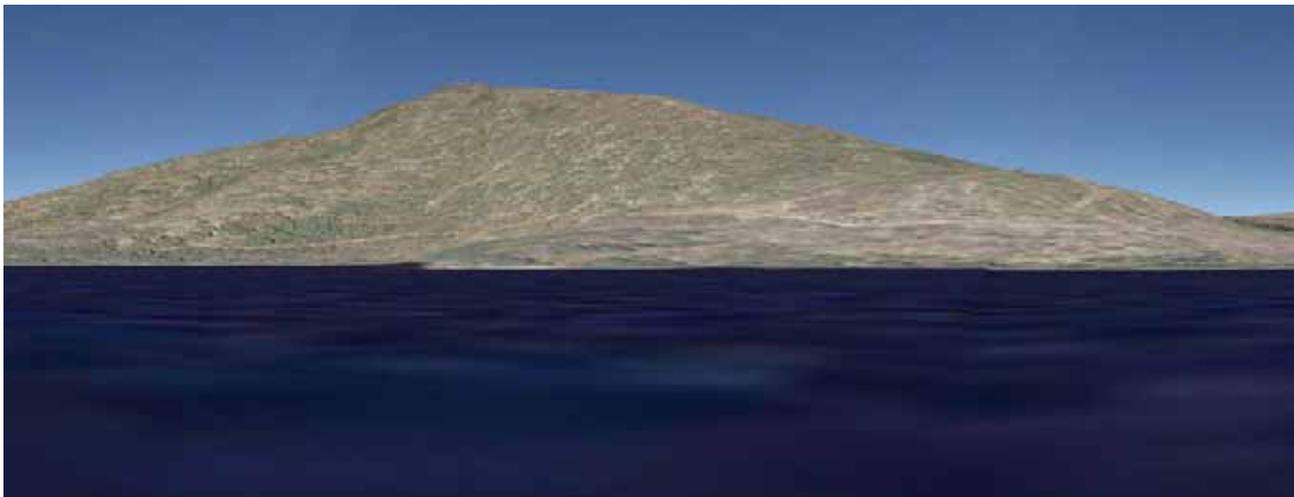
P81: Continued panoramic view looking east to southeast from in front of the Coburn House.



P82: Panoramic view looking east toward Saddleback Ridge from Halfmoon Pond in Mexico/Carthage. Portions of 6 +/- turbines would be visible at distances of 6.4 to 7.0 miles. See Photosimulation 5 in Appendix B.



P83: Pedestrian, ATV, and snowmobile access trail to Halfmoon Pond.



P84: Google Earth panoramic view from the center of Halfmoon Pond looking southwest toward Carr Mountain.



P85: Small stream which crosses trail to Halfmoon Pond.



P82: Panoramic view looking south from Berry Mills in Carthage. The Project would not be visible from this viewpoint due to intervening topography and vegetation.



P83: Continued panoramic view looking southeast from Berry Mills in Carthage.

Appendix B

Photosimulations



Saddleback Ridge Wind Project



Saddleback Ridge Wind Project

Webb Lake

Overlap

Photosimulation 1: Panoramic view looking southeast to southwest from the summit of Mount Blue, within Mount Blue State Park in Avon, toward the proposed Saddleback Ridge Wind Project. The summit of Mount Blue is located in the eastern portion of the State Park. This view is from the base of the firetower and is approximately 150 degrees wide. The turbines will occupy approximately 4 degrees of the total view. Five of the twelve turbines will be within 8 miles of this viewpoint. See Page 3 for normal view photosimulation.

| LEGEND | VIEWPOINT LOCATION MAP | PHOTOSIMULATION INFORMATION | Photosimulation 1 Mount Blue, Mount Blue State Park | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|--|---------------|-------------|--------------|-----------------|---------------|-------------------|--|-------------------|----------------|--------------------|---------------------|---------------|--|--------------------------|-----------|---------------------------|-----------|-------------------|-----|----------------|----------|----------------|---------|---|--|
| <ul style="list-style-type: none"> ● Saddleback Ridge Wind Project Turbines ↔ Viewpoint location and direction of view | | <table border="0"> <tr> <td>Turbine Model:</td> <td>GE 2.75-100.0</td> </tr> <tr> <td>Hub Height:</td> <td>85m (279 ft)</td> </tr> <tr> <td>Rotor Diameter:</td> <td>100m (328 ft)</td> </tr> <tr> <td>View Coordinates:</td> <td>Latitude: 44.728054263°, Longitude: -70.341925507°</td> </tr> <tr> <td>Viewer Elevation:</td> <td>973m (3191 ft)</td> </tr> <tr> <td>Direction of View:</td> <td>Southeast-Southwest</td> </tr> <tr> <td>Focal Length:</td> <td>Digital equivalent to 50mm normal lens</td> </tr> <tr> <td>Closest Visible Turbine:</td> <td>7.4 miles</td> </tr> <tr> <td>Furthest Visible Turbine:</td> <td>8.8 miles</td> </tr> <tr> <td>Turbines Visible:</td> <td>12±</td> </tr> <tr> <td>Date of Photo:</td> <td>08.28.09</td> </tr> <tr> <td>Time of Photo:</td> <td>4:30 pm</td> </tr> </table> | Turbine Model: | GE 2.75-100.0 | Hub Height: | 85m (279 ft) | Rotor Diameter: | 100m (328 ft) | View Coordinates: | Latitude: 44.728054263°, Longitude: -70.341925507° | Viewer Elevation: | 973m (3191 ft) | Direction of View: | Southeast-Southwest | Focal Length: | Digital equivalent to 50mm normal lens | Closest Visible Turbine: | 7.4 miles | Furthest Visible Turbine: | 8.8 miles | Turbines Visible: | 12± | Date of Photo: | 08.28.09 | Time of Photo: | 4:30 pm | <p>Saddleback Ridge Wind Project <i>Visual Impact Assessment</i></p> | |
| Turbine Model: | GE 2.75-100.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hub Height: | 85m (279 ft) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rotor Diameter: | 100m (328 ft) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| View Coordinates: | Latitude: 44.728054263°, Longitude: -70.341925507° | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Viewer Elevation: | 973m (3191 ft) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Direction of View: | Southeast-Southwest | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Focal Length: | Digital equivalent to 50mm normal lens | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Closest Visible Turbine: | 7.4 miles | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Furthest Visible Turbine: | 8.8 miles | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Turbines Visible: | 12± | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date of Photo: | 08.28.09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Time of Photo: | 4:30 pm | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 9.29.10 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Page 1 | | | | | | | | | | | | | | | | | | | | | | | | |



Normal view of existing conditions looking south from the summit of Mount Blue in Avon. Viewer should hold this image, when printed at 11" x 17", approximately 20" from eye to replicate actual view.

Mount Blue

Existing Conditions

Page

2



Photosimulation 1A: Normal view from the summit of Mount Blue looking south toward the proposed Saddleback Ridge Wind Project. Twelve turbines will be visible from this location at distances of 7.4 to 8.8 miles. Five turbines will be within 8 miles of this viewpoint. Viewer should hold this image, when printed at 11" x 17", approximately 20" from eye to replicate actual view.

Mount Blue

Photosimulation 1A

Page

3



Photosimulation 2: Panoramic view looking south from the Center Hill Overlook in Mount Blue State Park in Weld toward the proposed Saddleback Ridge Wind Project. Turbines visible from this location would be 6.9 to 8.0 miles away. This overlook is located below Mount Blue and is used for picnicing and blueberry picking. Webb Lake is visible in the mid-ground, Tumbledown and Jackson Mountain are visible in the background to the east.

| LEGEND | VIEWPOINT LOCATION MAP | PHOTOSIMULATION INFORMATION | Photosimulation 2 Center Hill Overlook, Mount Blue State Park | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|-------------------------|-------------|--------------|-----------------|---------------|-------------------|--|-------------------|----------------|--------------------|-------|---------------|--|--------------------------|-----------|---------------------------|-----------|-------------------|-----|----------------|----------|----------------|----------|---|--|
| <ul style="list-style-type: none"> ● Saddleback Ridge Wind Project Turbines ↔ Viewpoint location and direction of view | | <table border="0"> <tr> <td>Turbine Model:</td> <td>GE 2.75-100.0</td> </tr> <tr> <td>Hub Height:</td> <td>85m (279 ft)</td> </tr> <tr> <td>Rotor Diameter:</td> <td>100m (328 ft)</td> </tr> <tr> <td>View Coordinates:</td> <td>Latitude: 44.713775°, Longitude: -70.419834°</td> </tr> <tr> <td>Viewer Elevation:</td> <td>355m (1166 ft)</td> </tr> <tr> <td>Direction of View:</td> <td>South</td> </tr> <tr> <td>Focal Length:</td> <td>Digital equivalent to 50mm normal lens</td> </tr> <tr> <td>Closest Visible Turbine:</td> <td>6.9 miles</td> </tr> <tr> <td>Furthest Visible Turbine:</td> <td>8.0 miles</td> </tr> <tr> <td>Turbines Visible:</td> <td>12±</td> </tr> <tr> <td>Date of Photo:</td> <td>08.06.09</td> </tr> <tr> <td>Time of Photo:</td> <td>10:40 am</td> </tr> </table> | Turbine Model: | GE 2.75-100.0 | Hub Height: | 85m (279 ft) | Rotor Diameter: | 100m (328 ft) | View Coordinates: | Latitude: 44.713775°, Longitude: -70.419834° | Viewer Elevation: | 355m (1166 ft) | Direction of View: | South | Focal Length: | Digital equivalent to 50mm normal lens | Closest Visible Turbine: | 6.9 miles | Furthest Visible Turbine: | 8.0 miles | Turbines Visible: | 12± | Date of Photo: | 08.06.09 | Time of Photo: | 10:40 am | Saddleback Ridge Wind Project <i>Visual Impact Assessment</i> | |
| Turbine Model: | GE 2.75-100.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hub Height: | 85m (279 ft) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rotor Diameter: | 100m (328 ft) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| View Coordinates: | Latitude: 44.713775°, Longitude: -70.419834° | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Viewer Elevation: | 355m (1166 ft) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Direction of View: | South | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Focal Length: | Digital equivalent to 50mm normal lens | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Closest Visible Turbine: | 6.9 miles | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Furthest Visible Turbine: | 8.0 miles | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Turbines Visible: | 12± | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date of Photo: | 08.06.09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Time of Photo: | 10:40 am | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 9.29.10 <hr/> Page 4 | | | | | | | | | | | | | | | | | | | | | | | | |



Normal view of existing conditions looking south from the Center Hill Overlook in Mount Blue State Park in Weld. Viewer should hold this image, when printed at 11" x 17", approximately 20" from eye to replicate actual view.



Photosimulation 2B: Normal view looking south toward the proposed Saddleback Ridge Wind Project from the Center Hill Overlook. Twelve turbines would be visible from this viewpoint at distances of 6.9 to 8.0 miles. Viewer should hold this image, when printed at 11" x 17", approximately 20" from eye to replicate actual view.

Center Hill Overlook

Page

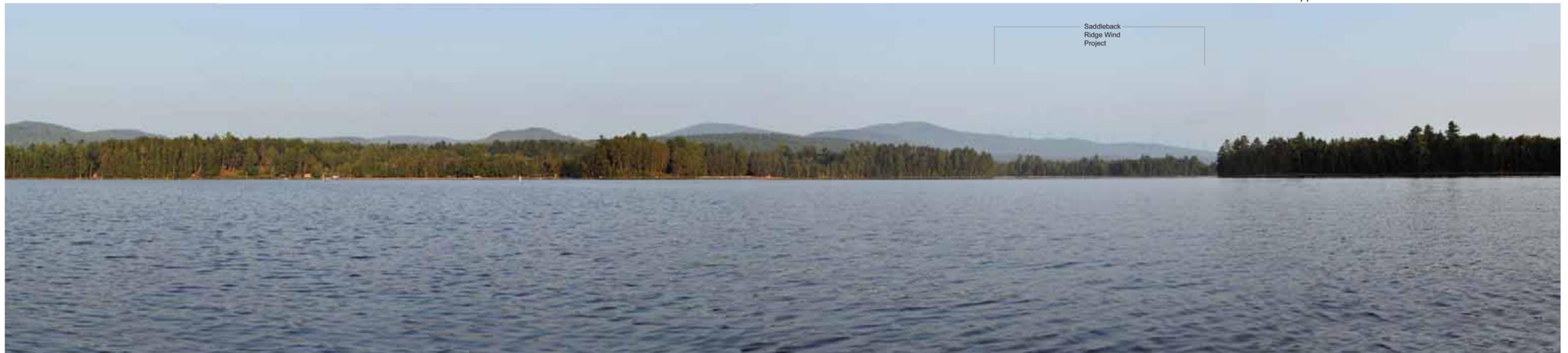
Photosimulation 2B

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Photosimulation 3: Panoramic view looking southwest to east from Webb Lake in Weld. Photographs from Webb Lake have been adjusted in Photoshop to reduce atmospheric haze. See Page 8 for continuation of panoramic view and photosimulation of project.

| LEGEND | VIEWPOINT LOCATION MAP | PHOTOSIMULATION INFORMATION | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|---|------------------------------------|-------------|--------------|-----------------|---------------|-------------------|--|-------------------|---------------|--------------------|-----------|---------------|--|--------------------------|-----------|---------------------------|-----------|-------------------|-----|----------------|----------|----------------|----------|--|--|
| <ul style="list-style-type: none"> ● Saddleback Ridge Wind Project Turbines ↔ Viewpoint location and direction of view | | <table border="0"> <tr> <td>Turbine Model:</td> <td>GE 2.75-100.0</td> </tr> <tr> <td>Hub Height:</td> <td>85m (279 ft)</td> </tr> <tr> <td>Rotor Diameter:</td> <td>100m (328 ft)</td> </tr> <tr> <td>View Coordinates:</td> <td>Latitude: 44.676093°, Longitude: -70.433681°</td> </tr> <tr> <td>Viewer Elevation:</td> <td>206m (677 ft)</td> </tr> <tr> <td>Direction of View:</td> <td>Southeast</td> </tr> <tr> <td>Focal Length:</td> <td>Digital equivalent to 50mm normal lens</td> </tr> <tr> <td>Closest Visible Turbine:</td> <td>5.0 miles</td> </tr> <tr> <td>Furthest Visible Turbine:</td> <td>5.8 miles</td> </tr> <tr> <td>Turbines Visible:</td> <td>12±</td> </tr> <tr> <td>Date of Photo:</td> <td>09.01.10</td> </tr> <tr> <td>Time of Photo:</td> <td>12:15 pm</td> </tr> </table> | Turbine Model: | GE 2.75-100.0 | Hub Height: | 85m (279 ft) | Rotor Diameter: | 100m (328 ft) | View Coordinates: | Latitude: 44.676093°, Longitude: -70.433681° | Viewer Elevation: | 206m (677 ft) | Direction of View: | Southeast | Focal Length: | Digital equivalent to 50mm normal lens | Closest Visible Turbine: | 5.0 miles | Furthest Visible Turbine: | 5.8 miles | Turbines Visible: | 12± | Date of Photo: | 09.01.10 | Time of Photo: | 12:15 pm | <h2>Photosimulation 3</h2> <h3>Webb Lake, Weld, Maine</h3> | |
| Turbine Model: | GE 2.75-100.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hub Height: | 85m (279 ft) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rotor Diameter: | 100m (328 ft) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| View Coordinates: | Latitude: 44.676093°, Longitude: -70.433681° | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Viewer Elevation: | 206m (677 ft) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Direction of View: | Southeast | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Focal Length: | Digital equivalent to 50mm normal lens | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Closest Visible Turbine: | 5.0 miles | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Furthest Visible Turbine: | 5.8 miles | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Turbines Visible: | 12± | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date of Photo: | 09.01.10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Time of Photo: | 12:15 pm | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | <h2>Saddleback Ridge Wind Project</h2> <h3>Visual Impact Assessment</h3> | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <p>PATRIOT RENEWABLES Saddleback Ridge Wind, LLC</p> | <p>Terrence J. DeWan & Associates Landscape Architects & Planners</p> | <p>9.29.10</p> <hr/> <p>Page 7</p> | | | | | | | | | | | | | | | | | | | | | | | | |



Photosimulation 3: Panoramic view looking southeast to south from Webb Lake in Weld toward the proposed Saddleback Ridge Wind Project. All twelve turbines would be visible from this location at distances of 5.0 to 5.8 miles.

| LEGEND | VIEWPOINT LOCATION MAP | PHOTOSIMULATION INFORMATION | <p style="text-align: center;">Photosimulation 3 Webb Lake, Weld, Maine</p> | |
|---|------------------------|---|---|---|
| <ul style="list-style-type: none"> ● Saddleback Ridge Wind Project Turbines ↔ Viewpoint location and direction of view | | <p>Turbine Model: GE 2.75-100.0 Hub Height: 85m (279 ft) Rotor Diameter: 100m (328 ft) View Coordinates: Latitude: 44.676093°, Longitude: -70.433681° Viewer Elevation: 206m (677 ft) Direction of View: Southeast Focal Length: Digital equivalent to 50mm normal lens Closest Visible Turbine: 5.0 miles Furthest Visible Turbine: 5.8 miles Turbines Visible: 12± Date of Photo: 09.01.10 Time of Photo: 12:15 pm</p> | <p style="text-align: center;">Saddleback Ridge Wind Project <i>Visual Impact Assessment</i></p> | |
| | | | | <p style="text-align: center;">9.29.10 Page 8</p> |



Normal view of existing conditions looking southeast from Webb Lake in Weld. Viewer should hold this image, when printed at 11" x 17", approximately 20" from eye to replicate actual view.

Webb Lake

Existing Conditions

Page

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Photosimulation 3A: Normal view looking southeast toward the proposed Saddleback Ridge Wind Project from Webb Lake. Twelve turbines would be visible from this viewpoint at distances of 5.0 to 5.8 miles. Viewer should hold this image, when printed at 11" x 17", approximately 20" from eye to replicate actual view.

Webb Lake

Photosimulation 3A

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Photosimulation 4: Panoramic view looking southwest from the Perkins Lot on Bald Mountain in Perkins TWP toward the proposed Saddleback Ridge Wind Project. Portions of eight turbines would be visible from this viewpoint at distances of 1.6 to 3.2 miles. The Perkins Lot is a 166.7 acre parcel of Maine Public Reserved land on the southwest side of Bald Mountain.

| LEGEND | VIEWPOINT LOCATION MAP | PHOTOSIMULATION INFORMATION | Photosimulation 4 Perkins Lot on Bald Mountain Perkins TWP, Maine | |
|---|------------------------|---|--|--------------------------|
| <ul style="list-style-type: none"> ● Saddleback Ridge Wind Project Turbines ↔ Viewpoint location and direction of view | | <p>Turbine Model: GE 2.75-100.0 Hub Height: 85m (279 ft) Rotor Diameter: 100m (328 ft) View Coordinates: Latitude: 44.645271°, Longitude: -70.351745° Viewer Elevation: 708m (2323 ft) Direction of View: Southwest Focal Length: Digital equivalent to 50mm normal lens Closest Visible Turbine: 1.6 miles Furthest Visible Turbine: 3.2 miles Turbines Visible: 8± Date of Photo: 09.01.10 Time of Photo: 12:40 pm</p> | Saddleback Ridge Wind Project <i>Visual Impact Assessment</i> | |
| | | | | 9.29.10 <hr/> Page 11 |



Normal view of existing conditions looking southwest from a midpoint on the ridgeline on the Perkins Lot on Bald Mountain in Perkins Plantation. Viewer should hold this image, when printed at 11" x 17", approximately 20" from eye to replicate actual view.

Perkins Lot

Page

Existing Conditions

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Photosimulation 4A: Normal view looking southwest toward the proposed Saddleback Ridge Wind Project from the Perkins Lot on Bald Mountain. Portions of eight turbines would be visible from this viewpoint at distances of 1.6 to 3.2 miles. Viewer should hold this image, when printed at 11" x 17", approximately 20" from eye to replicate actual view.

Perkins Lot

Page

Photosimulation 4A

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Photosimulation 5: Panoramic view looking east from Halfmoon Pond in Mexico toward the proposed Saddleback Ridge Wind Project. Portions of 6± turbines would be visible from this location at a distance of 6.4 to 7.0 miles. Halfmoon Pond has been designated as “outstanding” in the *Maine’s Finest Lakes* study.

| LEGEND | VIEWPOINT LOCATION MAP | PHOTOSIMULATION INFORMATION | <h2 style="text-align: center;">Photosimulation 5</h2> <h3 style="text-align: center;">Halfmoon Pond, Mexico, Maine</h3> | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|---|-------------|--------------|-----------------|---------------|-------------------|--|-------------------|---------------|--------------------|------|---------------|--|--------------------------|-----------|---------------------------|-----------|-------------------|----|----------------|----------|----------------|---------|---|--|
| <ul style="list-style-type: none"> ● Saddleback Ridge Wind Project Turbines ↔ Viewpoint location and direction of view | | <table border="0"> <tr> <td>Turbine Model:</td> <td>GE 2.75-100.0</td> </tr> <tr> <td>Hub Height:</td> <td>85m (279 ft)</td> </tr> <tr> <td>Rotor Diameter:</td> <td>100m (328 ft)</td> </tr> <tr> <td>View Coordinates:</td> <td>Latitude: 44.602239°, Longitude: -70.503008°</td> </tr> <tr> <td>Viewer Elevation:</td> <td>152m (498 ft)</td> </tr> <tr> <td>Direction of View:</td> <td>East</td> </tr> <tr> <td>Focal Length:</td> <td>Digital equivalent to 50mm normal lens</td> </tr> <tr> <td>Closest Visible Turbine:</td> <td>6.4 miles</td> </tr> <tr> <td>Furthest Visible Turbine:</td> <td>6.4 miles</td> </tr> <tr> <td>Turbines Visible:</td> <td>6±</td> </tr> <tr> <td>Date of Photo:</td> <td>08.06.10</td> </tr> <tr> <td>Time of Photo:</td> <td>2:15 pm</td> </tr> </table> | Turbine Model: | GE 2.75-100.0 | Hub Height: | 85m (279 ft) | Rotor Diameter: | 100m (328 ft) | View Coordinates: | Latitude: 44.602239°, Longitude: -70.503008° | Viewer Elevation: | 152m (498 ft) | Direction of View: | East | Focal Length: | Digital equivalent to 50mm normal lens | Closest Visible Turbine: | 6.4 miles | Furthest Visible Turbine: | 6.4 miles | Turbines Visible: | 6± | Date of Photo: | 08.06.10 | Time of Photo: | 2:15 pm | <h3 style="text-align: center;">Saddleback Ridge Wind Project</h3> <p style="text-align: center;"><i>Visual Impact Assessment</i></p> | |
| Turbine Model: | GE 2.75-100.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hub Height: | 85m (279 ft) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rotor Diameter: | 100m (328 ft) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| View Coordinates: | Latitude: 44.602239°, Longitude: -70.503008° | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Viewer Elevation: | 152m (498 ft) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Direction of View: | East | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Focal Length: | Digital equivalent to 50mm normal lens | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Closest Visible Turbine: | 6.4 miles | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Furthest Visible Turbine: | 6.4 miles | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Turbines Visible: | 6± | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date of Photo: | 08.06.10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Time of Photo: | 2:15 pm | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | <p style="text-align: center;">9.29.10</p> <hr/> <p style="text-align: center;">Page 14</p> | | | | | | | | | | | | | | | | | | | | | | | | |



Normal view of existing conditions looking east from Halfmoon Pond in Mexico. Viewer should hold this image, when printed at 11" x 17", approximately 20" from eye to replicate actual view.

Halfmoon Pond

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Existing Conditions

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Photosimulation 5A: Normal view looking east toward the proposed Saddleback Ridge Wind Project from Halfmoon Pond. Portions of 6± turbines would be visible from this location at a distance of 6.4 to 7.0 miles. Viewer should hold this image, when printed at 11" x 17", approximately 20" from eye to replicate actual view.

| | |
|---------------------------|------|
| Halfmoon Pond | Page |
| Photosimulation 5A | 16 |

Appendix C

Market Decisions Survey of Hikers on Mount Blue



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Email: research@marketdecisions.com
Web: www.marketdecisions.com

Research Report

Mt. Blue-Saddleback Ridge Wind Power Project Intercepts

September 2010

Prepared for:

Patriot Renewables

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Summary

Patriot Renewables is in the process of seeking approvals for a wind energy project on Saddleback Ridge in Carthage, Maine. Since this project may affect the view from Mt. Blue State Park, which is designated as a scenic resource of state or national significance, the client wished to better understand public opinions of the possible effects of the project on that viewshed.

Patriot Renewables requested that the survey be conducted on Mt. Blue, looking towards Saddleback Ridge, over Labor Day weekend 2010. Mt. Blue is 7.4 to 8.8 miles away from the proposed wind energy project on Saddleback Ridge.

Patriot Renewables engaged Market Decisions to finalize and conduct the survey, and evaluate the results. Market Decisions interviewed 22 hikers during the survey.

- Mt. Blue is a recreational attraction because it is an accessible, short hike with open views of the surrounding landscape. Hikers here are not expecting a wilderness experience, rather, a chance to get exercise and enjoy the outdoors, often as a family.
- On average, respondents rated the current scenic value of a photograph of the view from Mt. Blue as 5.5 on a 7-point scale, above the mid-point or neutral (4) level of the scale. Five respondents gave the photographic image the highest rating of 7.
- The addition of a wind energy project to the view dropped the average rating to 4.2, slightly above the midpoint or neutral level of the scale. Four respondents gave the image with the wind farm the lowest rating of 1.
- Most respondents thought that the addition of a wind farm to the view from Mt. Blue would have no effect on their enjoyment (4 on a 7-point scale). Expectations for negative and positive effects were nearly balanced; seven thought that the wind farm would negatively affect their enjoyment and five thought it would positively affect their enjoyment. No respondents said that the effect on their enjoyment would be extremely negative (1 on a 7-point scale); one said their enjoyment would be extremely positive (7 on a 7-point scale).
- Most respondents thought that the addition of a wind farm to the view from Mt. Blue would have no effect on their likelihood of returning to Mt. Blue (4 on a 7-point scale). Likelihood of returning to Mt. Blue was nearly balanced; five thought that the wind farm would make them less likely (less than 4 on a 7-point scale) to return while six thought the wind farm would make them more likely (greater than 4 on a 7-point scale). No respondents gave the lowest rating of 1; however, four respondents gave the highest rating of 7, indicating they would be very likely to return.
- Most respondents supported commercial wind power in Maine; half (11 of 22) completely supported it (7 on a 7-point scale). Only two were neutral on the issue and one was negative; two respondents were not sure how to rate their level of support.

Methodology

The survey used in this research was developed by Market Decisions. The survey was designed to be administered in person, on the top of Mt. Blue, so it was purposefully short - just 17 questions, including demographic information.

For the most important set of questions, respondents were asked to rate the scenic value of Saddleback Mountain, then to rate a photograph of a view looking towards Saddleback Ridge, and finally to rate the same view of Saddleback Ridge with simulated images of a wind power project. The images presented were each approximately 9" by 14"; copies of these images are contained in the final section of this report. Interviewees were instructed to hold the images at a distance of approximately 21", which replicates the 'normal' view of the landscape.

The survey was administered on Sunday, September 5th and Monday, September 6th of Labor Day Weekend, 2010. The weather was clear and sunny both days, ideal for hiking. Two trained interviewers were on the top of the mountain from 10am to 5pm on Sunday and from 10am to 12pm on Monday. Interviewers intercepted each party of hikers that appeared on the mountain and multiple adults from each party were invited to participate as were willing. Children were not interviewed.

Forty hikers, including adults and children, were observed during the survey. In all, 22 interviews were completed among adult hikers that were hiking Mt. Blue.

With such a high "response rate" (22 hikers interviewed of 30 adult hikers observed) we can say that the collected data is representative of the hikers on the mountain during the survey period. We cannot say whether the data would be the same for other days. Additional data would be necessary to make more definitive conclusions.

Visitor Traffic to Mt. Blue

A total of forty hikers (adults and children) visited the mountain over the two days. There were three single hikers, six parties of two hikers, one party of three hikers, three parties of four hikers and one party of ten hikers. Up to three adults in each party were interviewed for this project.

| # of Hikers in Party | # of Parties | Total # of Hikers | Adults | Children |
|----------------------|--------------|-------------------|-----------|-----------|
| 1 | 3 | 3 | 3 | 0 |
| 2 | 6 | 12 | 12 | 0 |
| 3 | 1 | 3 | 1 | 2 |
| 4 | 3 | 12 | 10 | 2 |
| 10 | 1 | 10 | 4 | 6 |
| Total | 14 | 40 | 30 | 10 |

Visitor Residence

Five out of the twenty-two respondents were from out of state and one respondent was from the local community of Phillips.

Q1: Note number in party

Q2: First, can you tell me the zip code of the place you live?

| Respondent ID | Zip Code | Town or City |
|---------------|----------|--------------------|
| 1 | 04966 | Phillips, ME |
| 2 | 04106 | South Portland, ME |
| 3 | 04260 | New Gloucester, ME |
| 4 | 04260 | New Gloucester, ME |
| 5 | 04102 | Portland, ME |
| 6 | 04937 | Fairfield, ME |
| 7 | 02838 | Manville, RI |
| 8 | 02838 | Manville, RI |
| 9 | 01588 | Whitinsville, MA |
| 10 | 12563 | Patterson, NY |
| 11 | 04072 | Saco, ME |
| 12 | 04072 | Saco, ME |
| 13 | 04963 | Oakland, ME |
| 14 | 04963 | Oakland, ME |
| 15 | 04103 | Portland, ME |
| 16 | 04976 | Skowhegan, ME |
| 17 | 04976 | Skowhegan, ME |
| 18 | 04976 | Skowhegan, ME |
| 19 | 04107 | Cape Elizabeth, ME |
| 20 | 04358 | South China, ME |
| 21 | 04358 | South China, ME |
| 22 | 21032 | Crownsville, MD |

Previous Visits to Mt. Blue

Seven of twenty-two respondents had been to Mt. Blue before. Of these seven, three had visited Mt. Blue in the past year. Most respondents said that they hike regularly, some as many as 30 days a year.

Q3: Have you hiked the trail to Mt. Blue before?

IF YES: About how many times in the past year?

Q4: About how many days a year do you hike?

| Respondent ID | Been to Mt. Blue Before? | # Times In Past Year | Hiking Days per Year |
|---------------|--------------------------|----------------------|----------------------|
| 1 | Yes | 0* | 2 |
| 2 | Yes | 1 | 20 |
| 3 | No | | 25 |
| 4 | No | | 10 |
| 5 | No | | 2 |
| 6 | Yes | 1 | 30 |
| 7 | No | | 3 |
| 8 | No | | 1 |
| 9 | No | | 1 |
| 10 | No | | 7 |
| 11 | No | | 5 |
| 12 | No | | 2 |
| 13 | No | | 30 |
| 14 | Yes | 0* | 2 |
| 15 | No | | 1 |
| 16 | No | | 4 |
| 17 | No | | 2 |
| 18 | No | | 3 |
| 19 | Yes | 0* | 10 |
| 20 | Yes | 2 | 6 |
| 21 | Yes | 0* | 20 |
| 22 | No | | 10 |

*These hikers had been to Mt. Blue before, but not in the past year.

Reasons for Hiking Mt. Blue

The Mt. Blue hike is apparently well known and is often recommended as a good day hike. Some respondents mentioned that it was a great day for a nice, little hike. Others wanted to get some exercise and some hikers stated that they were camping, had the weekend off and wanted to enjoy the weather. A few said they found the trail by looking on the Internet.

Q5: What brought you to Mt. Blue today?

PROBE: Any other reasons?

| Respondent ID | What brought you to Mt. Blue today? |
|---------------|--|
| 1 | The kids. |
| 2 | Good hike. Relatively undisturbed. |
| 3 | Seemed like an exciting mountain; we've done Tumbledown a few times - good little day hike. |
| 4 | We didn't want to do Tumbledown with the dog. Good little hike. |
| 5 | Always just wanted to visit it. We were in the area for some other stuff but came partly to see the state park. |
| 6 | Recon for AMC in October. State Park Series in Fall. Close by -- good day trip. |
| 7 | Found campsite on the Internet. |
| 8 | Internet / should probably hike; we never hike. |
| 9 | My friends / camping. |
| 10 | Group. Just following them. |
| 11 | Camping in a campground -- too windy to be on the lake. |
| 12 | Camping at State Park. He talked us into it. |
| 13 | Beautiful weekend. My husband's weekend off. |
| 14 | Had the weekend off -- camping at Mt. Blue State Park. Wanted to take an easier hike -- we're old folks; seemed like a hike we can do. |
| 15 | Friends / Wanted to see something beautiful and exercise. |
| 16 | Wanted to go on an adventure and here we are. |
| 17 | Friend told me it was a nice hike. |
| 18 | Recreation and exercise -- I'd say probably also sightseeing, definitely. |
| 19 | Solace -- kinda felt like going out and doing something I like to do |
| 20 | Nice weather. Felt like good day for a hike. Last nice weekend of the year. I hadn't hiked Mt. Blue in a while. |

| Respondent ID | What brought you to Mt. Blue today? |
|----------------------|---|
| 21 | Beautiful day. Day off - quality time with daughter. Tumbledown last year. Brings back memories of my mother. |
| 22 | Recommendation from someone locally. A good day hike -- beaten path trail. |

Rating Scenic Values

This set of questions was intended to establish reference points for the ratings of scenic value. By asking for the best and the worst places of scenic value, it was thought that the responses of the survey participants could be better understood and that survey participants would be better prepared to rate the scenic value of Saddleback Mountain having considered their own scenic value reference points in advance.

Participants had little difficulty choosing a view that represented the highest scenic value; seven respondents mentioned Mount Katahdin as a destination with a very high scenic view. However, they had more difficulty choosing one that represented the lowest scenic value, and there did not appear to be a consistent concept for what constituted a low scenic value. For some, it was another view from a mountain top, such as Bradbury (mentioned twice), but perhaps just not as impressive. For others, views of Portland or areas in Portland (mentioned four times) reduced scenic value. Due to the different interpretations of what constituted low scenic value, it was not clear whether this question added value to the research.

Q6: Now I'd like to ask you about scenic value. Can you think of a destination in Maine that has a very high scenic value, or outstanding view? On a scale of 1-7 for scenic views, one you would rate as a 7 for highest scenic value.

Q7: Can you think of an outdoor destination in Maine that has a very low scenic value? On a scale of 1-7 for scenic views, one you would rate as a 1?

PROMPT: Please think only of outdoor, viewing or scenic areas

| Respondent ID | Scenic Value Rated "7" | Scenic Value Rated "1" |
|---------------|---|--|
| 1 | Saddleback | Portland / Portland Park; Funtown |
| 2 | This trail | A paper mill |
| 3 | This area; White Mountain area; Grafton Notch; Bald Pate Mountain | Bradbury |
| 4 | Mt. Battie | Lewiston |
| 5 | Top of Katahdin on a clear day | Western Prom (in Portland) - you can see the oil tanks |
| 6 | Katahdin / Bigelow | Don't Know |
| 7 | This one; haven't been to Maine much | Portland: too built up |
| 8 | Don't Know, this place; never hike | Portland |
| 9 | Don't Know | Don't Know |
| 10 | Don't Know -- only view I've seen in Maine is here. | City - Don't Know |
| 11 | Katahdin (when not cloudy) | Bradbury Mountain |
| 12 | Bar Harbor | Biddeford |

| Respondent ID | Scenic Value Rated “7” | Scenic Value Rated “1” |
|----------------------|---------------------------------------|--|
| 13 | Katahdin | Don't Know -- can't think of an ugly place |
| 14 | Cobscook Bay; Quoddy Light | Lower Androscoggin River |
| 15 | Sugarloaf | Lake George |
| 16 | Acadia | Lake George Regional Park |
| 17 | Bald Mountain -- So far | Trailer Park |
| 18 | Sugarloaf | Rangeley State Park |
| 19 | Katahdin | Chebeague Island looking over at Cousins |
| 20 | Mt. Katahdin & Chimney Pond | Kennebunkport Rest Stop |
| 21 | Katahdin | Bog - in [Biddeford?] - not much to look at, swamp |
| 22 | This is a 7, few roads, mostly forest | I don't know too well - Rumford |

Rating Scenic Views from Mt. Blue

Seven respondents gave the actual view from Mt. Blue the highest rating, a 7. Six others rated the view a 6. All respondents but one rated the actual view at or above the midpoint of the scale (4) with the average as a 5.7.

Differences in ratings of the actual view and the photograph of the same view were slight. Six of twenty-two rated the view from the photograph lower than the actual view, thirteen rated both views the same, and, oddly enough, three rated the view in the photograph higher than the actual view.

Fourteen respondents rated the scenic value of the photographic image with the wind farm lower than the image without the wind farm. Seven did not change their ratings, and one respondent rated the view with the wind farm higher. Changes in ratings varied with the greatest change being a four-point rating reduction. On average, ratings decreased slightly more than one point (1.2).

No dramatic pattern of differences in responses was apparent. Men and women had similar rating changes, where ratings by men declined by 1.4 points on average and ratings by women declined by 1.1 points on average.

Ratings from out of state respondents changed similarly to those from within the state; out of staters' ratings declined by 1.2 points on average while Mainers' ratings declined by 1.5 points on average.

Of the eleven whom most strongly supported wind power (rating of 7), one increased the rating by two points, five did not change their ratings and five decreased their ratings (the largest decrease was a change by one point).

Q8: Now look towards Saddleback Mountain. On the 1-to-7 scale of scenic value in Maine, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic value of this view?

INT: ASK RESPONDENT TO TURN AWAY FROM ACTUAL VIEW BEFORE SHOWING PHOTOS

Please take a look at this photograph taken looking towards Saddleback Ridge. HAND IMAGE TO RESPONDENT

Q9: On a scale of 1-7, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic value of this view?

Please take a look at this photo simulation of a wind power project that has been proposed on Saddleback Ridge. HAND IMAGE TO RESPONDENT

Q10: On a scale of 1-7, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic value of this view?

| Resp. ID | Gender | Residence | Support for Wind Power in Maine <i>1-7, 7 Completely Support, 1 Do Not Support at All</i> | Scenic Value Actual View <i>1-7, 7 Highest, 1 Lowest</i> | Scenic Value Photo of View <i>1-7, 7 Highest, 1 Lowest</i> | Scenic Value Photo of View With Wind Farm <i>1-7, 7 Highest, 1 Lowest</i> | Change in Scenic Value |
|-----------------|---------------|--------------------|---|--|--|---|-------------------------------|
| 1 | Male | Phillips, ME | 7 | 1 | 1 | 1 | 0 |
| 2 | Male | South Portland, ME | 6 | 6 | 6 | 2 | -4 |
| 3 | Male | New Gloucester, ME | 5 | 6 | 6 | 5 | -1 |
| 4 | Female | New Gloucester, ME | 7 | 6 | 6 | 5 | -1 |
| 5 | Female | Portland, ME | 5 | 5 | 5 | 2 | -3 |
| 6 | Male | Fairfield, ME | 4 | 5.5 | 6 | 3 | -3 |
| 7 | Female | Manville, RI | 7 | 5 | 6 | 6 | 0 |
| 8 | Male | Manville, RI | 7 | 5 | 5 | 7 | +2 |
| 9 | Female | Whitinsville, MA | 6 | 4 | 5 | 5 | 0 |
| 10 | Male | Patterson, NY | 7 | 7 | 7 | 6 | -1 |
| 11 | Male | Saco, ME | 1 | 4 | 4 | 1 | -3 |
| 12 | Female | Saco, ME | Don't Know | 6 | 5 | 1 | -4 |
| 13 | Female | Oakland, ME | Don't Know | 7 | 6 | 6 | 0 |
| 14 | Male | Oakland, ME | 7 | 7 | 7 | 6 | -1 |
| 15 | Female | Portland, ME | 4 | 7 | 7 | 5 | -2 |
| 16 | Female | Skowhegan, ME | 5 | 5 | 4 | 1 | -3 |
| 17 | Female | Skowhegan, ME | 7 | 7 | 5 | 5 | 0 |
| 18 | Female | Skowhegan, ME | 7 | 6 | 4 | 4 | 0 |
| 19 | Female | Cape Elizabeth, ME | 7 | 7 | 7 | 7 | 0 |
| 20 | Female | South China, ME | 7 | 5.5 | 5.5 | 5 | -5 |
| 21 | Male | South China, ME | 7 | 6 | 5.5 | 5 | -5 |
| 22 | Male | Crownsville, MD | 6 | 7 | 7 | 5 | -2 |
| Average: | | | 6.0 | 5.7 | 5.5 | 4.2 | -1.2 |

Effect of Wind Power Project on Enjoyment of Mt. Blue

Seven respondents said that the wind power project would negatively affect their enjoyment of Mt. Blue and five said that the project would positively affect their enjoyment. Ten gave a neutral response (a rating of 4). Overall, the average was neutral, a 4.0.

The wind power project also does not appear to greatly affect respondents' likelihood of returning to Mt. Blue. Overall, the average was neutral, a 4.3. Six respondents said that they were likely to return to Mt. Blue (ratings of 5, 6 and 7) while five stated that they were not likely to return (ratings of 1, 2 and 3). Eleven gave a neutral response (a rating of 4).

Q11: Now I'd like you to think about how your enjoyment of Mt. Blue today would be affected by a change in the current view of Saddleback Ridge to the one in the image. On a scale of 1-7, where 7 is a very positive affect and 1 is a very negative affect on your enjoyment how would your enjoyment be affected? A "4" means that it would not change your enjoyment at all.

Q12: Why do you say that?

Q13: Please think about how a change from the current view of Saddleback Mountain to the one in the image would affect your likelihood of returning to Mt. Blue. On a scale of 1-7 where 7 means you are more likely to return and 1 means you are less likely to return, how likely are you to return to Mt. Blue, given the change in the view? A "4" means the change in the view would have no effect on your return.

| Resp. ID | Effect on Enjoyment <i>1-7, 7 Positive, 1 Negative</i> | Comments | Likelihood to Return <i>1-7, 7 Very Likely, 1 Not at all Likely</i> |
|----------|---|--|--|
| 1 | 4 | As long as my light bill drops. | 4 |
| 2 | 2 | There's new structure on a (relatively?) pristine area. | 2 |
| 3 | 6 | It's not a nuclear plant; I guess that's... if they move to alternative energy, wind's gonna help hopefully. | 4 |
| 4 | 7 | Because I would encourage to move away from fossil fuel energy. | 7 |
| 5 | 3 | It's nice not to see human influence on the environment; there aren't too many places where that's the case. This is a pretty short climb to get a view without human influence. | 4 |
| 6 | 3 | I wouldn't rate it lower because you have the rest of the view. Wouldn't rate higher - man made structure. | 2 |
| 7 | 4 | Clean energy, more efficient; so windy up here; coal is dirty -- the windmills don't take up too much -- low maintenance to take care of it. | 4 |
| 8 | 4 | Because we know it's energy for less money than coal; it's just as good. | 4 |

| Resp. ID | Effect on Enjoyment <i>1-7, 7 Positive, 1 Negative</i> | Comments | Likelihood to Return <i>1-7, 7 Very Likely, 1 Not at all Likely</i> |
|-----------------|--|--|---|
| 9 | 4 | Experienced a lot of beauty walking up here, probably won't change. | 5 |
| 10 | 5 | Doesn't bother me at all. | 7 |
| 11 | 2 | When you get on a mountain to get views -- views change -- not as worth it -- trying to get away from that sort of thing. | 3 |
| 12 | 2 | I don't know -- I think that's ugly. I almost died getting up here. See ugly wind mills? (in disgust) | 2 |
| 13 | 6 | Wouldn't benefit much as it would be affected to society. | 7 |
| 14 | 4 | Still well worth the hike -- when this spruce forest dies due to global warming, it will take several lifetimes for the oak forest to take over -- I've been out west to Colorado -- it ain't pretty. | 4 |
| 15 | 4 | Not much of impact. Still beautiful. Green (energy) change. | 4 |
| 16 | 2 | Because we came up here to see something beautiful. The windmills are not beautiful. | 2 |
| 17 | 6 | It would take away from the scenery. | 7 |
| 18 | 4 | Structurally, not a big deficit, and knowing it's helping the environment, rather than detracting from it -- sustaining the beauty here instead of other sources of energy that negatively affect the environment. | 4 |
| 19 | 4 | I find the windmills are majestic and it's exciting to see how our ridges can promote energy and I think they're beautiful. | 4 |
| 20 | 4 | I wouldn't mind see turbines at all. Don't think it takes away from the beauty at all. | 4 |
| 21 | 4 | Deter from coming. | 6 |
| 22 | 3 | Because the best, in my opinion, was like Alaska -- wasn't even a road. | 4 |
| Avg | 4.0 | | 4.3 |

Support for Wind Energy Development in Maine

The majority (17 of 22) of respondents support wind energy development in Maine (5, 6 and 7 on a 7-point scale); eleven completely support it (rating of 7). Only one respondent (a Maine resident) did not support wind energy development in Maine and two were not sure how to rate their level of support.

Q14: Using a scale of 1-7 where 7 is completely support and 1 is do not support at all, how much do you support commercial-scale wind energy development in Maine?

| Respondent ID | Support for Wind Energy Development in Maine <i>1-7, 7 Completely Support, 1 Do Not Support at All</i> |
|----------------------|--|
| 1 | 7 |
| 2 | 6 |
| 3 | 5 |
| 4 | 7 |
| 5 | 5 |
| 6 | 4 |
| 7 | 7 |
| 8 | 7 |
| 9 | 6 |
| 10 | 7 |
| 11 | 1 |
| 12 | Don't Know |
| 13 | Don't Know |
| 14 | 7 |
| 15 | 4 |
| 16 | 5 |
| 17 | 7 |
| 18 | 7 |
| 19 | 7 |
| 20 | 7 |
| 21 | 7 |
| 22 | 6 |
| Average | 6.0 |

Demographic Information

Hikers to Mt. Blue represented a mix of demographics. In regards to age, the largest groups of respondents were ages 18-24 (7) and 35-44 (6). There was mix of gender with 10 men and 12 women and about half of respondents (10) had a bachelor's degree or higher.

Finally, we would like to ask a few questions so that we can develop a demographic profile of the visitors to this area.

Q15: Please stop me when I say your age group

Q16: Please stop me when I say the highest level of education you completed

Q17: GENDER (BY OBSERVATION)

| Respondent ID | Age | Education | Gender |
|----------------------|------------|---|---------------|
| 1 | 35-44 | Completed some college | Male |
| 2 | 35-44 | Completed a Graduate or Professional Degree | Male |
| 3 | 25-34 | Completed high school or GED | Male |
| 4 | 25-34 | Completed some college | Female |
| 5 | 55-64 | Completed a Bachelor's Degree | Female |
| 6 | 35-44 | Completed an Associate's Degree | Male |
| 7 | 18-24 | Completed an Associate's Degree | Female |
| 8 | 18-24 | Completed an Associate's Degree | Male |
| 9 | 18-24 | Completed a Bachelor's Degree | Female |
| 10 | 18-24 | Completed an Associate's Degree | Male |
| 11 | 35-44 | Completed some college | Male |
| 12 | 35-44 | Completed some college | Female |
| 13 | 65+ | Completed some college | Female |
| 14 | 65+ | Completed a Graduate or Professional Degree | Male |
| 15 | 18-24 | Completed a Bachelor's Degree | Female |
| 16 | 18-24 | Completed an Associate's Degree | Female |
| 17 | 25-34 | Completed high school or GED | Female |
| 18 | 18-24 | Completed a Bachelor's Degree | Female |
| 19 | 45-54 | Completed a Bachelor's Degree | Female |
| 20 | 25-34 | Completed a Bachelor's Degree | Female |
| 21 | 45-54 | Completed a Bachelor's Degree | Male |
| 22 | 35-44 | Completed a Graduate or Professional Degree | Male |

Survey Instrument



ID# _____

Survey Questions

GREET HIKERS TO MOUNTAIN: Hello, I am conducting a short survey about impressions of visitors to Mt. Blue. Do you have a few minutes?

1. INTERVIEWER NOTE NUMBER IN PARTY: _____

2. First, can you tell me the zip code of the place you live? _____

3. Have you hiked the trail to Mt. Blue before? (CIRCLE RESPONSE)

| | | |
|---|---|---------|
| 1 | Yes (ASK: About how many times in the past year?) | # times |
| 2 | No | _____ |
| 8 | DK | |
| 9 | REF | |

4. About how many days a year do you hike? _____

5. What brought you to Mt. Blue today?

PROBE: Any other reasons?



6. Now I'd like to ask you about scenic value. Can you think of a destination in Maine that has a very high scenic value, or outstanding view? On a scale of 1-7 for scenic views, one you would rate as a 7 for highest scenic value.

7. Can you think of an outdoor destination in Maine that has a very low scenic value? On a scale of 1-7 for scenic views, one you would rate as a 1?

PROMPT: Please think only of outdoor, viewing or scenic areas

8. Now look towards Saddleback Mountain. On the 1-to-7 scale of scenic value in Maine, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic value of this view? (CIRCLE NUMBER)

| | | | | | | | | |
|---|---|---|---|---|---|---|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | DK | REF |
|---|---|---|---|---|---|---|----|-----|

INT: ASK RESPONDENT TO TURN AWAY FROM ACTUAL VIEW BEFORE SHOWING PHOTOS

Please take a look at this photograph taken looking towards Saddleback Ridge. HAND IMAGE TO RESPONDENT

9. On a scale of 1-7, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic value of this view? (CIRCLE NUMBER)

| | | | | | | | | |
|---|---|---|---|---|---|---|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | DK | REF |
|---|---|---|---|---|---|---|----|-----|

Please take a look at this photo simulation of a wind power project that has been proposed on Saddleback Ridge. HAND IMAGE TO RESPONDENT

10. On a scale of 1-7, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic value of this view? (CIRCLE NUMBER)

| | | | | | | | | |
|---|---|---|---|---|---|---|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | DK | REF |
|---|---|---|---|---|---|---|----|-----|

11. Now I'd like you to think about how your enjoyment of coming here today would be affected by a change in the current view of Saddleback Ridge to the one in the image. On a scale of 1-7, where 7 is a very positive affect and 1 is a very negative affect on your enjoyment how would your enjoyment be affected? A "4" means that it would not change your enjoyment at all. (CIRCLE NUMBER)

| | | | | | | | | |
|---|---|---|---|---|---|---|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | DK | REF |
|---|---|---|---|---|---|---|----|-----|

12. Why do you say that?

13. Please think about how a change from the current view of Saddleback Mountain to the one in the image would affect your likelihood of returning to Mt. Blue. On a scale of 1-7 where 7 means you are more likely to return and 1 means you are less likely to return, how likely are you to return to Mt. Blue, given the change in the view? A "4" means the change in the view would have no effect on your return.

| | | | | | | | | |
|---|---|---|---|---|---|---|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | DK | REF |
|---|---|---|---|---|---|---|----|-----|

14. Using a scale of 1-7 where 7 is completely support and 1 is do not support at all, how much do you support commercial-scale wind energy development in Maine?

| | | | | | | | | |
|---|---|---|---|---|---|---|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | DK | REF |
|---|---|---|---|---|---|---|----|-----|

Finally, we would like to ask a few questions so that we can develop a demographic profile of the visitors to this area.

15. Please stop me when I say your age group (Circle Response)

| | |
|---|-------|
| 1 | 18-24 |
| 2 | 25-34 |
| 3 | 35-44 |
| 4 | 45-54 |

| | |
|---|--------------|
| 5 | 55-64 |
| 6 | 65 and older |
| 8 | DK/REF |

16. Please stop me when I say the highest level of education you completed, CIRCLE RESPONSE

| | |
|---|---------------------------------|
| 1 | Have not completed high school |
| 2 | Completed high school or GED |
| 3 | Completed some college |
| 4 | Completed an Associate’s Degree |

| | |
|---|---|
| 5 | Completed a Bachelor’s Degree |
| 6 | Completed a Graduate or Professional Degree |
| 8 | DK/REF |

17. GENDER (BY OBSERVATION)

1 Male

2 Female

Thank you for your help.

Date: _____ **Time:** _____

Saddleback Ridge Images

Figure A. Saddleback Mountain Existing View



Figure B. Saddleback Mountain Simulated View

