SECTION 30 GENERATING FACILITY – VISUAL QUALITY AND SCENIC CHARACTER

TJD&A conducted a Visual Impact Assessment (VIA) (Exhibit 30-1 [Visual Impact Assessment]) to evaluate the effects of the Project on scenic resources of State or national significance (SRSNS).

There are seven SRSNSs within the 8-mi Project Study Area: Bingham Free Meetinghouse in Bingham; portion of the Arnold Trail on land in Carrying Place Township and another portion on the Kennebec River below Wyman Dam; Moxie Pond in East Moxie Township, The Forks Plantation, and Bald Mountain Township T2R3; Wyman Lake (as an impounded part of the Kennebec River); the Kennebec River; the AT; and the Wyman Lake Scenic Turnout on Route 201 (Old Canada Road National Scenic Byway). Of these, the Project will be visible in varying degrees from three SRSNSs: the Arnold Trail below Wyman Dam, Moxie Pond, and the Kennebec River.

The Arnold Trail is considered a medium value SRSNS since there is no evidence that it is listed on the NRHP due to its scenic character, or the uses related to its scenic character. Its primary importance is derived from its association with events that have made a significant contribution to the broad patterns of American history(i.e., Arnold's march to Quebec). Project visibility is limited to a small portion of the Kennebec River below the Wyman Dam, where filtered views of several turbines may appear at distances of 5.1 to 6.1 mi.

Moxie Pond is considered a high value SRSNS due to its outstanding scenic quality as defined in the Maine Wildlands Lake Assessment. Blades from two turbines will be visible at a distance of 7.7 mi from a relatively small portion (1.4%) of the southern end of the pond.

The Kennebec River is assigned a resource significance rating of medium because of its rating of Unique/Significant for Scenic River Resource Values in the Maine Rivers Study. Filtered views of three nacelles and blades from two additional turbines will be visible from a small portion of the Kennebec River below the Wyman Dam at distances of 5.1 to 6.1 mi. On Wyman Lake (which is part of the Kennebec River but not rated for its scenic value) the blades from up to six turbines may be visible at a distance of 4.0 to 6.0 mi from two relatively small areas near Wyman Dam.

Throughout the majority of the Study Area, views of the Project are concealed by topography and intervening vegetation. The Project will not be visible within 8 mi from any of the following categories of SRSNSs identified by the Maine WEA: National Natural Landmarks, Federally-designated wilderness areas, properties on the NRHP, National or State Parks, Maine Department of Transportation scenic turnouts, scenic viewpoints located in the coastal area, State public reserve land, or trails used exclusively for pedestrian use designated by Maine Department of Agriculture, Conservation & Forestry.

The VIA applied the criteria in the WEA to examine each SRSNS in terms of context, significance, existing public use, viewer expectations, Project impact, and the potential effect on public use. This information was used to determine if the Project would significantly compromise views from these resources, resulting in an unreasonable adverse effect on scenic character or the existing uses related to scenic character for these resources.

- **Arnold Trail**: The visual impact to the Arnold Trail below the Wyman Dam is identical to that of the Kennebec River, concentrated in a small area downstream from the Wyman Dam just above the confluence with Austin Stream. Within this area there will be filtered views of three turbine hubs and blades from two additional turbines in the background distance zone. Turbines will be partially screened by riparian vegetation along the shoreline of the river.
- **Moxie Pond:** The visual impact on Moxie Pond would be almost non-detectable and limited to a view of the blades of two turbine at a distance of almost 8 mi (under the WEA, turbines beyond 8 mi from the SRSNS are considered insignificant in the scenic assessment process). At this distance, the blades would be seen over a very small percentage of the total pond area and would be barely discernable.

- **Kennebec River:** The visual impact of the Project on the Kennebec River would be concentrated in a small area downstream from the Wyman Dam just above the confluence with Austin Stream. At that point there will be filtered views of three turbine hubs and blades from two additional turbines in the background distance zone. The turbines will be partially screened by riparian vegetation along the shoreline of the river and stream. The turbines also will be seen from a small area on Wyman Lake (which is a part of the Kennebec River but not rated for its scenic value).

The significance of the impact to the Arnold Trail below Wyman Dam is considered to be low, based primarily upon the limited Project visibility and the potential effect on public use and enjoyment. The Overall Scenic Impact to the Arnold Trail is considered low. As noted above, there will be no impact to the land-based section of the Arnold Trail in Carrying Place Township.

The significance of impacts to Moxie Pond also is considered to be low, based primarily upon the limited Project visibility, the distance to the observer, and the potential effect on public use and enjoyment. The overall scenic impact to Moxie Pond will be low. Likewise, the overall scenic impact to the Kennebec River and Wyman Lake will be low, based primarily upon the limited Project visibility and the minimal potential effect on public use and enjoyment.

The associated facilities for the Project (i.e., the access roads, the overhead and underground electrical collection system, O&M building, laydown areas, ADLS tower) will have no impact on views from SRSNSs. The associated facilities will not be of a location, character, or size to cause an unreasonable adverse visual effect on the scenic values and existing uses of SRSNSs within the Study Area.

The Project will use an ADLS designed to minimize the visual effects of the aviation warning lights mounted on the nacelles. Such systems are approved by the FAA on a project-by-project basis and allow turbine obstruction lights to remain off unless an aircraft is operating in the vicinity of the Project, thus greatly reducing the time that nighttime lighting is visible. Standard turbine lighting will be installed and tied into the radar-assisted lighting system upon approval of the system by the FAA. Additional detail on Project lighting is provided in Section 27 (Public Safety).

Based on the VIA analysis and the user intercept survey (Exhibit 30-1 [Visual Impact Assessment], see Appendix F), the Applicant has demonstrated that the Project will not have an unreasonable adverse impact on scenic values and existing uses of the three SRSNSs that have been identified with potential views. The Project will not compromise views from scenic resources of State or National significance, such that the development will have an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNSs. Pursuant to 06-096 CMR 382(I), a low impact to a medium or high value resource does not constitute an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS.

Exhibits

- Exhibit 30-1 Visual Impact Assessment

EXHIBIT 30-1 VISUAL IMPACT ASSESSMENT

Visual Impact Assessment

WESTERN MAINE RENEWABLE ENERGY
Moscow, Maine

MAY 2021

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APPENDICES

1. EXECUTIVE SUMMARY

1.1 Project Overview

This Visual Impact Assessment (VIA) applied the evaluation criteria in CH. 382: Wind Energy Act Standards to determine whether the proposed Project would significantly compromise views from Scenic Resources of State or National Significance (SRSNS) such that the proposed facility would have an unreasonable adverse effect on the scenic character or existing uses related to the scenic character of those scenic resources. The criteria for this determination includes:

- Significance of the potentially affected SRSNS
- Existing character of the surrounding area
- Expectations of the typical viewer
- Purpose and context of the proposed activity
- Public use and enjoyment of a potentially affected SRSNS
- Scale and scope of the potential effect.

1.2 Summary of Conclusions

This visual impact assessment examined the criteria established by the Maine Wind Energy Act (WEA) and the CH. 382 Wind Energy Act Standards: i.e., the context, significance, existing public use, viewer expectations, project impact, and the potential effect on public use and enjoyment, for each of the SRSNS. This information was used to make a determination of whether the project would significantly compromise views from any of 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 WMRE Project's visual impact on these resources will not be unreasonably adverse, and in all cases these impacts will be within the range expected and allowed under the WEA.

The VIA concludes that the Project will have a minor impact on a limited portion of the southern end of Moxie Pond and a similar impact on Wyman Lake, which is an impounded part of the Kennebec River. The Project will have virtually no impact on the free-flowing portion of the Kennebec River below Wyman Dam. The Project will have virtually no impact on the Arnold Trail and no impact on the Bingham Free Meetinghouse. The Project will have no impact on Jackson Pond. The Project will have no impact on the Appalachian Trail. While there are several miles of a designated scenic byway within the study area, there are no scenic turnouts that have been constructed by the Maine Department of Transportation that will have a view of the Project.

The associated facilities for the Project (i.e., the access roads, meteorological tower, underground electrical collection system, aboveground electrical transmission line, and O&M facility) will have a low or no impact on views from SRSNS. The associated facilities will not be of a location, character, or size to cause an unreasonable adverse visual effect on the scenic character of the study area. Adequate provisions have been made for fitting the associated facilities harmoniously into the existing environment to ensure that there will be no undue adverse effect on the scenic character of the surrounding area.

A cumulative impact analysis was also conducted for the WMRE Project, relative to the existing Bingham Wind Project that has some overlap to its 8-mile study area. The cumulative impact analysis found that there is only one SRSNS that would be affected by cumulative visual impacts (i.e., a small portion of Wyman Lake), and the visual impact from both projects would not cause unreasonable adverse effects

to the scenic character of the proposed project's SRSNS, or scenic character related to cumulative impacts related to the existing, previously approved, applications under review, or planned wind energy projects.

2. INTRODUCTION

2.1 Background

TJD&A Landscape Architects and Planners (TJD&A) in Yarmouth, Maine, prepared this VIA for the Western Maine Renewable Energy Project. The methodology for assessing the potential visual impacts of the Project involves the judgment of experienced landscape architects in the selection of factors chosen to evaluate scenic quality and determine the magnitude of visual impact. This approach, widely used in permitting work in Maine and elsewhere throughout the country, is based upon current studies of what constitutes scenic landscapes and visual impacts.

The 8-mile study area includes 13 towns, townships, and unorganized territories. The communities within the study area are located primarily in Somerset County and a small portion of the western edge of Piscataquis County. The Project is entirely located within the Town of Moscow. In Somerset County, the study area includes portions of The Forks Plt., Carrying Place Town Twp., Carrying Place Twp., Caratunk, Bald Mountain Twp T2 R3, Highland Plt, Pleasant Ridge Plt, Moscow, Mayfield Twp., Concord Twp., Bingham, and Brighton Plt. In Piscataquis County the study area includes the western edge of Kingsbury Plt.

The entire study area is within the area designated as "expedited for permitting" under the WEA. The extent of the eight-mile study is based upon the WEA, which instructs the primary siting authority (Maine Department of Environmental Protection (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.)

This report is based upon the mapping and design plans for the proposed Project provided by the Applicant, with input from other professional members of the design team. TJD&A created a series of viewshed maps with ESRI Arc GIS software to help determine the limits of potential Project visibility.

See Appendix A:

- Map 1: Project Study Area
- Map 2: Potential Visibility of Turbine Blade Tips Using Topographic Data
- Map 3: Potential Visibility of Turbine Blade Tips Using Topographic + Surface Data
- Map 4: Potential Visibility of Turbine Hub Tips Using Topographic + Surface Data
- Map 5: Cumulative Impact - Potential Visibility of Turbine Blade Tips Using Topographic + Surface Data

In addition to field investigations, TJD&A used Google Earth Pro and 3D Studio Max to further assess the physical characteristics of the landscape and develop a better understanding of the Project setting relative to surrounding topographic features.

2.2 Field Investigations

Field studies began with an evaluation of the viewshed analysis and field investigations to determine where the maximum number of turbines may be visible from SRSNSs. TJD&A personnel collected field data by a variety of means during site visits on September 23 and 24, 2019; October 8, 2019; May 8, 2020; October 3, 2020; and November 5, 2020. Fieldwork concentrated on evaluating and

photographing SRSNSs and other components of the visible landscape within eight miles of the turbine area. TJD&A personnel visited the study area by automobile, boat, and on foot. Fieldwork was limited to lands, roads, and waterbodies that are open to the public.

Photographs of the Project area were taken with a Nikon D5600 camera and a Nikon D750 camera. Photographs were set to record at the highest resolution (fine) and set to 35mm (equivalent to a 50mm 'normal' lens in a film camera) for the Nikon D5600 and a 50mm lens for the Nikon D750 (a full-frame camera). GPS coordinates of the photographs were recorded with a camera-mounted GPS unit. Photographs were used in the preparation of the photosimulations in Appendix D. An annotated selection of representative views within the study area is also included in Appendix C: Study Area Photographs.

2.3 Viewshed Analysis and Photosimulations

Computer-generated images (i.e., viewshed analysis maps and photosimulations) have been prepared to illustrate the relationship between the scenic resources within the study area and the WMRE Project. Viewshed maps were used to guide fieldwork to areas of potential Project visibility from SRSNSs and other visually sensitive areas. Photosimulations were prepared to illustrate the anticipated changes in views from SRSNSs due to the Project.

2.3.1 Viewshed Analysis

TJD&A prepared a computer-based viewshed analysis as a predictive screening tool to determine potential Project visibility within the study area. The viewshed analysis was conducted using ESRI ArcGIS Pro software. The analysis relied on a Digital Terrain Model (DTM) to represent topography (i.e., bare earth conditions), as well as a Digital Surface Model (DSM) to represent vegetation and structures in the landscape. For most of the 8-mile study area, the DTM and DSM used to represent the landscape were derived from LiDAR point cloud data, which was taken from The National Map produced by the U.S. Geological Survey (USGS)[1]. The point cloud data was processed to create 3-foot square resolution surface raster models.

The geospatial turbine data used in the viewshed analysis was provided by the Applicant. For purposes of the viewshed analysis, a viewer height of 5 feet above the terrain was assigned to represent the eye level of a typical viewer. Project components are counted as 'visible' if the computer determines that a single point on the component would be seen from eye level and not blocked by topography, vegetation, or buildings. In addition to determining whether the Project would be visible, the analysis can also identify how many turbines would be seen from any point (or raster) within the study area.

There are some technological shortcomings to the viewshed analysis. It does not determine the degree of visibility based on distance, weather, or other atmospheric conditions. It also does not determine how much of a turbine would be seen from any one viewpoint, or whether any part of the turbine would be seen silhouetted against the sky. As an initial screening tool, it is used to determine the geographic extent of Project visibility, identify visually sensitive resources with potential visibility, and select places to conduct field investigations to further our understanding of Project visibility.

Topographic Model Viewshed Analysis. As required by CH. 382:3.G(1) TJD&A prepared a topographic viewshed analysis of the study area to determine maximum potential turbine visibility (Map 2 in Appendix A). This analysis modeled the potential visibility of the blade tips based only on the digital terrain model (DTM). This analysis presents a worst-case scenario, illustrating potential areas of visibility based on bare-earth conditions, i.e., as if there were no intervening vegetation or structures in the

[1] The National Map produced by the U.S. Geological Survey is available at: https://viewer.nationalmap.gov/basic/

landscape. However, it does provide a baseline understanding of where there is no possible Project visibility due to the screening effects of topography alone.

Surface Model Viewshed Analysis. To gain a more realistic understanding of Project visibility, two additional viewshed analyses were prepared using both the DTM (topography) and DSM (vegetation and structures). This provides a more accurate depiction of potential Project visibility, as it considers features in the landscape, such as buildings and forest cover, that would block views of the turbines. Map 3 in Appendix A shows where a viewer would see at least the blade tip of turbines within 8 miles, considering both vegetation and topography. This analysis of blade tip visibility may overstate potential Project visibility, since blades are often difficult to see at distances beyond 3-4 miles. Map 4 in Appendix A is the most realistic of the viewshed maps in that it shows where a viewer would see the nacelles as well as the blades within 8 miles, considering both vegetation and topography.

2.3.2 Photosimulation

Photosimulations (computer-altered photographs) are prepared to illustrate the anticipated changes in views from SRSNSs due to the Project. Based upon the viewshed analyses and field investigations, Moxie Pond, the Kennebec River, and a short segment of the Arnold trail were the only identified SRSNSs where the Project may be visible (see Appendix D). Two photosimulations were completed from the Kennebec River: one on Wyman Lake, which is not a SRSNS; the second from the western shoreline of the river below Wyman Dam that was traversed by the Arnold expedition. A third photosimulation was completed from the southern end of Moxie Pond.

Photosimulations were prepared by 1) creating a three dimensional DTM model base of the study area landscape using National Elevation Data from USGS; 2) creating three dimensional computer models of the turbines (based on information provided by the Applicant and Vestas) generated in 3D Studio Max and inserting them into the model; 3) inserting associated facilities data as an AutoCAD file from the Applicant into the model; 4) aligning the computer model of the Project with GPS located photographs (elevation, latitude, and longitude data) in 3D Studio Max, matching the lens focal length, date and time of photograph, digital resolution, and lighting conditions; existing visible elements in the landscape (e.g., ridgelines, roads, buildings) were used to register the photographs to actual ground conditions; 5) rendering a simulated perspective of the Project using 3D Studio Max.

Post-production editing involved eliminating parts of turbines on the computer model that would be blocked by terrain or vegetation. Images were then enhanced in Photoshop to account for time of day, weather conditions, haze, and other environmental factors.

The photosimulation was also merged with adjacent photographs of existing conditions in Photoshop to create a panorama that gives a more contextual view of the broader landscape as seen from the SRSNS.

The legend in the panoramic image provides the latitude and longitude of the viewpoint, view direction, date/time when the photograph was taken, camera make and model and lens focal length, description of view, distance to the nearest Project components, and turbine specifications and dimensions. Each photosimulation also includes a Project context map and a photosimulation location map. The normal view also describes the distance that the viewer should hold the photosimulation from the eye to accurately replicate real-world conditions. See Appendix D.

2.3.3 Study Area Photographs

Representative photographs of the study area are included in Appendix C. The locations of the photographs are indicated on the Study Area Map in Appendix A. The photographs were selected to

document the field study, give the reviewers additional information on the existing character of the surrounding area (§3452.3.B), and provide context for the photosimulation location.

3. REGULATORY REQUIREMENTS

On April 18, 2008 the Governor signed into law LD 2283 An Act to Implement Recommendations of the Governor's Task Force on Wind Power Development (also known as the Wind Energy Act [WEA]). As part of this legislation, the Legislature found that certain aspects of the State's regulatory process for determining the environmental acceptability of wind energy projects should be modified to encourage the siting of projects in Expedited Permitting Areas.

On September 9, 2013, Maine DEP made changes to the guidance for Section 30 of the Site Location of Development Act Permit Application (Generating facility – Visual Quality and Scenic Character) which outlined more detailed requirements for assessments.

Effective April 30, 2018, Maine DEP adopted Chapter 382: Wind Energy Standards, a new set of rules that outlines requirements for the review of wind energy developments for impacts related to scenic character, shadow flicker, public safety, tangible benefits, and decommissioning under the WEA, 35-A M.R.S. § 3401–3459.

3.1 Visual Impact Standard

Expedited Permitting Areas include all of the organized areas of the State and limited locations within Maine Land Use Planning Commission's (LUPC's) jurisdiction. The Project will be located in Moscow, an organized town within the Expedited Windpower Permitting Area.

3.2 Scenic Resources of State or National Significance (Wind Energy Act)

"Scenic resources of state or national significance" (SRSNS) as defined under the WEA §3451.9 as an area or place owned by the public or to which the public has a legal right of access that is:

A. A national natural landmark, federally designated wilderness area or other comparable outstanding natural and cultural feature, such as the Orono Bog or Meddybemps Heath;
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;
C. A national or state park;
D. A great pond that is:
    (1) One of the 66 great ponds located in the State's organized areas 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 Lake Assessment;"
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;"
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, which the Department of Agriculture, Conservation and Forestry designates by rule adopted in accordance with section 3457;
G. A scenic turnout on a scenic highway constructed by the Department of Transportation; or

H. Scenic viewpoints located in the coastal area that are ranked as having state or national significance in terms of scenic quality in: (1) One of the scenic inventories prepared for and published by the Executive Department, State Planning Office: "Method for Coastal Scenic Landscape Assessment with Field Results for Kittery to Scarborough and Cape Elizabeth to South Thomaston," Dominie, et al., October 1987; "Scenic Inventory Mainland Sites of Penobscot Bay," DeWan and Associates, et al., August 1990; or "Scenic Inventory: Islesboro, Vinalhaven, North Haven and Associated Offshore Islands," DeWan and Associates, June 1992; or (2) A scenic inventory developed by or prepared for the Executive Department, former State Planning Office, or the Department of Agriculture, Conservation and Forestry.

The SRSNSs with potential Project views are **The Arnold Trail**, a property on the National Register of Historic Places; **The Kennebec River**, classified as a SRSNS under WEA §3451.9(E); and **Moxie Pond**, classified as a SRSNS under WEA §3451.9(D). The potential visual impact on these resources is described in Section 8.2.

3.3 Regulatory Standard: Associated Facilities

According to CH 382.3.A, associated facilities may be reviewed under the scenic impact standard applicable to the wind generating facilities, unless DEP determines that the application of the WEA standard may result in unreasonable adverse effects due to the scope, scale, location or other characteristics of the associated facilities. Based upon discussions with DEP staff and consistent with Section 7 below, the associated facilities for the Project would be reviewed under the Wind Energy Act.

4. PROJECT DESCRIPTION

The following section describes the visible components of the generating facilities of the WMRE Project and its associated infrastructure.[2]

4.1 Wind Turbines

The Project will consist of 14 Vestas V126 4.2 MW turbines, to be mounted on 105-meter (344 feet) towers with a rotor diameter of 150 meters (492 feet), for a total height with the blades fully extended of 180 meters (591 feet). All turbines are located within the Town of Moscow.

The base elevation of the turbines ranges from 1,273 to 1,493, which is relatively similar to the topography of the surrounding landscape. A map of the proposed turbine locations is provided in Appendix A.

The siting of individual turbines considered the wind resource, topographic features, access road locations, and proximity to wetlands, wildlife habitat, existing harvesting operations, and other site conditions.

The turbine components (base, nacelle, and blades) will be white to provide contrast for pilots. By using white turbines, which offer a considerable amount of visual contrast, the FAA will not require daytime lighting.

[2] The Maine Wind Energy Act 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'.

Turbine contrast and visibility is a highly variable phenomenon; white turbines can appear to change from dark gray to a shade that almost matches the background sky, depending upon the time of day, orientation of the viewer, atmospheric conditions, and weather. In the midground and background viewing distances, the turbines will typically appear as light gray due to the effects of atmospheric perspective, especially on hazy or overcast days. In early morning, the turbines may appear a brighter white due to the more horizontal lighting.

4.2 Project Lighting

The Project will use a radar-assisted lighting system designed to minimize the visual effects of the aviation warning lights mounted on the nacelles. Such systems are approved by the Federal Aviation Administration (FAA) on a project-by-project basis and allow turbine obstruction lights to remain off unless an aircraft is operating in the vicinity of the Project, thus greatly reducing the time that nighttime lighting is visible. Standard turbine lighting will be installed and tied into the radar-assisted lighting system upon approval of the system by the FAA. Further detail on lighting is provided in Section 27 (Public Safety).

The Project is designed so that one of two radar-assisted lighting systems can be constructed:

- A two-radar transmitter system that will include the construction of two 100-foot permanent lattice steel towers containing radar transmitters, and approximately 4.85 miles of underground power and fiber optic cable.
- A one-radar transmitter system that will include the construction of one 150-foot permanent lattice steel tower containing a single radar transmitter, and approximately 0.86 miles of underground power and fiber optic cable.

4.3 Access Roads

A substantial road network, primarily consisting of gravel logging roads and access roads associated within the former USAF Radar Station, currently exists within the Project area. Approximately 6.4miles of existing roads will be upgraded to provide for crane travel for turbine installation. Approximately 3.7 miles of new road will also be required. Following construction, many of the road surfaces will be revegetated to approximately half of their construction width.

4.4 Electrical Collection System

The majority of the electrical and communication cables required for the Project will be buried. The Applicant plans to connect to CMP's existing 115 kV transmission line that runs through the property.

The underground electrical and fiber optic lines to service the radar towers will be installed in typical 2-inch conduits routed within existing roadways. Below grade boxes will be installed as needed (typically every 1,500 feet) to splice cables and will be installed immediately adjacent to roadways. Boxes will be sited to avoid natural resource locations.

The power from each turbine will be collected in approximately 5.45 miles of 34.5-kV electrical collector lines. The collector lines will primarily be underground, though above-ground lines also will be installed. The underground electrical collector lines will be buried in trenches generally located within roadways. Below grade boxes will be installed as needed (typically every 1,500 feet) to splice collector cables and will be installed immediately adjacent to roadways. Boxes will be sited to avoid natural resource locations. Underground fiber optic communications cables will be installed in typical 2-inch conduits routed adjacent to the electrical collector lines, and the fiber optic cables will require splice/pull boxes.

Overhead collector lines will avoid impacts to wetlands and will be installed on wood utility poles in areas where roadways do not exist.

4.5 Substation

A substation location that had been used for the USAF Radar Defense Facility will be rebuilt for use with the Project. Power from the collector lines will be transmitted to the new substation facility that includes a fenced 34.5/115 kV Project substation to "step up" the power from 34.5 kV to 115 kV, and an adjacent 115 kV interconnection substation (Substation) to transmit directly into the Central Maine Power (CMP) Section 222 transmission line. The Section 222 transmission line is an existing 115 kV transmission line that can accept power from the Project.

4.6 Operations and Maintenance Building

The Project will renovate one of the existing USAF Radar Station buildings to serve as the Project's operations and maintenance (O&M) building. The renovation will include the construction of new interior walls to create office, meeting and equipment storage spaces, the installation of new overhead doors to access the equipment storage area, and the construction of a new fenced gravel storage and parking area.

4.7 Temporary Laydown Area

The location of the temporary laydown area will be determined as part of the logistical planning by the selected contractor.

5. PROJECT STUDY AREA

5.1 Site Context

The study area is defined as the potential viewshed within eight miles of the turbine arrays, which is illustrated in Appendix A. The regional character is described by the existing landforms, water resources, vegetative patterns, and cultural character.

5.1.1 Landforms

The study area is almost entirely within the Central Mountains biophysical region of Maine. The study area also includes small areas of the Western Foothills region to the southeast and the Western Mountains region to the west.[3] The Central Mountains region is characterized by some of the largest mountains in Maine including the Katahdin Range, surrounded by rolling hills and highlands. The landform within and around the 8-mile study area is a complex mixture that includes mid-sized mountains, broad highland valleys, and a major river system (i.e., the Kennebec River), all interspersed with lakes, ponds, man-made impoundments, and small streams. The highest summit is on Moxie Mountain (el. 2,936 feet), located north of the Project.

5.1.2 Water Resources

Lakes and Ponds. There are several lakes and ponds of varying sizes within the study area. Two are considered SRSNSs: Moxie Pond (2,370 acres) and Jackson Pond (31 acres). Both are rated for outstanding scenic quality in the Maine Wildlands Lake Assessment. Some of the other larger

[3] 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.

waterbodies include Wyman Lake (1,819 acres) and Austin Pond (1,037 acres). Wyman Lake, an impoundment on the Kennebec River, is the largest waterbody in the study area.

Rivers and Streams. The Kennebec River is the only river within the study area listed in the Maine Rivers Study that qualifies as a SRSNS. The river is not actually free-flowing throughout most of the 8-mile radius that defines the study area, but is rather an artificial impoundment, Wyman Lake, created by CMP's Wyman Dam. However, because the Maine Rivers Study did not differentiate between free-flowing vs. impounded sections, it is included in this assessment.

Austin Stream, which flows from Austin Pond southwest to the Kennebec River, is not rated for scenic resources in the Maine Rivers Study and therefore is not considered a SRSNS.

5.1.3 Vegetative Patterns

Vegetation in the study area is primarily characterized by forest land containing a mix of northern hardwood/softwood species. Much of the forest growth in the area includes second growth forest land, with evidence of active clear cutting, strip cutting, and other logging operations across the entire the study area. Representative photographs throughout the study area – taken at both foreground and midground viewing distances – are provided in Appendix C, Study Area Photographs. Of particular note are the photographs of existing conditions within the Project site, roadside vegetation, and riparian vegetation along the rivers and ponds that characterize the study area and provide screening for the wind turbines.

5.1.4 Cultural Characteristics

Population Centers. Population in the study area is primarily concentrated in the towns of Moscow (pop. 505), and Bingham (pop. 900) located in the southwestern portion of the Project study area[4]. The vast majority of the study area is defined by minimal rural development.

Historic Resources. There are two historic resources on the National Register of Historic Places within the study area, i.e., the Bingham Free Meetinghouse and the Arnold Trail. There will be no views of the Project from the Free Meetinghouse. The only views of the Project that will be seen from the Arnold Trail are immediately below the Wyman Dam, where a few of the turbines may be intermittently seen above the eastern shoreline of the Kennebec River at distances of at least 5 miles. See Photosimulation 3 in Appendix D.

Recreation. Popular recreational activities in the area include hiking, hunting, fishing, boating, swimming, camping, snowmobiling, and ATV riding. The Maine Snowmobile Association's Interconnected Trail System (ITS 87) runs generally north-south through the study area from Caratunk toward Bingham. Portions of ITS 87 will have intermittent views of the Project, most notably in the vicinity of the Stream Road and Chase Pond Road intersection. Appendix C: Study Area Photographs provides images of many of the recreational opportunities that exist within the study area.

Approximately 7.7 miles of the Appalachian National Scenic Trail (AT) are within the 8-mile study area, with the closest point located 6.1 miles from the nearest turbine. The portion of the AT located within the Study Area includes a small parking area and AT trailheads to Bald Mountain and Pleasant Pond Mountain near the southern end of Moxie Pond. The Project will not be visible from any portion of the

[4] Based on 2010 U.S. Census data (https://www.census.gov/data/tables/time-series/demo/popest/2010s-total-cities-and-towns.html)

AT within 8 miles of the Project due to intervening vegetation and topography. See photograph P3 in Appendix C: Study Area Photographs.

The 2020 Caratunk Comprehensive Plan contains a list of 'Scenic Areas' identified by the town planning committee as having scenic, recreational, and cultural values. These include undeveloped parts of Pleasant Pond, undeveloped areas of Pleasant Pond Rd, older homes, Caratunk boat landing, Kennebec River, Moore's Bog, Robinson Pond, Arnold Trail, Moxie Mountain, MacDougal Pond, the Appalachian Trail, Cemeteries, and Pleasant Pond Mountain.

Scenic Byways. The Old Canada Road National Scenic Byway (Route 201) begins in Solon and runs north to its terminus at the Canadian Border. Approximately 18 miles of the Byway are within 8 miles of the Project. The Wyman Lake Rest Area is the only scenic turnout within 8 miles of the Project. There are no Project views from the rest stop. See photograph P10 in Appendix C: Study Area Photographs.

5.2 Distance Zones

The concept of distance zones is used as a frame of reference to discuss the characteristics of the visible landscape and the scenic effects of human activities in the surrounding landscape. The concept is based upon the USDA Forest Service visual analysis criteria for forested landscapes and addresses the amount of detail that an observer can differentiate at varying distances.[5] The evaluation of foreground, midground, and background, as defined below, provides a useful framework for evaluating the significance of wind turbines and their related facilities in the larger landscape. While the size of contemporary wind turbines may require a different understanding of how wind power components relate to the surrounding landscape, the distance zone concept remains a helpful reference tool in such evaluations. The distance zones used for the WMRE Project are defined as:

- **Foreground**: 0 to 1/2 mile from the observer. Within the foreground, observers can detect surface textures, details, and a full spectrum of color. The details of the turbines (blades, nacelles, support towers), the met towers, and other infrastructure components of the Project will be readily apparent. There are no SRSNSs within one-half mile of any turbine. Many of the turbines will be visible from local publicly accessible roads such as Stream Road and Chase Pond Road, which are also part of ITS 87 and other local snowmobile trails. These roads and trails are not considered SRSNSs.

- **Midground**: 1/2 mile to 3-5 miles from the observer. The midground is a critical part of the natural landscape. The WEA 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 de-sharpen outlines even further. In panoramic views, the midground landscape is the most important element in determining visual impact. From Wyman Lake the blades from the nearest turbine would be seen at a distance of 4.3 miles (See Photosimulation 2).

[5] Landscape Aesthetics: A Handbook for Scenery Management. USDA Forest Service. Agricultural Handbook Number 701. December 1995.

- **Background**: greater than 3–5 miles.[6] 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 atmospheric haze will obliterate the surface textures, detailing, and form of Project components. While most structures in typical commercial or residential developments cease to be uniquely recognizable at distances greater than 3–5 miles, the color, form, and scale of contemporary wind turbines are readily distinguishable at distances up to eight miles from the observer.

  Objects in the background will be highly visible only if they present a noticeable contrast in form or line, and when weather and lighting conditions are favorable. The Project would be minimally visible in the background from Moxie Pond at a distance of 7.7 miles to the nearest turbine. The Project would also be intermittently visible from portions of the Kennebec River below the Wyman Dam at distances of 5.1 – 6.1 miles. This part of the river is also where the Arnold expedition travelled upstream on their way to Quebec between October 8 and 10, 1775. See Photosimulations 1 and 3 in Appendix D.

6.0 VISUAL IMPACTS ON SCENIC RESOURCES OF STATE OR NATIONAL SIGNIFICANCE

6.1 Evaluation Criteria in the Maine Wind Energy Act and Chapter 382

There are seven SRSNS within eight miles of the turbines. Appendix B: Scenic Resources Chart presents a listing of the resources within 8 miles of the Project that have been evaluated. Of these, three resources at two individual locations[7] will have views of the Project. The following section describes each of the seven resources and evaluates the two with potential Project visibility, using the criteria in the WEA and Chapter 382:

- ***Context***. *The existing character of the surrounding area and the context of the proposed activity*. (§ 3452.3.B, 3452.3.D, Chapter 382.3.C, 382.3.E, Chapter 382.3.I).
- ***Significance***. *The significance of the potentially affected scenic resource of state or national significance* (§ 3452.3.A, Chapter 382.3.B, and Chapter 382.3.I).
- ***Public Uses***. *The extent, nature and duration of potentially affected public uses of the scenic resource of state or national significance.* (§ 3452.3.E and Chapter 382.3.B.(3)).
- ***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, Chapter 382.3.D, and Chapter 382.3.I).
- ***Purpose and context.*** *The expedited wind energy development's purpose and context of the proposed activity*. (§ 3452.3.D and Chapter 382.3.E).
- ***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 and Chapter 382.3.G).
- ***Potential Effect on Public Use***. *The potential effect of the generating facilities' presence on the*

[6] For purposes of this visual impact assessment, the background viewing distance is limited to eight miles, since the legislature has determined that "the primary siting authority (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." (§ 3452.3.)

[7] The portion of the Arnold Trail that may have filtered views of the Project is located on the Kennebec River.

public's continued use and enjoyment of the scenic resource of state or national significance. (§ 3452.3.E and Chapter 382.3.F).

- ***Cumulative Impact.*** *The potential cumulative effect of multiple wind generating facilities, under both daytime and nighttime conditions, within eight miles of each scenic resource of state or national significance. Areas of combined, sequential or successive observation are to be identified.* (Chapter 382.3.H and Chapter 382.3.H).
- ***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 and Chapter 382.3.I).

6.2 Scenic Resources of State or National Significance

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

There are no national natural landmarks (NNL), federally designated wilderness areas, or other comparable outstanding natural and cultural features within the study area.

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.

There are two historic resources on the National Register of Historic Places located within the study area:

- **Bingham Free Meetinghouse** is located on the corner of Old Church Street and Route 201 near the town center of Bingham. The meeting house is currently owned by the Town. The site is located approximately 5.3 miles southwest of the nearest turbine. Project views from the Bingham Free Meetinghouse will be totally screened by foreground structures and vegetation. (See Appendix C: Study Area Photographs)

- **Arnold Trail to Quebec** is the route taken by a force of Continental Army troops in an ill-fated attempt to attack Quebec City under the command of Colonel Benedict Arnold in the fall of 1775 during the Revolutionary War. The historic route follows the Kennebec River to the northern part of Wyman Lake, then runs overland through western Maine to the Quebec border. There are approximately 14.5 miles of the route within 8 miles of the Project.

  The Land Use Planning Commission (LUPC) has designated the land-based portion of the Carrying Place Trail between the Kennebec River and Flagstaff Lake as a P-UA zone to protect the land-based portion of the Arnold Trail. Since 2014 the trail has been formally recognized with a public access easement over the 13 miles between the Kennebec River and Flagstaff Lake. The Project will not be visible from this section of the Arnold Trail (i.e., west of the Kennebec River in Carrying Place Twp.) due to intervening structures, vegetation, and topography.

  Between the Carrying Place and Wyman Dam the entire stretch of the route of Arnold's march is

deeply submerged under the headwaters of Wyman Lake. The Resource is destroyed along this stretch of the river.[8]

The study area south of the Wyman Dam includes an extensively cleared area with multiple transmission lines below the dam, a mile of relatively undisturbed shoreline above Austin Stream, and then industrial and residential development on the east bank of the river in Bingham. The viewshed analysis indicates that there will be a very limited number of locations where several of the turbines will be visible in the background distance zone (i.e., greater than five miles). Riparian vegetation on the eastern shoreline throughout most of this area will limit views of the Project, as noted in Photosimulation 3.

The Arnold Trail up to Wyman Dam followed the thread of the Kennebec River, as the soldiers pushed and paddled their batteaux upstream. Campsites used by Arnold's troops in this area are of uncertain location. From the upper reaches of the Williams Dam impoundment at Caratunk Falls in Solon to the Wyman Dam the National Registry boundary is drawn 50m inland from the edge of the river and includes all the islands in the river. The inland portion is included due to the potential for undiscovered camp sites attributable to the expedition.[9]

C. National or State Parks

There are no state parks within the study area. The closest unit of the National Park Service is the Appalachian National Scenic Trail (AT), described in 6F below. There will be no Project views within 8 miles the AT.

D. A great pond that is:

(1) One of the 66 great ponds located in the State's organized area 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 Lake Assessment."

Two ponds in the study area within the State's unorganized areas are rated as 'Outstanding' for scenic quality in the Maine Wildlands Lake Assessment: Jackson Pond in Concord Twp. and Moxie Pond in Bald Mountain Township.

Jackson Pond is 31 acres in size with approximately 29 acres within 8 miles of the Project. The nearest turbine is located 7.6 miles from the pond and will not be visible due to intervening vegetation and topography.

Moxie Pond is 2,370 acres waterbody located in East Moxie Twp., The Forks Plt., and Bald Mountain Twp. T2 R3. The majority of Moxie Pond is outside of the study area, with only about 18% (423 acres) of its surface within 8 miles of the Project. Moxie Pond is rated as 'Outstanding' for scenic resources in the Maine Wildlands Lake Assessment. The Scenic Lakes Character Evaluation in Maine's Unorganized Towns characterizes Moxie Pond as having "low complexity" of Relief, "medium complexity" for Shoreline Configuration, Vegetation Diversity, and Special Features and "high complexity" for Physical Features. Moxie Pond was also rated as "High" for Inharmonious

[8] Arnold Trail to Quebec ME 1002. American Battlefield Protection Program Associated Historic Property District Form Continuation Sheets 9 – 11.

[9] Arnold Trail to Quebec ME 1002. American Battlefield Protection Program Associated Historic Property District Form Continuation Sheets 9.

Development, attributable to the boat launch on the northwest end near the dam, approximately 145 camps on the west side of the pond, and approximately 30 camps on the east side. The majority of camps on the western shoreline are oriented to the east and away from the Project. The land surrounding the pond within the 8-mile study area is mostly privately owned. An existing 115kV transmission line parallels the western shoreline and Moxie Road/Troutdale Road (to the west of the camps) throughout most of its length and is generally not visible from the water.

Foreground and midground topography and vegetation will screen most of the Project from the pond. According to the viewshed analysis and photosimulation, Project visibility is limited to the blades of two turbines within 8 miles, seen by boat over approximately 34 acres of water at the southern end of the pond under optimal viewing conditions. This represents approximately 8% of the pond area within 8 miles of the Project, and 1.4% of the total pond area. The dozen remaining turbines are all greater than 8 miles from the pond. The visual impact to Moxie Pond will be minimal due to the limited number of turbine blades visible, the distance to the turbines, the relative thinness of the turbine blades, and the limited pond area that would be affected. See photosimulation 3 from Moxie Pond in Appendix D.

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."

The Project will be visible from two areas on the Kennebec River: Wyman Lake (impounded portion of the river) and an area below the Wyman Dam.

Context. The Kennebec is the third longest river in the State, paralleling Route 201 on the west side of the study area. Above the Wyman Dam, the 15±-mile long Wyman Lake is largely undeveloped with sloping wooded banks. The dam was built for power generation (Wyman Station) and for log driving. Route 201 is designated as a National Scenic Byway and is part of the Kennebec-Chaudiere Heritage Corridor. Much of the 4.5-mile section between the Wyman Dam and the Williams Dam in Solon is characterized by braided channels that weave through large wooded islands. Land use on either side of the river includes commercial, industrial, and residential development in Moscow and Bingham, an abandoned rail line, local roads, and agricultural land. Appendix C Study Area Photographs provide views of characteristic land use along the river.

The Kennebec River is also the location of a portion of the Arnold Trail, described in more detail in 6.2.B above. At the time of Arnold's march in 1775, prior to the construction of the Wyman Dam, the Kennebec River was free flowing and a very different environment than it is today.

Significance. The 87-mile segment of the Kennebec River between Augusta to The Forks is noted in Appendix G of the Maine Rivers Study as a Scenic River. The 45-mile segment of the Kennebec River between Madison and The Forks is rated as a "B" River in the Maine Rivers Study, which means that it has a composite of natural and recreational resource values with outstanding statewide significance. None of its resource values within the segment between Madison and The Forks are of greater than statewide or national significance.[10] The Study describes the scenic resources in this segment as having "a unique and diverse range of views related to a variety of spatial enclosures and topographic diversity."[11] While the Maine Rivers Study notes that the Kennebec River has significant scenic

[10]In addition, the Maine Rivers Study also identifies this segment of the Kennebec River as having unique / significant geologic/hydrologic, critical/ecologic, inland fishery, canoe touring, and historic resource values.
[11] Maine Rivers Study. Maine Department of Conservation and US Department of the Interior, National Park Service. May 1982. p. 137.

resources, the Maine Wildlands Lake Assessment does not consider Wyman Lake to have significant or outstanding scenic resources.

Public Use. There are two Department of Conservation boat launches on the east side of the Kennebec River off Route 201 within 8 miles of the Project: the Moscow Boat Launch located 1.9 miles south of the Moscow/Caratunk town line, and the Caratunk Boat Launch 4.4 miles north of the Moscow/Caratunk town line. These areas are also used for swimming and picnicking and afford open views of the lake. Neither of these boat launches will have views of the Project.

The Wyman Lake Recreation Area/Pleasant Ridge Swim Area on the west side of Wyman Lake off Pleasant Ridge Road in Pleasant Ridge Plt., just above the Wyman Dam, is managed by Brookfield Renewables and the Bingham-Moscow Chamber of Commerce. The area includes a boat launch, swimming beach, picnic areas, and rest rooms. The Project will be visible from the swimming beach adjacent to the existing 115kV transmission line corridor and will be seen in context with the Wyman Hydroelectric Dam and the Bingham Wind Project, 6.5 to 7.2 miles away. See Photograph 26 in Appendix C: Study Area Photographs.

The fishery in Wyman Lake is composed principally of salmon, lake trout, rainbow trout, yellow perch, pickerel, and smelt. There is a tailwater fishery starting below Wyman Dam that includes Brown and Brook trout, landlocked salmon, and one of the few self-sustaining populations of Rainbow trout in Maine. There is no formal access to the river at this point below the dam; however, there is an informal road under a powerline on the west side of the river off of Pleasant Ridge Road. Access is steep and wading is not an option.[12] There is no known source of data on the number of users of these fisheries.

Viewer Expectations. People who use Wyman Lake for boating, fishing, and swimming likely have a moderate to high expectation of scenic quality, tempered by the presence of Route 201, with its high volume, high speed traffic immediately adjacent to it, and the presence of the recently completed Bingham Wind Project. The lake itself is the result of a large hydro power facility, and a wind power project may be seen as a next generation form of renewable power that is not out of context with the setting. The dam and associated infrastructure are visible up to 3.5 miles upstream of the dam. The Project will be seen 2.3 miles upstream of the dam. Thus, boaters and fishermen who can see the Project turbines from Wyman Lake will also be seeing the infrastructure associated with Wyman Dam and portions of the Bingham Wind Project.

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.

As noted above, approximately 7.7 miles of the Appalachian National Scenic Trail (AT) are within 8 miles of the Project, with the closest point located 6.1 miles from the nearest turbine. The portion of the AT within the study area includes a small parking area and trailheads to Bald Mountain and Pleasant Pond Mountain near the southern end of Moxie Pond. The Project will not be visible from any portion of the AT within 8 miles of the Project due to intervening vegetation and topography.

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

The Old Canada Road National Scenic Byway (Route 201) begins in Solon and runs north to its terminus at the Canadian Border. Approximately 18 miles of the Scenic Byway are within 8 miles of the Project.

[12] http://www.maineflyfishing.com/ourriver.htm. Accessed 12.03.2020.

The Wyman Lake Scenic Turnout on Route 201, located 0.2 mile south of the Moscow/Caratunk town line, is approximately 4.1 miles from the nearest turbine. None of the turbines will be visible due to intervening topography and vegetation. See Map 1 in Appendix A for location of the scenic byway and related features.

A plaque commemorating the site where the Arnold Expedition left the Kennebec River and started the land-journey at Carrying Place is located approximately 1.25 miles northwest of the Wyman Lake Scenic Turnout on the west (river) side of Route 201. None of the Project turbines will be visible due to intervening topography and vegetation. Since there are no facilities or a designated parking area, this location is not considered a SRSNS.

There are several informal pull-offs along Route 201 in Moscow where gaps in the guardrails allow for informal parking. None of these are MDOT designated turnouts and none will have views of the Project due to intervening topography and shoreline vegetation.

H. Scenic viewpoints located in the coastal area that are ranked as having statewide significance or national importance in terms of scenic quality in: (1) One of the scenic inventories prepared for and published by the Executive Department, State Planning Office: "Method for Coastal Scenic Landscape Assessment with Field Results for Kittery to Scarborough and Cape Elizabeth to South Thomaston," Dominie, et al., October 1987; "Scenic Inventory Mainland Sites of Penobscot Bay," DeWan and Associates, et al., August 1990; or "Scenic Inventory: Islesboro, Vinalhaven, North Haven and Associated Offshore Islands," DeWan and Associates, June 1992; or (2) A scenic inventory developed by or prepared for the Executive Department, State Planning Office.

There are no coastal scenic viewpoints within the study area.

7. IMPACTS FROM ASSOCIATED FACILITIES

The associated facilities for the WMRE Project include access roads, substation, an operations and maintenance building (O&M), an underground electrical collection system, ADLS towers, and a temporary laydown site.

7.1 Visual Impacts from Associated Facilities

The associated facilities in support of the 14 wind turbines include access roads, electrical collection system, electrical substation, O&M building, ADLS towers, and temporary laydown areas.

7.1.1 Access Roads

New access roads will be similar in nature to the network of roads that now exist on the site and throughout the study area. The access roads will not be highly visible from outside the immediate Project area. No existing or proposed access roads will be visible from any SRSNS.

7.1.2 Electrical Collection System

The majority of the electrical collection system will be buried, thereby minimizing potential visual impact. The new infrastructure used for the electrical collection will not be visible from any SRSNS.

7.1.3 Substation

The Project will reuse an existing substation site, minimizing potential visual impact that may result from a new facility.

7.1.4 Operations & Maintenance Building (O&M)

The Project will restore and reuse an existing O&M building on site, minimizing potential visual impact that may result from a new facility.

7.1.5 Temporary Laydown Area

The location of the temporary laydown area will be determined as part of the logistical planning by the selected contractor.

7.2 Conclusion

The associated facilities for the Western Maine Renewable Energy Project will not be visible from any SRSNS, and will not be of a location, character, or size to cause an unreasonable adverse visual effect on the scenic character of the study area.

8. EVALUATION

8.1 Overview

The WEA established several criteria to determine whether expedited wind energy development significantly compromises views from a SRSNS such that the development has an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the resource. This section evaluates the effect the Project would have on Moxie Pond, the Arnold Trail, and the Kennebec River/Wyman Lake. SRSNSs with no Project visibility have not been evaluated.

TJD&A and Tetra Tech collaborated with Market Decisions Research to conduct a user intercept survey to test public reaction to the Project on Moxie Pond and Wyman Lake. The goal was to evaluate the visual impact of the project and assess potential impacts on user's views and their use and enjoyment of scenic resources where the future project would be visible. The survey is included in Appendix F: Moscow Area Wind and Solar VIA Final Report. The intercept survey was conducted over three data collection periods in September 2020. A total of 69 participants completed the survey. 49 participants from the Moxie Pond site and 20 participants from the Wyman Lake site.

Since the survey was administered during the pandemic, the survey instruments were tailored to the social distancing required. Instead of showing the respondents paper copies of photosimulations, Market Decisions had people review poster-sized enlargements (approximately 3' x 6') of the simulations. At Moxie Pond, the survey was administered at the northern end of the pond to avoid interference with the boat launch. From this location, respondents were not able to see the existing Bingham Wind Project, or the limited area at the southern end of Moxie Pond where the turbine blades would be visible at a distance of nearly 8 miles.

8.2 Evaluation Criteria

CH. 382.B Wind Energy Standards provides direction to the Department for evaluating wind energy developments for impacts related to scenic character under the Maine Wind Energy Act. The following section provides a description of each of the criteria and rates the effect that the Project will have on each of the identified SRSNSs. A summary of the ratings is presented in Table 10.1.

A. Resource Significance: CH. 382: B provides: *When evaluating whether a proposed development would significantly compromise views from a SRSNS such that the development would have an unreasonable adverse effect on scenic character or existing uses related to scenic character of an SRSNS, the Department will take into consideration all relevant evidence in the record regarding the significance of the SRSNS.* CH. 382:B(3) stipulates that the Department will be guided by an evaluation of *The character, landscape context, unique features, usage patterns, and other relevant characteristics of the SRSNS.* CH. 382:B(3) stipulates that the Department will consider *Evidence of the high scenic value of the viewshed from the SRSNS or of the protection of the viewshed through public ownership, conservation easements or other restrictions put in place for purposes specifically including protection of the scenic values of the area. Such evidence may increase the significance of an SRSNS*. Lastly, CH. 382:B(5) requires the Department to consider *Evidence of the degradation of the scenic character of the SRSNS by factors such as incompatible development in the viewshed. Such evidence may decrease the significance of an SRSNS.*

Historic Resources: CH. 382:B(2) stipulates: *If a property is designated as an SRSNS due to its listing on the National Register of Historic Places, evidence regarding the consideration of the scenic character or uses related to the scenic character of the property as factors in the listing process.*

There is no evidence that the Benedict Arnold Trail to Quebec Historic District was listed on the National Register due to its scenic character, or the uses related to its scenic character. It is our understanding that the Arnold Trail was listed under Criterion A which recognizes properties that "are associated with events that have made a significant contribution to the broad patterns of our history."

Great Ponds: CH. 382:B(1) stipulates that the evaluation will be guided by evaluation of *Any assessment of the scenic character of the SRSNS through a formal assessment process such as the Maine's Finest Lakes Study, the Maine Wildlands Lake Assessment, a Coastal Scenic Inventory published by DACF, or other federal, state or local government assessment process.*

Moxie Pond is assigned an initial resource significance rating of High because of its 'Outstanding' rating in the Maine Wildlands Lake Assessment. (A 'Significant' rating in the Assessment would result in a Medium rating for resource significance.) However, the 'High' could reasonably be reduced to a rating of 'Medium', due to the number of camps on the pond (approximately 175) and the rating of "High" for inharmonious development in the Scenic Lakes Character Evaluation in Maine's Unorganized Towns.

The **Kennebec River** is assigned a resource significance rating of Medium because of its rating of Unique/Significant for Scenic River Resource Values in the Maine Rivers Study. The Study notes that the Kennebec River's scenic resource values meet a minimum standard of significance. (Rivers that are noted with a 'X*' are some of the state's most significant and may have greater than statewide or national significance. Rivers in this category would be rated High.)

The rating of Medium is reinforced by the lack of scenic rating for **Wyman Lake** in the Maine's Finest Lakes study**,** which is considered a part of the Kennebec River. Likewise, the scenic quality of the Kennebec River below Wyman Dam is greatly affected by the presence of the dam, transmission lines crossing the river, and the commercial/residential development along much of the shoreline in Moscow and Bingham.

B. Existing Character of Surrounding Area: This criterion evaluates the setting of the resource and its surrounding area. CH. 382:C stipulates: *The existing character of the surrounding area will be taken into consideration by the Department when determining whether the proposed development would have an unreasonable adverse effect on scenic character or existing uses related to scenic character of the SRSNS.*

When evaluating the existing character of the surrounding area, the Department will take into consideration all relevant evidence, including but not limited to the following.

> *(1) The visible aspects of the natural character of the viewshed of the SRSNS, including but not limited to: landscape scale, vegetation and forest cover types; variations in topography and geology; prominent natural features (cliffs, mountains); and waterbodies.*
> *(2) The type and amount of development in the viewshed of the SRSNS, including but not limited to: roads, buildings and other structures, utility lines, communication towers, and nighttime lighting.*

Moxie Pond is assigned a rating of Medium due to the presence of numerous camps along its shoreline and its 'High' rating for inharmonious development in the Scenic Lakes Character Evaluation in Maine's Unorganized Towns.

The **Kennebec River** is assigned a rating of Medium due to the presence of the Wyman Dam, the transmission corridors crossing the river, the lack of vegetation along the shoreline.

C. Viewer Expectation: CH. 382:D stipulates*: When evaluating the expectations of the typical viewer, the Department will take into consideration all relevant evidence including but not limited to user intercept surveys, written public comments submitted by users of the SRSNS, oral statements made at Department public meetings held pursuant to 38 M.R.S. § 345-A(5), and sworn testimony at public hearings held pursuant to Chapter 3 of the Department's Rules.*

> *(1) Viewer expectations will be considered to be high at an SRSNS which is valued for its setting in a naturally scenic landscape. Viewer expectations may be considered to be lowered by substantive evidence of degradation of the scenic values of the SRSNS since its designation as a scenic resource, or a lack of scenic value in a particular location.*

The intercept survey showed that people recreating on both **Moxie Pond** and **Wyman Lake** have a high expectation of scenic quality, and that their expectation was met in terms of their experience on the pond. The number of boaters and anglers is anticipated to be moderate, based upon the number of camps and the presence of an access facility. Viewer expectations is rated as **high**.

Boaters, anglers, and people attracted to the Arnold Trail on the **Kennebec River** below the dam are expected to have a **Medium** expectation of scenic quality, due to the presence of the dam and related infrastructure. The expectation at the dam itself may be **Low** but will improve as the visitor heads downstream and away from the infrastructure of the power generating facility. This area is known for its fisheries, which is one of the main draws to the area. There are no facilities or interpretive markers for the Arnold Trail in this area. The occasional history-oriented visitor will come with an expectation of seeing a river that severely challenged the expedition, representing a major obstacle to its success. People who have some knowledge of the route will understand that the water route stops at the Wyman Dam.

D. Purpose and Context of the Proposed Activity: CH. 382.F stipulates: *the context of the proposed development will be considered both in the physical sense and in the practical sense. The physical context of the proposed development includes the topography and existing characteristics of the area. The practical context of the proposed development includes factors specific to the location of the proposed development, such as the magnitude and reliability of the wind resource present, and the proximity to transmission infrastructure. When considering the purpose and context of the proposed activity, the Department will take into consideration all relevant evidence, including but not limited to the following.*

(1) Data related to the magnitude and reliability of the wind resource at the proposed development site, and the potential energy output expected from the development, as compared with any alternative sites in Maine investigated by the applicant.
(2) The location of the proposed development in relation to existing transmission lines, roads or other infrastructure.
(3) The topography and existing characteristics of the area surrounding the proposed development.
(4) The existence of any other permitted wind energy development in the viewshed of any affected SRSNS.
(5) Evidence of any mitigation proposals, such as improved access to the affected SRSNS, or improvements to the quality of the resource.

Medium: The reliability and magnitude of the wind resource and the potential energy output are not factors that lend themselves to evaluation in a visual impact assessment. Generating enerty from a renewable resource is a **purpose** encouraged by the enactment of the Wind Energy Act.

The **context** of the proposed wind energy facility includes an existing transmission line, and existing substation, an established road network, and existing buildings and other infrastructure that can be reused for the proposed activity. Minimal clearing will be required for the installation of the turbines and related infrastructure.

E.1. Extent, nature & duration of uses: CH. 382.F stipulates that the Department consider:

(1) Evidence of the extent, nature, and duration of existing public uses of the SRSNS where the scenic character of the SRSNS is an important part of the enjoyment of the activity.

(2) Evidence of the extent, nature and duration of existing public uses of the SRSNS where the natural, undeveloped character of the area surrounding the SNSRS is an important part of the enjoyment of the activity. For such uses, low use levels will not necessarily be found to decrease the significance of potential impacts to existing uses related to scenic character.

(3) Evidence of tourism-related businesses or recreational clubs or organizations whose purpose or viability is related to the public use and enjoyment of the SRSNS.

There are no publicly available records that quantify the number of people who typically use **Moxie Pond**. There is a well-maintained boat launch that is indicative of public use at the northern end of the pond. As noted, the pond is surrounded by 175 camps, which would indicate moderate to high existing use. Based upon the number of camps and evidence of use observed during field observation, the extent, nature, and duration of use at Moxie Pond was rated as **Medium**.

Wyman Lake / Kennebec River. There are two state boat launches at the northern end of the lake and one FPL/municipal facility at the southern end near the Wyman Dam. While the lake has minimal development on the land surrounding it, the Kennebec River below the dam is bordered by commercial/residential uses in Moscow and Bingham. Access is relatively easy into Wyman Lake, while the steep bank surrounding the river below the dam limits casual access. Based upon the density and type of development, the number of water access points, and the opportunities for other recreational activities, the extent, nature, and duration of use on Wyman Lake and the Kennebec River was rated as **Medium**.

Due to the popularity of the fisheries resource in the **Kennebec River** below the dam, the extent, nature, and duration of use of the river was rated as **Medium**. There are no records indicating how many

people visit the area to experience the **Arnold Trail**. Based upon the lack of facilities and interpretive material a rating of **Low** would be appropriate.

E.2. Effect on continued use and enjoyment:

On **Moxie Pond** the intercept survey indicated that, while the turbines would impact the scenic quality of the pond, respondents reported that their enjoyment would be altered to only a minor degree. The presence of the wind turbines had, on average, no impact on their likelihood to return. 30% of the participants report that the wind turbines would have a very negative affect on their enjoyment of the area, while 41% felt they would have a slight, somewhat, or very positive impact on their enjoyment. The effect on continued use and enjoyment was rated as **Medium**. Almost half (48%) report they would be more likely to return to Moxie Pond if the turbines were in place. Some participants believe wind turbines would make the view look more industrialized, obstruct the view and natural character of the pond, or cause noise. Others report that the turbines would not bother them at all and that they appreciate helping the environment. People were not shown a map that described the limited area that would be affected by views of the turbine blades at close to 8 miles. The vast majority of the pond is beyond 8 miles from the nearest turbine where the effect on views would be considered insignificant.

At **Wyman Lake** the intercept survey indicated that the turbines would have a negative impression on scenic value and their enjoyment of the Lake. However, the presence of the wind turbines would not impact their likelihood to return. The effect on continued use and enjoyment was rated as **Medium**. Over half (53%) report they would be more likely to return to Wyman Lake if the turbines were in place, while 37% would be less likely to return. People were not shown a map that described the limited area of the lake that would be affected by views of the turbines. Participants were also not given the opportunity to describe their feelings about the existing Bingham Wind Project that is currently visible from the southern end of the lake. Like Moxie Pond the vast majority of the Wyman Lake is beyond 8 miles from the nearest turbine where the effect on views would be considered insignificant.

F. Scope and scale of Project views/ Visual Impact: As directed by CH. 382.G, Scope and Scale of the Potential Effect, the VIA has provided *evidence of the number of turbines and portions of turbines that would be visible from various viewpoints for users of the SRNSN* (see photosimulations and viewshed maps).

A rating of **Low** was assigned to **Moxie Pond** because of the minimal Project views. The Project would only be visible from a relatively small area in the southern portion of the pond in the form of blades from two turbines at distances of almost 8 miles. Turbines would be seen over a horizontal field of view of approximately 4.5º (which is just over the width of two thumbs held out at arm's length). The blades would not be a dominant presence in the landscape.

A rating of **Low** was assigned to **Wyman Lake** because of the minimal Project views. The Project would be visible from a small area in the southern portion of the lake near the Wyman Dam. Turbine blades would be seen over a horizontal field of view of approximately 5º (which is just over the width of two and one-half thumbs held out at arm's length). The blades would not be a dominant presence in the landscape.

G. Overall Scenic Impact. The Overall Scenic Impact evaluates the Project at two levels: scenic impacts on individual SRSNS, and the scenic impact of the Project as a whole, considering only the area within 8 miles of the turbines. Based on Chapter 382, the evaluation of impacts to SRSNS is a composite finding, based on 1) the Value of the Resources (based on significance of the resource, existing character, and viewer expectations); and 2) the Significance of the Impacts, (based on project purpose and context;

extent, nature, and duration of public uses and the potential effect on that public use and enjoyment of those uses; scope and scale of potential impact; and cumulative impacts).

Overall Scenic Impact on Individual Scenic Resources
Based on the factors described above, the overall scenic value of **Moxie Pond** is rated as High, although it could be rated Medium, based upon the number of camps on the pond (approximately 175) and the rating of "High" for inharmonious development in the Scenic Lakes Character Evaluation in Maine's Unorganized Towns. The Significance of the Impacts to Moxie Pond is considered **Low**, based primarily upon the limited area of Project visibility, the distance to the observer, the limited number of turbine blades (and no nacelles) that would be seen, and the potential effect on public use and enjoyment. The Overall Scenic Impact to Moxie Pond is considered **Low**.

Pursuant to Chapter 382.I., a Low impact to a Medium or High value resource does not constitute an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS.

Based on the factors described above, the overall scenic value of **Wyman Lake** is rated as Medium. The Significance of the Impacts to Wyman Lake is considered **Low**, based primarily upon the limited Project visibility and the potential effect on public use and enjoyment. The Overall Scenic Impact to Wyman Lake/Kennebec River is considered **Low**.

Pursuant to Chapter 382.I., a Low impact to a Medium value resource does not constitute an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS.

Based on the factors described above, the overall scenic value of the **Kennebec River** below the Wyman Dam is rated as **Medium**. The Significance of the impact to Kennebec River in this location is considered **Low**, based primarily upon the limited Project visibility and the potential effect on public use and enjoyment. The Overall Scenic Impact to Kennebec River is considered **Low**.

Pursuant to Chapter 382.I., a Low impact to a Medium value resource does not constitute an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS.

Based on the factors described above, the overall scenic value of the **Arnold Trail** below the Wyman Dam is rated as **Medium**. The Significance of the impact to the Arnold Trail in this location is considered **Low**, based primarily upon the limited Project visibility and the potential effect on public use and enjoyment. The Overall Scenic Impact to the Arnold Trail is considered **Low**. As noted earlier, there will be no impact to the land-based section of the Arnold Trail in Carrying Place Twp.

Pursuant to Chapter 382.I., a Low impact to a Medium value resource does not constitute an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS.

9. CUMULATIVE VISUAL IMPACTS

The Site Location of Development Application guidance requires the following information on potential cumulative impacts:

1) Identify any wind projects proposed by the applicant or other applicants which are existing, have been approved, or for which applications have been submitted, at the state or local level that would be within eight miles of any portion of any SRSNS within eight miles of the proposed project. These wind energy projects must include projects subject to the small-scale certification statute (35-A M.R.S.A. §3456).

(2) Identify any projects which the applicant is currently investigating or planning within eight miles of any of the proposed project's SRSNS.

(3) Provide a detailed description of how construction of the proposed project will not cause unreasonable adverse effects to the scenic character of the proposed project's SRSNS, or scenic character related to cumulative impacts related to the existing, previously approved, applications under review, or planned wind energy projects.

Bingham Wind is the only existing wind energy project with a study area that overlaps the 8-mile study area for WMRE (see Map 7 Cumulative Impact, Landcover Viewshed for Blades). The only scenic resource that would be affected by both projects is Wyman Lake in a small area just above the Wyman Dam. From this part of the lake seven turbines from the Bingham project are currently visible to the east, with the closest turbine approximately 6.6 miles to the east. As seen in Photograph 26 in Appendix C, Study Area Photographs, the nacelles of six turbines are seen just above the treeline; blades from a seventh turbine are also visible. Photograph 30, taken closer to the Wyman Dam, shows 8 of the Bingham turbines visible. The VIA for the Bingham project showed a total of 8 turbines in approximately the same location.[13] The current photographs in Appendix C show that the turbines, while visible, are not a dominant presence, especially when compared to the upper portion of the Wyman Dam, which is a strong horizontal element in the landscape.

The WMRE project, as seen in Photosimulation 2, would be slightly closer to the viewer (4.3 to 5.5 miles to the northeast) than the Bingham Wind Project. The blades of six of the turbines would be visible just above the treeline on a low ridge above the lake. None of the nacelles would be visible. The turbine blades would appear over a horizontal field of view of approximately 5º.

Due to the complex nature of the shoreline of Wyman Lake, there are relatively few places on the shore where both projects would be visible at the same time. Map 7 indicates where both sets of turbines would be visible to someone on the southern end of the lake. The area of overlap is relatively small compared to the overall size of Wyman Lake (approximately 110 acres or 6% of the total 1,819 acres).

10. CONCLUSION

The determination of effect on scenic character was guided by Chapter 382.I Unreasonable Adverse Effect on Scenic Character: *In evaluating whether the development significantly compromises views from an SRSNS such that the development has an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS, the Department will consider evidence regarding the significance of the SRSNS; the existing character of the area surrounding the SRSNS; and the expectations of the typical user of the SRSNS, to inform a rating of the value of the SRSNS as low, medium, or high.*

The Department will also evaluate the evidence regarding the purpose and context of the proposed wind

[13] LandWorks. Exhibit 12: Annotated Visual Simulation from Wyman Lake. Sheet 2 of 4. 4/18/13.

energy development; the extent, nature and duration of public uses of the SRSNS and the potential effect of the proposed development on that public use and enjoyment; the scope and scale of the potential impacts of the proposed development; and any cumulative impacts on the scenic character or existing uses related to scenic character of the SRSNS, to inform a rating of the significance of the impacts as low, medium, or high.

Impact of the Project as a Whole

The visual impact assessment examined the criteria established by Chapter 382.I and determined that the Project would have low scenic impact on Moxie Pond, the Arnold Trail (where it follows the Kennebec River below the Wyman Dam), the Kennebec River below the dam, and Wyman Lake. These findings conclude that the Project would not significantly compromise views from these resources such that the Project would have an unreasonable adverse effect on their scenic character or the existing uses related to their scenic character.

- The Project site, a retired Air Force Radar installation, is highly suitable for conversion to an energy producing facility. The Project will re-use the existing substation, portions of the road network, and at least one of the existing buildings. The site is already highly disturbed by previous clearing and construction activities, so the WMRE Project should be seen as a continuation of a large-scale infrastructure project.

- The site is adjacent to an existing 115 kV transmission line, which means there will be minimal amount of tree clearing required for generator lead lines or transmission lines.

- The Project will not be located on a pronounced ridgeline, which will limit the Project viewshed and the area that it may be visible.

- There will be no Project views from most categories of Scenic Resources of State or National Significance (SRSNS) identified by the Wind Energy Act.

- The Project will be minimally visible from a small portion of the Arnold Trail, and no other structures or places listed on the National Register of Historic Places. The overall impact to the Arnold Trail will be low.

- Blades from two turbines may be visible at a distance of 7.7 miles from a relatively small portion (1.4%) of **Moxie Pond,** which is a High value SRSNS. The overall scenic impact to Moxie Pond will be low.

- The blades from up to six turbines may be visible at a distance of 4 to 6 miles from two relatively small areas on **Wyman Lake,** which is not a rated lake for its scenic value, and a small portion of the Kennebec River just below the Wyman Dam. The overall scenic impact to Wyman Lake and the Kennebec River will be low.

- The cumulative visual impact of the Project in relation to the Bingham Wind Project will be minimal. The only SRSNS that would have views of both projects is a small portion of Wyman Lake, in an area where viewers already see the infrastructure of Wyman Dam.

- The associated facilities for the Project (i.e., the access roads, the underground electrical collection system, O&M facility, laydown areas, ADLS tower, etc.) will have no impact on views from SRSNSs. The associated facilities will not be of a location, character, or size to cause an

unreasonable adverse visual effect on the scenic values and existing uses of SRSNS within the study area.

- Overall Scenic Impacts on SRSNSs. The Project will not have an unreasonable adverse impact on scenic values and existing uses of the identified SRSNSs. The Project will not compromise views from scenic resources of state or national significance such that the development will have an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the scenic resource of state or national significance.

These findings are supported by:

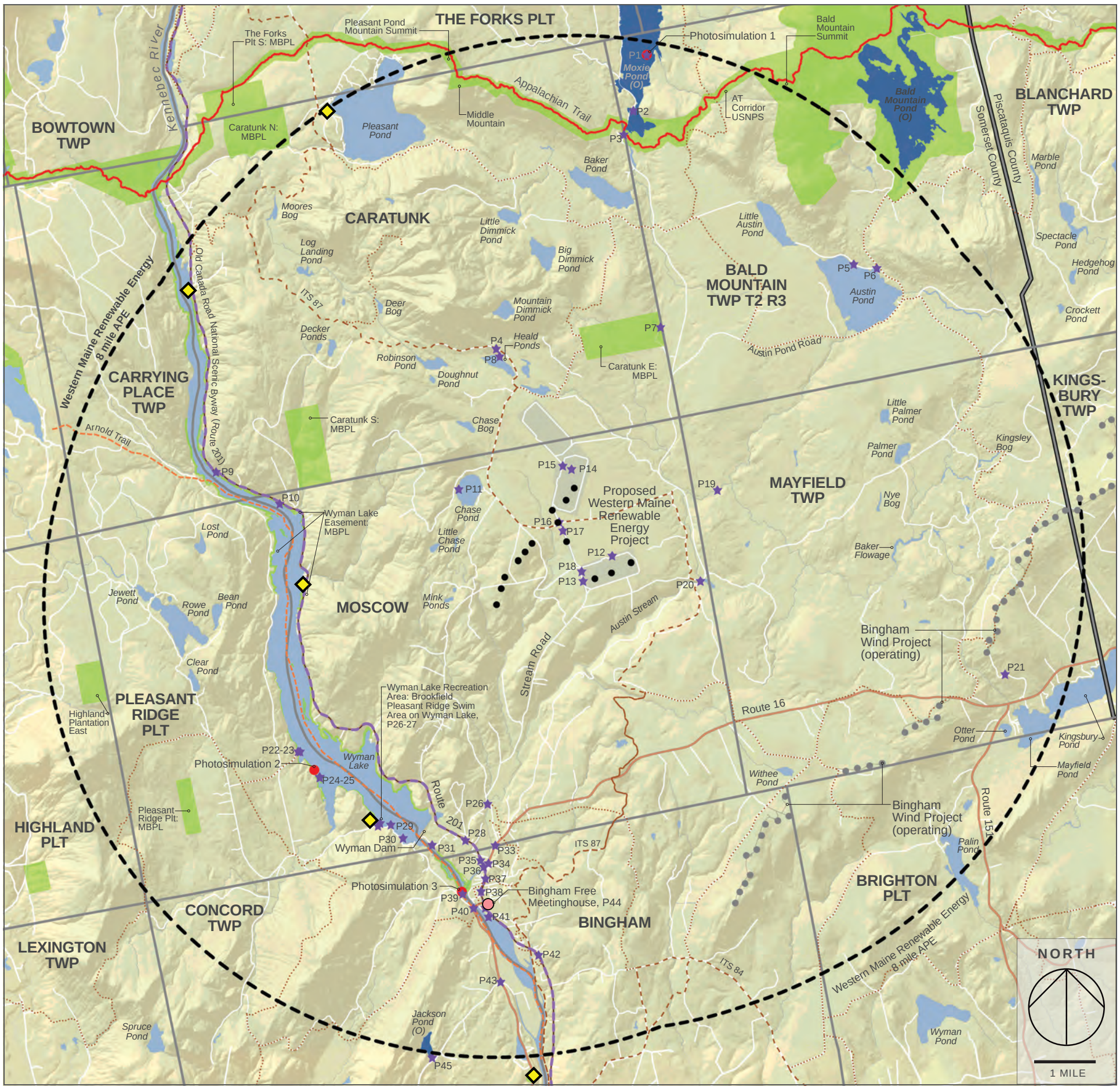
- CH 382.1.(1) High Value SRSNS. A Department finding of high or medium scenic impact to an SRSNS with high value will be considered to constitute an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS. **A Department finding of low scenic impact to an SRSNS with high value will be considered to not constitute an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS.**

- CH 382.I.(2) Medium Value SRSNS, which notes: *A Department finding of high scenic impact to an SRSNS with medium value will be considered to constitute an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS. A finding of medium scenic impact to an SRSNS with medium value will require further evaluation by the Department of the evidence to make a determination as to whether the proposed impact would be unreasonably adverse**. A Department finding of low scenic impact to an SRSNS with medium value will be considered to not constitute an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS.*** (emphases added.)

Table 10.1 Summary Table of Evaluation Criteria

Scenic Resource of State or National Significance	Scenic Impact Evaluation Criteria							Overall Scenic Impact
	A: Resource Significance	B. Character of Surrounding Area	C: Viewer Expectation	D: Purpose and Context	E.1: Extent, Nature, Duration of Use	E.2: Effect on Continued Use and Enjoyment	F: Scope and Scale of Project Views	
B. Historic Site								
Arnold Trail / Kennebec River	Medium	Medium	Medium	Medium	Low	Low	Low	Low
D. Great Pond								
Moxie Pond	High*	Medium	High	Medium	Medium	Medium	Low	Low
E. Scenic River								
Wyman Lake/ Kennebec River	Medium	Medium	Medium	Medium	Medium	Low	Low	Low

*The 'High' rating could be reduced to a rating of 'Medium', due to the number of camps on the pond (approximately 175) and the rating of "High" for inharmonious development in the Scenic Lakes Character Evaluation in Maine's Unorganized Towns

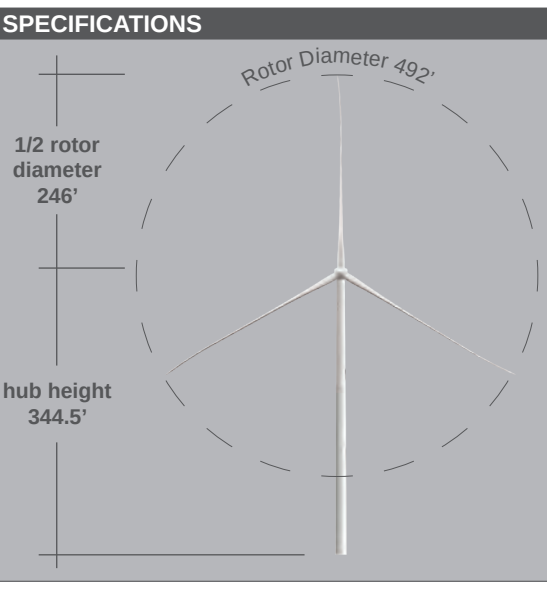


MAP INDEX

LEGEND

- WMRE Turbine (Proposed)
- Bingham Turbine (Operating)
- County Lines
- Municipal Boundaries
- Conservation Lands
- Appalachian Trail
- Arnold Trail
- Interconnected Trail System (ITS)
- Local Snowmobile Route
- Boat Launch
- Structure on National Register of Historic Places
- Scenic Lake/Pond
- Scenic Byway
- P# Study Area Photo Location
- Photosimulation Location

TURBINE SPECIFICATIONS



WESTERN MAINE RENEWABLE ENERGY

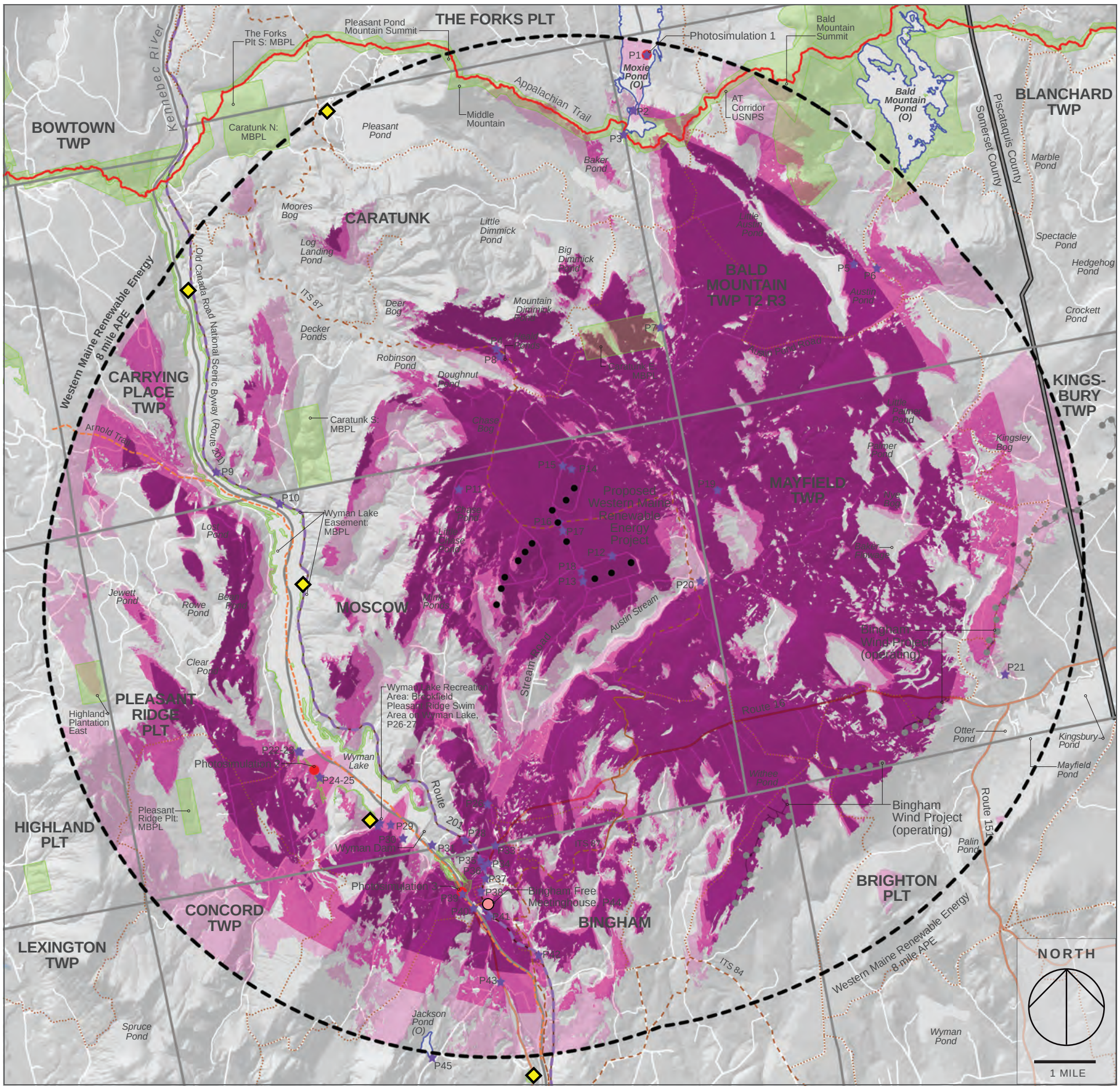
MAP 1

PROJECT STUDY AREA

tjd&a

February 15, 2021

Western Maine Renewable Energy Project Turbine layout as of 2021.02.02



LEGEND

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- Scenic Lake/Pond
- Scenic Byway
- P# Study Area Photo Location
- Photosimulation Location

VISIBILITY

Number of Turbines with Visible Blades

- 1-5
- 6-10
- 11-14

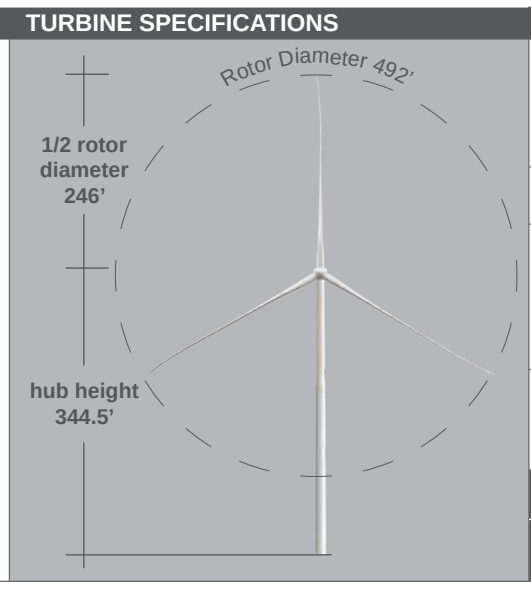
ANALYSIS NOTES

Map shows areas where a viewer may see at least one blade tip within 8 miles of any proposed turbine, based upon the screening effects of topography, and assuming no vegetation or structures to block views.

The analysis is based on a Digital Terrain Model (DTM) processed at 3-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.

Potential turbine visibility should be confirmed with field investigations and other visualization techniques.

TURBINE SPECIFICATIONS



WESTERN MAINE RENEWABLE ENERGY

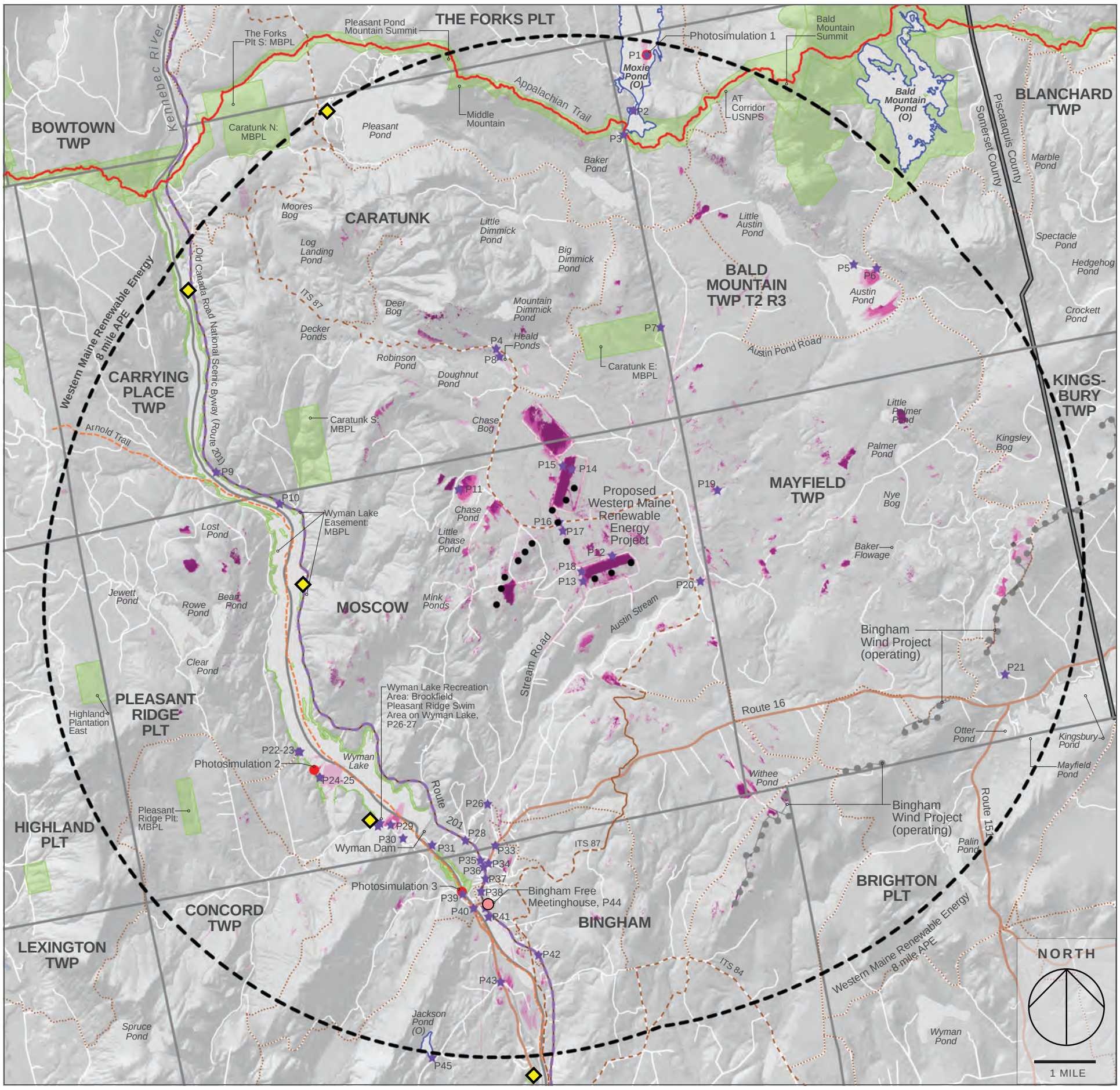
MAP 2

Potential Visibility Of Turbine Blade Tips Using Topographic Data

tjd&a

February 15, 2021

Western Maine Renewable Energy Project Turbine layout as of 2021.02.02



LEGEND

- WMRE Turbine (Proposed)
- Bingham Turbine (Operating)
- County Lines
- Municipal Boundaries
- Conservation Lands
- Appalachian Trail
- Arnold Trail
- Interconnected Trail System (ITS)
- Local Snowmobile Route
- Boat Launch
- Structure on National Register of Historic Places
- Scenic Lake/Pond
- Scenic Byway
- P# Study Area Photo Location
- Photosimulation Location

VISIBILITY

Number of Turbines with Visible Blades

- 1-5
- 6-10
- 11-14

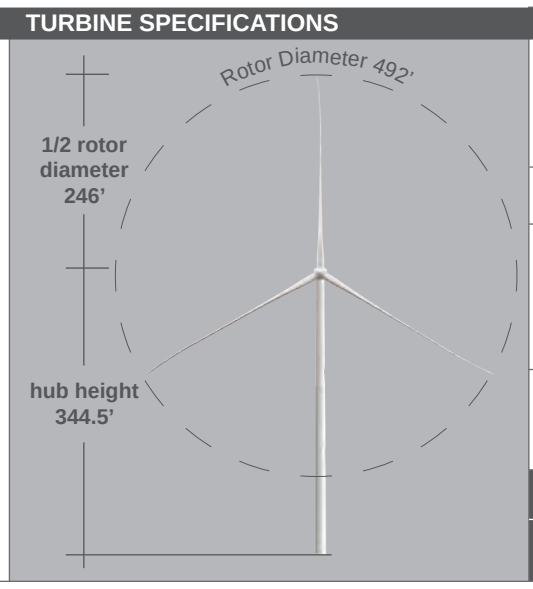
ANALYSIS NOTES

Map shows areas where a viewer may see at least one blade tip within 8 miles of any proposed turbine, based upon the screening effect of topography, vegetation, and structures to block views.

The analysis is based on a Digital Surface Model (DSM) processed at 3-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.

Potential turbine visibility should be confirmed with field investigations and other visualization techniques.

TURBINE SPECIFICATIONS



WESTERN MAINE RENEWABLE ENERGY

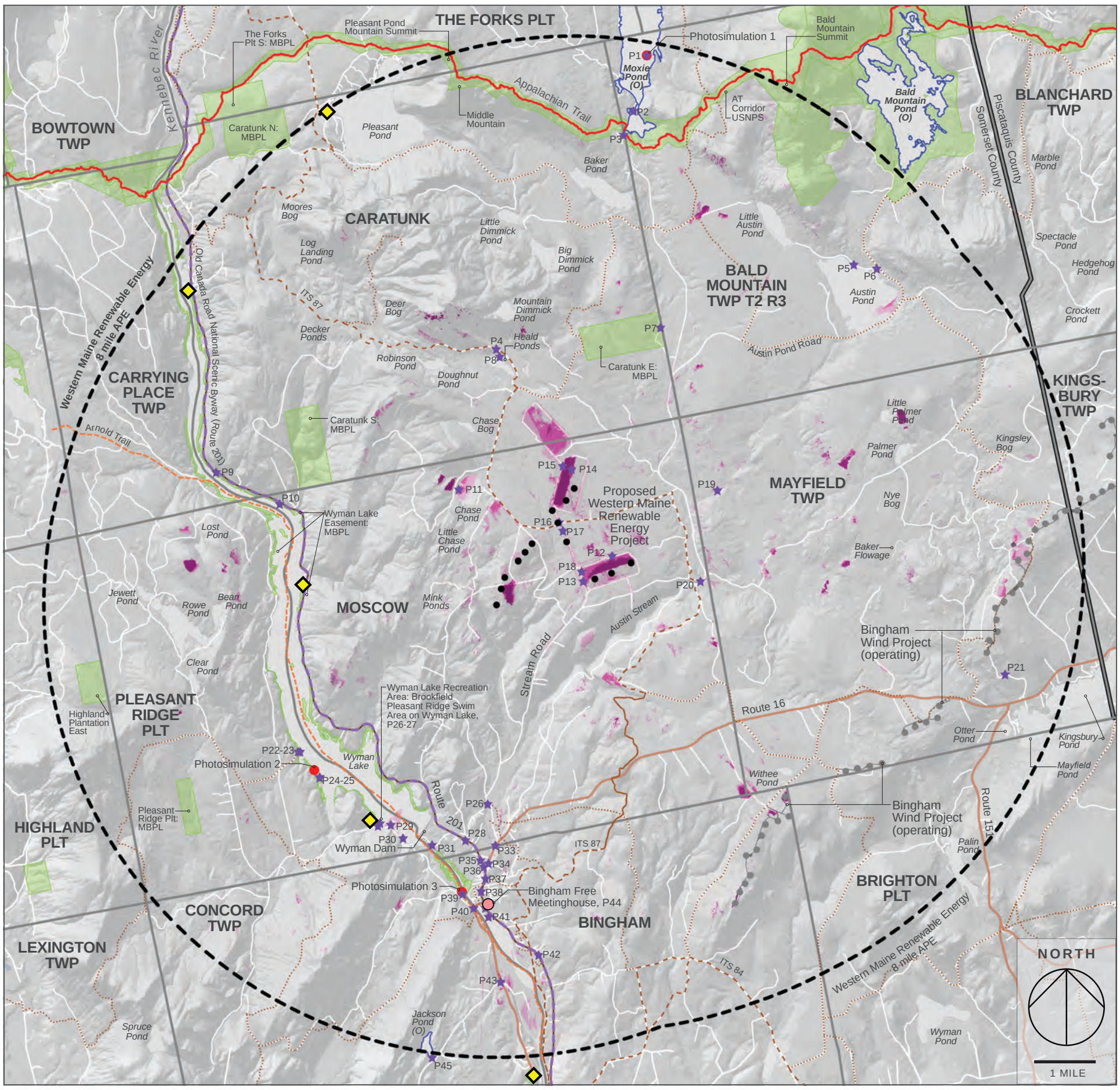
MAP 3

Potential Visibility Of Turbine Blade Tips Using Topographic + Surface Data

tjd&a

February 15, 2021

Western Maine Renewable Energy Project Turbine layout as of 2021.02.02



LEGEND

- WMRE Turbine (Proposed)
- Bingham Turbine (Operating)
- County Lines
- Municipal Boundaries
- Conservation Lands
- Appalachian Trail
- Arnold Trail
- Interconnected Trail System (ITS)
- Local Snowmobile Route
- Boat Launch
- Structure on National Register of Historic Places
- Scenic Lake/Pond
- Scenic Byway
- P# Study Area Photo Location
- Photosimulation Location

VISIBILITY

Number of Visible Hubs

- 1-5
- 6-10
- 11-14

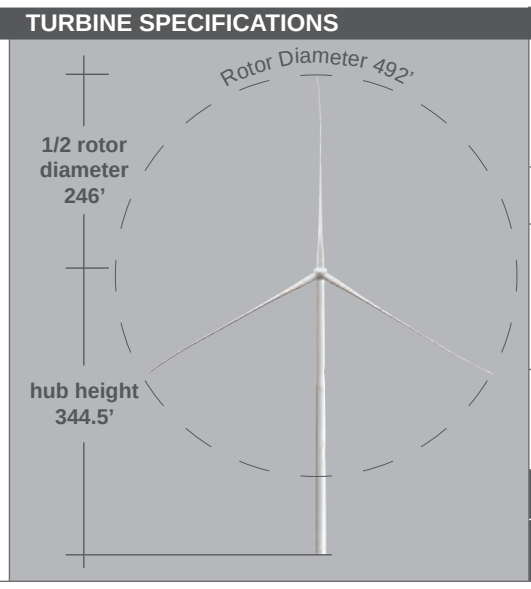
ANALYSIS NOTES

Map shows areas where a viewer may see at least one turbine hub within 8 miles of any proposed turbine, based upon the screening effect of topography, vegetation, and structures to block views.

The analysis is based on a Digital Surface Model (DSM) processed at 3-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.

Potential turbine visibility should be confirmed with field investigations and other visualization techniques.

TURBINE SPECIFICATIONS



WESTERN MAINE RENEWABLE ENERGY

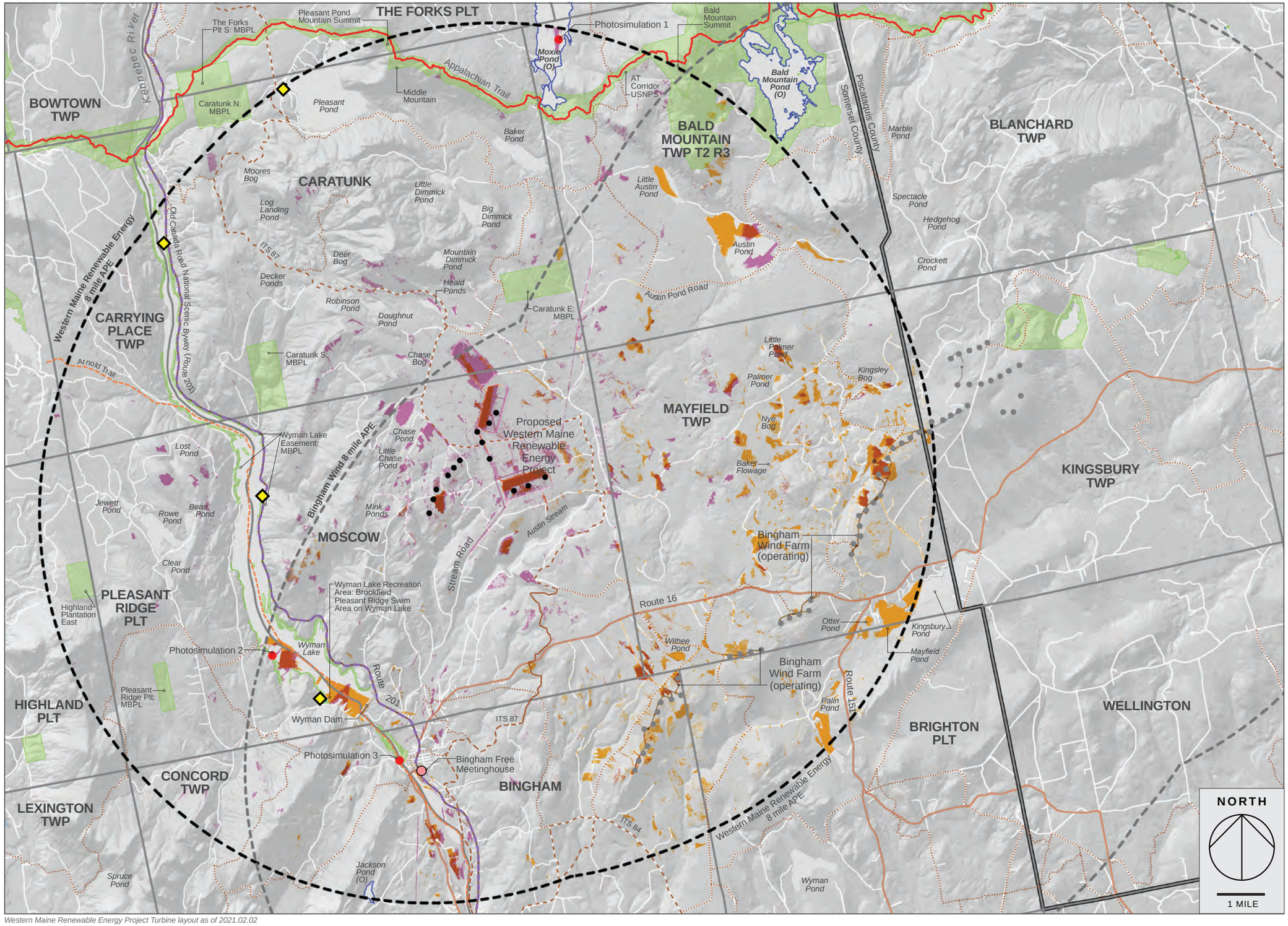
MAP 4

Potential Visibility Of Turbine Hubs Using Topographic + Surface Data

tjd&a

February 15, 2021

Western Maine Renewable Energy Project Turbine layout as of 2021.02.02



Western Maine Renewable Energy Project Turbine layout as of 2021.02.02

WESTERN MAINE RENEWABLE ENERGY

MAP 5

CUMULATIVE IMPACT
Potential Visibility Of Turbine Blade Tips Using Topographic + Surface Data

LEGEND

- WMRE Turbine (Proposed)
- Bingham Turbine (Operating)
- County Lines
- Municipal Boundaries
- Conservation Lands
- Appalachian Trail
- Arnold Trail
- Interconnected Trail System (ITS)
- Local Snowmobile Route
- Boat Launch
- Structure on National Register of Historic Places
- Scenic Lake/Pond
- Scenic Byway

VISIBILITY

- Western Maine Renewable Energy Project
- Bingham Project
- Western Maine Renewable Energy and Bingham Project

ANALYSIS NOTES

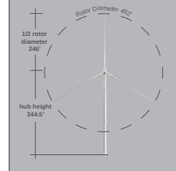
The viewshed map shows where a viewer may see at least one blade tip of any turbine within 8 miles of any proposed turbine, based upon the screening effect of topography, vegetation, and structures to block views.

The analysis is based on a Digital Surface Model (DSM) processed at 3-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.

Potential turbine visibility should be confirmed with field investigations and other visualization techniques.

TURBINE SPECIFICATIONS

Western Maine Renewable Energy



Bingham Wind

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February 15, 2021

WESTERN MAINE RENEWABLE ENERGY PROJECT

Appendix B: Scenic Resource Chart - February 2021

tjd&a

Resource	Location	Ownership	Size	Access	DEV	Scenic Rating or Resource Significance	DIST/ DIST (V)	Project Visibility	Notes
A. A National Natural Landmark, federally designated wilderness area or other comparable outstanding natural and cultural feature. ***NONE WITHIN PROJECT AREA***									
B. A property listed on the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966.**									
Bingham Free Meetinghouse	Bingham	Public	N/A	Yes: restricted	Yes	National Register of Historic Places - 1976	5.3 miles	**None**: Viewshed analysis and modeling confirmed intervening vegetation, structures, and topography will screen Project from view.	Village setting includes a small park, modest single family houses, and a few larger commercial buildings along Route 201 surrounded by open grass areas and scattered deciduous trees.
Arnold Trail	Concord Twp, Bingham, Pleasant Ridge Plt, Moscow, Carrying Place Twp, Caratunk	Easement over private and public land	Approximately 2.5 miles of on-land trail within 8 miles.	Yes	Yes	National Register of Historic Places - 1969	4.3 – 5.7 miles to nearest point of visibility	**Carrying Place Twp: None.** Intervening vegetation, structures, and topography will screen Project from view from Carrying Place west to Carry Ponds. **Below Wyman Dam: Minimal**. Several turbines will be intermittently visible through riparian vegetation at distances of over 5 miles.	Historic location of expedition route north of Bingham is now under Wyman Lake. No designated trail below Wyman Dam where viewshed map shows scattered minor visibility.
C. National or State Parks ***NONE WITHIN PROJECT AREA***									
D. A great pond that is: ***(1) One of the 66 great ponds located in the State's organized area 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 Lake Assessment."***									
Jackson Pond	Concord Twp	Public	31 acres/ approximately 29 acres within 8 miles	Yes	No	Rated "Outstanding" for scenic resources - *Maine Wildlands Lake Assessment*	7.6 miles	**None:** No visibility due to intervening vegetation and terrain.	About 3/4 of the pond is within 8 mile of the Project.
Moxie Pond	Bald Mountain Township, East Moxie Township, The Forks Plt	Public	2379 acres, includes Joes Hole; approximately 423 acres within 8 miles	Yes	Yes	Rated "Outstanding" for scenic resources - *Maine Wildlands Lake Assessment*	6.4 – 7.5 miles to nearest point of visibility	**Minimal**: Blade tips from 2 turbines within 8 miles will be visible from a 34± acre area in the southern portion of the pond. See Photosimulation1 in Appendix D.	Achieved a score of 55 in the *Scenic Lakes Character Evaluation in Maine's Unorganized Towns.* Area of visibility = 1.4% of total pond area; 8% of pond within 8 miles. See Photosimulation 1 in Appendix D
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."									
Kennebec River	Bingham, Moscow, Caratunk, Concord Twp, Pleasant Ridge Plt, Carrying Place Twp.	Public	17 miles within 8 miles.	Yes	Yes	Rated as a "B" River in the *Maine Rivers Study* , for geologic/hydrologic, critical ecologic & scenic resources. Designated as a Scenic River in *Maine Rivers Study.*	3.2/ 4 miles to nearest point of visibility	**Minor**: Blades of to 6 turbines will be visible from the southern portion of Wyman Lake. There will be 3 to 5 turbines visible below the dam at distances greater than 5 miles. See Photosimulations 2 and 3 in Appendix D.	While Wyman Lake is part of the Kennebec River, it is not rated for scenic resources in the *Maine Wildlands Lake Assessment.* Turbine blade views are seen in conjunction with Wyman Dam and related infrastructure.
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. ***									
Appalachian National Scenic Trail	Bald Mountain Township, The Forks Plt, Caratunk	Public	7.7 miles within 8 miles of the project	Public	No	A unit of the National Park Service	6.1 miles	Foreground vegetation and terrain will block views of the Project from the Trail within 8 miles.	Summits of Bald Mountain and Pleasant Pond Mountain are > 8 miles from the Project.
G. A scenic turnout on a scenic highway constructed by the Department of Transportation.									
Wyman Lake Rest Area - Old Canada Road National Scenic Byway - Route 201	Moscow	Public	N/A	Public	Yes	DOT Scenic Turnout on National Scenic Byway	4.2 miles	**None**: No Project visibility due to intervening terrain and vegetation.	Rest area includes parking, picnic tables, and interpretive panels about Wyman Lake and the Arnold Expedition
H. Scenic viewpoints located in the coastal area that are ranked as having statewide significance or national importance in terms of scenic quality .*** ***NONE WITHIN PROJECT AREA***									

*****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.***

******Scenic viewpoints located in the coastal area that are ranked as having statewide significance or national importance in terms of scenic quality in: (1) One of the scenic inventories prepared for and published by the Executive Department, State Planning Office: "Method for Coastal Scenic Landscape Assessment with Field Results for Kittery to Scarborough and Cape Elizabeth to South Thomaston," Dominie, et al., October 1987; "Scenic Inventory Mainland Sites of Penobscot Bay," DeWan and Associates, et al., August 1990; or "Scenic Inventory: Islesboro, Vinalhaven, North Haven and Associated Offshore Islands," DeWan and Associates, June 1992; or (2) A scenic inventory developed by or prepared for the Executive Department, State Planning Office.***

HEADINGS/RATINGS

DIST/DIST(V): Distance from edge of resource to nearest turbine / Distance to nearest visible turbine based on viewshed analysis and/or fieldwork.
DEV: Development on or near the resource. Based on Google Earth aerial analysis & documentation.
Proect Visibility: Based on viewshed analysis, modeling, and fieldwork.
Res Class/Mgmt Class: Resource Class/Management Class (LUPC Comprehensive Land Use Plan 2010 App. C)

RATINGS

Resource Class "1A": Lakes of statewide significance with multiple outstanding natural values (two or more outstanding values).
Resource Class "1B": Lakes of statewide significance with a single outstanding natural value. Maine Wildlands Lake Assessment.
Management Class "7": All lakes not otherwise classified in the Maine Wildlands Lake Assessment.
Outstanding Great Pond: Of statewide importance due to unique or otherwise noteworthy characteristics.
"B" Rivers 1. Rivers or river segments possessing four or five resource values with regional, statewide or greater than statewide significance in a specific resource category. 2. Rivers or river segments possessing one resource value which is recognized to be one of the state's most significant in a given resource category. - *Maine Rivers Study*

P1. Panoramic view looking southeast to southwest from Moxie Pond in Bald Mountain Twp toward the proposed Western Maine Renewable Energy (WMRE) Project. Moxie Pond is rated 'Outstanding' for scenic resources in the *Maine Wildlands Lake Assessment*. Up to five turbine blade tips will be visible 7.7 to 9.2 miles away from this location. See Photosimulation 1 in Appendix D.

P2. Panoramic view looking southeast to southwest from the southern end of Moxie Pond, Joes Hole, in Bald Mountain Twp toward the proposed WMRE Project. The closest proposed turbine is 6.75 miles from this location and will not be visible due to intervening terrain and vegetation.

P3. View looking east from a trailhead of the Appalachian Trail in Caratunk leading to Bald Mountain. The closest proposed turbine is 6.3 miles from this location and will not be visible due to intervening terrain and foreground vegetation.

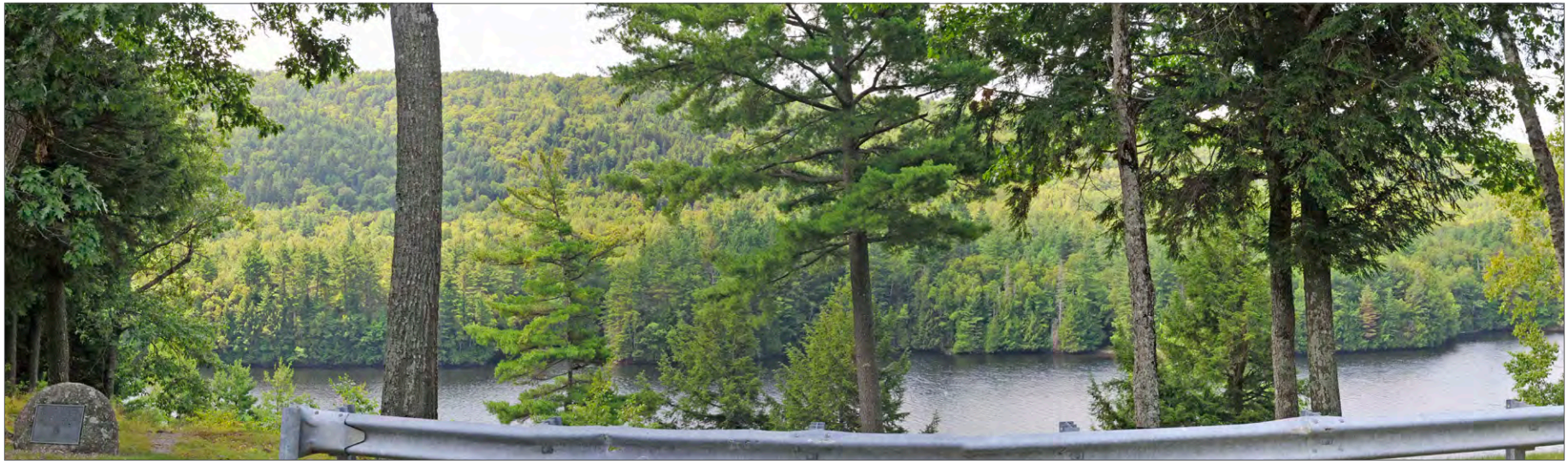
P4. View looking southeast from Heald Pond Road in Caratunk toward the Bingham wind turbines on the horizon. The closest proposed turbine is 2.8 miles from this location and will not be visible due to intervening terrain and foreground vegetation.

P5. Panoramic view looking southwest to northwest from the northern shore of Austin Pond in Bald Mountain Twp toward the proposed WMRE Project. Austin Pond is not rated for scenic resources. Blades of proposed turbines may be visible 6.3 miles from this location.

P6. Panoramic view looking southwest to east from the northern shore of Austin Pond in Bald Mountain Twp toward the proposed WMRE Project. Austin Pond is not rated for scenic resources. Blades of proposed turbines may be visible 6.6 miles from this location.

P7. Panoramic view looking south to southwest from an unnamed road on Maine Public Reserve Land in Caratunk toward the proposed WMRE Project. The closest proposed turbine is 3.2 miles from this location and will not be visible due to intervening terrain and foreground vegetation.

P8. Panoramic view looking southeast to southwest from the northern shore of Heald Pond in Caratunk toward the proposed WMRE Project. Heald Pond is not rated for scenic resources. The closest proposed turbine (at a distance of 2.7 miles) and blade tips of other proposed turbines may be visible from this location.



P9. Panoramic view looking southwest toward the Arnold Historic Site marker on the west side of Route 201 above the Kennebec River. The WMRE Project is east of this viewpoint and will not be visible due to topography and intervening vegetation

P10. Panoramic view looking southeast to southwest from the Wyman Lake Rest Area on the west side of Route 201 in Moscow. Wyman Lake is part of the Kennebec River, which is rated for scenic resources in the *Maine Rivers Study*. The WMRE Project is east of this viewpoint and will not be visible due to topography and intervening vegetation

P11. Panoramic view looking east to southeast from the northern shore of Chase Pond in Moscow toward the proposed WMRE Project. Chase Pond is not rated for scenic resources. Proposed turbines and blade tips will be visible 1.6 to 3.4 miles from this location.

P12. Aerial view looking southwest above the former Air Force Backscatter Radar Defense Site in Moscow.

P13. View looking northeast from Stream Road in Moscow toward the Backscatter Radar towers on the southernmost portion of the former Air Force site. These towers have since been removed.

P14. View looking southwest toward the middle section of the former Air Force site.

P15. View looking northwest toward the northernmost portion of the former Air Force site. The existing substation (lower left side of image) will be restored and used as part of the Project.

P16. Characteristic view of the former Air Force site, looking northwest to northeast from Stream Road within the proposed WMRE Project area in Moscow.

P17. Characteristic view of the former Air Force site, looking southeast to southwest from Stream Road within the proposed WMRE Project area in Moscow.

P18. This is one of the few locations where both the WMRE and the Bingham Wind turbines will be visible. The Bingham turbines are seen at a distance of 7 miles in the background. Three of the WMRE turbines will be visible from this viewpoint. See Map 5 in Appendix A.

P19. Panoramic view looking southwest to northwest from Austin Stream in Mayfield Township toward the proposed WMRE Project. Austin Stream is not rated for scenic resources in the *Maine Rivers Study*. The closest visible turbine is 2.5 miles from this location. Blades of up to five turbines may be visible from this location.

P20. Panoramic view looking southwest to northwest from the ITS 87 bridge over Austin Stream in Moscow toward the proposed WMRE Project. The closest proposed turbine is 1.25 miles from this location. The proposed project will most likely not be visible from this location due to intervening terrain and foreground vegetation.

P21. Panoramic view looking southwest from a Bingham Wind Project access road toward a portion of the Bingham Wind Project in Mayfield Twp. The closest proposed WMRE turbine is 6.9 miles from this location and will not be visible due to intervening terrain and foreground vegetation.

P22. Panoramic view looking northeast from a MPRL easement on the western shore of Wyman Lake in Pleasant Ridge PLT toward the proposed WMRE Project. Wyman Lake is part of the Kennebec River, which is rated for scenic resources in the *Maine Rivers Study.*

P23. View looking southeast from the MPRL easement in Pleasant Ridge PLT toward Wyman Lake.

P24. View looking northeast from a Brookfield White Pine Hydro campsite in Pleasant Ridge PLT toward Wyman Lake. Blades of up to 6 turbines may be visible from the shoreline of the campsite area.

P25. View looking northeast from a Brookfield White Pine Hydro campsite along Wyman Lake in Pleasant Ridge PLT toward the proposed WMRE Project. Blades of six turbines may be visible from this location. See Photosimulation 2 in Appendix D.

P26. Panoramic view looking northeast to southeast from the Pleasant Ridge Swim Area along Wyman Lake in Pleasant Ridge PLT toward the proposed WMRE Project. Blades from approximately two turbines may be visible from this location. The hubs of six turbines and the blades of one additional turbine from the Bingham Wind Project are visible (right side of image) approximately 6.5 to 7.2 miles from this location. This is another location where some turbines from both the WMRE and the Bingham Wind Project will be visible. See Map 5 in Appendix A.

P27. View looking north from the entrance to the Pleasant Ridge Swim Area along Pleasant Ridge Road in Pleasant Ridge PLT.

P28. View looking northwest from Route 201 in Moscow. The closest proposed turbine is 4.2 miles from this location and will not be visible due to intervening terrain and vegetation.

P29. Panoramic view looking northeast from Pleasant Ridge Road along Wyman Lake in Pleasant Ridge PLT toward the proposed WMRE Project. The closest proposed turbine is 4.3 miles from this location. Blades of approximately 6 turbines may be visible from this location.

P30. Panoramic view looking northeast to southeast from Pleasant Ridge Road in Pleasant Ridge PLT toward the Wyman Hydroelectric Dam. Up to eight Bingham Wind turbines are visible in the background at distance of 6.5 miles.

P31. Panoramic view looking east to northwest toward the Wyman Hydroelectric Dam. The closest proposed turbine is 4.4 miles away and will not be visible from this location due to intervening terrain and foreground vegetation.

P32. View looking north from a bridge on Stream Road that crosses over Austin Stream in Moscow toward the proposed WMRE project. The closest proposed turbine is 4.3 miles from this location and will not be visible due to intervening terrain and vegetation.

P33. Panoramic view looking northwest to northeast from Route 16 in Moscow toward the proposed WMRE Project. Up to 11 turbines may be visible at 4.3 to 6.5 miles from this location. Six turbines will be visible on the horizon and 5 will be partially screened by foreground vegetation.

P34. Panoramic view looking northwest to northeast from Route 16 in Bingham toward the proposed WMRE Project. Up to three turbines will be visible from this location, filtered by foreground vegetation.

P35. Panoramic view looking northeast from Route 201 in Bingham toward the Bingham General Store and the proposed WMRE Project. The closest proposed turbine is 4.5 miles from this location and will not be visible due to intervening terrain and vegetation.

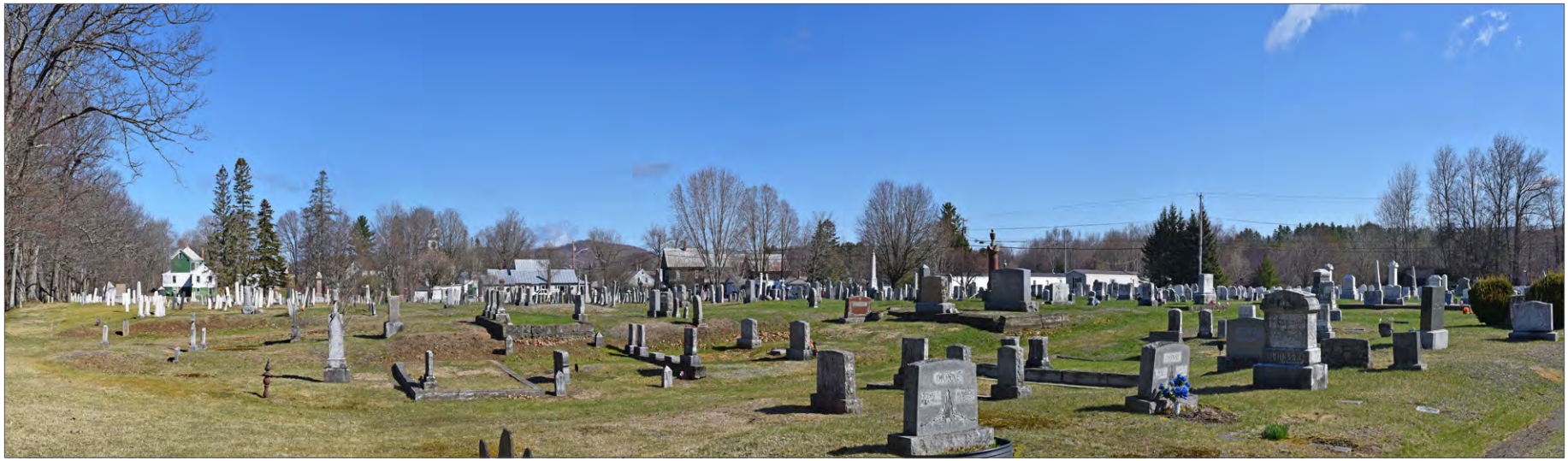
P36. Panoramic view looking northwest to northeast from the Route 201 bridge over Austin Stream in Bingham toward the proposed WMRE Project. The closest proposed turbine is 4.6 miles from this location and will not be visible due to intervening terrain and vegetation.

P37. Panoramic view looking south to southwest from Main Street in Bingham. The closest proposed turbine is 4.9 miles from this location and will not be visible due to intervening terrain and vegetation.

P38. Panoramic view looking north to northeast from Main Street in Bingham. The WMRE Project will be 5.1 miles from this location and will be blocked by intervening terrain and vegetation.

P39. Panoramic view looking north to northeast from the confluence of the Kennebec River and Austin Stream in Concord Township. Up to five turbines may be visible at distances of 5.1 to 6.1 miles from this location. See Photosimulation 3 in Appendix D.

P40. Panoramic view looking northwest to northeast from the Bridge Street bridge over the Kennebec River in Bingham. The closest WMRE turbines will be 5.4 miles from this location. Filtered views of approximately six turbines may be possible during leaf-off season.



P41. Panoramic view looking northwest to northeast from the Bingham Village Cemetery. Intervening terrain, structures, and foreground vegetation will screen the Project from this location.

P42. Panoramic view looking northwest from Route 201 in Bingham. The WMRE Project will be located to the northeast and not visible from this location due to intervening terrain and vegetation.

P43. Panoramic view looking northwest to northeast from Route 16 in Concord Township. There will be six turbines visible from this location at distances of 6.7 to 7.8 miles away.

P44. View looking northwest from Old Church Street in Bingham toward the Bingham Free Meeting House. The Bingham Free Meetinghouse is listed on the NRHP. The closest proposed turbine is 5.3 miles from this location and will not be visible due to intervening terrain, structures, and foreground vegetation.

P45. View looking northwest from Jackson Pond in Concord Township. Jackson Pond is rated 'Outstanding' for scenic resources in the *Maine Wildlands Lake Assessment.* Portions of the Pond are located within 8 miles of the WMRE Project, but there will be no visibility due to intervening foreground vegetation.

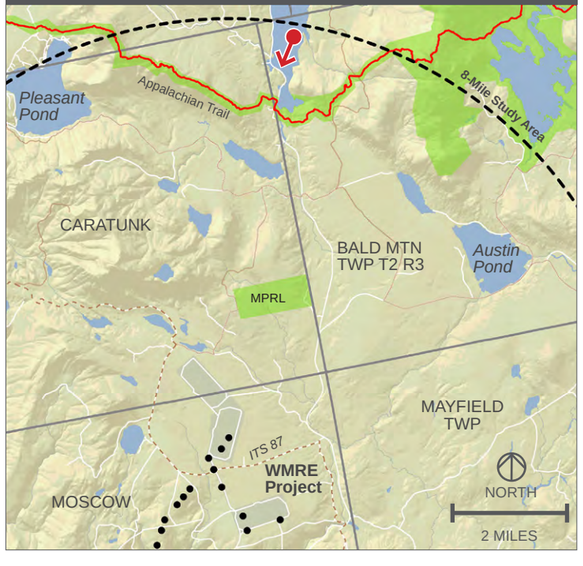
P01. Moxie Pond

Bald Mountain Twp

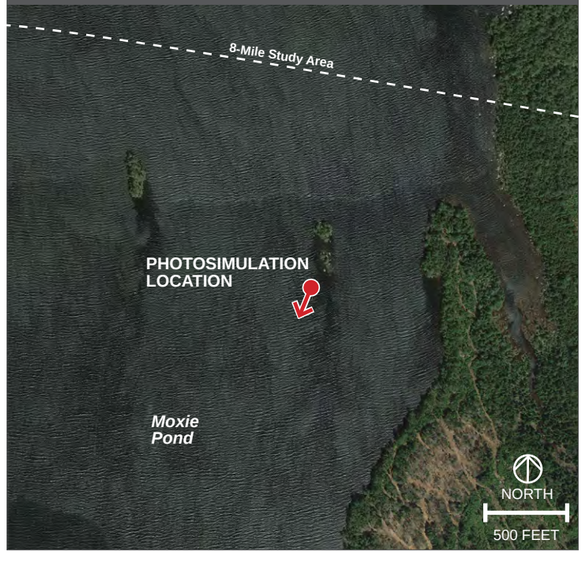
PANORAMIC PHOTOSIMULATION

EXTENT OF NORMAL VIEW

CONTEXT MAP



LOCATION MAP



DESCRIPTION

View looking southwest from Moxie Pond in Bald Mountain Township. Moxie Pond is rated 'Outstanding' for scenic resources in the *Maine Wildlands Lake Assessment*. Up to five turbine blade tips may be visible 7.7 to 9.2 miles from this location.

TURBINE DIMENSIONS

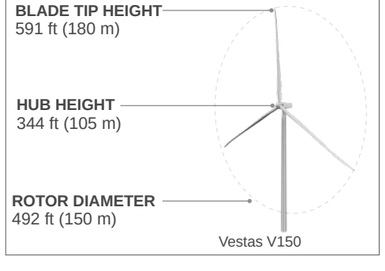


IMAGE DATA

LOCATION

Date	8 October 2019
Time	9:22 AM
Latitude	45.270160°
Longitude	-69.822468°
View Direction	Southwest

PHOTO

Camera	NIKON D5600
Resolution	300 dpi
Focal Length	35mm (50mm Eq.)
Weather	Sunny

PROJECT VIEW

Distance to Project	7.7 miles
Project Horizontal Field of View (HFOV)	4.5°

P01

Moxie Pond

Bald Mountain Twp

WESTERN MAINE RENEWABLE ENERGY

tjd&a Landscape Architects & Planners

P01. Moxie Pond

Bald Mountain Twp

NORMAL VIEW EXISTING CONDITIONS

P01

View looking southwest from Moxie Pond in Bald Mountain Township.

VIEW NOTE

When printed on 11x17 inch paper, viewer should hold this image approximately 21 inches from eye to replicate actual view.

WESTERN MAINE RENEWABLE ENERGY

tjd&a

P01. Moxie Pond

Bald Mountain Twp

NORMAL VIEW PHOTOSIMULATION

P01

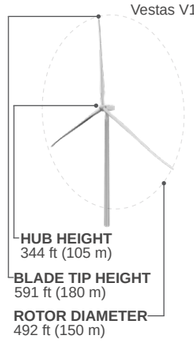
View looking southwest from Moxie Pond in Bald Mountain Township. Up to five turbine blade tips may be visible 7.7 to 9.2 miles from this location.

VIEW NOTE

When printed on 11x17 inch paper, viewer should hold this image approximately 21 inches from eye to replicate actual view.

TURBINE DIMENSIONS

Vestas V150



WESTERN MAINE RENEWABLE ENERGY

tjd&a

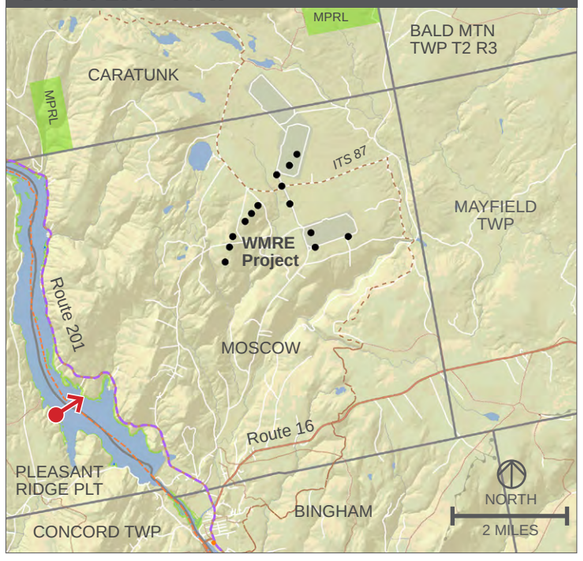
P02. Wyman Lake

Pleasant Ridge Plt

PANORAMIC PHOTOSIMULATION

EXTENT OF NORMAL VIEW

CONTEXT MAP



LOCATION MAP

DESCRIPTION

View looking northeast from the western edge of Wyman Lake in Pleasant Ridge Plt. Wyman Lake is an impoundment on the Kennebec River, which is rated as a 'B' river in the *Maine Rivers Study*. The Arnold Trail followed the Kennebec River to the northern part of what is now Wyman Lake. Blades of six turbines will be visible 4.3 to 5.5 miles from this location.

TURBINE DIMENSIONS

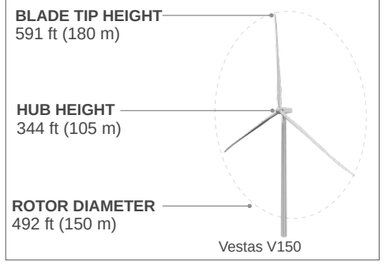


IMAGE DATA

LOCATION

Date	8 May 2020
Time	2:51 PM
Latitude	45.087524°
Longitude	-69.943666
View Direction	Northeast

PHOTO

Camera	NIKON D750
Resolution	300 dpi
Focal Length	50mm
Weather	Sunny

PROJECT VIEW

Distance to Project	4.3 miles
Project Horizontal Field of View (HFOV)	5°

P02

Wyman Lake

Pleasant Ridge Plt

WESTERN MAINE RENEWABLE ENERGY

tjd&a Landscape Architects & Planners

P02. Wyman Lake

Pleasant Ridge Plt

NORMAL VIEW EXISTING CONDITIONS

P02

View looking northeast from the western edge of Wyman Lake in Pleasant Ridge Plt.

VIEW NOTE

When printed on 11x17 inch paper, viewer should hold this image approximately 21 inches from eye to replicate actual view.

WESTERN MAINE RENEWABLE ENERGY

tjd&a

P02. Wyman Lake

Pleasant Ridge Plt

NORMAL VIEW PHOTOSIMULATION

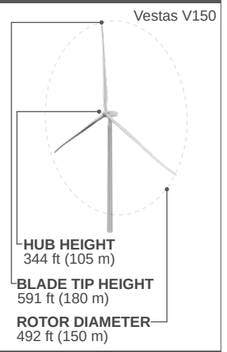
P02

View looking northeast from the western edge of Wyman Lake in Pleasant Ridge Plt. Up to six turbine blade tips may be visible 4.3 to 5.5 miles from this location.

VIEW NOTE

When printed on 11x17 inch paper, viewer should hold this image approximately 21 inches from eye to replicate actual view.

TURBINE DIMENSIONS



WESTERN MAINE RENEWABLE ENERGY

tjd&a

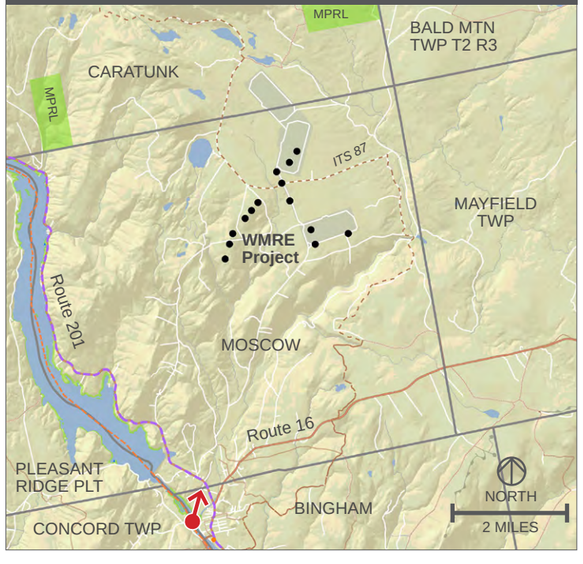
P03. Kennebec River

Concord Twp

PANORAMIC PHOTOSIMULATION

EXTENT OF NORMAL VIEW

CONTEXT MAP



LOCATION MAP

DESCRIPTION

View looking northeast from the shoreline of the Kennebec River in Concord Township just above the confluence with Austin Stream. The Kennebec River is is rated as a 'B' river in the Maine Rivers Study. There will be up to three turbine hubs and blades from two additional turbines visible 5.1 to 6.1 miles from this location.

TURBINE DIMENSIONS

BLADE TIP HEIGHT
591 ft (180 m)

HUB HEIGHT
344 ft (105 m)

ROTOR DIAMETER
492 ft (150 m)

Vestas V150

IMAGE DATA

LOCATION

Date	8 October 2019
Time	11:52 AM
Latitude	45.056238°
Longitude	-69.890470°
View Direction	Northeast

PHOTO

Camera	NIKON D5600
Resolution	300 dpi
Focal Length	35mm (50mm Eq.)
Weather	Sunny

PROJECT VIEW

Distance to Project	5.1 miles
Project Horizontal Field of View (HFOV)	4°

P03

Kennebec River

Concord Twp

WESTERN MAINE RENEWABLE ENERGY

tjd&a Landscape Architects & Planners

P03. Kennebec River

Concord Twp

NORMAL VIEW EXISTING CONDITIONS

P03

View looking northeast from the Kennebec River shoreline in Concord Township.

VIEW NOTE

When printed on 11x17 inch paper, viewer should hold this image approximately 21 inches from eye to replicate actual view.

WESTERN MAINE RENEWABLE ENERGY

tjd&a

P03. Kennebec River

Concord Twp

NORMAL VIEW PHOTOSIMULATION

P03

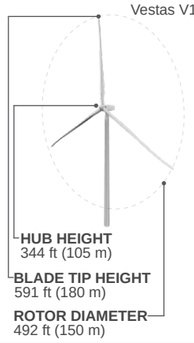
View looking northeast from the Kennebec River shoreline in Concord Township. Up to three turbine hubs and blades from two additional turbines will be visible 5.1 to 6.1 miles from this location.

VIEW NOTE

When printed on 11x17 inch paper, viewer should hold this image approximately 21 inches from eye to replicate actual view.

TURBINE DIMENSIONS

Vestas V150



WESTERN MAINE RENEWABLE ENERGY

tjd&a

Form No. 10-300 (Rev. 10-74) PH0354503

DATA SHEET

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR NPS USE ONLY
RECEIVED JAN 30 1976
DATE ENTERED JUN 3 1976

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC
** Bingham Free Meeting House
AND/OR COMMON

LOCATION

STREET & NUMBER West side, Route 201
South Main Street
__NOT FOR PUBLICATION

CITY, TOWN
Bingham __ VICINITY OF
CONGRESSIONAL DISTRICT
Second

STATE
Maine
CODE
23
COUNTY
Somerset
CODE
025

CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	X PUBLIC	__OCCUPIED	__AGRICULTURE	__MUSEUM
X BUILDING(S)	__PRIVATE	X UNOCCUPIED	__COMMERCIAL	__PARK
__STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	X YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	__BEING CONSIDERED	__YES: UNRESTRICTED	__INDUSTRIAL	__TRANSPORTATION
		__NO	__MILITARY	X OTHER: Historic Landmark

OWNER OF PROPERTY

NAME
Town of Bingham
STREET & NUMBER
Selectmen's Office
CITY, TOWN
Bingham __ VICINITY OF
STATE
Maine

LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.
Somerset County Registry of Deeds
STREET & NUMBER

CITY, TOWN
Skowhegan
STATE
Maine

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

DATE
__FEDERAL __STATE __COUNTY __LOCAL
DEPOSITORY FOR SURVEY RECORDS
CITY, TOWN
STATE

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
__EXCELLENT	__DETERIORATED	__UNALTERED	XORIGINAL SITE
XGOOD	__RUINS	XALTERED	__MOVED DATE_____
__FAIR	__UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Bingham Free Meeting House of 1835-36 prominently displays a Federal style design with tastefully blended Gothic Revival elements.

The construction of the church consists of a wood frame upon a granite foundation. The exterior of the building is sheathed with clapboards and detailed with wood trim. The church itself is a simple rectangle with a gable roof running the entire length. At the front of the roof a square tower base rises, with only a slightly projectingmoulding separating its front face from the facade.

The entrance facade on the Meeting House is noticeably free of any interrupting mouldings which leaves the face of the church delicately textured with its even clapboards. The only sculptural relief is provided by the Federal style doorways, which are evenly spaced along with a third unit, a window, across the facade at the ground level. Above each element at the balcony level is a window like the one at the ground level. Each door is flanked by wide pilasters and capped by a wide architrave and dramatically projecting cornice moulding, a feature noticeably absent from the rest of the church. The side elevation shows a row of four equally spaced windows of exactly the same type as those on the front. The rear elevation is composed of three of the same windows, equally spaced at ground level, with the center unit raised above the others. All of these windows are crowned by louvred panels in the pointed arch motif of the Gothic Revival. The entire window unit is surrounded by a narrow moulding which is almost flush with the clapboards.

The square tower base displays a louvred circular "sunburst" panel on the front and both sides. This panel is encircled by the same moulding used on the windows. The square section is crowned by a railing with balustrades and corner posts topped by small Gothic Revival pinnacles. Within the railing eight columns support the steeple. Each pair of columns supports a wide architrave with a basket arch cut between the columns. A graceful bell-shaped steeple rises from the projecting cornice above the architrave, providing a restrained culmination to a disciplined progression. The summit of the steeple is made complete by a pinnacle which bears a wrought iron weathervane.

The simplicity of the exterior is continued on the interior. The large auditorium was designed with a raised pulpit at the front, pews on the main floor and a second floor gallery at the rear. All of these features were executed in restrained Federal Style woodwork. While the pew doors and the gallery were removed in a 1902 remodelling, the meeting room retains its original light and spacious atmosphere as well as its pulpit, pews and woodwork.

The Bingham Free Meeting House represents a frontier Maine church in which the strong influence of traditional Federal period design is enhanced by the presence of the incoming romantic Gothic Revival.

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
__PREHISTORIC	__ARCHEOLOGY-PREHISTORIC	__COMMUNITY PLANNING	__LANDSCAPE ARCHITECTURE	X RELIGION	
__1400-1499	__ARCHEOLOGY-HISTORIC	__CONSERVATION	__LAW	__SCIENCE	
__1500-1599	__AGRICULTURE	__ECONOMICS	__LITERATURE	__SCULPTURE	
__1600-1699	X ARCHITECTURE	__EDUCATION	__MILITARY	__SOCIAL/HUMANITARIAN	
__1700-1799	__ART	__ENGINEERING	__MUSIC	__THEATER	
X 1800-1899	__COMMERCE	__EXPLORATION/SETTLEMENT	__PHILOSOPHY	__TRANSPORTATION	
__1900-	__COMMUNICATIONS	__INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)	
		__INVENTION			

SPECIFIC DATES 1835-36 BUILDER/ARCHITECT

STATEMENT OF SIGNIFICANCE

The Bingham Free Meeting House is significant as the earliest church building used by the first religious organization north of Caratunk Falls on the Kennebec River in the Maine wilderness. It is also noteworthy as an early ecumenical experiment at a time when denominational lines were ordinarily very strictly drawn.

The Town of Bingham takes its name from William Bingham of Philadelphia, land speculator and entrepreneur, who had served the Revolutionary cause as agent for obtaining supplies and munitions from France through a base which he established on the island of Martinique. Following the war he became one of the wealthiest men in America and acquired vast land holdings not the least of which was an immense area in central Maine granted to him and Gen. Henry Knox by the Massachusetts Legislature.

Although the earliest known settler in the area came there in 1764, the first legal property titles were not granted by Bingham and Knox until 1800

In 1805, a "Society Meeting" was formed by Mrs. Elizabeth Goodrich which met every Sabbath for religious observances. Shortly thereafter, a Congregational Church was organized. For a number of years there was no specific place for public worship and meetings were held in homes of the members. After 1815 the local schoolhouse was employed for this purpose.

By 1835 the town had increased in size and prosperity. In response to Mrs. Goodrich's often repeated words, "You are building better homes for yourselves, but none for God," the Union Free Meeting House Society was formed. This organization erected the church on a hill south of the village between 1835 and 1836.

The construction of the meeting house was entirely a local effort. The timber was cut from the banks of the local Austin Stream. The builders came from Bingham and the nearby towns of Concord and North Anson. Surviving records are unclear as to who designed the church and who oversaw its construction. The result was a restrained but handsome structure of traditional form. The influence of the passing Federal style was exhibited in the doorways and both interior and exterior woodwork, while the emerging Gothic Revival was displayed in the pointed arch windows as well as the pinnacles at each corner of the tower. The total cost of the church came to just under $2,000. It was dedicated on October 29, 1836.

(See continuation sheet)

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Bingham Sesquicentennial History, Skowhegan, 1962

Records of the Society for Building a Meeting-House in Bingham, Maine, typescript copy in the Maine State Library, Augusta, Maine.

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 1 acre

UTM REFERENCES

	ZONE	EASTING	NORTHING
A	19	430 417 5	4988 925
B			
C			
D			

VERBAL BOUNDARY DESCRIPTION

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE: Frank A. Beard, Historic Preservationist
Mark Wilcox, Student Assistant

ORGANIZATION: Maine Historic Preservation Commission

DATE: December, 1975

STREET & NUMBER: 31 Western Avenue

TELEPHONE: 207-289-2133

CITY OR TOWN: Augusta

STATE: Maine

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL ___ STATE ___ LOCAL ✓

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE Alan Pullen

TITLE State Historic Preservation Officer

DATE 1/26/76

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

Acting DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

DATE 6/3/76

ATTEST: Acting KEEPER OF THE NATIONAL REGISTER

DATE 6-2-76

RBR for WJM 6-2-76

GPO 892-453

Form No. 10-300a
(Rev. 10-74)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR NPS USE ONLY
RECEIVED JAN 30 1976
DATE ENTERED JUN 3 1976

Because of the variety of religious persuasions then existing in the community, the church building was so arranged that any one of the various denominations might have the use of it at some time. There were fifty-two pews, one for each Sunday in the year, and any pew owner might, on the Sunday corresponding to his pew number, choose and provide such preaching and service as he wished. The Congregational Church, however, being the only organized body, soon took over the building and installed the first minister.

From this time the church prospered for many years, but by 1902, a new Congregational Church building having been erected in the center of town, attendance fell off. The building was remodelled inside, removing the gallery, four rows of pews and the pew doors. Electric lights were also installed.

Eventually services ceased to be held in the building but final razing of the structure was prevented when the Kennebec Chapter of the D.A.R. raised funds and acquired title to it in 1916. Finding maintenance of the building too great a burden, the D.A.R. later transferred ownership to the Town of Bingham as a local landmark.

The Bingham Free Meeting House is a tangible and direct tie with earliest religious strivings in the Kennebec wilderness and stands as a reminder of a noble, if short lived, effort toward denominational cooperation and toleration.

Form 10-300
(Dec. 1968)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY – NOMINATION FORM

Sagadahoc,

(Type all entries – complete applicable sections)

STATE: Maine
COUNTY: Kennebec, Somerset & Franklin (Sagadahoc)
FOR NPS USE ONLY
ENTRY NUMBER: 69-10-18-0006 DATE: 10/1/69

RECEIVED
JUL 29 1969
NATIONAL REGISTER

SEE INSTRUCTIONS

1. NAME

COMMON: Arnold Trail to Quebec

AND/OR HISTORIC:

2. LOCATION

STREET AND NUMBER:

CITY OR TOWN:

STATE: Maine — CODE: 18 — COUNTY: Sagadahoc, Kennebec, Somerset & Franklin — CODE:

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
District [X] Building [ ]	Public [ ]	Public Acquisition:	Occupied [ ]	Yes:
Site [ ] Structure [ ]	Private [ ]	In Process [ ]	Unoccupied [X]	Restricted [ ]
Object [ ]	Both [X]	Being Considered [ ]	Preservation work in progress [ ]	Unrestricted [X]
				No: [ ]

PRESENT USE *(Check One or More as Appropriate)*

Agricultural	[ ]	Government	[ ]	Park	[ ]	Transportation	[X]
Commercial	[ ]	Industrial	[ ]	Private Residence	[ ]	Other *(Specify)*	[ ]
Educational	[X]	Military	[ ]	Religious	[ ]		
Entertainment	[ ]	Museum	[ ]	Scientific	[ ]		

Comments [ ]

Combined historic trail and public highway

4. OWNER OF PROPERTY

Scenic Turnouts and Interpretive sites along the trail

OWNERS NAME: State of Maine

STREET AND NUMBER: State House

CITY OR TOWN: Augusta — STATE: Maine — CODE: 18-0160

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC: Sagadahoc, Kennebec, Somerset & Franklin County Courthouses

STREET AND NUMBER:

CITY OR TOWN: Bath, Augusta, Skowhegan & Farmington — STATE: Maine — CODE: 18

APPROXIMATE ACREAGE OF NOMINATED PROPERTY:

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:

DATE OF SURVEY: Federal [ ] State [ ] County [ ] Local [ ]

DEPOSITORY FOR SURVEY RECORDS:

STREET AND NUMBER:

CITY OR TOWN: — STATE: — CODE:

STATE: | COUNTY: | FOR NPS USE ONLY: ENTRY NUMBER | DATE

7. DESCRIPTION

CONDITION	(Check One) Excellent ☐ Good ☒ Fair ☐ Deteriorated ☐ Ruins ☐ Unexposed ☐	
INTEGRITY	(Check One) Altered ☐ Unaltered ☐	(Check One) Moved ☐ Original Site ☒

DESCRIBE THE PRESENT AND ORIGINAL (If known) PHYSICAL APPEARANCE

x Somerset

The actual Arnold Trail in Maine is 194 miles long and stretches from Fort Popham at the mouth of the Kennebec River to the Canadian border at Coburn Gore, Maine. The Arnold Trail we are concerned with here is the actual route of Benedict Arnold and his men. This trail starts at Popham Beach and runs north and northwest up the Kennebec River, past Bath, Gardiner, Hallowell, Augusta, Winslow, Waterville, Skowhegan, Solon, Norridgewock, Bingham, through Wyman Lake along the path of the 'Great CaRRYING Place" through Flagstaff Lake, along the Dead River, through Eustis, along the Chain of Ponds and into Quebec Province.

Because Arnold's army followed a water route through Maine, it is possible to trace its steps today. The Kennebec is still there. So are portions of the Dead River. The three ponds on the link between the Kennebec and Dead River still exist. So do the Chain of Ponds extending from the upper end of the Dead River to the present Maine - Quebec border.

Much of the countryside through which the army passed looks much as it looked in the fall of 1775. Except for areas around Augusta, Winslow, Waterville, Skowhegan, and Madison there has been moderate urbanization or commercialization. The banks of the Kennebec from its mouth to Bingham are a patchwork of farms and woodlands. Above Bingham the agriculatural section ends, the land gets more hilly and rocky, and the forest closes in. Virtually no virgin timber remains along the trail from Bingham to the Canadian border, but the entire region does give the appearance of a vast, hostile wilderness, as it did in 1775,

A few of the buildings that the army passed are still standing. At Court House Point in Dresden stands the old Pownalborough Court House, a large, square, three story frame structure, it was built in 1760.

Further upstream, near Pittston, stands the home of Major Colburn, the man who constructed the batteaux and gathered supplies for the army.

At Augusta is Fort Western. It is historically important, for it was the real starting point of the expedition. Arnold made it his headquarters from September 23 - 29, 1775. Eighteen miles above Augusta, in Winslow, one block-house of old Fort Halifax still stands. A number of Arnolds troops spent at least one night there.

The rivers have been altered more than anything since 1775. The tidal sections of the Kennebec below Augusta are probably little different than when the Army coasted up them to Colburns.

The long reaches of salt marsh and tidal estuaries are unspoiled. But, above Augusta, the Kennebec has an entirely different aspect than it did in 1775. Dams have been constructed at 10-15 mile intervals up the river, giving the stream a rather placid appearance, far different from the quick flowing, shallow and treacherous Kennebec that the batteaux men knew.

Above the great carrying place the creation of Flaggstaff Lake has covered many historic spots such as the point where Arnold's Army first struck the Dead River. The Maine State Park and Recreation Commission has set up 33 interpretive panels at 9 different sites along the trail which have been very well received. These panels are located at Fort Popham, Hallowell, Skowhegan, Solon, Moscow, Stratton, Sarampus, Chain of Ponds and Coburn Gore.

SEE INSTRUCTIONS

8. SIGNIFICANCE

PERIOD *(Check One or More as Appropriate)*

Pre-Columbian ☐	16th Century ☐	18th Century ☒	20th Century ☐
15th Century ☐	17th Century ☐	19th Century ☐	

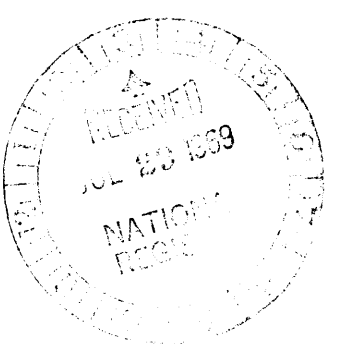
SPECIFIC DATE(S) *(If Applicable and Known)* 1775 September 22 - October

AREAS OF SIGNIFICANCE *(Check One or More as Appropriate)*

Aboriginal	Education ☐	Political ☐	Urban Planning ☐
Prehistoric ☐	Engineering ☐	Religion/Philosophy ☐	Other *(Specify)* ☐
Historic ☒	Industry ☐	Science ☐	
Agriculture ☐	Invention ☐	Sculpture ☐	
Art ☐	Landscape Architecture ☐	Social/Humanitarian ☐	
Commerce ☐	Literature ☐	Theater ☐	
Communications ☐	Military ☒	Transportation ☒	
Conservation ☐	Music ☐		

STATEMENT OF SIGNIFICANCE *(Include Personages, Dates, Events, Etc.)*

In the late summer of 1775 General George Washington ordered Colonel Benedict Arnold to lead an expedition of 1,050 men to attack Quebec City.
General Richard Montgomery was to lead another expedition at the same time against Montreal. The stratgey was to either contain or split Sir Guy Carleton's forces.
It was generally believed that Carleton had fewer than 800 regulars under his command and with the British bottled up in Boston he could not hope to receive reinforcements until spring. By that time Washington hoped that Montreal and Quebec would have risen against the English and that a British southern invasion would be forestalled.
Washington selected some troops who were not needed at Boston for the mission and selected the 34 year old Arnold to lead them. The route up the Kennebec along the Dead River to Lac Megantic and down the Chaudiere was considered to be the best and shortest way to attack Quebec at that time. A map was available but its limitations proved to be a hardship to Arnold.
Arnold hastily arranged for 200 light batteaux to be built by Reuben Colburn of Pittston, Maine.
On September 25, 1775, Arnold's group set out from Fort Western in Augusta for the journey that was expected to take 20 days and cover 180 miles. From that time until Arnold reached Quebec 45 days later Arnold and his men endured many hardships including portages of the 400 pound batteauxs, floods, snows, cold weather, lack of food, sickness, etc.
In the end Arnold's march was a failure in that he failed to capture Quebec but it did serve to delay for over a year a British buildup for a southern invasion.



SEE INSTRUCTIONS

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Crist, Robert and Cullen, Joseph, Arnold's March to Quebec, American History Illustrated, November 1968, p. 4

Gurney, Hugh, Johnson, Wallace and Wittpen, Richard, Area Investigation Report on Benedict Arnold Scenic Road Maine. National Park Service - Northeast Region, U. S. Department of The Interior, March 1, 1965.

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			OR	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN ONE ACRE	
CORNER	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE
	Degrees Minutes Seconds	Degrees Minutes Seconds		Degrees Minutes Seconds	Degrees Minutes Seconds
NW	45 ° 23 ' 05"	70° 48 ' 12"		° ' "	° ' "
NE	45 ° 49 ' 25"	70° 22 ' 47"			
SE	43 ° 45 ' 0 "	69° 4 ' 43"			
SW	43 ° 45 ' 20"	69° 47 ' 4"			

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY	CODE
Maine		Sagadahoc	023
Maine		Kennebec	011
Maine		Somerset	025
Maine		Franklin	007

11. FORM PREPARED BY

NAME AND TITLE: Donald Holmstrom, Historian

ORGANIZATION: State Park & Recreation Commission — DATE: July 14, 1969

STREET AND NUMBER: State House

CITY OR TOWN: Augusta — STATE: Maine — CODE:

12. STATE LIAISON OFFICER CERTIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National ☒ State ☐ Local ☐

Name Lawrence Stuart

Lawrence Stuart

Title Director

Date July 24, 1969

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

Ernest Allen Connally

Chief, Office of Archeology and Historic Preservation

OCT 1 1969

Date

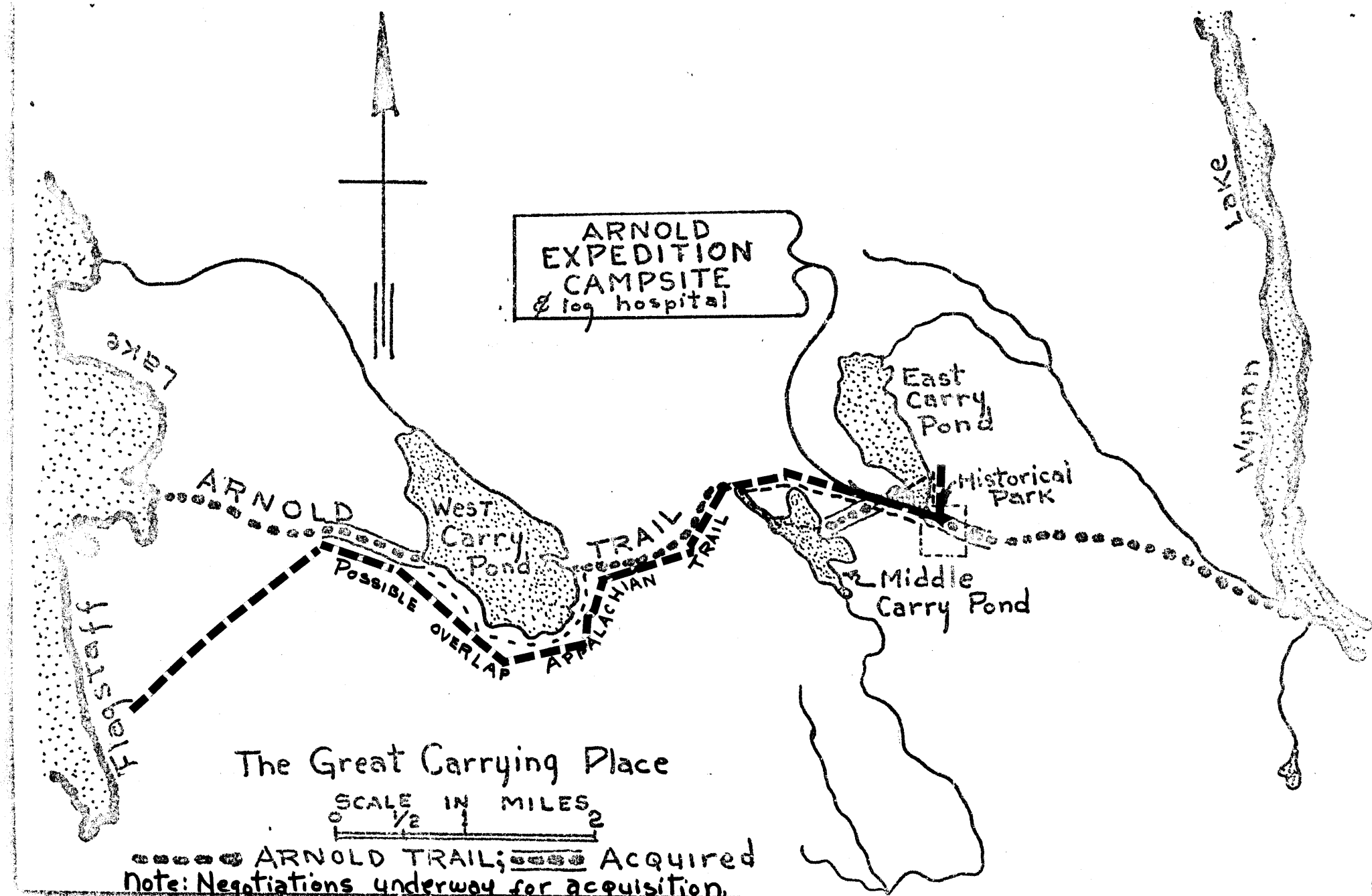
ATTEST:

William J. Brumbaugh

Keeper of The National Register

Date SEP 29 1969

SEE INSTRUCTIONS



Note: Negotiations underway for acquisition, or control, of other sections of the Arnold Trail; some of which is overlapped by the Appolachian Trail.

Refer to LITTLE BIGELOW MTN. QUADANGLE U.S.G.S. Topo Sheet

Status as of 1-28-71 -w.n.

Moscow Area Wind & Solar VIA Final Report

October 2020
Western Maine Renewables

75 Washington Ave, Suite 206
Portland, ME 04101
www.marketdecisions.com
(207) 767-6440

Prepared by:
Brian Robertson, PhD, Primary Investigator
Xiaolei Pan, MBA, Research Analyst
Allison Tippery, Research Assistant

Table of Contents

Methodology

Methodology

Background and Research Objectives

TJD&A and Tetra Tech have collaborated with Market Decisions Research to conduct a user intercept survey about a proposed wind farm located in Moscow and part of Caratunk. The goal was to evaluate the visual impact of the project and assess potential impacts on user's views and their use and enjoyment of scenic resources where the future project would be visible.

The Survey

The survey was developed by the staff of Market Decisions Research in collaboration with TJD&A. The survey included questions in the following areas: visits to the area, reasons for their visit, expectations about the visit, the impact of human activity on their experiences, the visual impact assessment, impact on enjoyment and likelihood to return, assessment of the existing windfarm, views of wind and solar power in Maine, and demographics. There are two versions of the survey which are location specific.

Sample

The goal of the sampling approach was to obtain a representative sample of visitors. This method of sampling also depended on the volume of visitors in the area during each weekend. Each respondent had to be at least 18 years of age and the survey was administered to one person at a time. If more than one member of a group wanted to do the survey, they had to respond separately.

Data Collection

The survey was conducted at the boat launch at Moxie Pond (Lake Moxie) and near the boat launch at Wyman Lake. There were three data collection periods. The first occurred September 4th – 7th and the second was over from September 18th – 21st. The final weekend was from September 25th – 28th. 24 hours of data collection took place across Friday through Monday each weekend. The hours each day were adjusted based on the time people were in the area and the weather.

A total of 69 participants completed the survey. 49 participants from the Moxie Pond site and 20 participants from the Wyman Lake site. Some respondents did not have time to answer every question in the survey.

Key Findings

Key Findings

❖ Visit to Area and Activities

- Participants were very familiar with both areas.
- 75% of participants had either visited Wyman Lake prior or have a camp nearby.
- 86% of participants had visited Moxie Pond before or live nearby.
- Summer is the most popular season for both Moxie Pond and Wyman Lake.
- The most common activities for people are hiking or walking (27%), boating (19%), and viewing the scenery (27%).
- 23% of total interviewees planned to spend their day in their camp or home. 20% planned to be out for 3-5 hours of their day.

❖ Expectations for the Weekend

- Participants have high expectations for the area and many activities met their expectations. They rated "enjoying the scenery" and "getting outdoors while enjoying fresh air" as their top activities that met their expectations.
- 97% of participants believed the experience of getting outdoors and enjoying the fresh air in the area completely met their expectations.
- Most participants (95%) said the scenery completely met their expectations.
- The "quality of fishing" was the activity that met participants' expectations the least (4.8 average out of 7).
- Visitors and locals expect the area and lakes to be uncrowded.
- 43% of Wyman Lake interviewees believed the area would be uncrowded while 31% of Moxie Pond interviewees thought it would be uncrowded.
- Visitors and residents from both areas expect the level of development to be low.
- Participants are somewhat concerned about the impact of industrial facilities and solar and wind power projects changing their experience.
- More than three-quarters (76%) of participants believe the views of industrial facilities such as a biomass generator, paper mill or landfill would have a strong negative effect on the experience.
- There are mixed ratings regarding the impact of wind power projects on participant's quality of experience. 47% believe the views of wind power projects would have a very negative impact on their experience.
- There are a variety of ratings concerning the effect of solar projects affecting peoples' quality of experience. 20% say it would have a positive impact on their experience while more than a quarter (26%) say it would negatively affect their experience.

Key Findings

❖ Moxie Pond Lake Photo Simulations

- People think highly of the current view of Moxie Pond. 88% of participants rated the current view at Moxie Pond as 7 on the scenic quality scale or high scenic value
- When compared to the current view, the average rating of scenic quality went down 2.6 points when presented with the proposed view.
- 23% of participants rated the view with wind turbines as a 6 and 15% rated them as a 7 (the highest scenic value).
- 23% rated the addition of wind turbines as a 1 (the lowest scenic value on the scale).
- The presence of the turbines did decrease the scenic quality in the minds of some respondents although 15% still rate the view as the highest scenic quality even with the presence of the turbines.
- There are mixed responses regarding the impact of enjoyment that wind turbines would have on people. 30% of participants report the addition of wind turbines would have a very negative affect on their enjoyment of the area while 17% also report it would have a positive impact on their enjoyment of the area.
- 41% of the participants report the addition of wind turbines would decrease their likelihood of returning to the area. 48% report they, in fact, would be more likely to return.
- 64% of all respondents are full time/part-time residents, that may return regardless.
- Participants (from both locations) are generally more supportive of commercial-scale solar development in the state.
- Participants from each lake are generally less supportive of commercial-scale wind energy in the state.

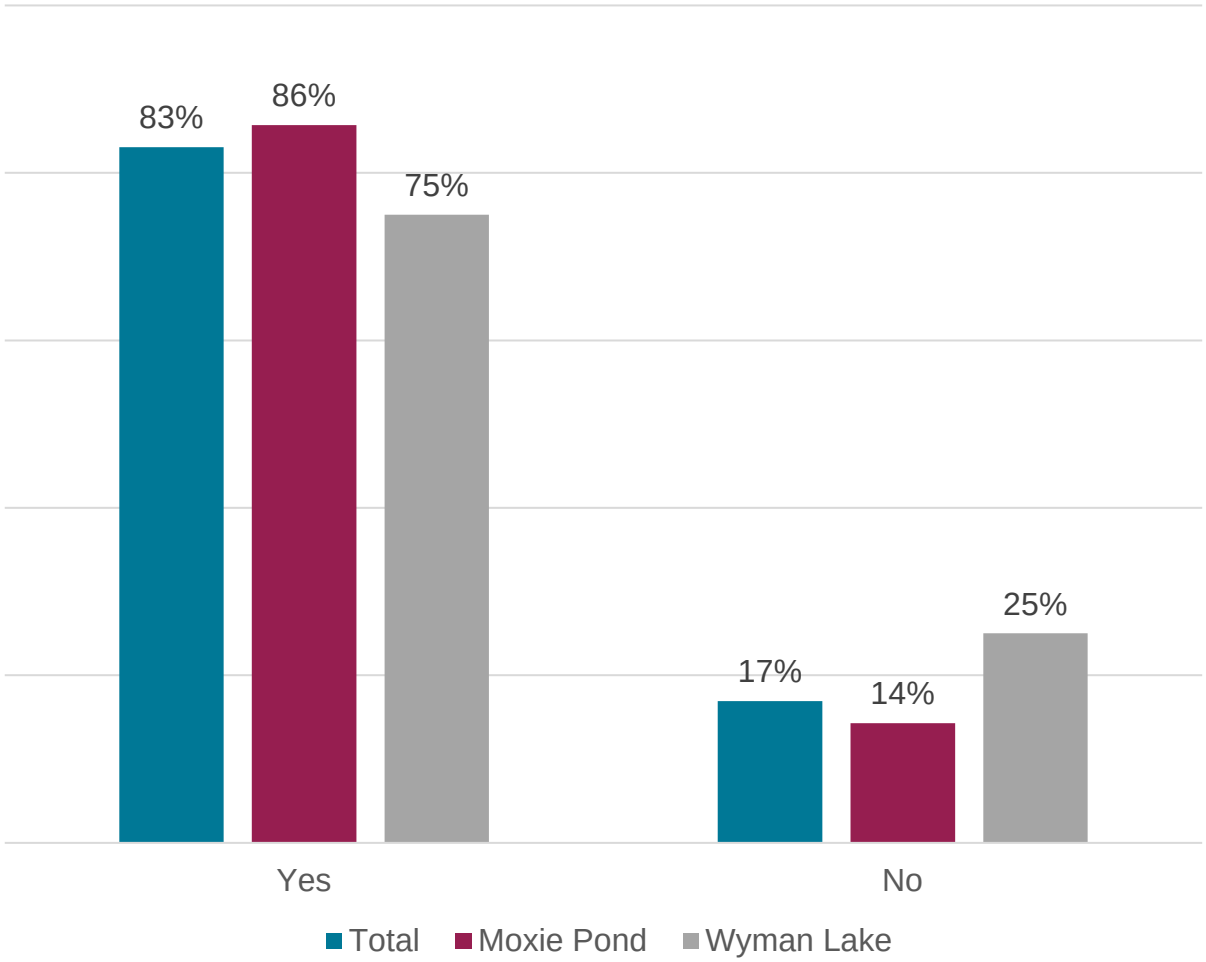
❖ Wyman Lake Photo Simulations

- More than half (56%) of participants rated the current view at Wyman Lake as a 7 (the highest scenic value) on the scenic quality scale.
- When compared to the current view, the average rating of scenic quality went down 1.6 points when presented with the proposed view.
- 28% still rate the lake as the highest scenic value while 11% rate the view with wind turbines as the lowest scenic value.
- On average, participants report the addition of wind turbines would have a negative impact on their enjoyment of the area. However, it does not impact their likelihood to return to the area. Again, this disconnect may be due to full time/part time residents.
- 63% of participants believe the addition of wind turbines would have a very negative influence on enjoyment of the area.
- More than half of participants indicate they presence of the wind turbine would make them more likely to return though 37% indicate they are much less likely to return.

Detailed Findings

Visits to Area and Activities

Q1. Have you visited the area before today? (n=65)



Summary

86% of Moxie Pond participants had been to the area before.

75% of the Wyman Lake participants had been to the area before as well.

Bottom Line

Many participants were familiar with both areas from prior visits.

Visits to Area and Activities

Q2. And how many times do you visit the area during the…? (n=32)

	Average	Max	Min
Winter	2.5	25	0
Spring	2.8	25	0
Summer	**5.1**	**25**	**0**
Fall	3.4	25	0

Summary

The average amount of times interviewees have visited the area during the summer is 5.1 compared to 2.5 in the winter.

Bottom Line

Summer is the most popular season to visit the area.

Visits to Area and Activities

Q3. Thinking about your visit, what are your plans while in this area? (n=64)

Activity	Moxie Pond	Wyman Lake	Total
Hiking or Walking	27%	27%	**27%**
Boating (sail or motor)	16%	27%	**19%**
Canoeing or kayaking	10%	27%	**14%**
Fishing from a boat	12%	13%	**13%**
Fishing from the shore or standing in water	10%	7%	**9%**
Swimming	2%	20%	**6%**
Viewing the scenery	24%	33%	**27%**
Nature observation or bird watching	2%	7%	**3%**
Picnicking	2%	-	**2%**
Camping	6%	13%	**8%**
Stargazing or looking at the night sky	2%	-	**2%**
Other:	71%	7%	**56%**

Summary

27% of participants planned to go hiking or walking around the areas.

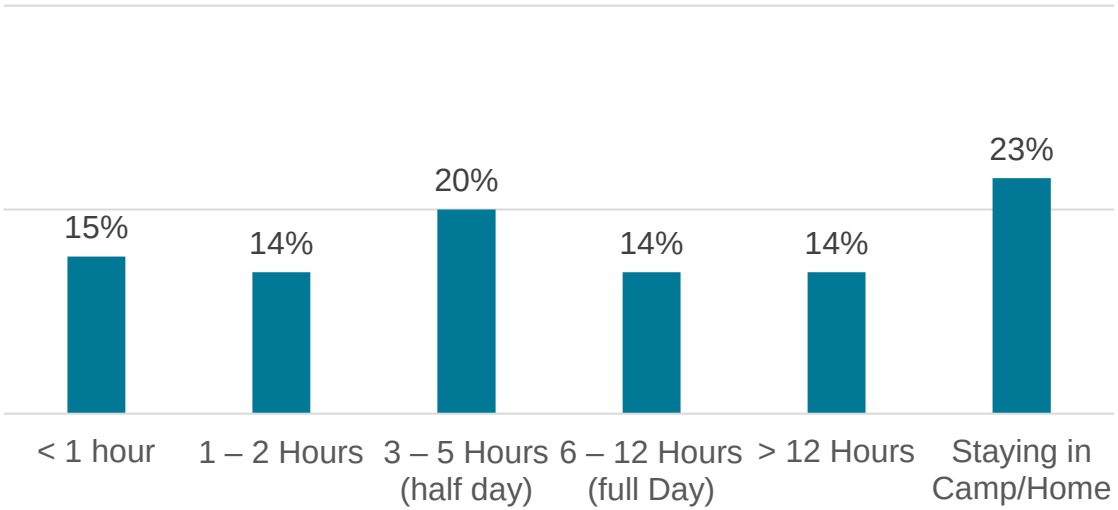
Other popular activities were boating (19%) and viewing the scenery (27%).

Bottom Line

People visiting the area are likely to engage in activities such as admiring the scenery, boating, and hiking.

Visits to Area and Activities

Q4. How long do you expect to be out today? (n=65)



Time	Moxie Pond	Wyman Lake	Total
< 1 hour	12%	25%	**15%**
1 – 2 Hours	2%	50%	**14%**
3 – 5 Hours (half day)	20%	19%	**20%**
6 – 12 Hours (Full Day)	18%		**14%**
> 12 Hours	18%		**14%**
Staying in Camp/Home	29%	6%	**23%**

Summary

23% of total interviewees planned to spend their day in their camp or home.

20% planned to be out for 3-5 hours of their day.

Half (50%) of Wyman Lake participants planned to be out for 1-2 hours.

Bottom Line

Visitors of both lakes vary with their amount of time planned to explore the area.

Expectations for Today

Q5-Q12. Please think about what you were looking forward to when coming to this area. How well did the area meet your expectations? Please rate each on a 7-point scale where 1 is the area did not meet my expectations AT ALL and 7 is the area COMPLETELY met my expectations. (n=62)

	Moxie Pond	Wyman Lake	Total
The scenery. Enjoying the beautiful surroundings	7.0	6.4	**6.8**
To get outdoors, enjoy the fresh air	6.9	7.0	**6.9**
Getting exercise	6.4	6.5	**6.4**
A sense of rejuvenation. Relief from the tensions of modern civilization	6.8	6.8	**6.8**
The companionship. Camaraderie, being with my family or friends	6.3	6.4	**6.4**
The enjoyment of being on a boat	6.4	7.0	**6.5**
The general experience of being out on the water	6.6	7.0	**6.7**
The quality of the fishing	4.7	5.3	**4.8**

Summary

The Moxie Pond scenery and enjoying the beautiful surroundings received an average of 7 regarding meeting participants' expectations.

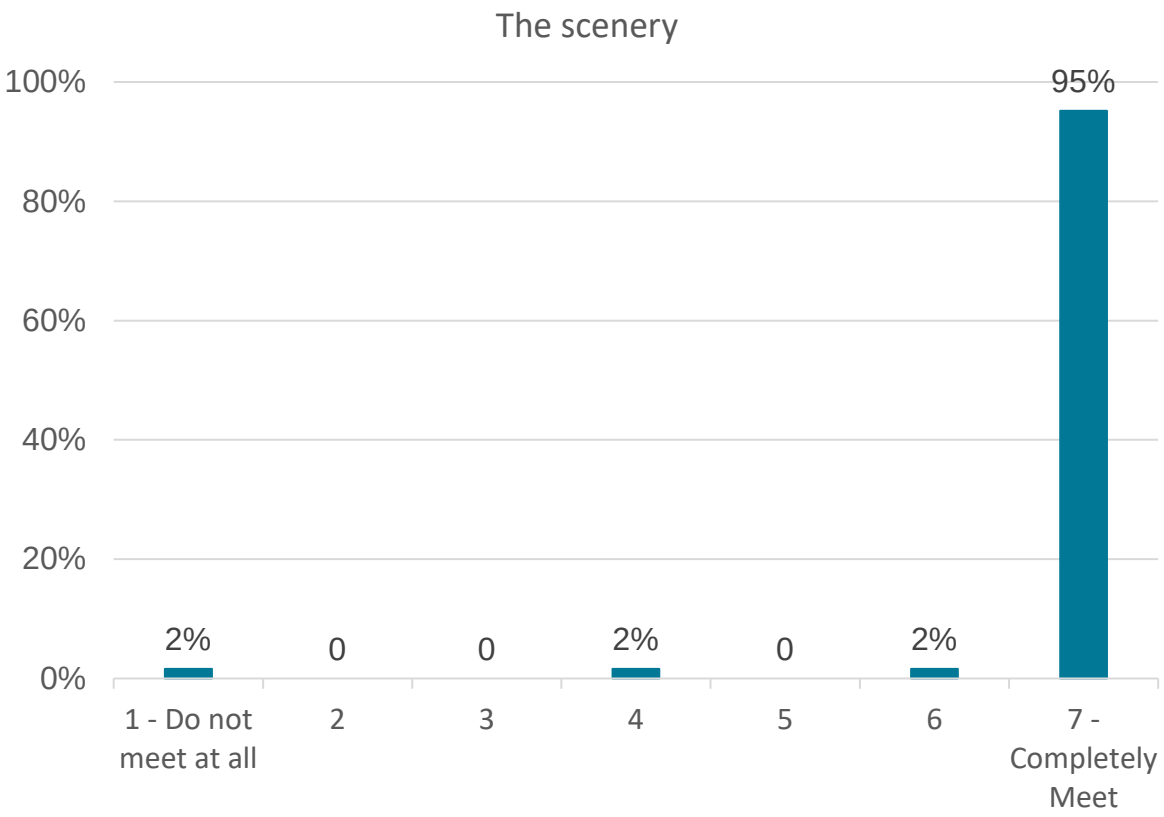
Getting outdoors and enjoying the fresh air had a 6.8 total average for both areas.

Bottom Line

Many activities met participants expectations.

Expectations for Today

Q5. Please think about what is it that you look forward to when coming to the area. I will ask you to rate about how well the area meets your expectations on a set of attributes. Please rate each on a 7-point scale where 1 is the area did not meet my expectations AT ALL and 7 is the area COMPLETELY met my expectations. (n=62)

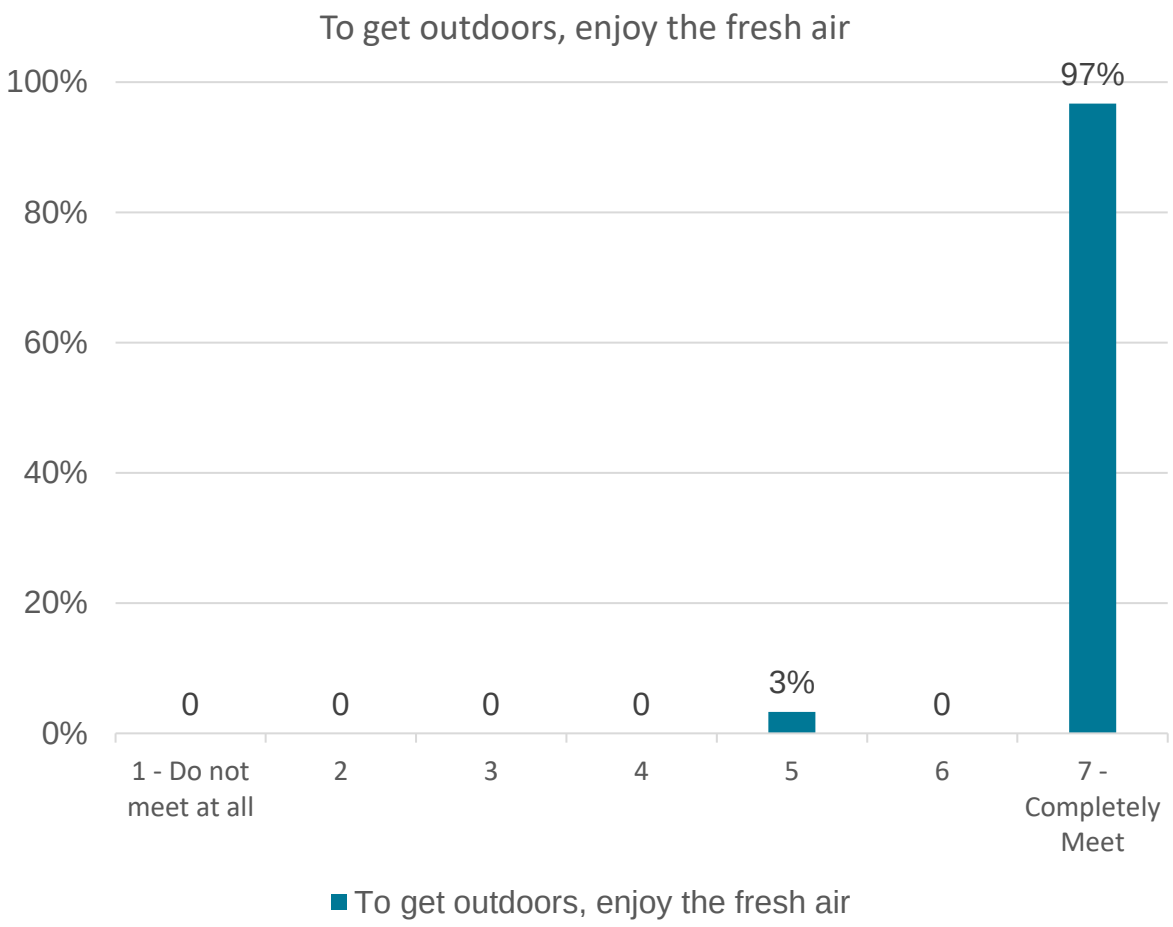


Summary

Almost all participants (95%) said the scenery completely met their expectations.

Expectations for Today

Q6. Please think about what is it that you look forward to when coming to the area. I will ask you to rate about how well the area meets your expectations on a set of attributes. Please rate each on a 7-point scale where 1 is the area did not meet my expectations AT ALL and 7 is the area COMPLETELY met my expectations. (n=61)

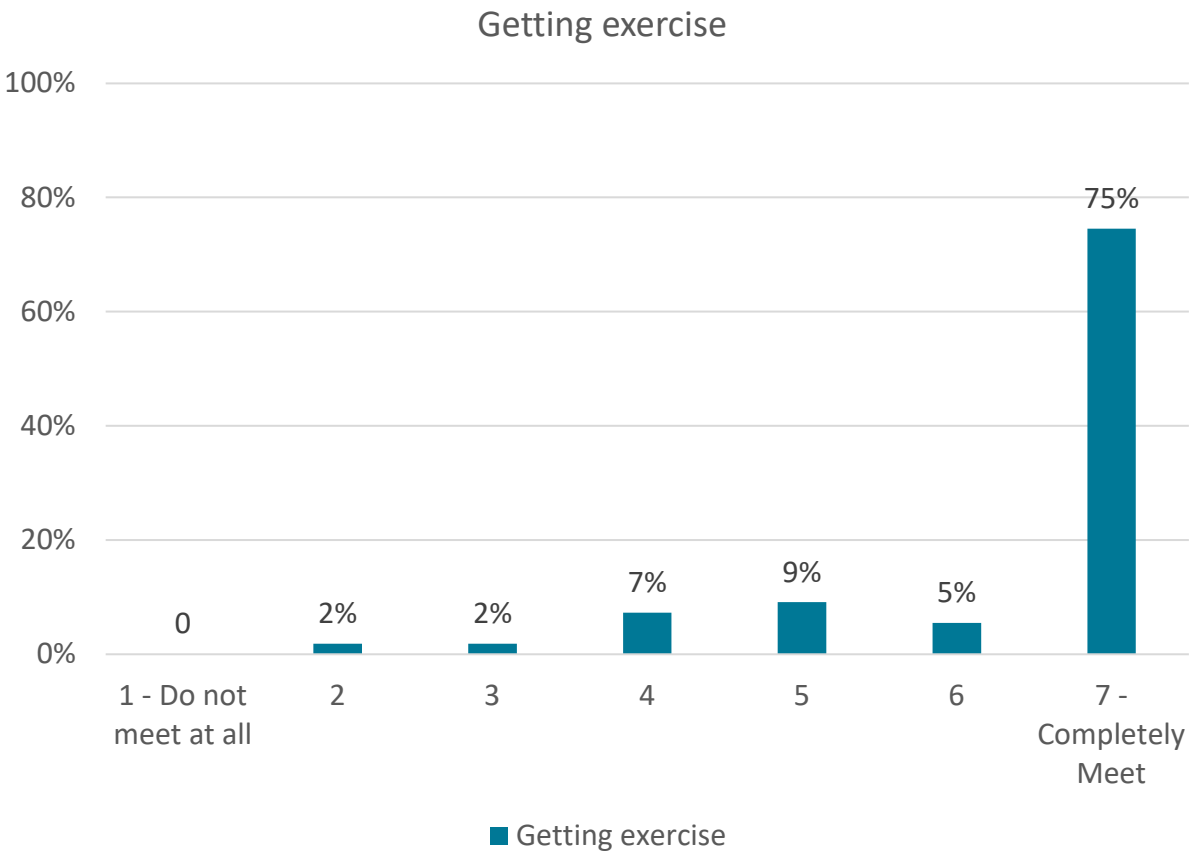


Summary

97% of participants believed the experience of getting outdoors and enjoying the fresh air in the area completely met their expectations.

Expectations for Today

Q7. Please think about what is it that you look forward to when coming to the area. I will ask you to rate about how well the area meets your expectations on a set of attributes. Please rate each on a 7-point scale where 1 is the area did not meet my expectations AT ALL and 7 is the area COMPLETELY met my expectations. (n=55)



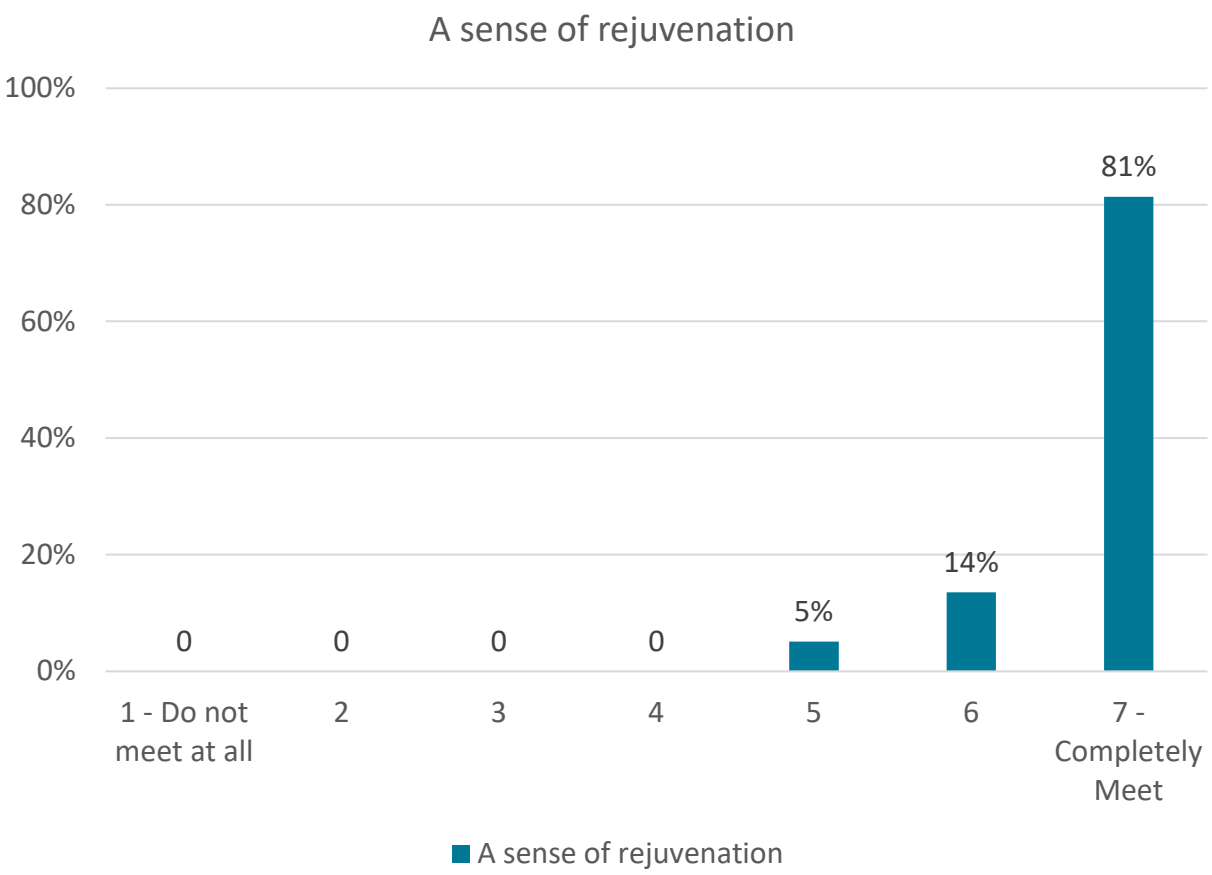
Summary

Three-quarters (75%) of participants thought getting exercise in the area met their expectations.

16

Expectations for Today

Q8. Please think about what is it that you look forward to when coming to the area. I will ask you to rate about how well the area meets your expectations on a set of attributes. Please rate each on a 7-point scale where 1 is the area did not meet my expectations AT ALL and 7 is the area COMPLETELY met my expectations. (n=59)

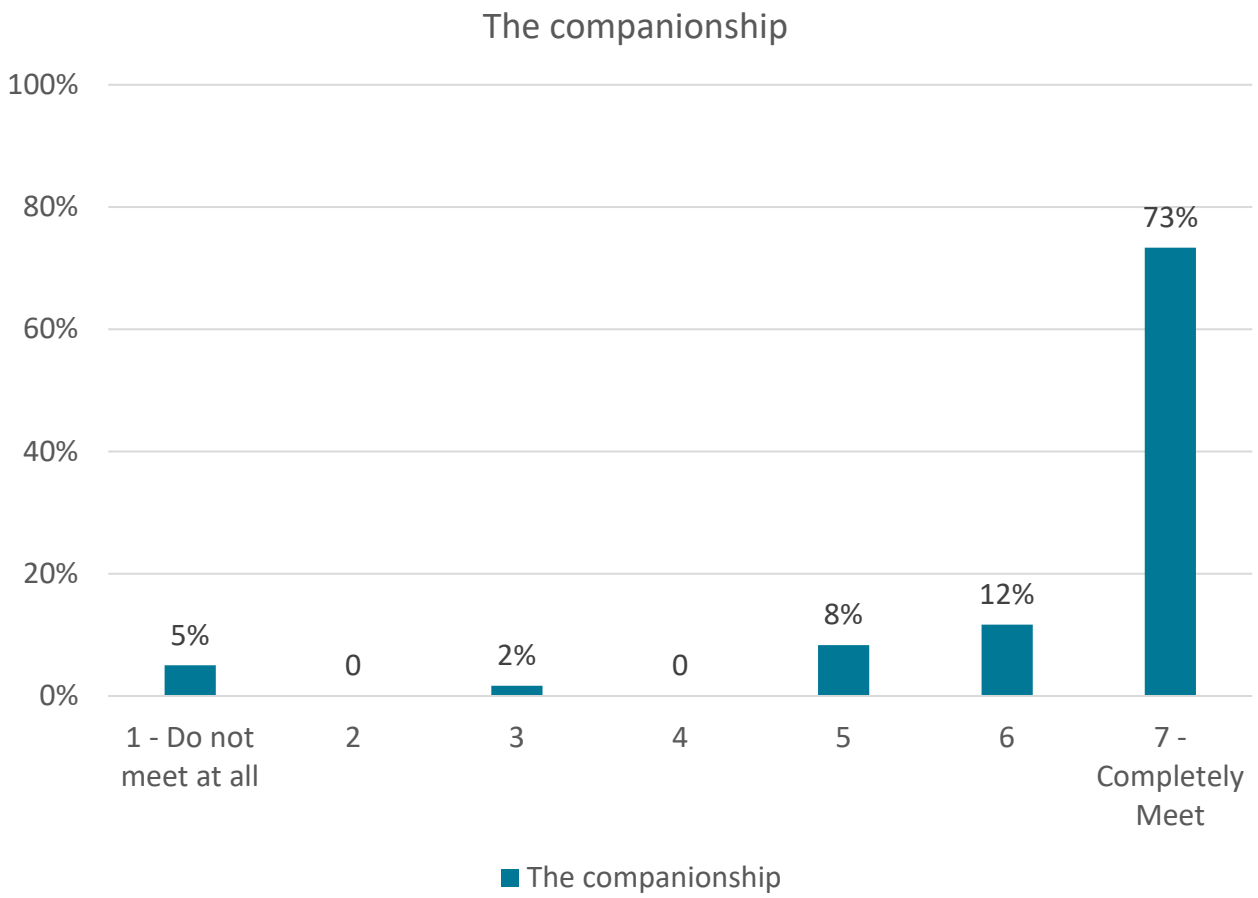


Summary

81% of participants thought the experience of feeling a sense of rejuvenation lived up to their expectations.

Expectations for Today

Q9. Please think about what is it that you look forward to when coming to the area. I will ask you to rate about how well the area meets your expectations on a set of attributes. Please rate each on a 7-point scale where 1 is the area did not meet my expectations AT ALL and 7 is the area COMPLETELY met my expectations. (n=60)

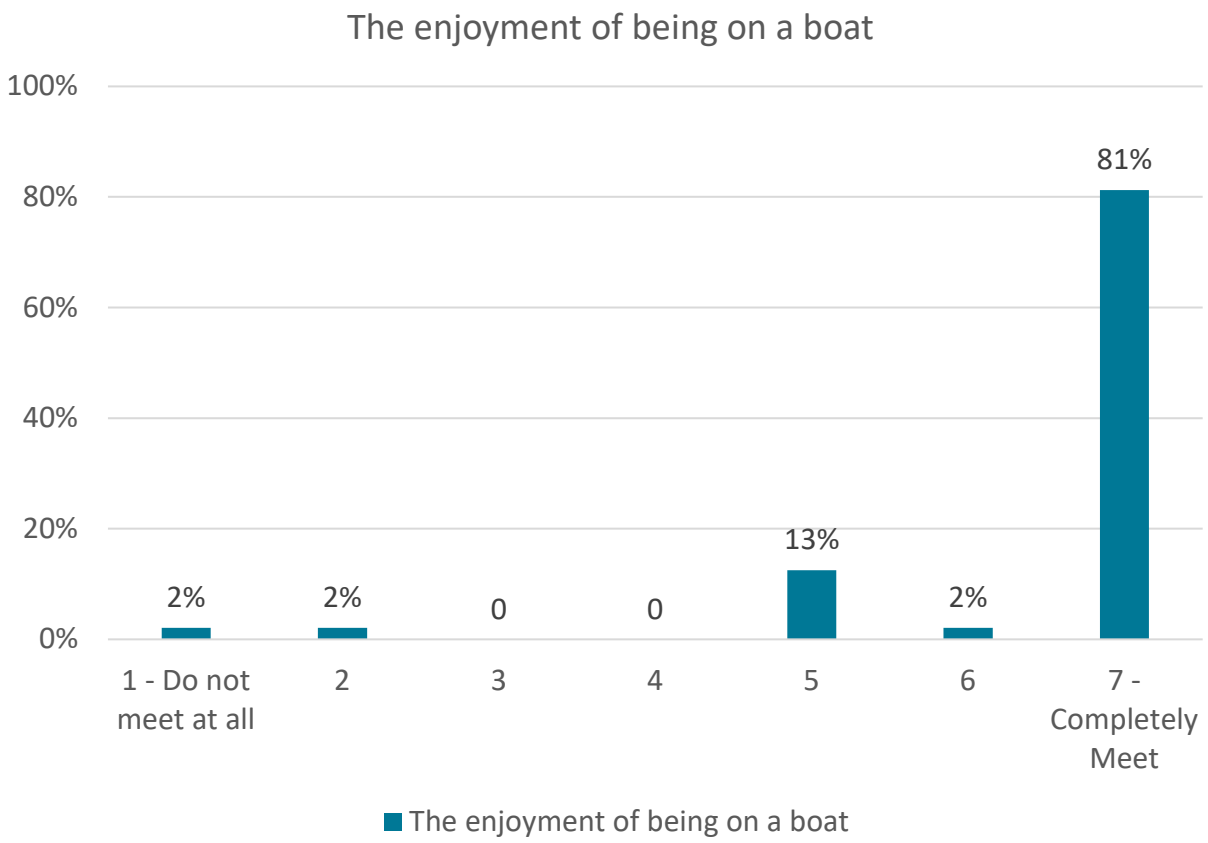


Summary

73% of the participants felt the companionship on their trip lived up to their expectations.

Expectations for Today

Q10. Please think about what is it that you look forward to when coming to the area. I will ask you to rate about how well the area meets your expectations on a set of attributes. Please rate each on a 7-point scale where 1 is the area did not meet my expectations AT ALL and 7 is the area COMPLETELY met my expectations. (n=48)

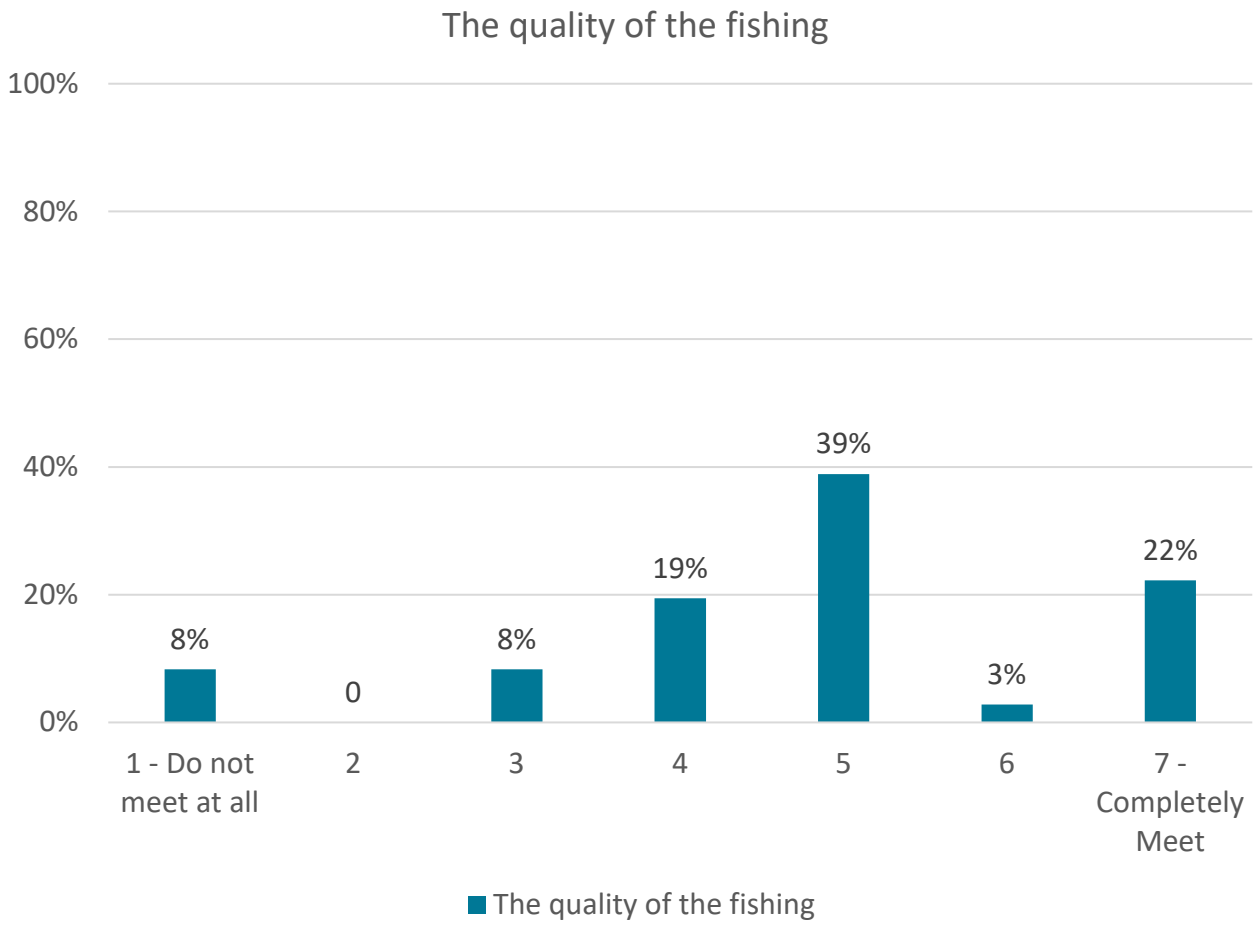


Summary

81% of participants said their enjoyment of being on a boat met their expectations.

Expectations for Today

Q11. Please think about what is it that you look forward to when coming to the area. I will ask you to rate about how well the area meets your expectations on a set of attributes. Please rate each on a 7-point scale where 1 is the area did not meet my expectations AT ALL and 7 is the area COMPLETELY met my expectations. (n=51)

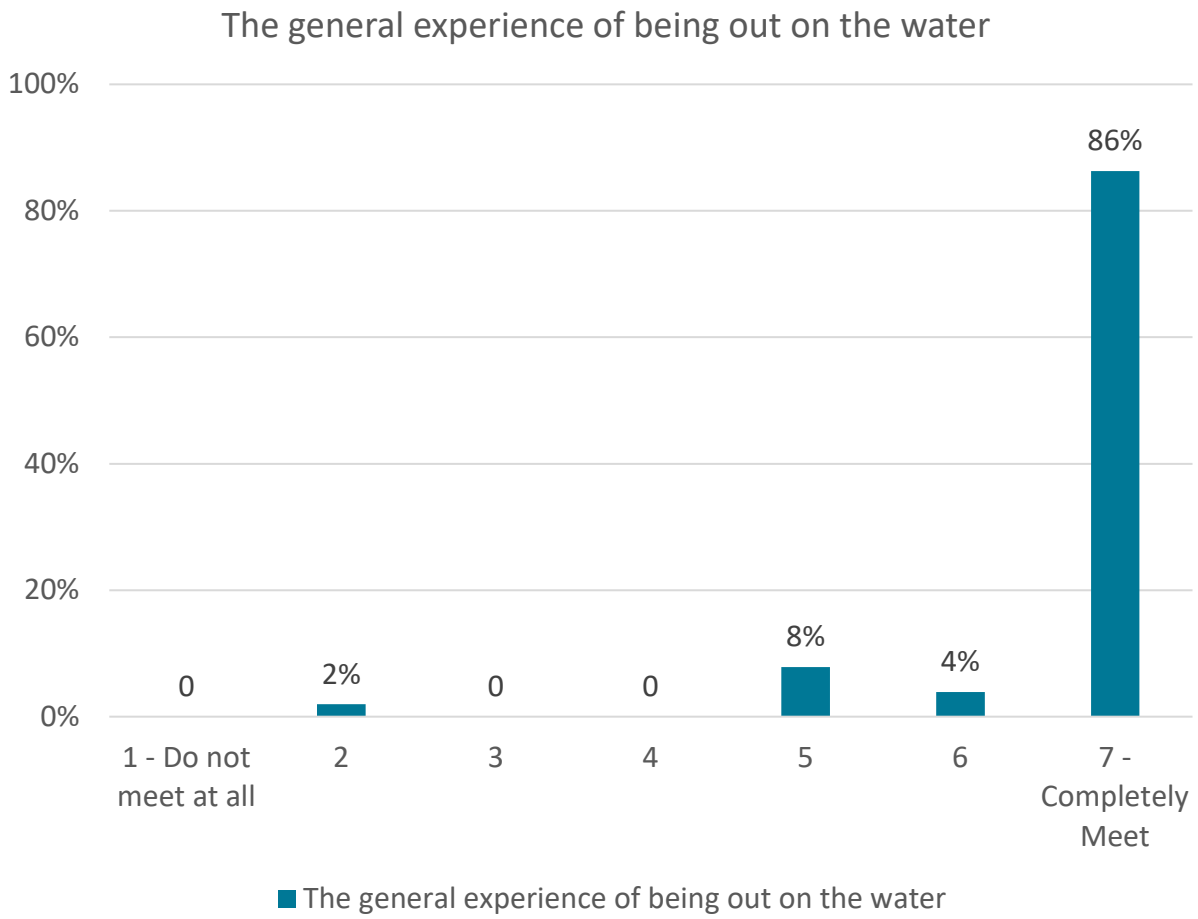


Summary

Only 22% of participants stated the quality of fishing at the lake met their expectations. 39% rated their expectations as a 5.

Expectations for Today

Q12. Please think about what is it that you look forward to when coming to the area. I will ask you to rate about how well the area meets your expectations on a set of attributes. Please rate each on a 7-point scale where 1 is the area did not meet my expectations AT ALL and 7 is the area COMPLETELY met my expectations. (n=36)

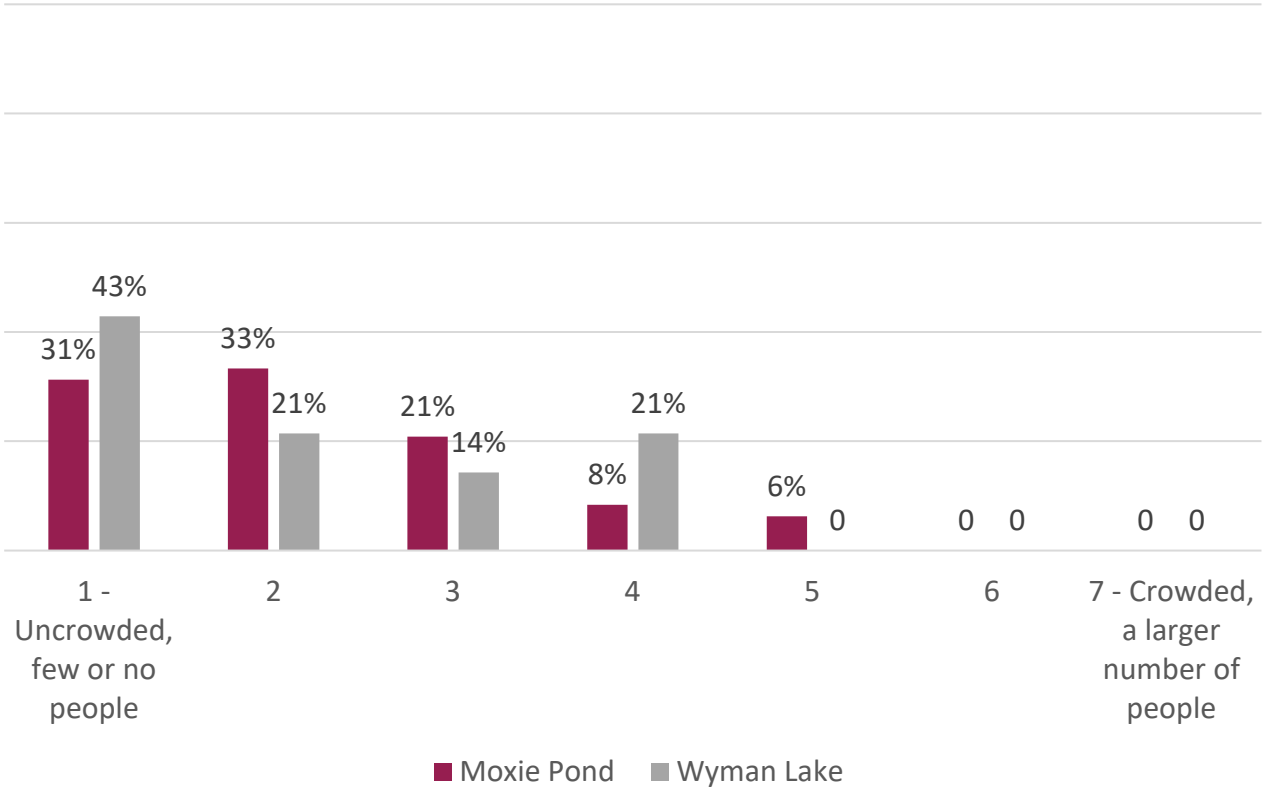


Summary

86% of interviewees rated their general experience of being out on the water as a 7.

Expectations for Today

Q13. First please think about your expectations for the number of people that may also be in the area. Please rate this on a scale from 1 to 7 where 1 means you expect it to be UN-crowded with few or no other people and 7 means you expect it to be crowded with a large number of people. You may also use any number in between. (n=62)



Summary

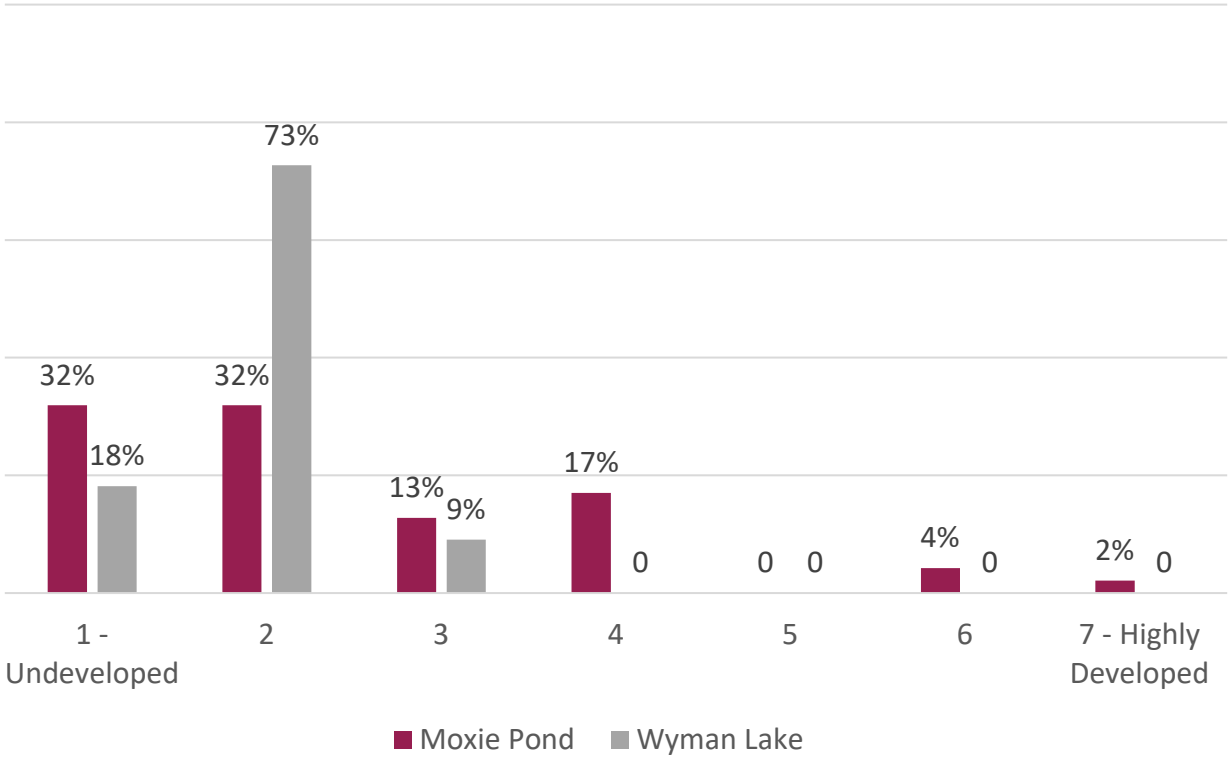
43% of Wyman Lake interviewees believed the area would be uncrowded while 31% of Moxie Pond interviewees thought the same.

Bottom Line

Visitors and locals expect the lakes to be uncrowded.

Expectations for Today

Q14. Next think about your expectations for level of development that you will see along the lake. Please rate on a scale from 1 to 7 where one means you expect the lake to be largely UN-developed and 7 means you expect it to largely or mostly developed. You may also use any number in between. (n=58)



Summary

73% of Wyman Lake participants rated the development around the lake a 2.

32% of Moxie Pond participants rated the are as a 2 and another 32% rated it as a 1 regarding development.

Bottom Line

Visitors and residents of the area expect the area to be undeveloped.

Expectations for Today

Q13. First please think about your expectations for the number of people that may also be in the area. Please rate this on a scale from 1 to 7 where 1 means you expect it to be UN-crowded with few or no other people and 7 means you expect it to be crowded with a large number of people. You may also use any number in between.

Q14. Next think about your expectations for level of development that you will see along the lake. Please rate on a scale from 1 to 7 where one means you expect the lake to be largely UN-developed and 7 means you expect it to largely or mostly developed. You may also use any number in between.

	Moxie Pond	Wyman Lake	Total
Your expectations for the number of people that may also be using the area.	2.3	2.1	**2.2**
Expectations for level of development that you will see along the area.	2.4	1.9	**2.4**

Summary

The average rate of expectations for the number of people using the area is 2.2, while the average rate of expectations for the level of development is 2.4.

Bottom Line

People expect this area to be undeveloped and not very crowded.

Expectations for Trip

Q15-Q23. Those that use Maine's lakes and ponds see evidence of human activity. I'm going to read you a list of things people MAY SEE from lakes and ponds in Maine. Please rate the impact of each factor on the quality of your experience. For this question we will use a 1 to 7 scale where 1 means the factor will have a very negative impact, 4 means no impact and 7 means a very positive impact on your experience. (n=62)

	Moxie Pond	Wyman Lake	Total
Views of large clear cuts on hillsides.	2.5	2.1	**2.4**
Views of downhill ski trails and facilities.	4.3	3.8	**4.2**
Views of power lines on hillsides.	2.5	2.6	**2.6**
Views of wind power projects.	2.7	2.9	**2.7**
Views of private docks along the shore.	5.6	4.0	**5.3**
Views of motorized craft on the lake or pond	4.9	4.8	**4.9**
Views of industrial facilities such as a biomass generator, paper mill or landfill	1.6	1.7	**1.6**
Views of residential development along the shore.	3.3	4.2	**3.5**
Views of solar projects.	3.6	3.9	**3.6**

Summary

The average quality impact rating of views of industrial facilities such as a biomass generator, paper mill or landfill was 1.6.

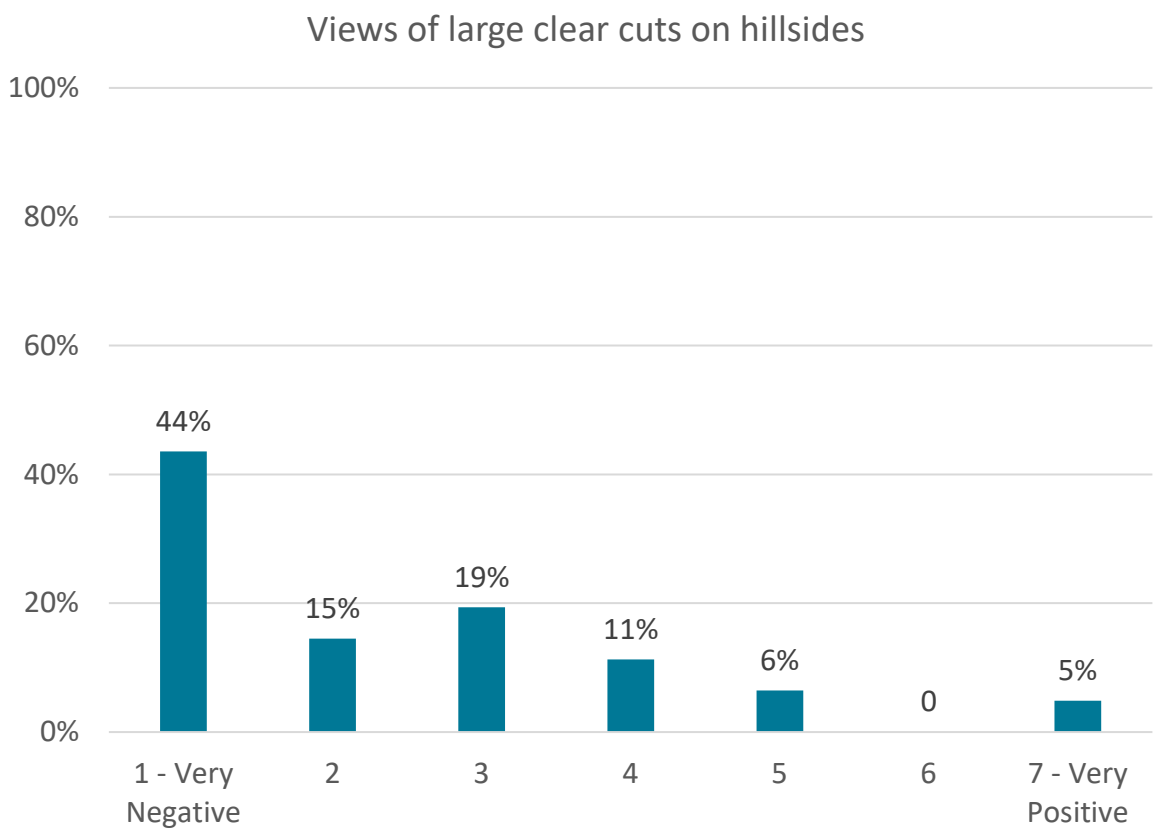
Other lower averages were views of large clear cuts on hillsides (2.4), views of power lines on hillsides (2.6), and views of wind power projects (2.7).

Bottom Line

Participants are somewhat concerned about the impact of industrial facilities and solar and wind power projects changing their experience.

Expectations for Trip

Q15. Please rate the impact of each factor on the quality of your experience. For this question we will use a 1 to 7 scale where 1 means the factor will have a very negative impact, 4 means no impact and 7 means a very positive impact on your experience. (n=62)

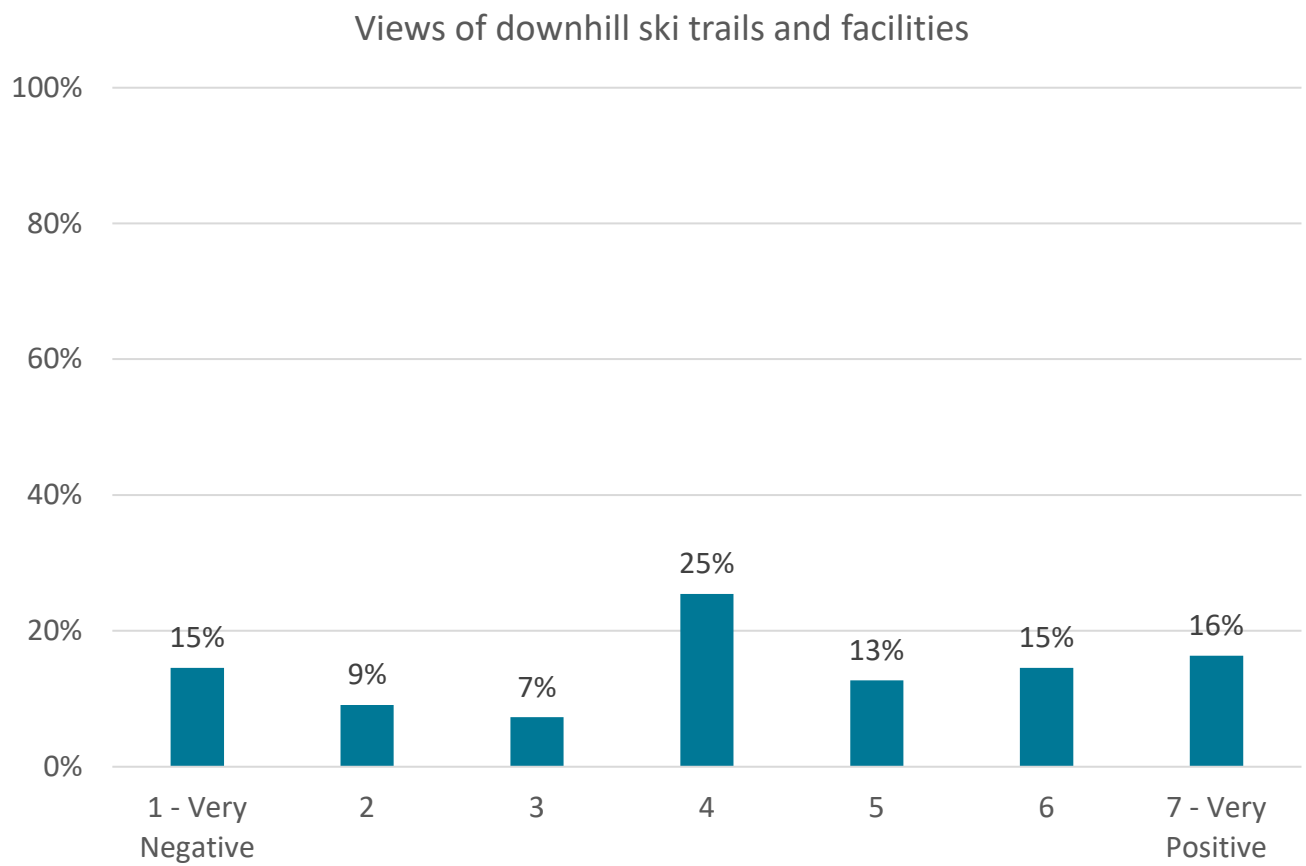


Summary

44% of participants rate the impact on views of large clear cuts on hillsides as very negative.

Expectations for Trip

Q16. Please rate the impact of each factor on the quality of your experience. For this question we will use a 1 to 7 scale where 1 means the factor will have a very negative impact, 4 means no impact and 7 means a very positive impact on your experience. (n=55)

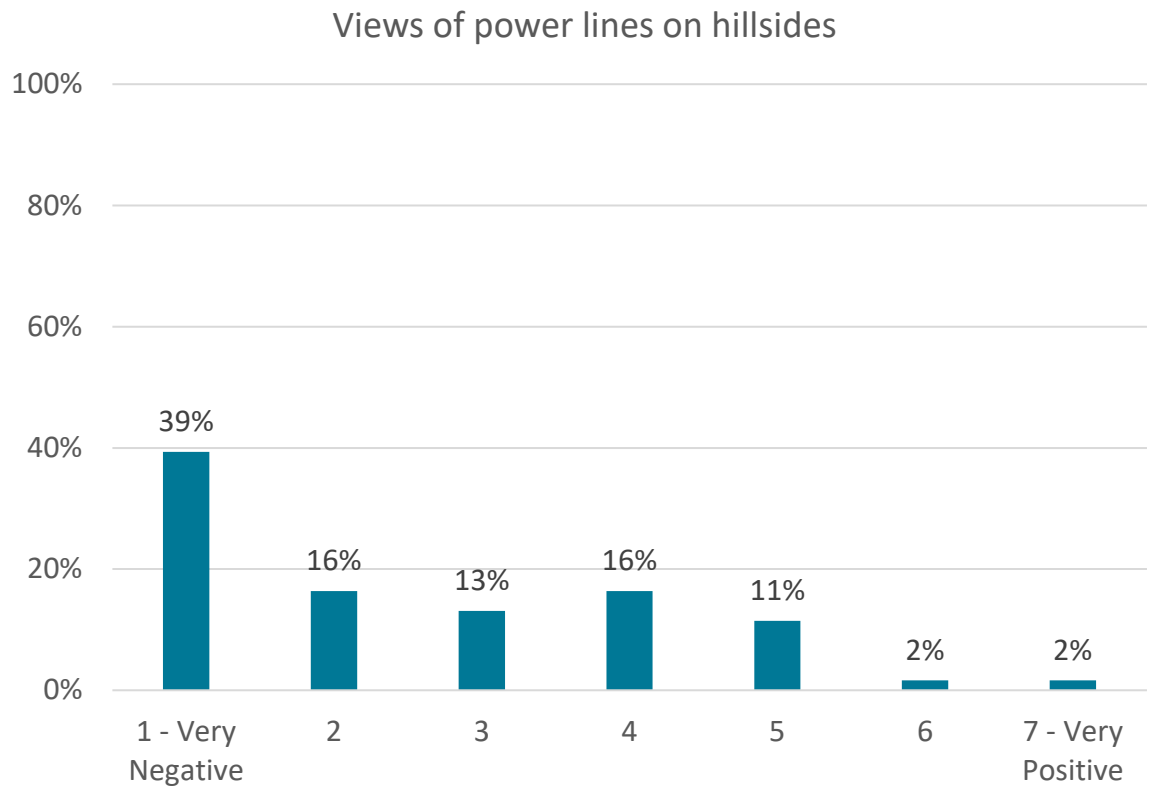


Summary

One quarter (25%) of participants rated the impact on views of downhill ski trail and facilities as a neutral 4.

Expectations for Trip

Q17. Please rate the impact of each factor on the quality of your experience. For this question we will use a 1 to 7 scale where 1 means the factor will have a very negative impact, 4 means no impact and 7 means a very positive impact on your experience. (n=61)

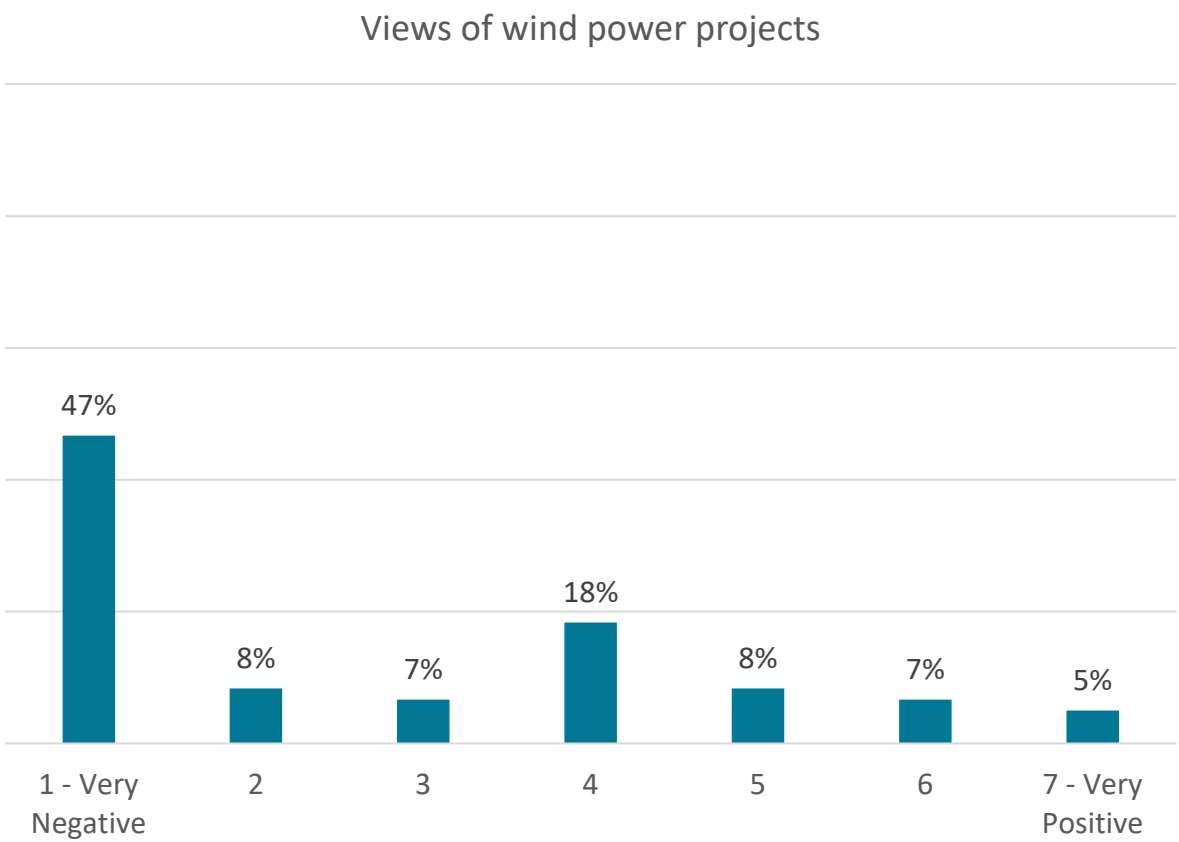


Summary

39% of interviewers rated the quality of their experience of viewing power lines on hillsides as very negative.

Expectations for Trip

Q18. Please rate the impact of each factor on the quality of your experience. For this question we will use a 1 to 7 scale where 1 means the factor will have a very negative impact, 4 means no impact and 7 means a very positive impact on your experience. (n=60)



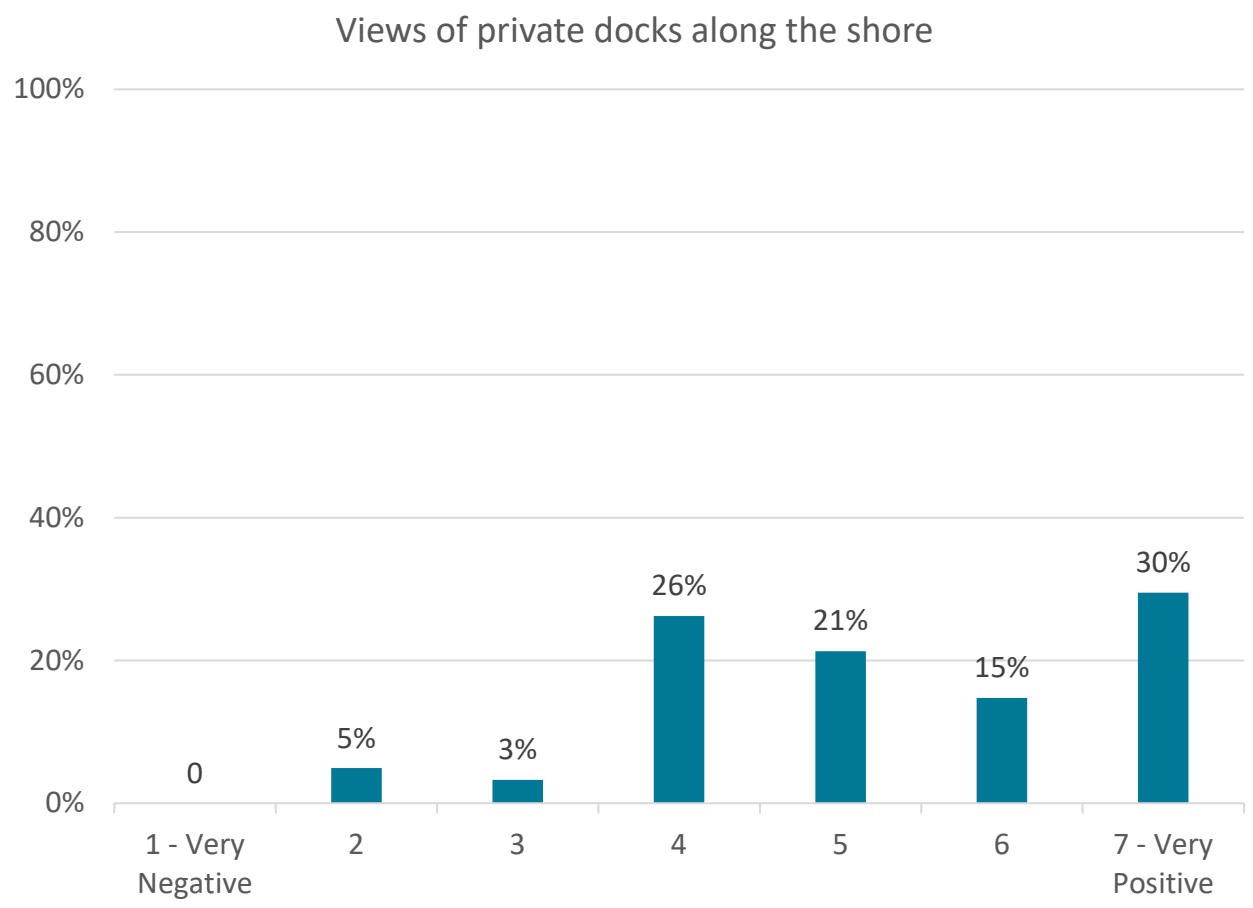
Summary

There are mixed ratings regarding the impact of wind power projects on participant's quality of experience.

47% believe the views of wind power projects would have a very negative impact on their experience.

Expectations for Trip

Q19. Please rate the impact of each factor on the quality of your experience. For this question we will use a 1 to 7 scale where 1 means the factor will have a very negative impact, 4 means no impact and 7 means a very positive impact on your experience. (n=61)

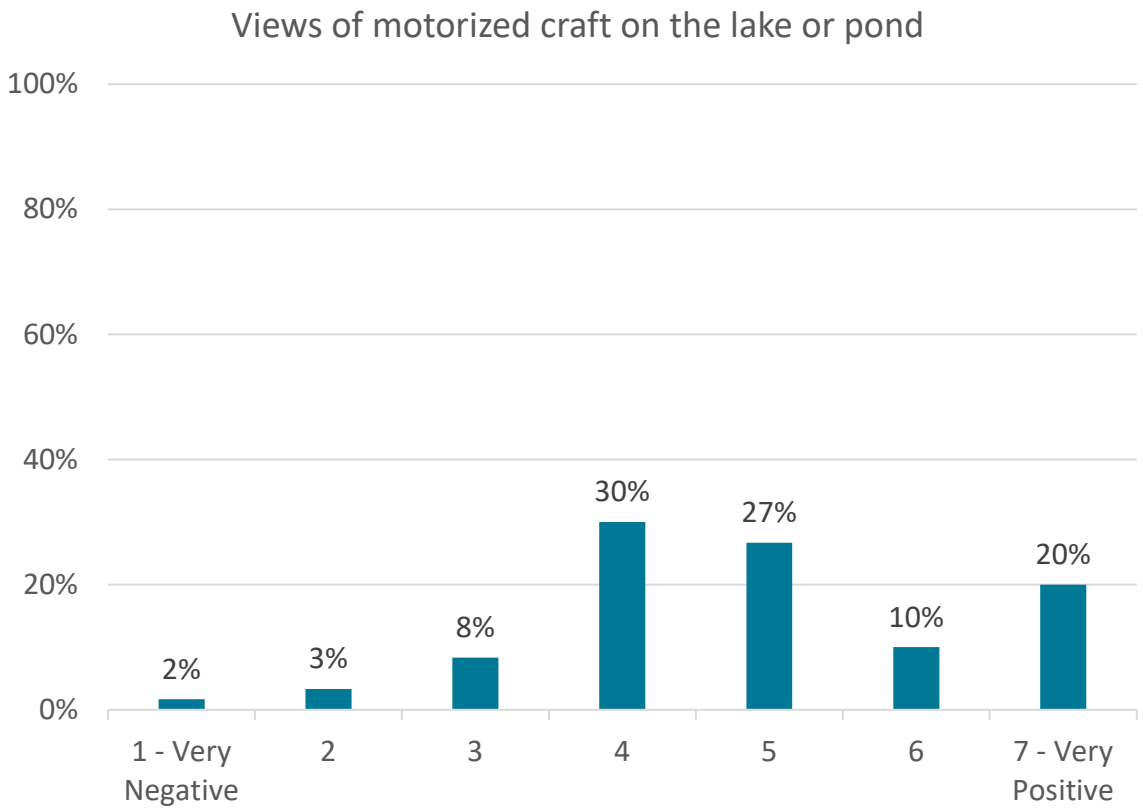


Summary

30% of interviewees rate a very positive impact on the view of private docks along the shore.

Expectations for Trip

Q20. Please rate the impact of each factor on the quality of your experience. For this question we will use a 1 to 7 scale where 1 means the factor will have a very negative impact, 4 means no impact and 7 means a very positive impact on your experience. (n=60)

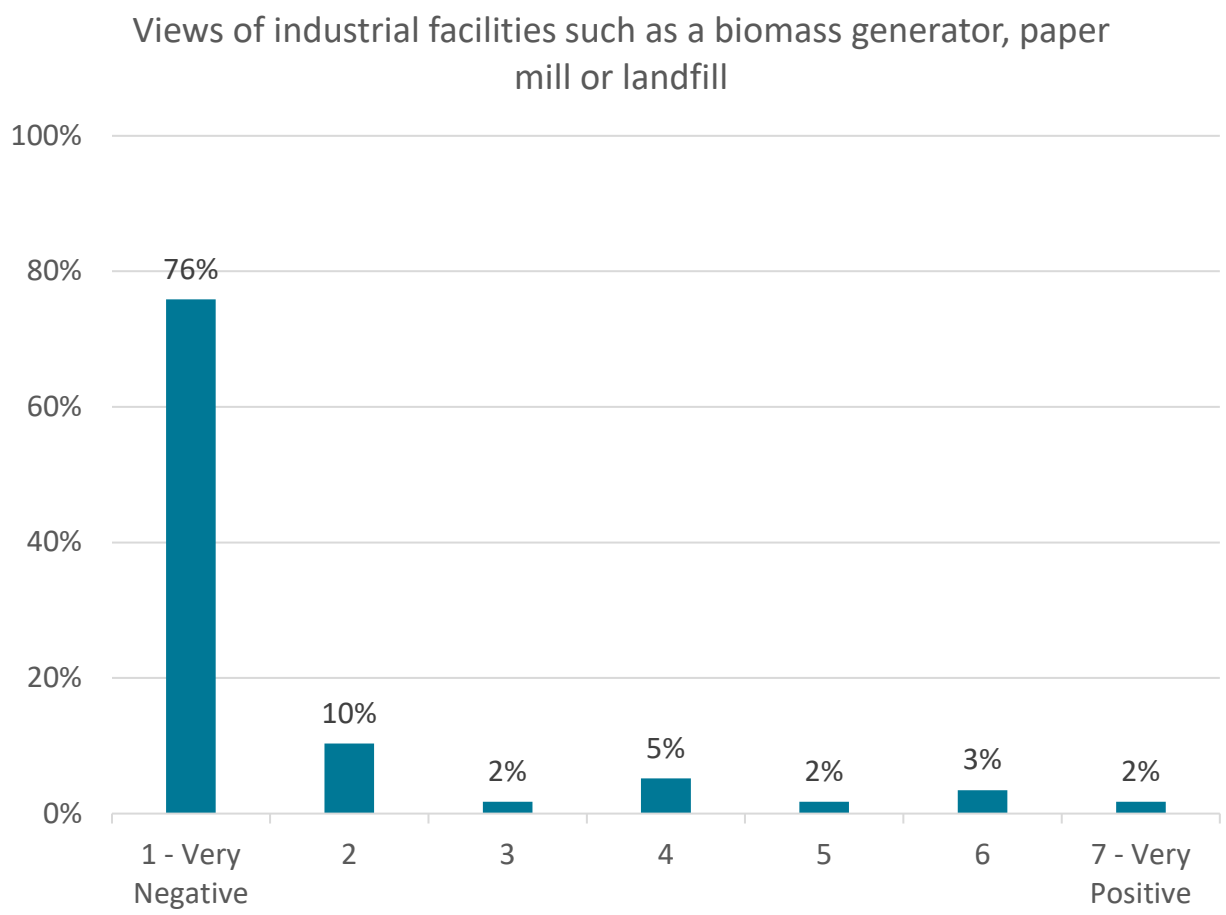


Summary

30% of participants rated a 4 for the views of motorized craft on the lake or pond.

Expectations for Trip

Q21. Please rate the impact of each factor on the quality of your experience. For this question we will use a 1 to 7 scale where 1 means the factor will have a very negative impact, 4 means no impact and 7 means a very positive impact on your experience. (n=58)

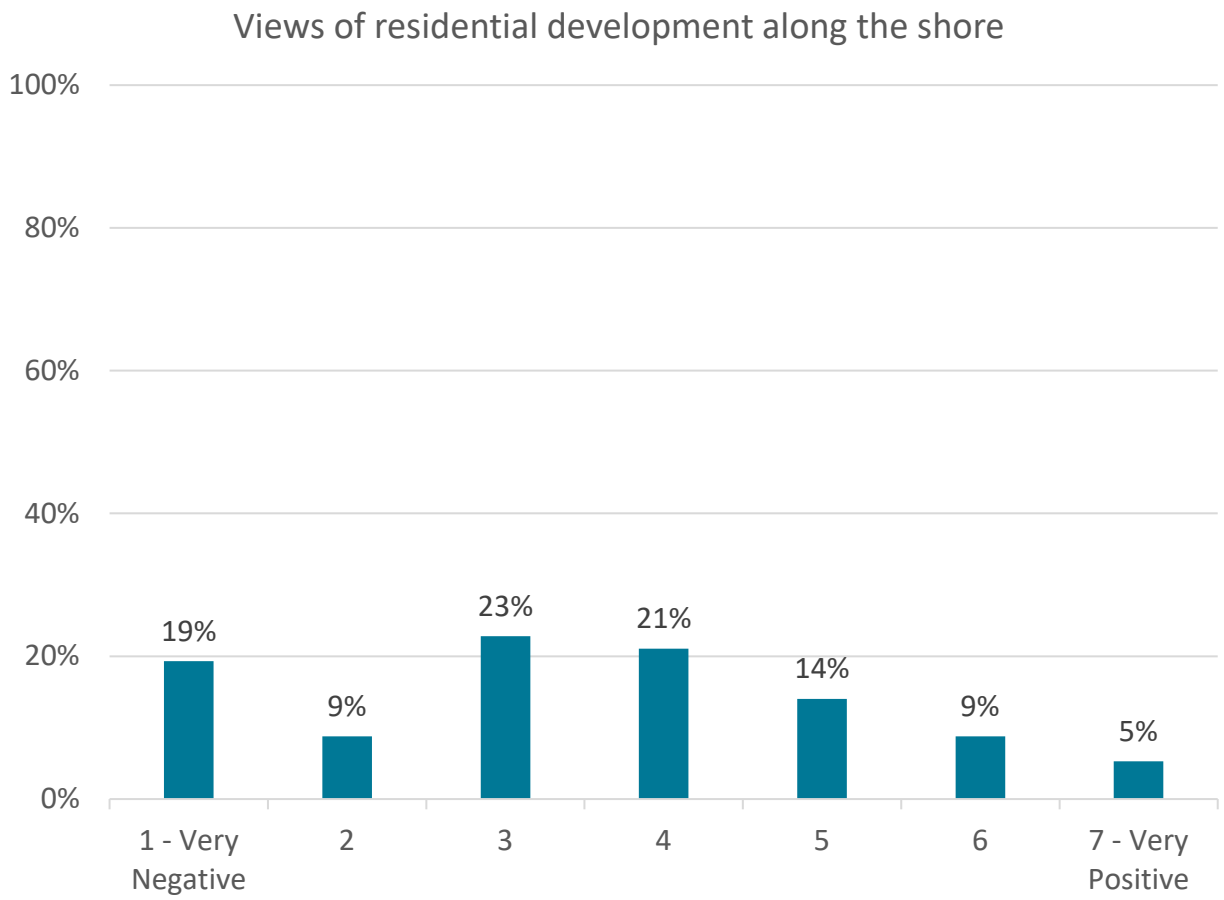


Summary

More than three-quarters (76%) of participants believe the views of industrial facilities such as biomass generator, paper mill or landfill would have a strong negative effect on the experience.

Expectations for Trip

Q22. Please rate the impact of each factor on the quality of your experience. For this question we will use a 1 to 7 scale where 1 means the factor will have a very negative impact, 4 means no impact and 7 means a very positive impact on your experience. (n=57)

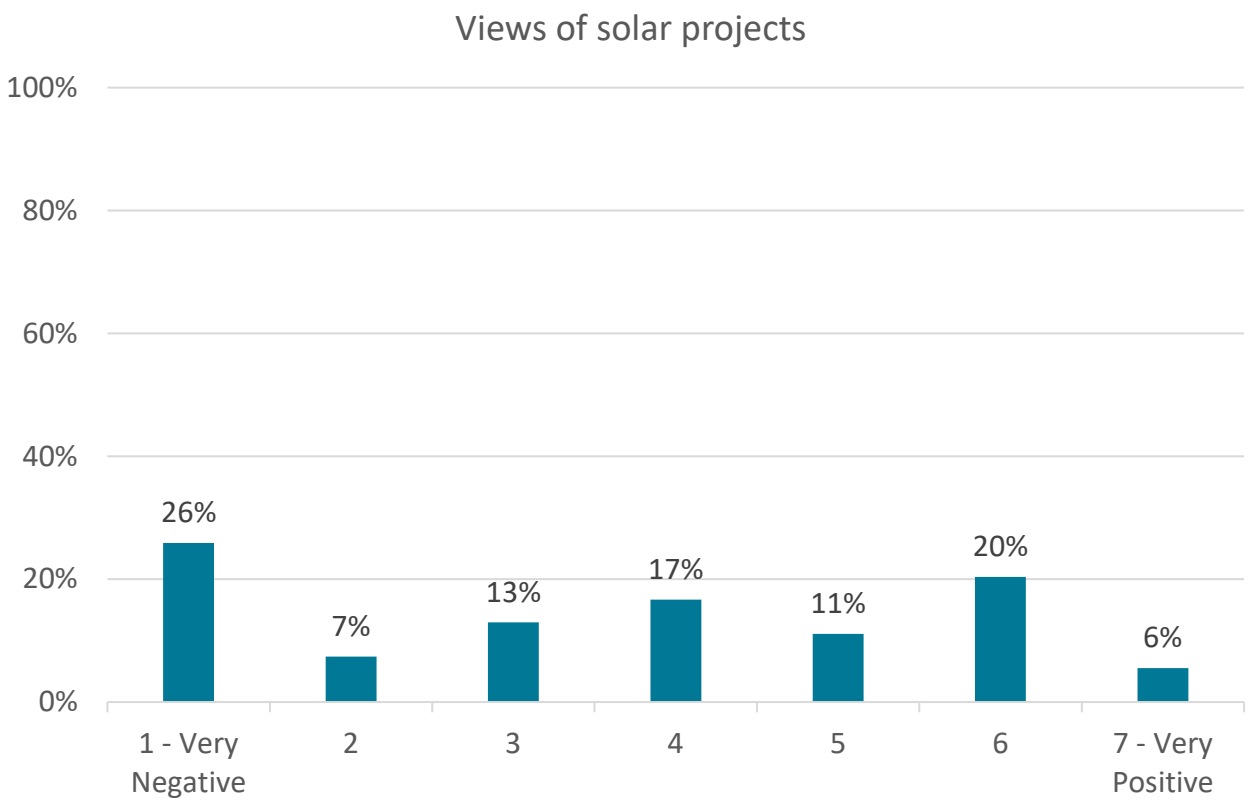


Summary

21% of interviewees feel neutral about the views of residential development along the shore while 19% rate a very negative impact.

Expectations for Trip

Q23. Please rate the impact of each factor on the quality of your experience. For this question we will use a 1 to 7 scale where 1 means the factor will have a very negative impact, 4 means no impact and 7 means a very positive impact on your experience. (n=54)



Summary

There are a variety of ratings concerning the effect of solar projects affecting peoples' quality of experience. 20% say it would have a positive impact on their experience while more than a quarter (26%) say it would negatively affect their experience.

Moxie Pond Photo Simulations

Photo Questions – Moxie Pond

Q28, Q30. I'd like to have you look at a picture of the view and get your impressions. I'll ask you to rate the scenic quality of the view. Averages below. (n=47)

	Moxie Pond
Current view	6.8
Proposed view	4.2
Difference between proposed view and current view	-2.6

Summary

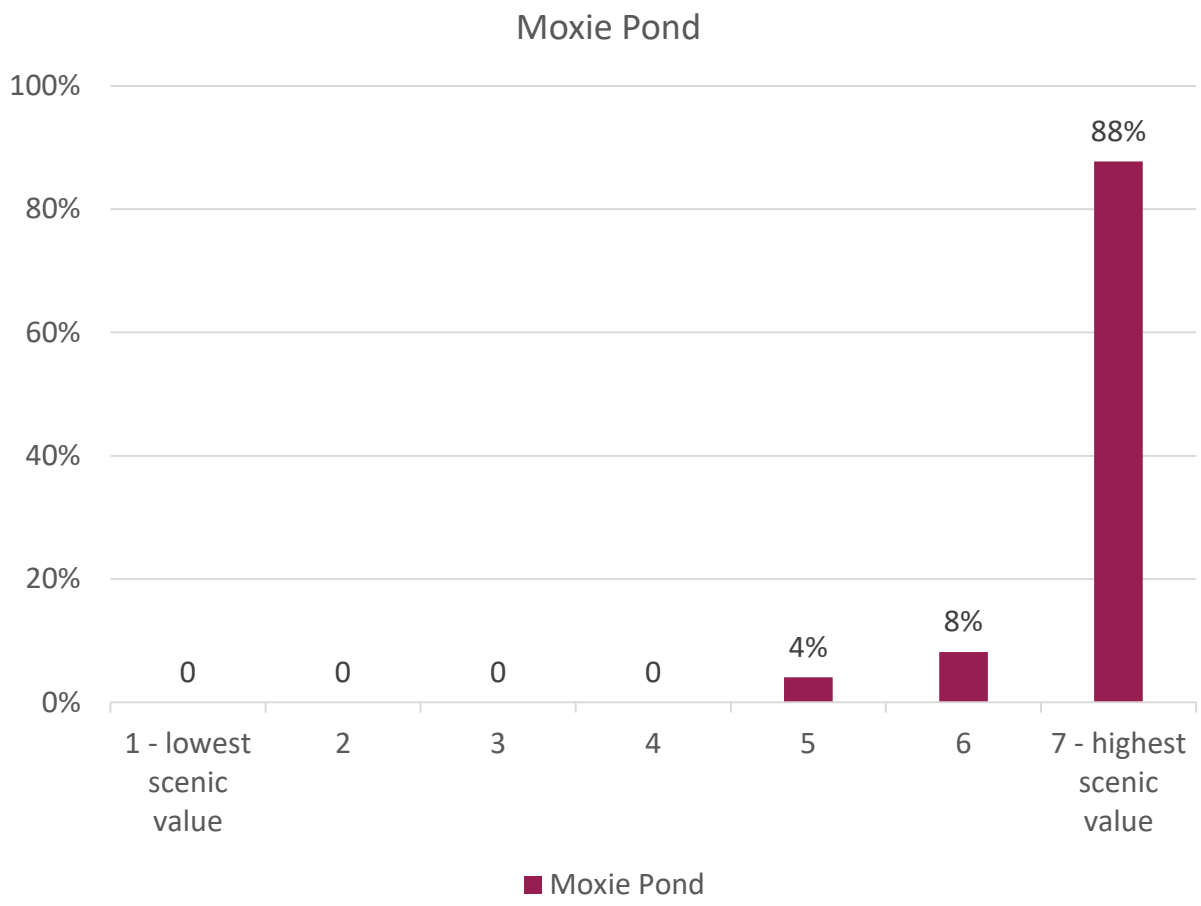
When compared to the current view, the average rating of scenic quality went down 2.6 points when presented with the proposed view.

Bottom Line

On average, the proposed turbines visible from the lake would have a negative impact on the scenic quality of the view.

Photo Questions – Moxie Pond

Q28. First take a look at the CURRENT southwest view. On the 1-to-7 scale of scenic quality in Maine, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic quality of this view? (n=49)



Summary

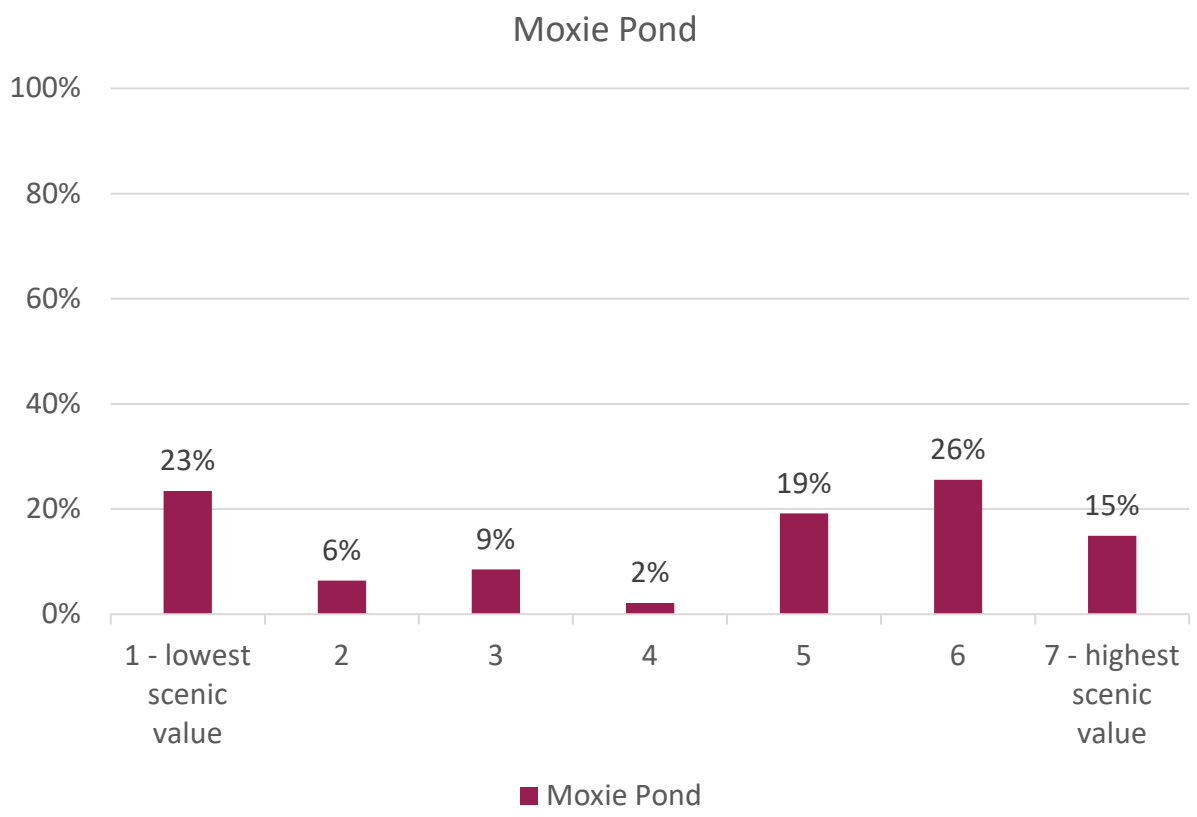
More than eight in ten (88%) of participants rated the current view at Moxie Pond as 7 on the scenic quality scale or high scenic value.

Bottom Line

People think highly of the current view of Moxie Pond.

Photo Questions – Moxie Pond

Q30. Now, please take a look at this photo simulation of the same view that NOW includes wind turbines that may be built in the future. On the 1-to-7 scale of scenic quality in Maine, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic quality of this view? (n=47)



Summary

23% of participants rated the view with wind turbines as a 6 and 15% rated them as a 7 (them highest scenic value).

23% rated the addition of wind turbines as a 1 (the lowest scenic value on the scale).

Bottom Line

The presence of the turbines did decrease the scenic quality in the minds of some respondents although 15% still rate the view as the highest scenic quality even with the presence of the turbines.

Photo Questions – Moxie Pond

Q29, Q31 Why do you say that? (some examples) (n=47)

Rating	Q29	Rating After	Q31
7	all natural	1	can see development
7	beautiful, few camps, not overcrowded	1	eye sore, nobody wants them in their backyard
7	beautiful, peaceful	6	not much offered on scenery
7	beautiful, untouched, peaceful	5	can't see turbines, not bad
7	can't see any powerlines, clear mountaintops, lake is beautiful	5	not a big problem w/ wind turbines, not on lake
7	defines Maine, calming	5	better than power plant
7	foliage, beautiful, want to be there	7	still beautiful
7	gorgeous, no development	3	don't want to look at windmills
7	I just love it here	1	Will we hear them? If they're close enough to hear that would have a big impact.
7	Its a beautiful spot.	6	You can barely see them
7	It's beautiful here, very peaceful	1	I don't want them here
5	typical, not unique	2	turbines impact on experience. Seem out of place
6	Little development of cabins, beautiful	1	Turbines are stupid

Summary

Some participants believe wind turbines would impact the view and do not want to look at them.

Others report that the wind turbines would not bother them and that they hardly notice them at all.

Photo Questions – Moxie Pond

Q32: Now I´d like you to think about how your enjoyment of coming here today would be affected by a change in the current southwest view compared to the view with wind turbines.

Q34: Please think about how a change from the current view to the view with wind turbines would affect your likelihood of returning to the area? (n=46)

	Moxie Pond
Impact on enjoyment	3.6
Impact on likelihood to return	4.3

Summary

The average rate of impact of enjoyment is 3.6, while the average rate for the impact on the likelihood to return is 4.3.

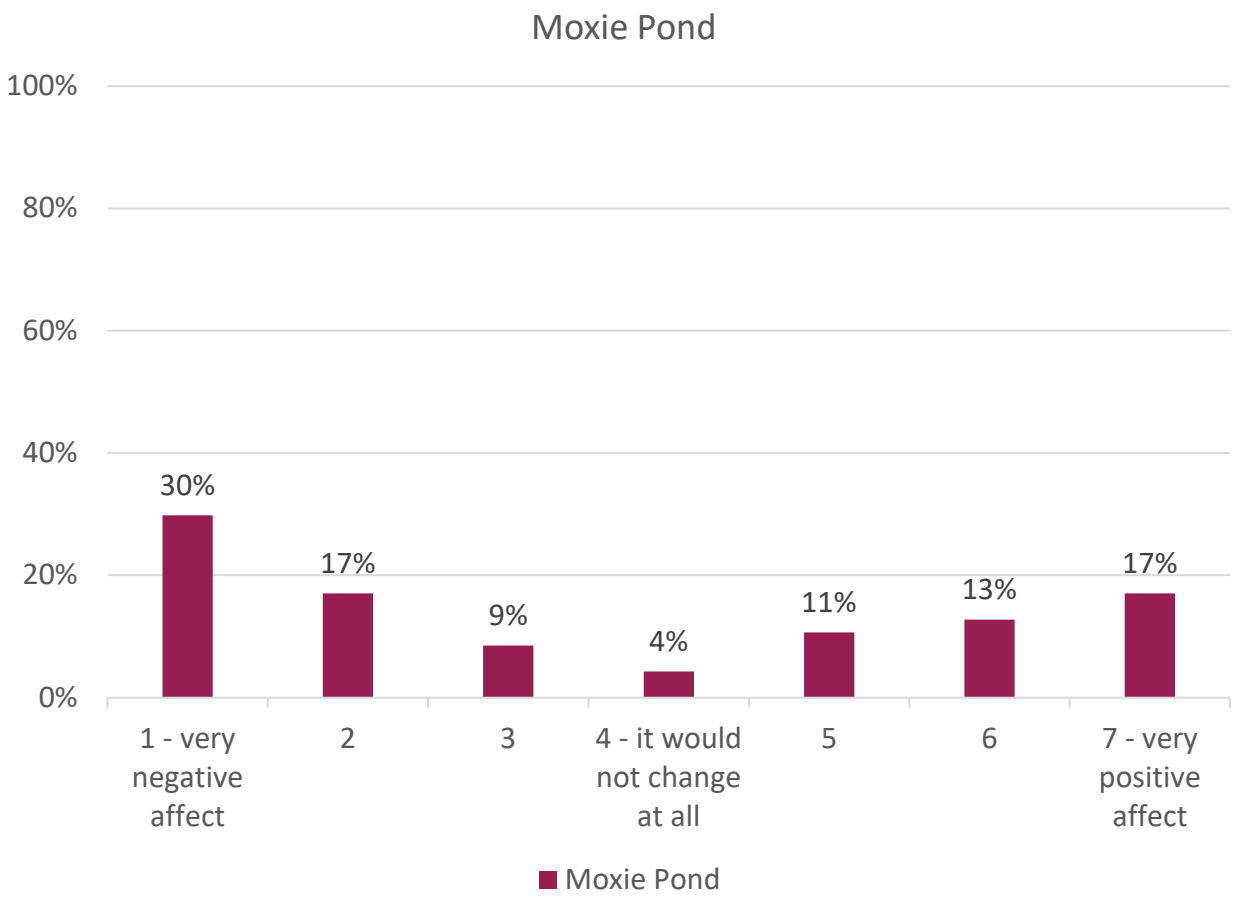
Bottom Line

While the turbines would impact the scenic quality, participants report on average that their enjoyment will be altered only to a minor degree.

The presence of the wind turbines had, on average, no impact on their likelihood to return.

Photo Questions – Moxie Pond

Q32. 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 compared to the view with wind turbines. 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. (n=46)



Summary

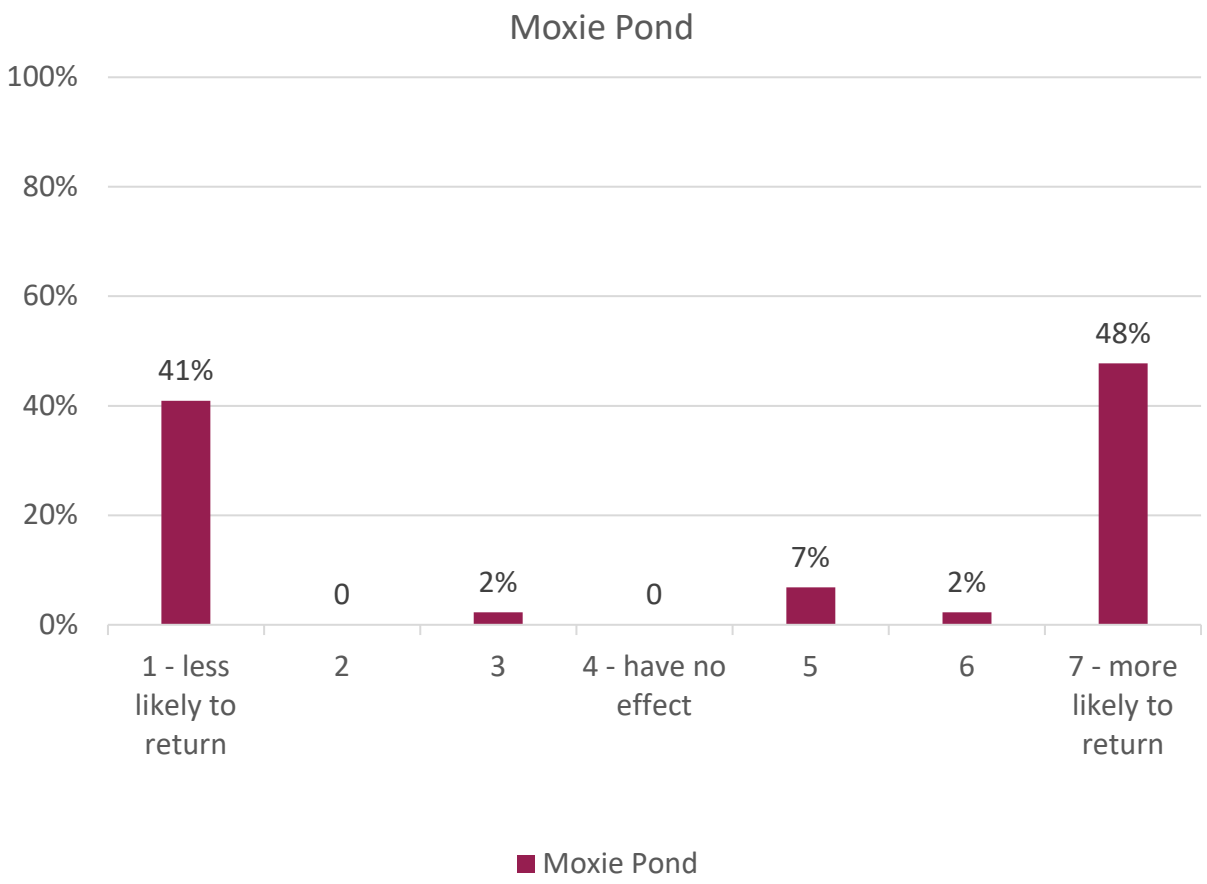
30% of participants report the addition of wind turbines would have a very negative affect on their enjoyment of the area while 17% also report it would have a positive impact on their enjoyment of the area.

Bottom Line

There are mixed responses regarding the affect of enjoyment that wind turbines would have on people.

Photo Questions – Moxie Pond

Q34 Please think about how a change from the current view to the view with wind turbines would affect your likelihood of returning to the area? (N=46)



Summary

41% of the participants report the addition of wind turbines would decrease their likelihood of returning to the area.

Almost half (48%)% report they in fact would be more likely to return.

Bottom Line

The wind turbines have a mixed impact on the likelihood of returning.

Photo Questions – Moxie Pond

Q33, Q35 Why do you say that? (some examples) (n=47)

Rating	Q31	Rating After	Q33
1	can see development and noise	1	would rather not have noise and obstruction of nature
7	can't see them	7	love the area
2	come to look at nature	7	still going to come
2	come up here to get away	7	still going to raft
1	come up here to get away from all of that stuff- not industrialized	1	to get away from "industrialized stuff"
5	wouldn't affect it because it's quiet, helps environment	5	doesn't hurt my view, still in nature

Summary

Some participants believe wind turbines would make the view look more industrialized, obstruct the nature, and cause more noise.

Others report that the wind turbines would not bother them at all and that they appreciate helping the environment.

Wyman Lake Photo Simulations

Photo Questions – Wyman Lake

Q28, Q30. I'd like to have you look at a picture of the view and get your impressions. I'll ask you to rate the scenic quality of the view. Averages below. (n=18)

	Wyman Lake
Current view	6.3
Proposed view	4.7
Difference between proposed view and current view	-1.6

Summary

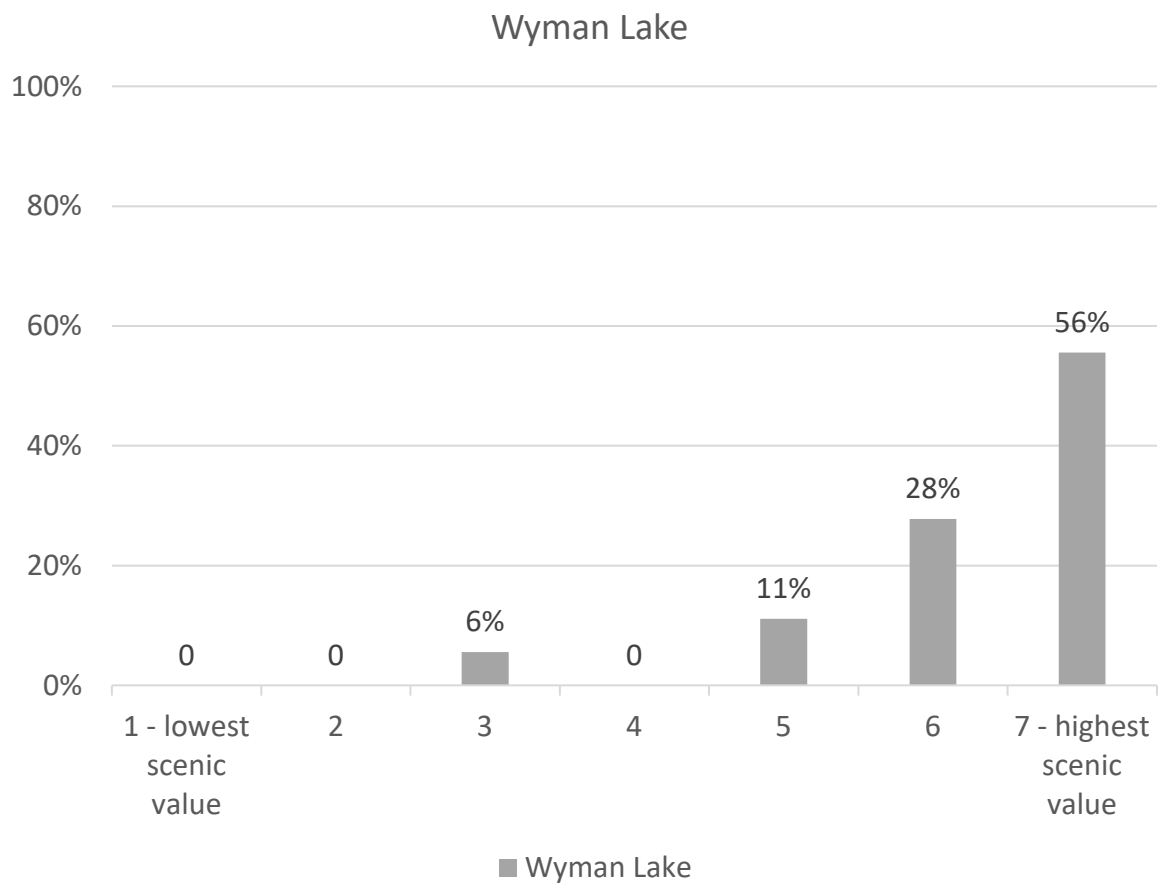
When compared to the current view, the average rating of scenic quality went down 1.6 points when presented with the proposed view.

Bottom Line

The proposed turbines would have a negative impression on scenic value.

Photo Questions – Wyman Lake

Q28. First take a look at the CURRENT southwest view. On the 1-to-7 scale of scenic quality in Maine, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic quality of this view? (n=18)



Summary

More than half (56%) of participants rated the current view at Wyman Lake as a 7 on the scenic quality scale.

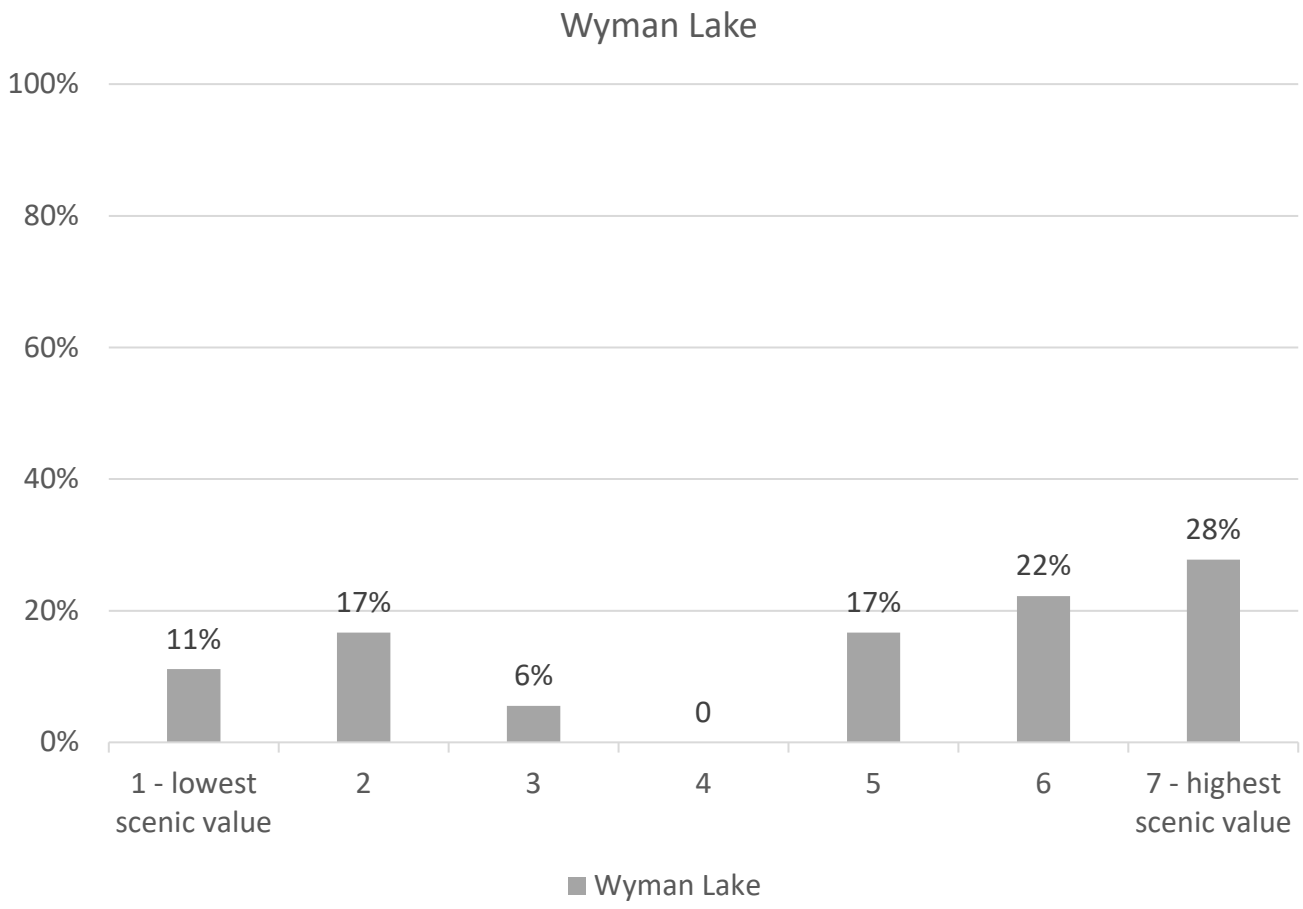
28% rate the scenic quality as a 6.

Bottom Line

People think very highly of Wyman Lake.

Photo Questions – Wyman Lake

Q30. Now, please take a look at this photo simulation of the same view that NOW includes wind turbines that may be built in the future. On the 1-to-7 scale of scenic quality in Maine, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic quality of this view? (n=18)



Summary

28% still rate the lake as the highest scenic value while 11% rate the view with wind turbines as the lowest scenic value.

Bottom Line

There are mixed ratings from participants on the scenic quality with the presence of the wind turbines.

Photo Questions – Wyman Lake

Q29, Q31 Why do you say that? (some examples) (n=17)

Rating	Q29	Rating After	Q31
7	Clean cut	7	No bother
3	Clear-cut	2	Doesn't Add
7	Clear-cuts	7	Don't mind windmills
6	It looks nice. Could use more color	3	It stands out. It's all you can see.
7	It's beautiful	7	The wind power doesn't bother me.
7	It's real outdoors.	5	You can't see things as clearly.
5	More scenic sights, Native	5	They don't bother me
6	Natural	2	Windmills
5	Nice view	2	It's a little eyesore. It draws your eye. It draws your eye
6	No houses	6	Well Hidden
6	No houses,	1	I don't believe windmills, cutting too many trees
7	It's the best	7	Fine if it helps Maine

Summary

Some participants believe wind turbines would make the view less clear and more of an eyesore.

Others report that the wind turbines doesn't change the view and support wind power.

Photo Questions – Wyman Lake

Q32: Now I´d like you to think about how your enjoyment of coming here today would be affected by a change in the current southwest view compared to the view with wind turbines.

Q34: Please think about how a change from the current view to the view with wind turbines would affect your likelihood of returning to the area?

	Wyman Lake
Impact on enjoyment	2.1
Impact on likelihood to return	4.6

Summary

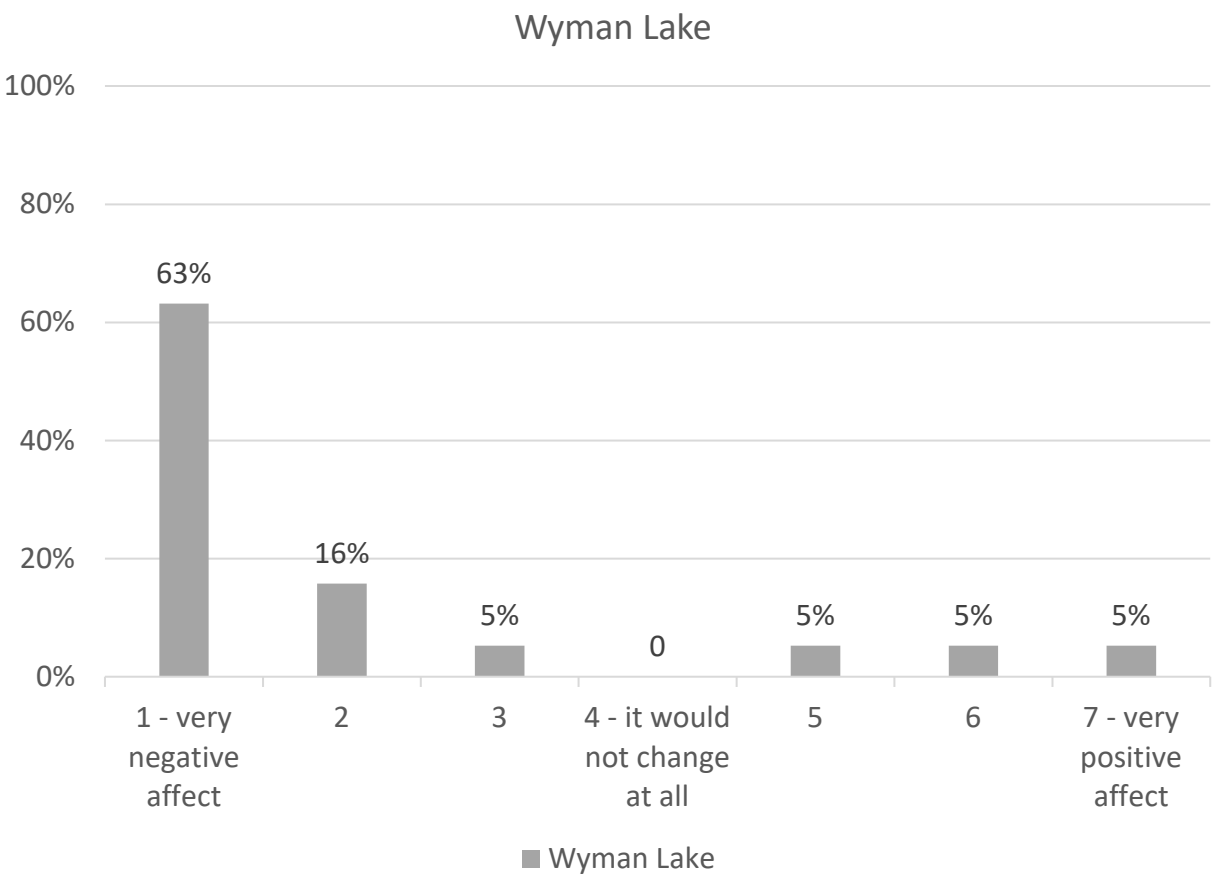
The average rate of impact of enjoyment is 2.1, while the average rate for the impact on the likelihood to return is 4.6.

Bottom Line

On average, participants report a negative impact on their enjoyment of the area. However, it does not impact their likelihood to return to the area.

Photo Questions – Wyman Lake

Q32. 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 compared to the view with wind turbines. 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. (n=18)



Summary

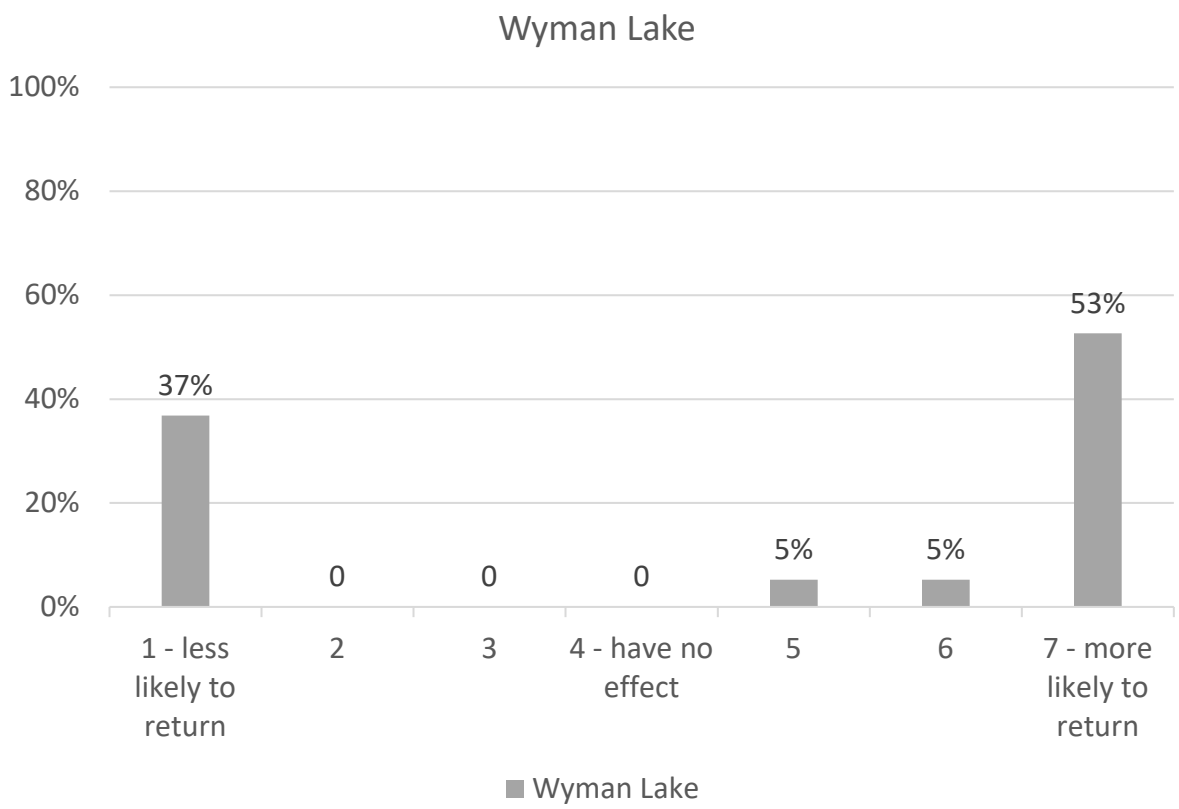
63% of participants believe the addition of wind turbines would have a very negative influence on enjoyment of the area.

Bottom Line

Overall most people feel their sense of enjoyment will change.

Photo Questions – Wyman Lake

Q34. Please think about how a change from the current view to the view with wind turbines would affect your likelihood of returning to the area. 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 the area, given the change in the view? A 4 means the change in the view would have no effect on your return. (n=18)



Summary

53% of participants state the view of wind turbines would make them more likely to return to the area while 37% would be less likely to return.

Bottom Line

More than half of participants indicate they presence of the wind turbine would make them more likely to return though 37% indicate they are much less likely to return.

Photo Questions – Wyman Lake

Q33, Q35 Why do you say that? (some examples) (n=14)

Rating	Q33	Rating After	Q35
1	At night with lights it would bother me.	1	I would still come.
7	Do not support windmills	1	Change lakes
1	Doesn't bother me. The power generated should stay in Maine.	7	Doesn't bother me.
1	It doesn't bother me.	1	
2	It doesn't get in the way	1	Would still come
3	It isn't awesome.	6	Love coming here
1	It wouldn't bother me.	1	I don't mind
2	Manmade is everywhere	7	No change, Lake house
1	No problem	7	Local
6	Windmills	7	Camp another lake, No other lake, Unfair Question No other option, no choice

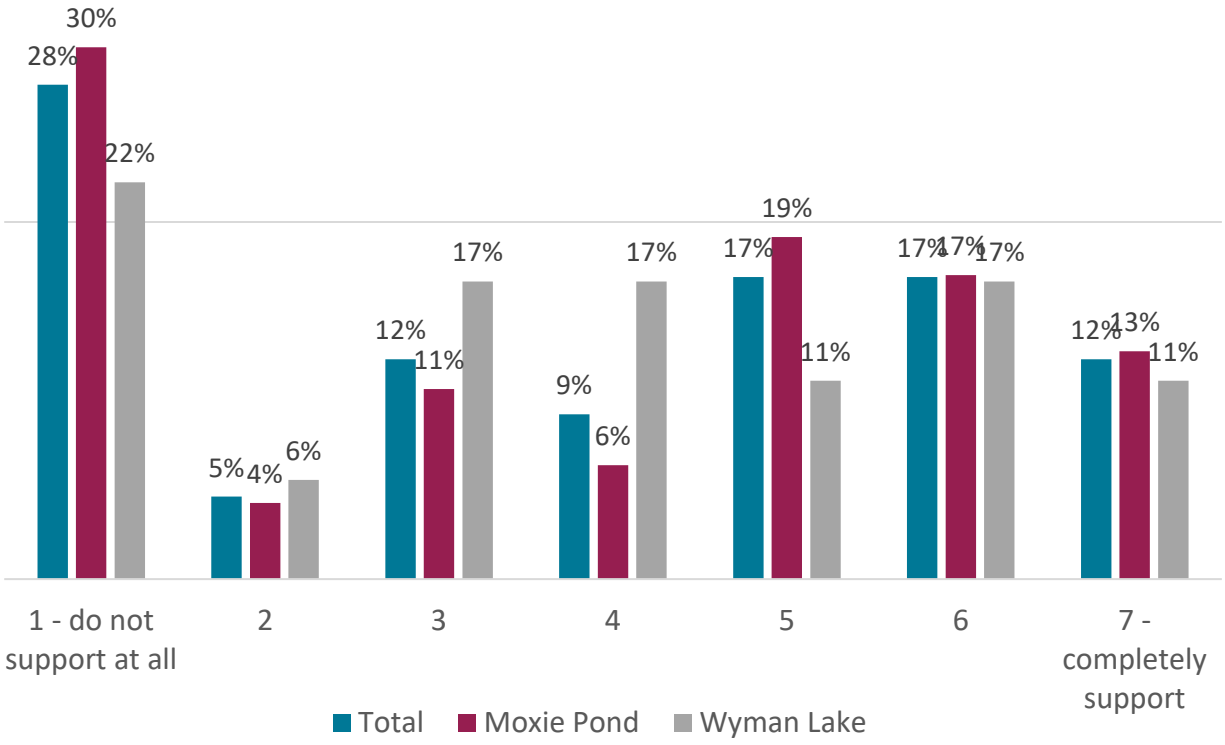
Summary

Some participants do not support the addition of wind turbines.

Others report that the wind turbines would not bother them at all, and they would still come to the area.

Photo Questions

Q36.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? (n=65)



Summary

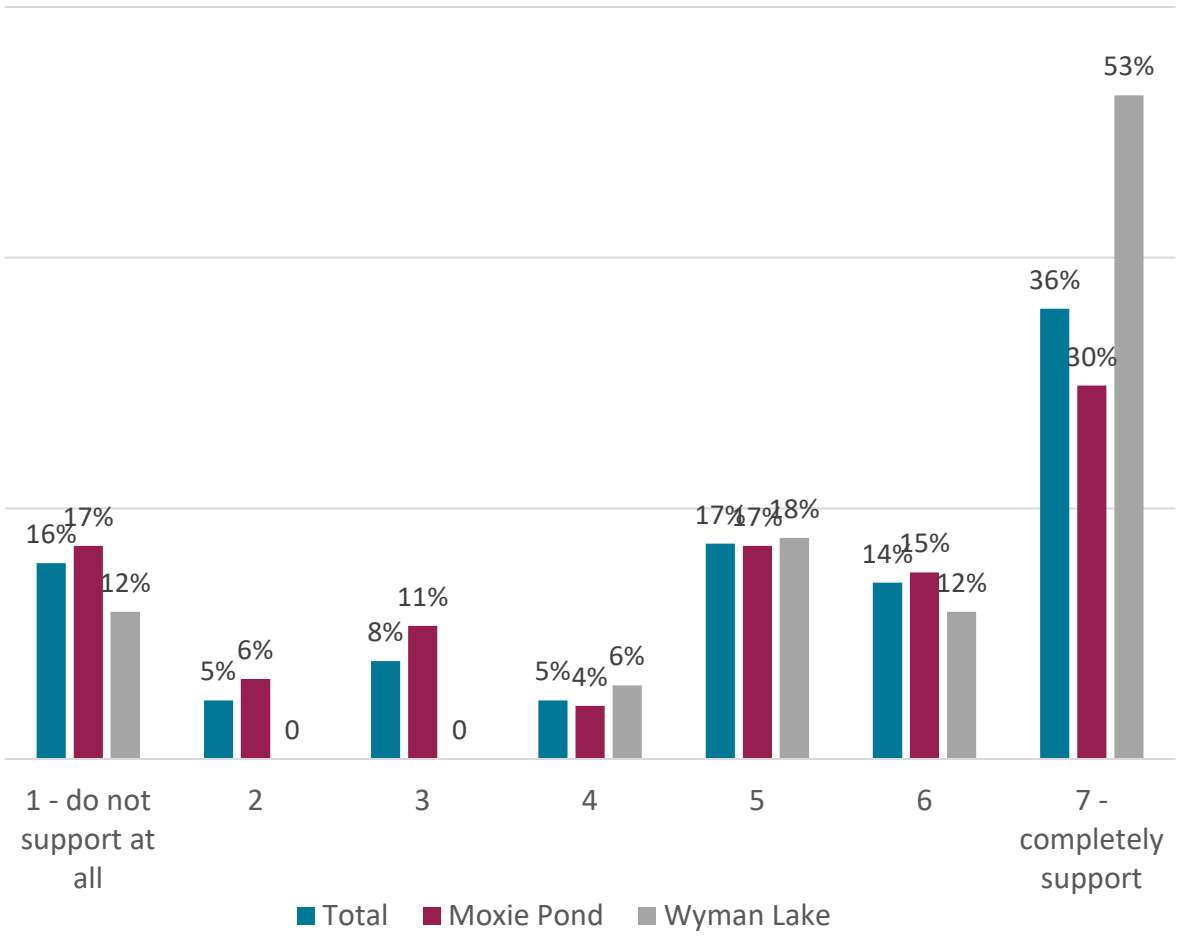
28% of participants overall do not support commercial-scale wind energy development. 12% completely support it.

Bottom Line

Participants are generally less supportive of commercial-scale wind energy in the state.

Photo Questions

Q37.Using a scale of 1-7 where 7 is completely support and 1 is do not support at all, 37. How much do you support how much you support commercial scale solar development in Maine? (N=64)



Summary

53% of participants overall completely support commercial-scale wind energy development.

Bottom Line

Participants are generally more supportive of commercial-scale solar development in the state.

Photo Questions

Q36.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?

Q37.Using a scale of 1-7 where 7 is completely support and 1 is do not support at all, how much do you support how much you support commercial scale solar development in Maine?

	Moxie Pond	Wyman Lake	Total
How much do you support commercial-scale wind energy development in Maine?	3.8	3.8	3.8
How much do you support commercial-scale solar development in Maine?	4.6	5.6	4.9

Summary

The average rate of supporting commercial-scale wind energy development in Maine is 3.8, while the average rate for supporting commercial-scale solar development in Maine 4.9.

Bottom Line

Respondents are more supportive of commercial-scale solar development in the state than wind energy development.

Photo Simulations

Moxie Pond Existing Conditions

Moxie Pond Proposed Conditions

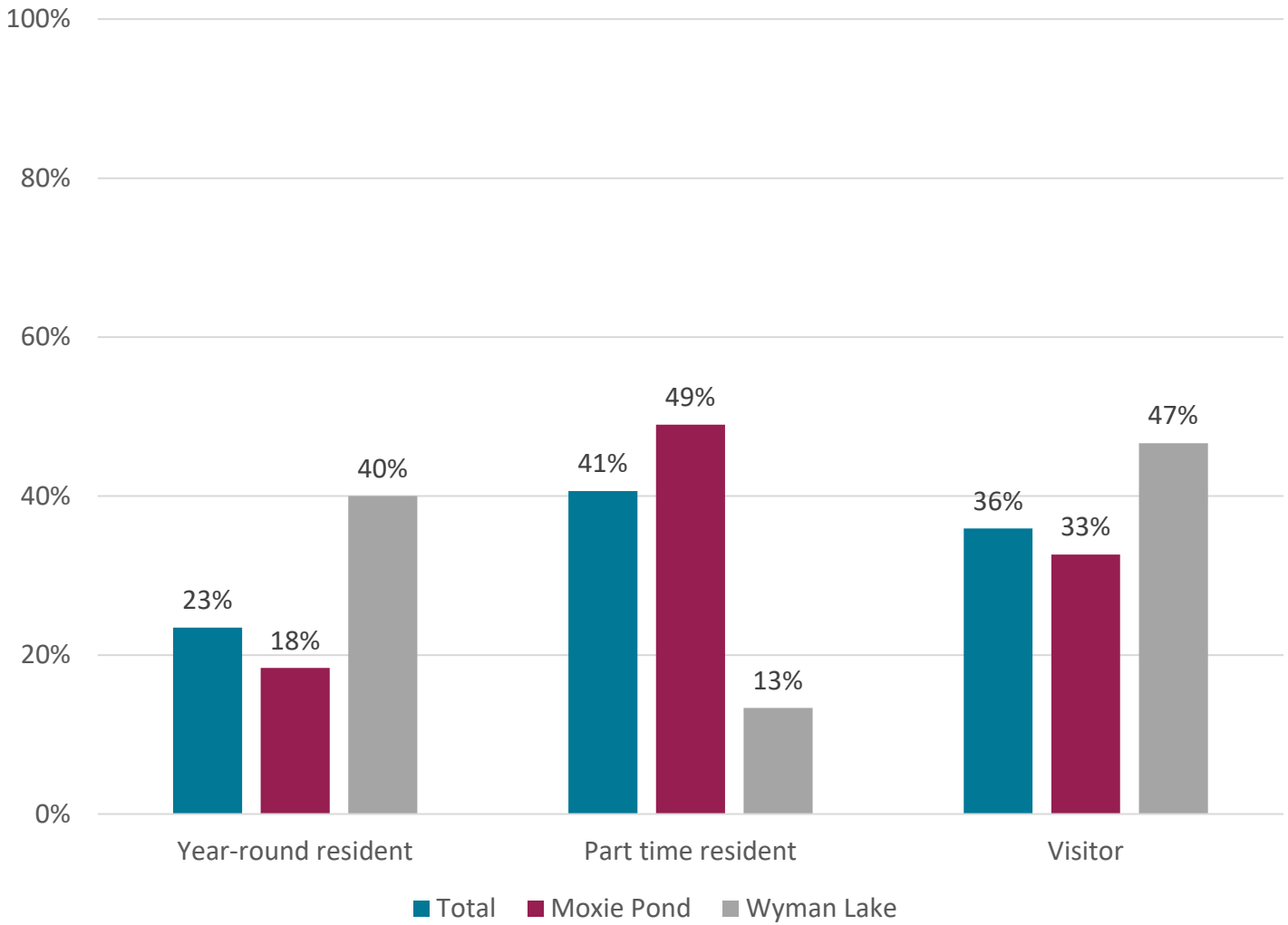
Wyman Lake Existing Conditions

Wyman Lake Proposed Conditions

Demographics

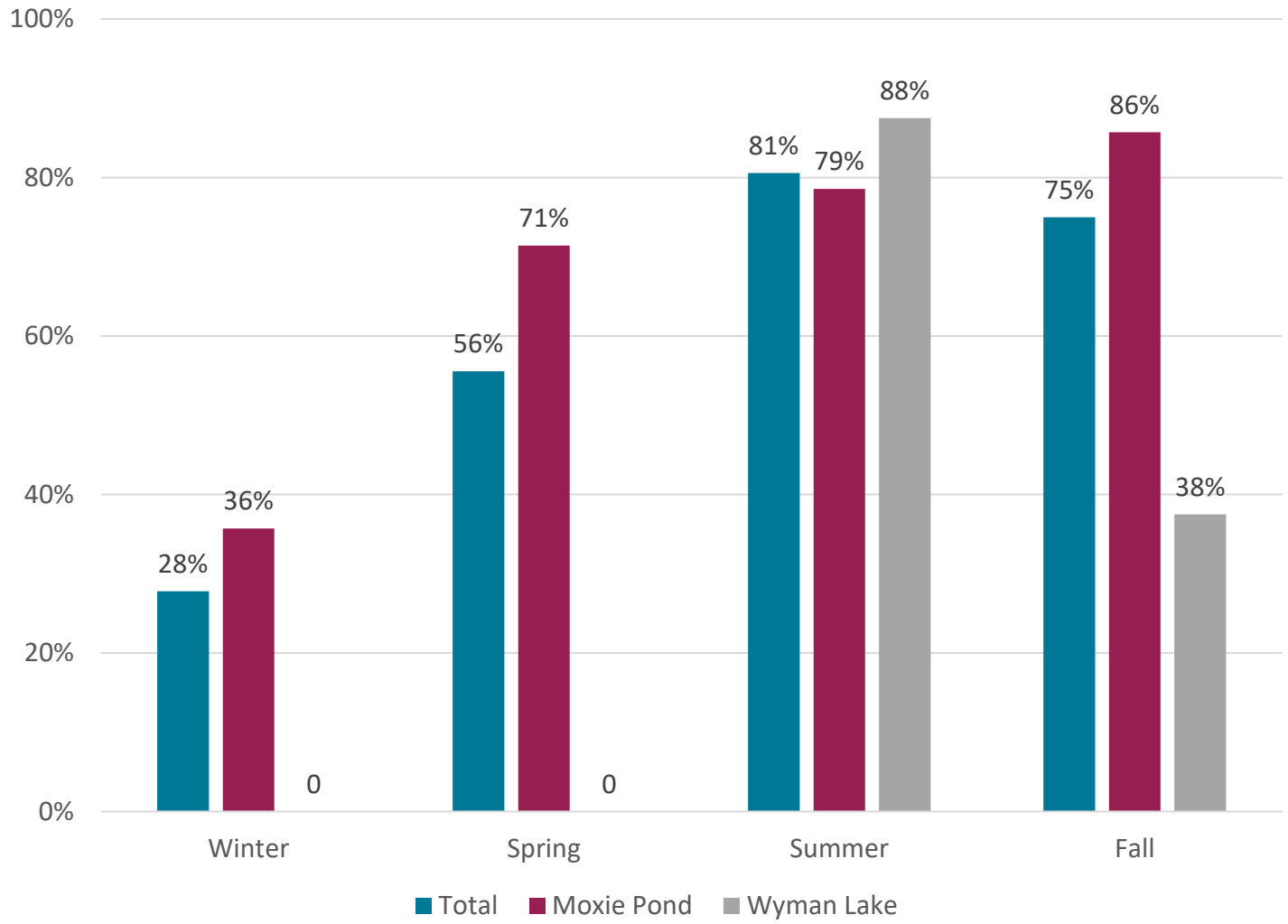
Demographics

Q38. Are you a year-round resident, part time resident, or visitor to this area? (n=64)



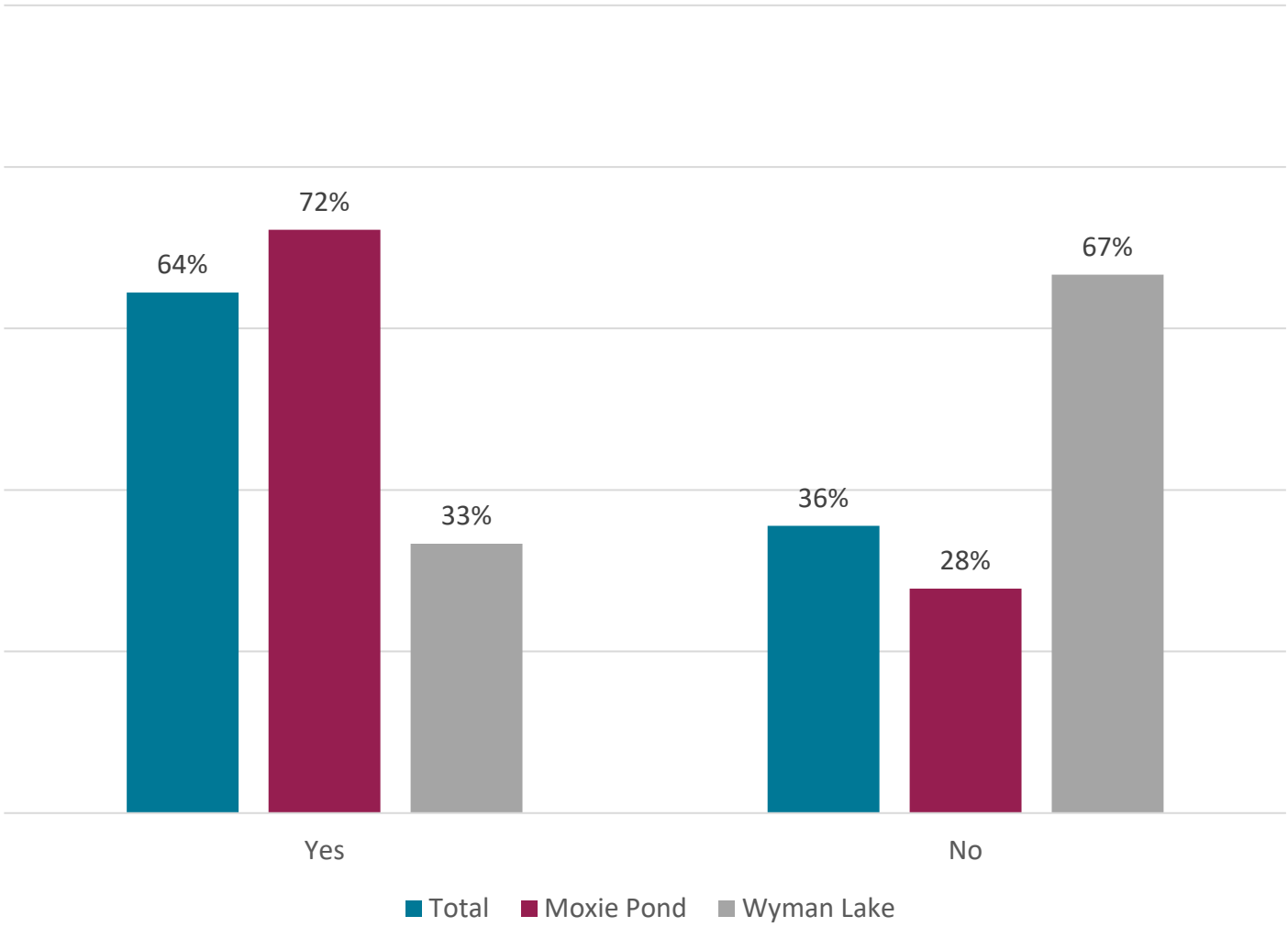
Demographics

Q39. FOR VISITORS OR PART TIME RESIDENTS: Do you live in or visit the area in: (n=36)



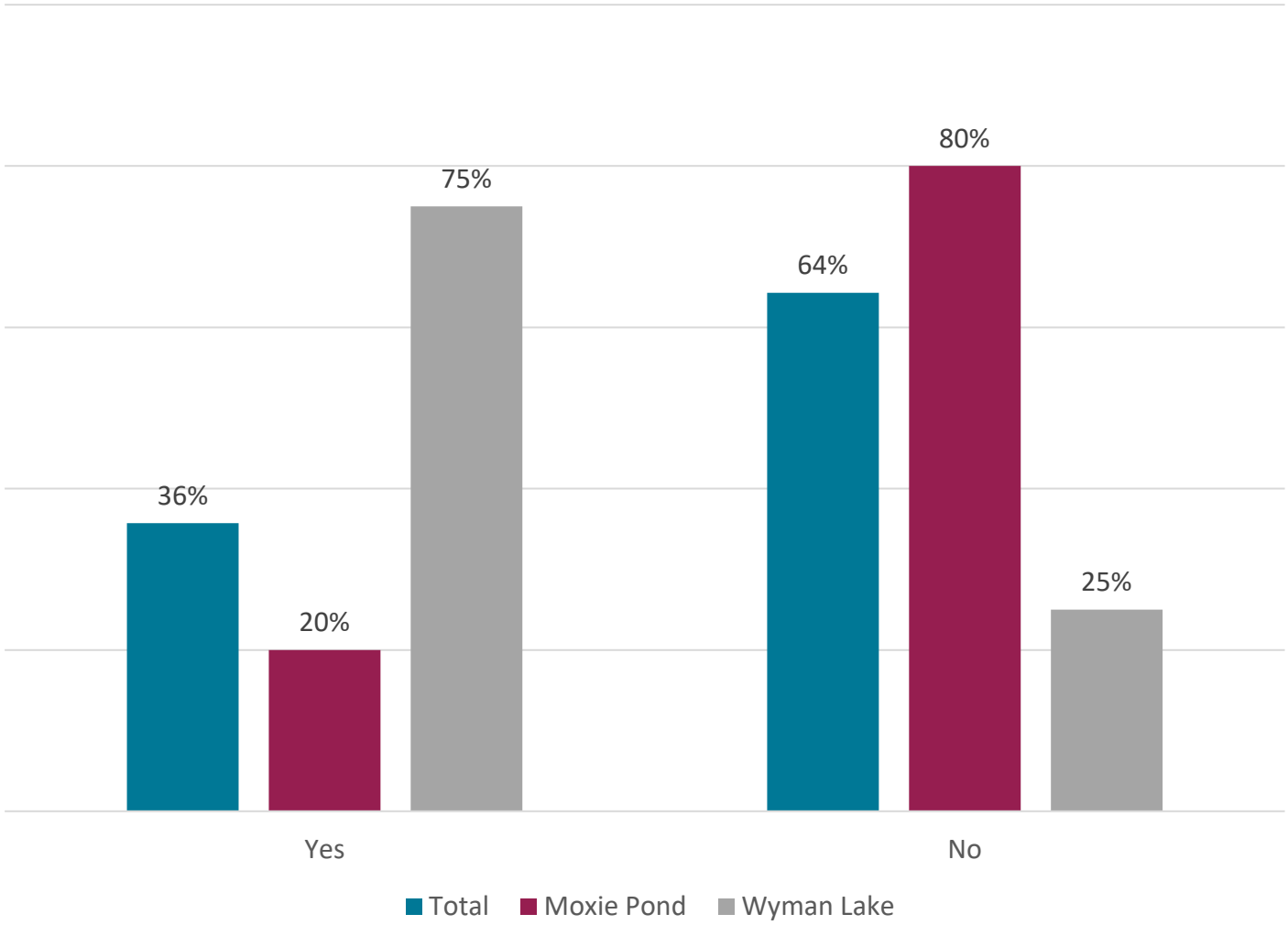
Demographics

Q40. Do you own a home or camp in this area? (n=45)



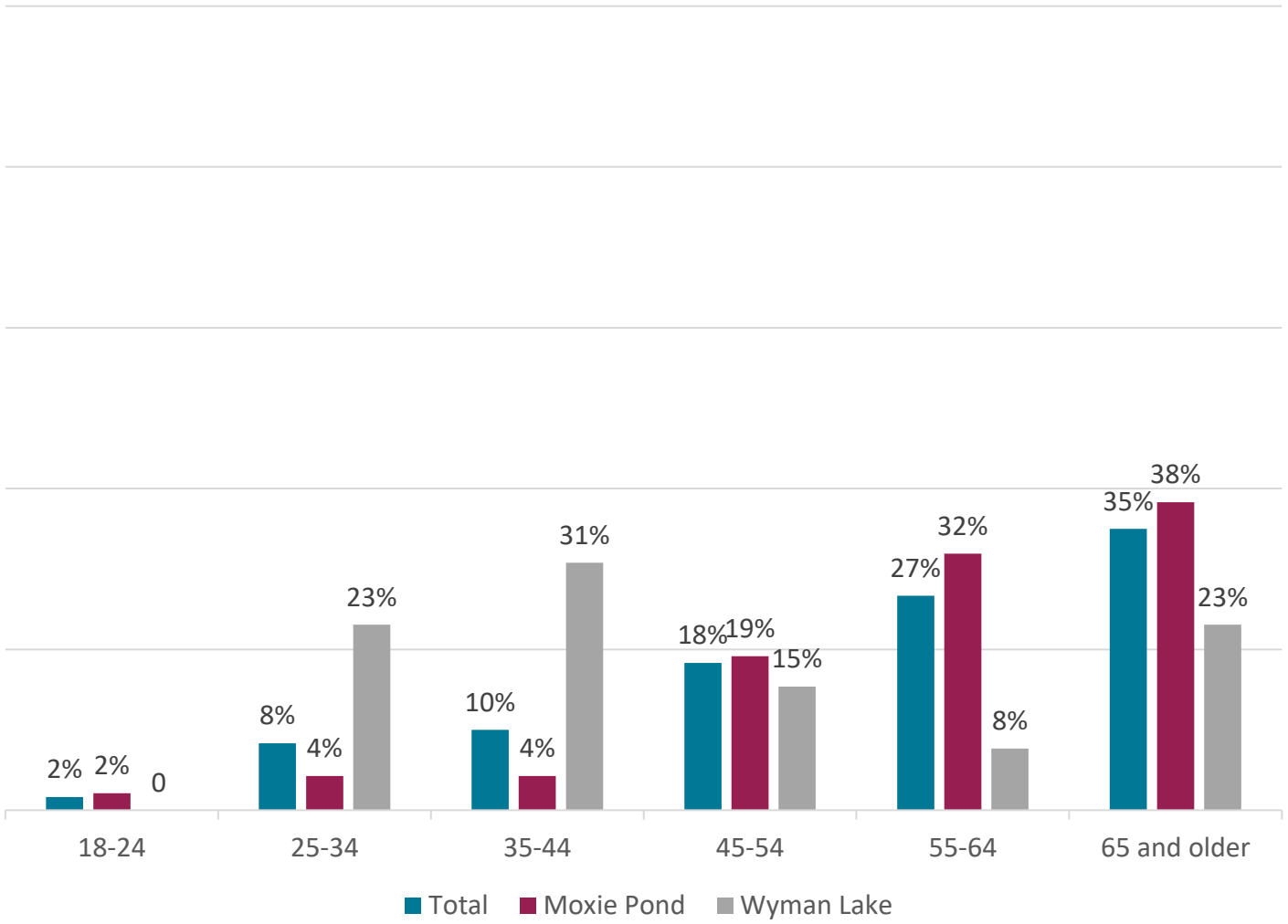
Demographics

Q41. Did the low rate of COVID 19 in Maine factor into your decision to visit this area? (n=14)



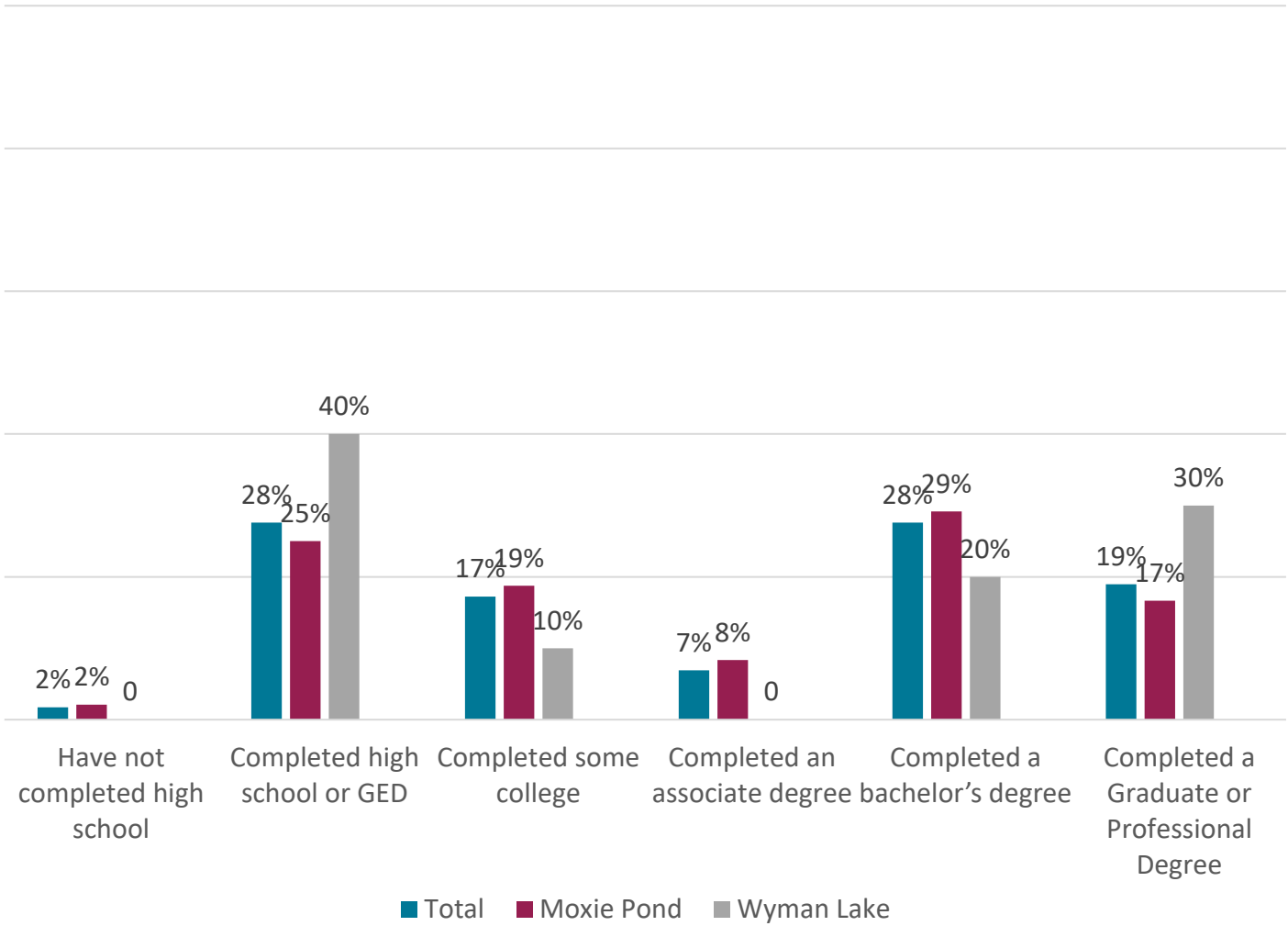
Demographics

Q42. Please stop me when I say your age group. (n=60)



Demographics

Q43. Please stop me when I say the highest level of education you completed. (n=58)



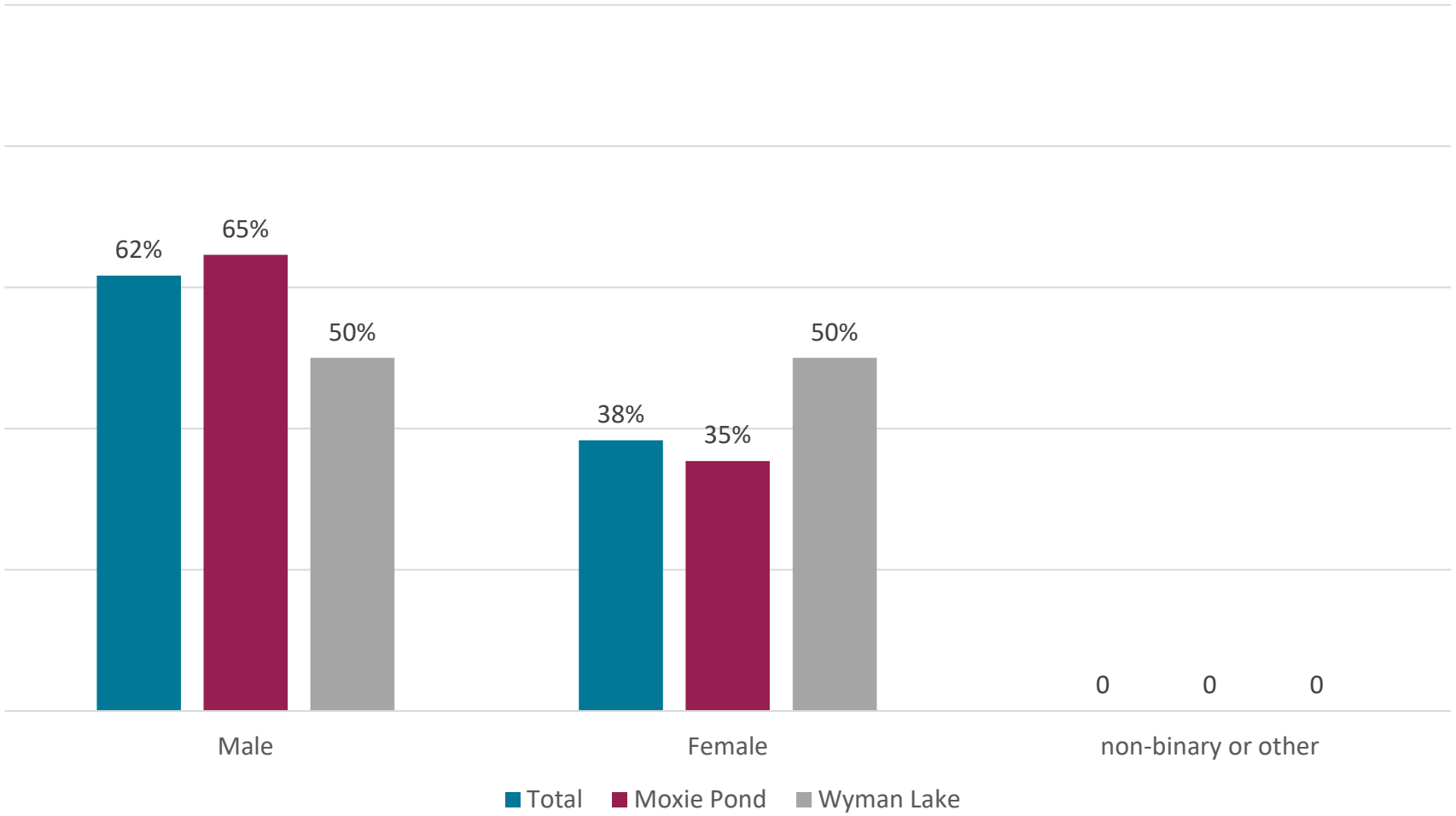
Demographics

Q44. What is your zip code? (n=69)

Zip Code	Moxie Pond	Wyman Lake	Total
01876	2%		1%
03229	2%		1%
03447	2%		1%
04027	6%		4%
04032	2%		1%
04070		5%	1%
04092	2%		1%
04102	2%		1%
04105	2%		1%
04106	2%		1%
04210	2%		1%
04222	2%		1%
04236	2%		1%
04254		10%	3%
04256	4%		3%
04260	4%		3%
04330	6%	5%	6%
04345	2%		1%
04401	2%		1%
04444	2%		1%
04463	2%		1%
04530	4%		3%
04562	2%		1%
04861	2%		1%
04920	2%	5%	3%
04925	2%		1%
04938	2%		1%
04976	2%		1%
04979		5%	1%
04985	10%		7%
06480	2%		1%
08065		5%	1%
08749	2%		1%
08817		10%	3%
14838	2%		1%
19103	4%		3%
19342	2%		1%
32114	2%		1%
33525	2%		1%
99999	6%	55%	20%

Demographics

Gender. (n=60)



Thank you!

Please contact us with any questions you may have.

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