

Weaver Wind Project

MDEP Site Location of Development/NRPA Combined Application

SECTION 10: BUFFERS

30.0 VISUAL IMPACT OF A GENERATING FACILITY

30.1 VISUAL IMPACT ASSESSMENT

Terrence J. DeWan & Associates (TJD&A) conducted a Visual Impact Assessment (VIA) to evaluate the effects of the project on scenic resources of state or national significance (SRSNS) (Exhibit 30-1). The VIA applied the criteria in the Maine Wind Energy Act (WEA) and 06-096 CMR 382(I) 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.

There are three SRSNS with the viewshed of the project. Within the 8-mile study area the project will be visible from portions of Upper Lead Mountain Pond and Lower/Middle Lead Mountain Ponds. The upper portion of the blades of one turbine may be visible from a small portion of Narraguagus Lake. All of these waterbodies are designated as 'Significant' for their scenic quality in the Maine Wildlands Lake Assessment. The Project will not be visible within eight miles from any National Natural Landmarks, federally designated wilderness areas, properties on the National Register of Historic Places, National Parks, State Parks, scenic river segments, MDOT scenic turnouts, scenic viewpoints located within the coastal area, or on state public reserve land, or trails used exclusively for pedestrian use designated by Maine Department of Conservation (MDOC). Throughout the majority of the study area, views of the project are blocked by topography and roadside vegetation.

The associated facilities for the project include access roads, crane paths, meteorological towers, and electrical collector lines. None of these associated facilities will be visible from any 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. Based on the VIA analysis and the user intercept surveys, the Applicant has demonstrated that the project will not have an unreasonable adverse effect on scenic character or existing uses related to the scenic character of the eight SRSNS within the project area.

The overall scenic impact on these SRSNSs is anticipated to be none to slight for Narraguagus Lake, low for Upper Lead Mountain Pond, and low to medium for Lower and Middle Lead Mountain Pond. The project should not have an unreasonable adverse impact on scenic values and existing uses of these SRSNSs.

30.2 RADAR-ASSISTED MITIGATION TECHNOLOGY

The FAA requires nighttime lighting on a certain number of turbines and met towers exceeding 200 feet in height to warn aircraft of the presence of the structures. If approved by the FAA, the project proposes to use a radar-assisted lighting system to minimize the effects of nighttime safety lighting of turbines. Such systems allow turbine obstruction lights to remain off at all times unless an aircraft is operating in the vicinity of the site, nearly eliminating the periods when nighttime lighting is visible.

Weaver Wind Project

MDEP Site Location of Development/NRPA Combined Application

SECTION 30: VISUAL IMPACT OF A GENERATING FACILITY

Exhibit 30-1

Visual Impact Assessment

Visual Impact Assessment

WEAVER WIND PROJECT

Hancock County, Maine



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1.0 EXECUTIVE SUMMARY

1.1 Overview

Weaver Wind LLC (Applicant) is proposing the Weaver Wind Project (Project), a 22-turbine wind power Project that will generate up to 72.6 megawatts of energy. The Project will include 14 turbines in the Town of Osborn and eight turbines on Little Bull Hill in the Town of Eastbrook. The specified turbine is the Vestas V126-3.45 MW; which has a 117 meter hub height and a maximum height of 591 feet.

As described in greater detail below, other Project features in both communities will include: upgrades to existing roads and construction of new roads; up to five permanent and up to eight temporary meteorological (met) towers with a maximum height of 400 feet; above and below ground 34.5 kilovolt (kV) electrical collector lines among the turbines (the majority of which will be buried alongside Project roads) and connecting to a new substation adjacent to the existing Bull Hill/Hancock substation in T16 MD, Maine.

The Towns of Osborn and Eastbrook are designated as expedited for permitting under the Maine Wind Energy Act (WEA). Osborn is under the jurisdiction of the Land Use Planning Commission (LUPC). In the organized town of Eastbrook, the Land Use Ordinance allows Type 3 Wind Energy Facilities¹ within the Forest Resource Protection District (FP) and Rural Residential (RR) zoning districts. The 8 turbines in Eastbrook will all be located within the FP zoning district.

The Project area is low elevation commercial forestland, with a road system that the Project will utilize to the extent practicable. Ridge elevations are between 500 and 700 feet above sea level. Land uses within the study area include forestry, recreation, small-scaled agriculture, and rural residential.

The Applicant has leased or otherwise obtained the rights necessary for the siting of the Project, and acquired other property interests as necessary to meet sound and setback standards.

The initial Visual Impact Assessment for this Project was completed in December 18, 2014. A supplemental report for the Alternate Turbine Layout was submitted in March 15, 2015. This Visual Impact Assessment has been updated to reflect the current Project layout, which eliminates one of the previously proposed turbines, and incorporates the newly adopted Chapter 382: Wind Energy Act Standards under the Site Location of Development Act, dated April 2, 2018.

¹ Wind Energy Facility, Type 3 - means a Wind Energy Facility having a generating capacity of 100kW or greater and which requires a state permit issued by the Department of Environmental Protection under the Site Location of Development Act, 38 M.R.S. §481, et seq. Eastbrook Land Use Ordinance. Adopted in January 19, 2011 and amended in November, 2014.

1.2 Project Visibility

The reduction from 23 to 22 wind turbines will not change the Project visibility from scenic resources of state or national significance (SRSNS). Portions of the Project may be visible from three SRSNSs as defined by the WEA and located within an eight-mile radius, including:

- Upper Lead Mountain Pond in T28 MD
- Lower and Middle Lead Mountain Ponds in T28 MD²
- Narraguagus Lake in T16 MD

Several other SRSNS are present within the eight-mile study area. However, the undulating nature of the intervening topography and the vegetation along the various shorelines will preclude views of the Project from these locations. These additional, non-affected resources include:

- Alligator Lake in T34 MD
- Myrick Pond in T10 SD
- West Branch Union River from Graham Lake to Great Pond headwaters
- Eastbrook Baptist Church and Town House in Eastbrook
- Brick School House in Aurora.

Route 182, connecting the towns of Franklin and Cherryfield, has been designated as the Blackwoods Scenic Byway by the Maine Department of Transportation (MaineDOT). Approximately 4.0 miles of the Byway are located in the southern part of the study area. However, there are no scenic turnouts within this length of the road that have been constructed by MaineDOT and therefore no portion of the Byway within the study area is considered a SRSNS.

Scenic viewpoints from the summit of Tunk Mountain, which are within the Donnell Pond Public Reserve Land and on adjacent land owned by The Nature Conservancy, are beyond 8 miles of the Project.

1.3 Overview of Conclusions

There are three SRSNSs within the viewshed of the Project. Within the 8-mile study area the Project will be visible from portions of Upper Lead Mountain Pond and Lower/Middle Lead Mountain Ponds. The upper portion of the blades of one turbine may be visible from a small portion of Narraguagus Lake. All of these waterbodies are designated as 'Significant' for their scenic quality in the Maine Wildlands Lake Assessment.

The Project will not be visible within eight miles from any National Natural Landmarks, federally designated wilderness areas, properties on the National Register of Historic Places, National Parks, State Parks, scenic river segments, MaineDOT scenic turnouts, scenic

² For purposes of this VIA, Lower and Middle Lead Mountain Ponds are considered as one waterbody. They are also listed as one resource in the *Maine Wildlands Lake Assessment*.

viewpoints located within the coastal area, or on state public reserve land, or trails used exclusively for pedestrian use designated by Maine Department of Conservation (DOC). Throughout the majority of the study area, views of the Project are blocked by topography and roadside vegetation.

The VIA applied the criteria in the WEA and Chapter 382 to examine each SRSNS in terms of their significance; the existing character of the surrounding area; purpose and context of the proposed activity; extent, nature, and duration of public use; viewer expectations; public use and enjoyment; scope and scale of potential effect; and cumulative scenic impact or effect. This information was used to make a determination of whether the Project would significantly compromise views from these resources such that it would have an unreasonable adverse effect on its scenic character or the existing uses related to its scenic character.

- **Narraguagus Lake:** The visual impact on Narraguagus Lake would be almost non-detectable and limited to a view of a portion of the blades of one turbine at a distance of 6.3 miles. To the extent the blades were visible, their presence would be seen in context with the existing Bull Hill turbines visible within 2.5 miles. The Maine Wildlands Lake Assessment gave Narraguagus Lake a rating of ‘significant’ for its scenic resources.
- **Upper Lead Mountain Pond:** The visual impact on Upper Lead Mountain Pond would be limited to a portion of the east side of the Pond. From these areas a person boating on the Pond would see the nacelle and blades of one turbine and the blades of up to five turbines at or just above the tree line at distances of 4.6 to 6.1 miles. At this distance, the blades and nacelle of these turbines would be seen just above the tree line on a relatively flat hillside. The turbines would be barely discernable and would not interfere with or be seen in conjunction with the easterly view toward Lead Mountain, which is the focal point of the Pond. The Maine Wildlands Lake Assessment gave Upper Lead Mountain Ponds a rating of ‘significant’ for its scenic resources.
- **Lower and Middle Lead Mountain Ponds:** The visual impact of the Project would be felt on the eastern halves of both Lower and Middle Lead Mountain Ponds. From Lower Lead Mountain Pond observers would see the nacelles and blades of up to four turbines and the blades of up to three turbines at or above the tree line at distances of 2.0 to 6.0 miles. The turbines would be seen over a horizontal arc of approximately 5% of the 360° panoramic view on the Pond. From Middle Lead Mountain Pond observers would see blades of up to four turbines and no nacelles at or above the tree line at distances of 2.9 to 6.0 miles. On both Ponds, the turbines would be seen just above a relatively flat hillside, and would not interfere with or be seen in conjunction with the easterly view toward Lead Mountain, which is the focal point on the Pond. The Maine Wildlands Lake Assessment gave Lower and Middle Lead Mountain Ponds a rating of ‘significant’ for its scenic resources.

The overall scenic impact on these SRSNSs is anticipated to be none to slight for Narraguagus Lake, low for Upper Lead Mountain Pond, and low-medium for Lower and Middle Lead Mountain Ponds. Considering the evaluation factors in Chapter 382, the Weaver Wind Project

should not significantly compromise views from any of these SRSNSs. The Project will not have an unreasonable adverse effect on their scenic character or existing uses related to the scenic character of these SRSNSs.

The associated facilities for the Project include the access roads, the crane roads, the meteorological towers, and a collector transmission line. None of these associated facilities will be visible from any 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.

2.0 INTRODUCTION

2.1 Background

Terrence J. DeWan and Associates (TJD&A), landscape architects in Yarmouth, Maine, prepared this visual impact assessment (VIA) for the Weaver Wind Project. The methodology for assessing the visual impacts of wind projects involves the judgment of experienced landscape architects in the selection of factors chosen to evaluate scenic quality and thereby 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 study area is centered on the Towns of Eastbrook and Osborn and includes the abutting towns and unorganized townships within an eight-mile radius of the Project (see Figure 1: Expedited Windpower Permitting Areas in the Vicinity of the Weaver Wind Project). The limits of the eight-mile study are based upon the WEA, which instructs the primary siting authority (in this case the 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 topographic mapping and design plans for the proposed Weaver Wind Project provided by Longroad, with input from other professional members of the design team. TJD&A created the following maps with WindPRO software to help determine the limits of potential Project visibility. See Appendix A:

- Map 2: Topographic Viewshed for Blades (i.e., where any portion of the turbine would be visible)
- Map 3: Vegetated Viewshed A for Blades
- Map 4: Vegetated Viewshed A for Nacelles (i.e., where the nacelle would be visible)
- Map 5: Vegetated Viewshed B for Blades
- Map 6: Vegetated Viewshed B for Nacelles
- Map 7: Enlargement of Lower, Middle, and Upper Lead Mountain Ponds
- Map 8: Enlargements of Alligator Lake
- Map 9: Enlargements of Narraguagus Lake
- Map 10: 8-Mile Study Areas for Weaver, Hancock and Bull Hill Wind Projects

- Map 11: Combined Visibility of Weaver and Hancock Wind Projects
- Map 12: Combined Visibility of Weaver and Hancock Wind Projects for Lower, Middle, and Upper Lead Mountain Ponds (Enlargements)

Market Decisions, a market research and survey firm in Portland, Maine, conducted an intercept survey of recreational users to better understand the views of users regarding the potential impacts of the proposed Project on their use and enjoyment of SRSNS. Market Decisions is well versed in conducting professionally sound, unbiased user intercept surveys to determine potential effects of wind energy development on the continuing use and enjoyment of scenic and recreational resources. The results of the survey are incorporated into the findings of the VIA. The survey instrument and the Market Decisions report are attached as Appendix D.

In addition to field investigations, TJD&A used the three-dimensional resources of Google Earth Pro and WindPRO to look at the study area from the air, the waterbodies, and on the ground. These digital tools give reviewers the capability to experience the overall physical characteristics of the landscape and thereby better understand the setting of the Project relative to the surrounding topographic features.

2.2 Field Investigations

TJD&A personnel collected field data by a variety of means during site visits on August 27, September 15, and 16, 2014. Fieldwork concentrated on evaluating and photographing SRSNSs and other components of the visible landscape within eight miles of the Project (see listing of scenic resources in Section 1.1 above). TJD&A personnel visited the study area by automobile, boat, and on foot. Fieldwork was limited to lands and waterbodies that are open to the public; no attempt was made to investigate potential impacts on private properties.

Photographs of the Project area were taken with Nikon digital cameras (a D300 and a D7100), recording at the highest resolution (fine). The cameras were equipped with a Nikon 35mm lens (equivalent to a 50mm 'normal' lens in a film camera).

GPS coordinates of the photographs were recorded with a camera-mounted GPS unit. An annotated selection of representative views within the study area is included in Appendix B: Study Area Photographs. Photographs were also used in the preparation of the photosimulations that are provided in Appendix C.

2.3 Viewshed Mapping and Photosimulations

A series of photosimulations (computer-altered photographs) have been prepared to illustrate the anticipated change to the views from SRSNSs resulting from the construction of the Weaver Wind Project. (See Appendix C: Photosimulations.) The following section describes the methodology used to develop these images:

- TJD&A prepared the initial viewshed analysis maps in 2014 using WindPRO³ software to determine maximum potential turbine visibility. Updated viewshed analysis maps based upon the current layout have been provided for the eight-mile study area using Arc GIS (Viewshed [Map 2: Topographic Viewshed for Blades](#)). Topographic information was obtained from the National Elevation Dataset (NED), which is the primary elevation data product of the United States Geologic Survey (USGS)⁴. This map was designed to answer the question “Where might someone see at least the turbine blade tips if there were no trees, buildings, or other obstacles to block the view?” Using this map, one can determine the maximum potential Project visibility. However, it grossly over represents actual Project visibility because it does not take into account tree cover or other obstacles that will limit or block Project visibility.
- To gain a more realistic understanding of Project visibility, two additional viewshed maps were prepared, using vegetative cover data from the Maine Office of GIS Data Catalog,⁵ to show the effect of tree cover on Project visibility. Consistent with Chapter 382.G(1), a forest cover height of 40 feet was assigned to existing forest vegetation found in the study area.⁶ These composite maps are based on the assumption that observers would not be able to see turbines a) where their view is blocked by topography, b) while in woodlands within the study area, and c) on waterbodies where the view is blocked by trees on forested ridgelines and along the shoreline. Viewshed [Map 3: Vegetated Viewshed A for Blades](#) shows where a viewer would see at least the blade tip within the study area. This map may also overstate Project visibility, since many of the trees between the observer and the turbines will be greater than 40 feet in height and thus will block views of the turbine blades. Viewshed [Map 4: Vegetated Viewshed Map A for Nacelles](#) shows where the viewer would see the nacelle and excludes visibility where only the blades are visible. These were the primary maps used in the visibility analysis and the basis for the photosimulations.
- To add further clarity to potential Project visibility throughout the study area, two additional viewshed maps were prepared using eight different vegetative cover types and conservative height estimates: 40’ for deciduous, evergreen, mixed forest types as well as light and heavy partial cut areas; 20’ for forested wetlands and regeneration forest; and 10’ for scrub/shrub areas. See Viewshed [Map 5: Vegetated Viewshed B for Blades](#), and [Map 6: Vegetated Viewshed B for Nacelles](#). These maps recognize that harvest cuts are a temporary phenomenon and that forested wetlands and scrub/shrub

⁴ The topographic data set (DEM 1/3 arc-second files) used for the updated viewshed maps is the same data set used in 2014, which is the highest resolution seamless DEM dataset available for the project area.

⁵ The vegetated cover data used for the updated Viewshed Analysis is based on Maine Landcover Data dated 2004, which is the most current landcover data set available for the Project and affected scenic resources.

⁶ The land cover data for Viewshed Maps 3 and 4 assumes that the typical tree height is 40’ for deciduous, evergreen, and mixed forest types as determined by the Maine Office of GIS. To be conservative, wetlands, regenerating forests, and harvested areas were assigned a tree height value of 0’ (i.e., no vegetation cover). These values are assigned as standards of practice. Field investigations have shown that the actual tree heights are greater than 40 feet in many locations, especially at the edges of lakes and ponds. Likewise, wooded wetlands, regenerating forests, and areas that have been harvested more than a decade ago often are covered with vegetation of significant height.

areas typically have substantial amounts of vegetation that limit visibility. While there is a noticeable difference between these maps and the two maps that assigned a height of 0 to partially cut areas, forested wetlands, regeneration forests, and scrub/shrub areas, there was virtually no difference in the effect on SRSNSs (i.e., the three lakes described above).

- Composite study area maps (Map 10: 8-Mile Study Areas for Weaver, Hancock, and Bull Hill Wind Projects; Map 11: Combined Visibility of Weaver and Hancock Wind Projects; and Map 12: Combined Visibility of Weaver and Hancock Wind Projects for Lower, Middle, and Upper Lead Mountain Ponds) were also prepared to study the potential for cumulative visual impact from the three wind energy projects in this area: Weaver Wind Project (proposed), Bull Hill Wind Project (constructed and operational), and the Hancock Wind Project (constructed and operational). The map was created using the topographic and vegetative base data up to blade tips, using the information provided in Map 5, which assigned heights to partially cut areas, forested wetlands, regeneration forests, and scrub/shrub areas.
- Maps 7, 8 and 9 provide enlargements of Viewshed A & B for Lower/Middle and Upper Lead Mountain Ponds, Alligator Lake, and Narraguagus Lakes, respectively. WindPro modeling analysis for Alligator Lake and Narraguagus Lake support the conclusion of no turbine visibility from Alligator Lake and the potential for slight visibility of blades for one turbine from Narraguagus Lake.
- Fieldwork by TJD&A verified the relative accuracy of the viewshed maps and determined the location of worst-case viewpoints to illustrate potential visual impacts to SRSNSs within the eight-mile study area.
- Field studies begin with an evaluation of the viewshed maps, which indicate where the maximum number of turbines may be visible. While on the waterbodies, TJD&A staff recorded images from several locations, knowing that visibility would be influenced by topography, distance, and intervening vegetation. The photographic inventory also included locations where the existing Bull Hill turbines were visible. The photographs used for the photosimulations were selected after evaluating relative Project visibility in Google Earth, the viewshed maps, and the photographs of the Bull Hill Wind Project to select a location showing maximum Project visibility.
- The photosimulations were prepared by TJD&A using WindPro's Visual-Photo Montage module. A digital elevation model (DEM) of the Project area was created in WindPRO, using data from National Map, an online data source from USGS (nationalmap.gov). The specifications of the wind turbines (location, manufacturer, model number, base height, rotor diameter, color) were entered into WindPRO, which created three-dimensional images of the turbines and placed them in the proper location on the model. Digital photographs of the selected view were imported into the computer and merged with the DEM, matching the lens focal length, date and time of photograph, digital resolution, and lighting. The DEM was matched with the photograph using the known elevation,

latitude, and longitude data from the PhotoGPS log. Existing camps and distinct shoreline elements were used to register photographs to actual ground conditions. Where visible, the existing Bull Hill turbines were also used as reference points.

- Post-production editing involved eliminating parts of towers on the computer model that are blocked by terrain or trees. The images were fine tuned in Photoshop to account for time of day, weather conditions, haze, and other environmental factors to maximize visibility of the turbine components. The existing Bull Hill turbines served as a control group (showing actual Project visibility) to assure that the photosimulations accurately replicated future conditions.
- The Project model was also inserted into Google Earth to verify the registration of the photographs with the computer model, to determine the extent that existing vegetation blocks views of the turbines, and to verify the accuracy of the viewshed maps and photosimulations.
- Google Earth was also used to determine the relative visibility of access roads, crane pads, and transmission lines (i.e., where tree removal would be seen from a particular viewpoint). Data on associated facilities was provided in geo-referenced shapefiles that were imported into Google Earth Pro, where the lines from the shapefile attach to the ground plane. The lines were then extruded to 40' to represent the proposed tree line on either side of the clearing. The resultant vegetation cut patterns were then evaluated from key viewpoints to determine if any of the openings would be visible. This exercise determined that no associated facilities would be visible from SRSNSs within the 8-mile study area.
- The photosimulations (single images) were also merged with adjacent photographs of existing conditions in Photoshop to create panoramas that give a more contextual view of the landscape. The resultant photosimulations are presented in Appendix C.

The legend in the panoramic views provides the following information:

- **Turbine Model:** Vestas V126 3.3.
- **Hub Height:** 117 meters (384 feet).
- **Rotor Diameter:** 126 meters (413 feet).
- **View Coordinates:** Latitude and Longitude of the photograph and computer model.
- **Viewer Elevation:** Approximate distance above mean sea level, in meters and feet.
- **Direction of View:** The compass direction from the viewpoint (indicated by the red arrows on the USGS Viewpoint Location map) to the center of the turbine array.
- **Degree of View of Turbines within 8 miles:** The angle of degrees of Project visibility from the viewpoint to only the turbines within 8 miles of the viewpoint.
- **Focal Length:** Digital equivalent to a 50mm normal lens, fixed setting for all photographs.
- **Closest/Furthest Turbine:** The horizontal distance in miles between the viewpoint and the closest and farthest turbines.

- **Turbines Visible within 8 Miles:** The number of turbines that would likely be visible within the 8-mile study area from the specific viewpoint, considering the effects of topography and vegetation.
- **Date/Time:** When the photograph was taken.

The normal view also provides the distance (in inches) that the viewer should hold the photosimulation from the eye to accurately replicate real-world conditions.

3.0 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. 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 the Expedited Permitting Areas.

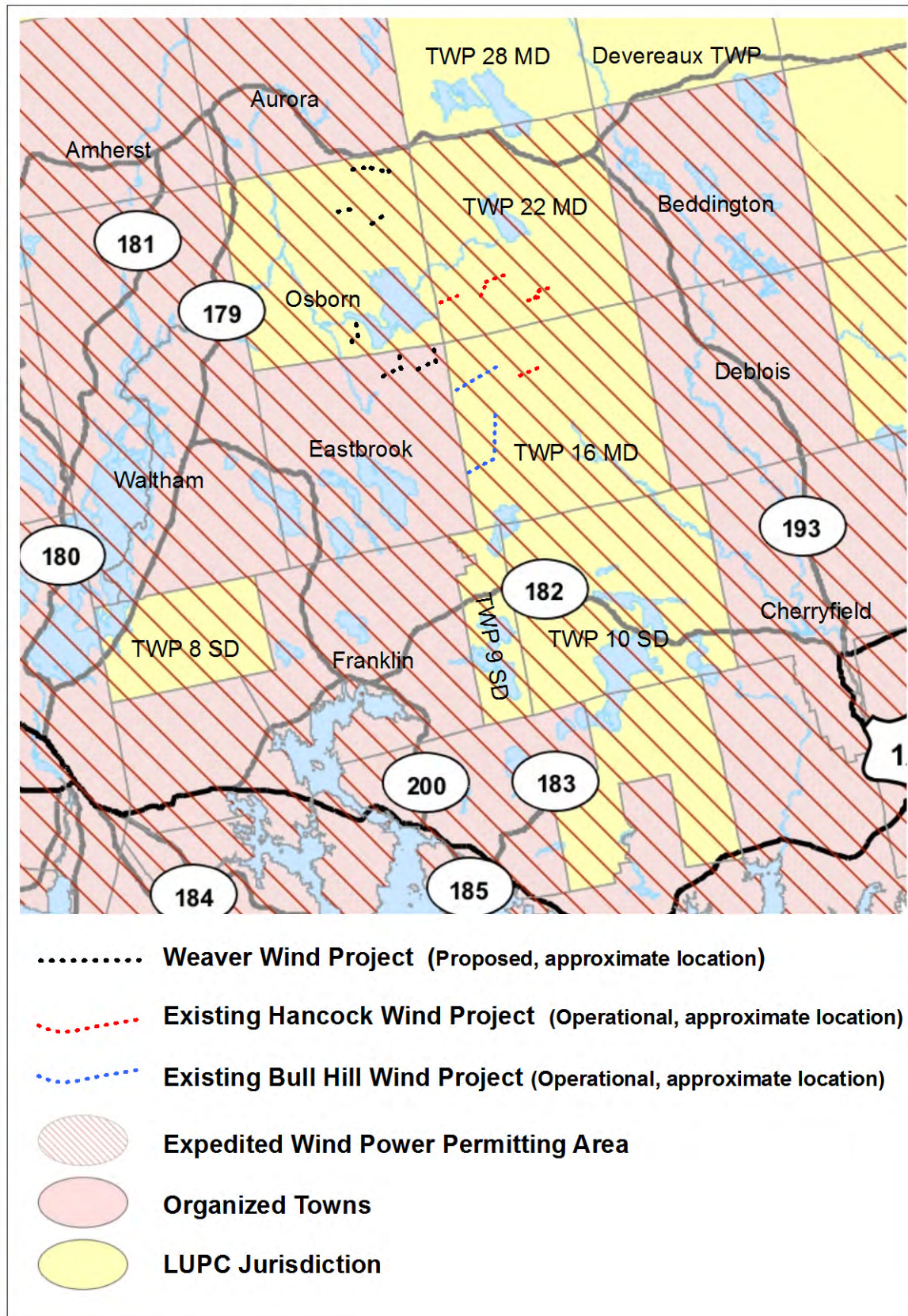
3.1 Modified Visual Impact Standard

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 Towns of Osborn and Eastbrook are designated as Expedited Windpower Permitting Areas, making windpower an allowed use in those communities. See Figure 1: Expedited Windpower Permitting Areas in Vicinity of Weaver Wind Project.

Modifications to the permitting process include, but are not limited to:

- A. Making wind energy development an allowed use within certain parts of the State's unorganized and deorganized areas;
- B. Refining certain permitting procedures of the Department of Environmental Protection and what was formerly known as the Maine Land Use Regulation Commission; and
- C. Modifying the scenic standard to reflect the nature of turbine visibility and the desire to facilitate wind energy development in areas determined by the Legislature to be most compatible with existing patterns of development and resource values when considered from a landscape level.

Figure 1: Expedited Windpower Permitting Area in the Vicinity of Proposed Weaver Wind Project



3.2 Scenic Resources

"Scenic resources of state or national significance" as defined under State law means: 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 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";
- 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 Conservation 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 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.

A listing of the SRSNSs within the study area is provided in Section 1.1 and described more thoroughly in Section 6.

3.3 Regulatory Standard

The Department enacted new rules (Chapter 382) in April 2018 to provide guidance and clarification on the review process and standards for wind energy projects under the Wind Energy Act (WEA) and how the DEP shall determine 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 scenic values. These rules provide further guidance by clarifying and explaining the current review and decision making process and evaluation criteria for wind energy projects under the WEA that have evolved since the implementation of the WEA in 2008. This Visual Impact Assessment addresses the criteria contained in Chapter 382.

Impacts to scenic character from a wind energy development's associated facilities are generally evaluated in the manner set forth in the WEA, 35-A M.R.S. §3452 (1) & (3). However, if the Department determines that application of the WEA evaluation criteria to the development may result in unreasonable adverse effects due to the scope, scale, location or other characteristics of the associated facilities, scenic impacts of the development's associated facilities will be evaluated solely under the standards of the Site Location of Development Act, 38 M.R.S. §484(3) or other applicable standards in the manner provided for evaluation of scenic impacts from development other than wind energy development. Based on the information in Section 7, the associated facilities for the Weaver Wind Project are reviewed under the modified scenic impact standard applicable to wind generating facilities in the WEA.

4.0 PROJECT DESCRIPTION

The following section describes the visible components of the generating components of the Weaver Wind Project (i.e., its generating facilities and associated facilities).⁷ The Weaver Wind Project will consist of wind turbines, lighting, access roads, electrical collection lines, meteorological towers, crane paths, and assembly areas. The evaluation of the visual impact of the generating facilities is found in Section 6; the evaluation of the visual impacts of the associated facilities is found in Section 7.

4.1 Wind Turbines

A total of 22 turbines, along with associated electrical interconnection infrastructure, will be installed in six groups of 3 to 6 turbines each on relatively low rounded hills. The southernmost turbines (2 groups of 4 turbines) each in Eastbrook will run in a northeast/southwest direction on Little Bull Hill west of the northern string of the ten turbines associated with the operational Bull Hill Wind Project on Bull Hill in T16 MD. The remaining 14 turbines will be located in four groups on Birch Hill, Een Ridge and an unnamed hill southwest of Spectacle Pond in Osborn. The hills range in height between 500 and 700 feet above sea level.

This assessment assumed the turbines will be the Vestas V126-3.45 turbines with a 117m hub height, a rotor diameter of 126m, and a maximum blade tip height of 180m (590 feet). By using a constant tower height, each of the nacelles will be roughly parallel to the ridgeline, creating a

⁷ 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'.

sense of order throughout the Project. The turbines are controlled electronically so they will always face into the wind when operating.

Individual turbines for the Project will be spaced between 1,170 feet and 1,850 feet apart. Turbine spacing is a function of meteorological considerations related to wind speed and direction, interference from adjacent turbines, and other considerations. The siting of individual turbines has taken into account the wind resource, site-specific topography, access road locations, proximity to wetlands, wildlife habitat, and other site conditions.

Turbine contrast and visibility is a highly variable phenomenon; the 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 where the Project will typically be seen, the turbines will appear as light gray due to the effects of atmospheric perspective, especially on hazy or overcast days.

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.

4.2 Project Lighting

If approved by the Federal Aviation Administration, the Project will use a radar-activated Aircraft Detection Lighting System (ADLS) that will essentially eliminate the impact of the required nighttime lighting. Specifically, the nighttime lighting mitigation systems utilize radar mounted on the turbines or in close proximity to the turbines to detect aircraft when they are approaching the structures at night and automatically turn on the FAA warning lights. The lights then automatically turn off once the aircraft has left the airspace in proximity to the Project. These systems permit wind turbine obstruction lights to remain off at all times unless an aircraft is operating in the vicinity of the wind energy facility, thus greatly reducing the time that nighttime lighting would be visible. Recent experience with these systems has shown that the lights are infrequently used. At a recently installed wind project in Wyoming, the lights are off over 99% of the time.⁸

The Applicant will install traditional lighting if FAA approval is not received at the time of Project construction, and retrofit the Project once FAA approval is obtained. Consistent with FAA safety requirements, the Applicant will retain the ability to keep the turbine lighting on at night if the radar-assisted system malfunctions or is being maintained or repaired. The visibility of the required FAA nighttime lighting on SRSNS is discussed in Section 6 below.

⁸ Turina, Frank. Program Manager, Policy Planning and Compliance, Natural Sounds and Night Skies Division, National Park Service. Pers. Communication. 10.16.2018.

4.3 Access Roads

The topography and land use patterns for the Weaver Wind Project site is very similar to the nature of the Hancock and Bull Hill sites. A network of existing haul roads on the property will be used to the greatest extent possible. Approximately 4.0 miles of existing access roads will be upgraded to provide construction and maintenance access to the Project areas and to connect turbine locations. Additionally, 6 miles of new roads will be constructed to further connect turbine locations and will be maintained by the Applicant.

The access roads to the turbines will be off of Route 9 (Airline Road) and the Spectacle Pond Road (73-00-0 Road). Figures 2 and 3: (from Google Earth, imagery dated 9.25.16) illustrates the pattern of existing haul roads in the area surrounding the turbines. As seen in these views, the land is currently being used for commercial timber production. The existing Line 66 transmission line is also clearly visible at the southern end of the image in Eastbrook.

Roads outside of the Project area, and therefore under the control of the landowner, will continue to be maintained by the landowner. In most locations the access roads will be screened by existing vegetation and will not be highly visible from outside the immediate area.

Figure 2: Aerial View of Project Site Looking North in Osborn



Figure 3: Aerial View of Project Site Looking North in Eastbrook

4.4 Electrical Collection System

Power from the turbines will be collected in a 14.5 mile 34.5 kilovolt (kV) collection line and flow to a new substation adjacent to the Bull Hill/Hancock substation in T16 MD, where it will tie into the existing electrical grid. Electrical infrastructure will be located within a fenced-in area at the substation expansion site to step up the power to 115 kV and transmit it directly to Emera Energy's Line 66. Line 66 is an existing 115 kV transmission line that can accept power from the Project. The majority of the collector system will be located underground, alongside Project roads, thereby minimizing its potential visual impact. No new stand-alone substations or generator lead lines will be required for the Project.

4.5 Meteorological Towers

The Project includes up to eight temporary and five permanent meteorological (met) towers, with a maximum height of 400 feet. (See Viewshed maps for possible locations of permanent met towers). The temporary met towers on the turbine pads will be removed prior to completion of construction. These towers will be lit according to FAA requirements. The towers may be freestanding or of a guyed lattice construction with a triangular cross section approximately 18 inches across. It is likely that one temporary tower (tmt_14) will be self-supporting. In restricted areas where guy lines are not possible, permanent met towers will also be self-supporting. The permanent met towers may be guyed or self-supporting.

4.6 Crane Pads and Crane Assembly Area

A cleared and level pad area averaging 2.75 acres in size will be required at the base of each turbine for staging, crane movement, and turbine installation. Eleven dead end turbine pads will average approximately 4.4 acres to accommodate turning movements. Additional clearing may be needed in some areas to account for cut/fill slopes. Following construction, the majority of crane assembly and turbine pad areas will be allowed to naturally revegetate.

4.7 Operations and Maintenance Facility

The operations and maintenance (O&M) functions required for the Weaver Wind Project will be housed in the O&M facility that was approved as part of the Hancock Wind Project on Old Route 9 (Old Airline Road) in the Town of Aurora.

5.0 PROJECT STUDY AREA

5.1 Existing Character of the Surrounding Area

The character of the study area is described by the landforms, water resources, vegetative and ownership patterns, and cultural features within eight miles of the proposed turbines. The study area includes all of Aurora, Osborn, Eastbrook, T22 MD, and portions of Great Pond, T34 MD, Amherst, T28 MD, Mariaville, Waltham, Fletcher's Landing TWP, Franklin, T9 SD, T10 SD, T16 MD, Deblois, Beddington, and Devereaux TWP (see Appendix A: Study Area). As seen on the Viewshed Maps, only a relatively small portion of the land within the study area will have views of the Project.

Landform

The study area is concentrated in one physiographic area, i.e., the Eastern Interior biophysical region, which parallels the more mountainous Eastern Coastal Region and extends in a band 20-25 miles inland. The area is characterized by generally rolling topography, with elevations averaging 200 to 400 feet. Higher hills, such as Lead Mountain and Spruce Mountain, are scattered throughout. This area contains the main stems and tributaries of the Narraguagus, Pleasant and Machias Rivers, and the East and West Branch of the Union River.⁹

The northern turbines will be built on Birch Hill, Een Ridge, and a hill southwest of Spectacle Pond in Osborn with elevations between 430 and 690 feet above sea level. The southern eight turbines will be built on Little Bull Hill in Eastbrook with elevations between 380 and 568 feet. The Project ridges are similar in elevation to many other landforms in the study area. None of the hills in the Project area have particularly distinct profiles, which make them difficult to distinguish when seen from background distances.

⁹ 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.

Water Resources

- **Lakes and Ponds.** There are approximately 24 lakes and ponds within the 8-mile radius study area. Five of these are considered SRSNS: Alligator Lake, Upper Lead Mountain Pond, Lower/Middle Lead Mountain Ponds, Narraguagus Lake, and Myrick Pond. The Project may be visible from three of these five waterbodies: Narraguagus Lake, Upper Lead Mountain Pond, and Lower/Middle Lead Mountain Ponds.
- **Rivers and Streams.** The West Branch Union River is the only SRSNS within the 8-mile study area. Virtually the entire 24-mile segment of the River that is rated for its scenic resource is within the study area. The Project will not be visible from the West Branch Union River.

The Union River drains into an area that includes the three Lead Mountain Ponds, Rocky Pond, Spectacle Pond, and Graham Lake before flowing into Union River Bay in Trenton. In addition to the Union River watershed, the West Branch of the Narraguagus River drains the eastern portion of the study area. The West Branch flows southeast through Cherryfield, where it joins with the main stem of the Narraguagus River, and then into Milbridge, where it discharges into Narraguagus Bay. The main stem of the Narraguagus River has its headwaters in an extensive series of peat bogs east of the Project (Denbow Heath).¹⁰

Vegetative and Ownership Patterns

The predominant forest cover in the study area is mixed second growth softwood/hardwoods, most of which is privately owned commercial forestland. See Figures 2 and 3 for Google Earth views of the woodlands in the vicinity of the Project.

The study area includes several tracts of publicly held land – including a small portion of the Donnell Pond Public Reserved Land, two Wildlife Management Areas (Lyle Frost WMA and Webb Pond WMA) and other lands managed by Maine Department of Inland Fisheries and Wildlife (IF&W) and the Bureau of Parks and Lands including the Amherst Mountain Community Forest and the Spring River parcel. These areas are not defined as SRSNSs. They are shown on the viewshed maps and the larger ones are described below to provide a more thorough understanding of existing conditions within the study area.

Wildlife Management Areas (WMA), as defined by the legislature, are tracts of land or bodies of water owned or leased by IF&W for the purposes of wildlife management, which is the art or science of producing wild animals and birds and of improving wildlife conditions in the State.¹¹ The state has over 50 designated WMAs, including the Lyle Frost WMA and the Webb Pond WMA. While their primary purpose is wildlife management, most of the WMA's offer a variety

¹⁰ Neither the main stem of the Union River nor the Narraguagus River are recognized in the Maine Rivers Study for their scenic resources. [Maine Rivers Study, Appendix G](#). Maine Department of Conservation. 1982.

¹¹ M.R.S.A. Title 12. §10001.73 and 10001.74 Definitions.

of resource-based recreational opportunities, such as hunting, fishing, trapping, and wildlife watching.¹²

- **Lyle Frost Wildlife Management Area** is located in the Town of Eastbrook, approximately 6.4 miles west of the Project. The 1,160-acre WMA is centered on Scammon Pond, a 658-acre impounded wetland. Activities include canoeing, fur trapping, ice fishing, hunting, fishing, and wildlife watching. The primary point of public access is a small parking area and boat launch at the northwest corner of the Pond.
- **Webb Pond Wildlife Management Area** is comprised of two small parcels on the south and southeast shoreline of Webb Pond in Eastbrook. The larger parcel is 50 acres in size and located along the western edge of George Brook, which connects Webb Pond and Georges Pond in Franklin. The smaller parcel is 13.5 acres and has approximately 3,600 of frontage on Webb Pond. The Maine Conservation Lands OGIS file describes the smaller parcel as a conservation area.¹³
- **The Spring River Block.** On September 9, 2003, The Nature Conservancy and H.C. Haynes Inc., reached an agreement to conserve nearly 10,000 acres and more than 12 miles along Spring River and the West Branch of the Narraguagus River. The property, known as the Spring River block, abuts the state's Donnell Pond Unit and IF&W land along the Spring River, and creates 24,000 acres of conservation land in Hancock County¹⁴. The primary purpose of this land acquisition was protection of wildlife habitat, with a focus on Atlantic salmon (*Salmo salar*). The Nature Conservancy intends to keep the land open for recreational uses while shifting ATV trails away from sensitive wetland habitats and riverbanks. The highest point in the block is Tunk Mountain, which is outside the 8-mile study area.
- **Amherst Mountains Community Forest (AMCF).** In 2009, BPL purchased the 4,974-acre parcel with funding from the Forest Legacy Program and the Land for Maine's Future Program. BPL's management plan for the land, adopted in December 2010, noted that AMCF is part of a 'regional vision aimed at sustaining managed forests, wildlife habitat, and recreational opportunities across tens of thousands of acres of forestlands east of the Penobscot River¹⁵. While BPL owns the property, the state and the Town of Amherst manage it jointly, with assistance from the Forest Society of Maine. The eastern portion of the AMCF within 8 miles of the Project is wooded and designated primarily for wildlife and timber management with some recreation areas near Partridge and Ducktail Pond. The summit of Bald Bluff Mountain, a scenic viewpoint within AMCF, is beyond the 8-mile study area.

¹² Maine Department of Inland Fisheries and Wildlife. Recreational Opportunities Provided by Lands Managed by the Maine Department of Inland Fisheries and Wildlife.

www.maine.gov/ifw/wildlife/management/wma/recreation.htm#regionc

¹³ www.frenchmanbay.org/old/library/04_Winter.pdf

¹⁴ www.maine.gov/doc/publications/traditional_use/TFMeetings/Meeting2/Majorlandsales-revisedversion.pdf.

¹⁵ www1.maine.gov/dacf/.../AMCF_FinalPlan_download.pdf.pdf

Cultural Character

Cultural resources within eight miles of the Project include a few population centers, recreation facilities for hiking, snowmobiling, and water-oriented pursuits, and the Blackwoods Scenic Byway. The Project will not be visible from most of these locations. Photographs of these cultural resources are provided in Appendix B.

- **Population centers:** Eastbrook (population 370) is the major population center in the study area. The community is composed of several residential neighborhoods, with the majority of homes concentrated on the shores of Molasses Pond. One of the structures in the study area on the National Register of Historic Places, the Eastbrook Baptist Church and Town House, is located at the junction of Route 200 and the Molasses Pond Road, 5 miles west of the Project.
- **Lakeside cottages** are found in dense clusters on the shoreline on Molasses Pond, Webb Pond, Spectacle Pond, Abrams Pond, and Upper Lead Mountain Pond. Smaller clusters of cottages in concentrated areas are found on Lower and Middle Lead Mountain Ponds. Many of the smaller ponds are either undeveloped or have very few cottages. These include Alligator Lake, Upper Middle Branch Pond, Narraguagus Lake, and Myrick Pond.
- **Residential development.** Very low density rural residential development, primarily single family homes and farmsteads, is found throughout the study area.
- **Recreational areas and facilities** include a public beach on Molasses Pond and public boat launches on most of the larger waterbodies, including Molasses Pond, Scammon Pond, Webb Pond, Spectacle Pond, Rocky Pond, Beddington Lake, Graham Lake, Lower Lead Mountain Pond, Upper Lead Mountain Pond and Alligator Lake. The Lyle Frost Wildlife Management Area on Scammon Pond in Eastbrook offers fishing, canoeing, hunting, hiking, and wildlife observation.
- **Blackwoods Scenic Byway:** Route 182, connecting the towns of Franklin and Cherryfield, has been designated as a Scenic Byway by MaineDOT. This winding road provides visitors with views of forests, ponds, mountains, and blueberry barrens and also provides access to the Donnell Pond Public Reserved Land. Approximately 4.0 miles of the Byway are located in the southern part of the study area. There are no designated scenic turnouts within 8 miles of the Project.
- **Designated snowmobile trails:** According to the Maine Snowmobile Trails map, the only portion of the Interconnected Trail System (ITS) in or near the study area is ITS 81, which parallels the Narraguagus River between Beddington and Cherryfield.¹⁶
- **Wind energy development:** The Project is proximate to and west/ northwest of the existing Bull Hill wind project in T16 MD that consists of 19 turbines and associated facilities that went on line in November 2012, and the existing Hancock Wind Project in T16 MD and

¹⁶ Maine Snowmobile Trails, 2014 Map of the Interconnected Trail System. Maine Snowmobile Association and Maine Department of Conservation. Augusta, Maine.

T22 MD that consists of 17 turbines and the associated facilities that went on line in December 2016.

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.¹⁷ 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 within 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 Weaver Project are defined as:

- **Foreground:** 0 to 1/2 mile from the observer. Within the foreground, observers are able to detect surface textures, details, and a full spectrum of color. The details of the turbines (blades, nacelles, support towers) will be readily apparent. There are no SRSNS within one-half mile of the Project. The 6 northern most turbines will be visible from Route 9 (not a SRSNS) within a 1/2 mile of the road.
- **Midground:** 1/2 mile to 3 miles from the observer. The midground is a critical part of the natural landscape. 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.

The WEA presumes that a visual impact assessment will be required to evaluate potential scenic impacts to scenic resources within three miles. Chapter 382.G.2.a states there is a rebuttable presumption that turbines within three miles of viewpoints within SRSNS would have a high impact to the scenic character of the SRSNS.¹⁸ The Project will be visible in the midground from Lower Lead Mountain Pond, with the area of greatest visibility approximately 2.9 miles from the closest turbine.

¹⁷ Landscape Aesthetics: A Handbook for Scenery Management. USDA Forest Service. Agricultural Handbook Number 701. December 1995.

¹⁸ This presumption may be rebutted by evidence showing that views of the turbines would be limited by intervening topography, or other mitigating factors.

- Background: 3–8 miles from the observer.¹⁹ 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.

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. Most structures in typical development proposals cease to be uniquely recognizable at distances greater than 3–5 miles. However, since wind turbines are very large and relatively simple objects, their form and color remain readily distinguishable within the midground and well beyond into the background (up to eight miles from the observer). Due to the thinness of the design, the outer ends of the turbine blades will be minimally visible in the outer portion of the background (e.g., the blade tips on Narraguagus Lake).

In his peer review of the Hancock Wind Project, Dr. James Palmer observed: “Within two or three miles of a turbine, 20 or 30 feet of the blade may be noticeable, but at further distance the casual observer is unlikely to be aware of them.” The WEA has determined that the visual effect of turbines on SRSNS beyond 8 miles is insignificant. Views from Upper Lead Mountain Pond will be in the background.

6.0 VISUAL IMPACTS ON SCENIC RESOURCES OF STATE OR NATIONAL SIGNIFICANCE

6.1 Evaluation Criteria: The Maine Wind Energy Act and Chapter 382.

As noted in Section 5, there are several SRSNS within eight miles of the Project. The following section evaluates each of these resources, 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, and 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*

¹⁹ 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.)

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 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).*

This assessment of potential visual impact on SRSNS is based upon knowledge of the Project site, viewshed analysis, photosimulations, and a user survey of recreational boaters on the Lead Mountain Ponds.

6.2 Scenic Resources of State or National Significance

The WEA provides a listing of scenic resources that are considered to be of state or national significance. Chapter 3823.B requires the evaluation to determine their 'significance'. In his peer review of the Hancock Wind Energy Project VIA performed under the WEA, James Palmer identified two main determinants of significance, i.e., a) an evaluation of scenic character through a formal assessment process (such as the Maine Wildlands Lake Assessment (MWLA)), and b) visitor catchment area: the relative distance that people travel to visit and use the SRSNS. Palmer suggests that if >1/3 of visitors using the resource are from outside Maine the significance is High; if >1/3 of the visitors using the resource are from the local region, the significance is Low; otherwise the significance is considered Medium.²⁰

Palmer determined the significance of the SRSNS by combining the two determinants, assuming each was equally weighted (see Table 1, Determination of Significance). Indicator 1 is the rating of scenic resource from the Maine Wildlands Lake Assessment. For the Weaver Wind Project, the three lakes that may have visibility of the Project have been rated as having 'Significant' scenic resources in the MWLA, which is equivalent to a Medium Rating. The Market Decisions intercept survey indicated that over half of the respondents were from the local area, which translates into a Low rating for visitor catchment. Using this approach, the lakes that may be affected by the Project have a Low-Medium significance.

²⁰ Palmer, James F. Review of the Hancock Wind Project Visual Impact Assessment, for Maine DEP. April 22, 2013.

Table 1: Determination of Significance

		INDICATOR 2: VISITOR CATCHMENT		
		Low	Medium	High
INDICATOR 1: MWLA Rating	Low	Low	Low-Medium	Medium
	Medium	Low-Med	Medium	Med-High
	High	Medium	Med-High	High

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, 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 three properties on the National Register of Historic Places within 8 miles of the Project: the Eastbrook Baptist Church and Town House in Eastbrook²¹, 4.3 miles west of the nearest turbine, and the Brick School House in Aurora, 4.7 miles west of the nearest turbine.

When the National Register nomination form for the Church and Town House was submitted in 1978, there was no mention made of its landscape context or the role that the setting played in its significance (in either Section 7 or 8). While the church seems to be in good condition (based upon exterior evaluation), the Town House has not been maintained and seems to be in fair condition. Earle S. Shettleworth, Maine Historic Preservation Office, signed the Certification on July 31, 1978, and noted that it was of local significance.

When the National Register nomination form for the Aurora Brick School House was submitted in 1980, there was no mention made of its landscape context or the role that the setting played in its significance (in either Section 7 or 8). Earle S. Shettleworth, Maine Historic Preservation Office, signed the Certification on February 15, 1980, and evaluated that the significance of the property within the state was local. The building appears to be in good condition and is currently used as a museum.

²¹ The Eastbrook Baptist Church and Town House are listed together on the NPS nomination form but they are separate structures located adjacent to each other on East Brook Road in Eastbrook.

The Project turbines will be screened from view from all the historic resources by the rolling topography and intervening vegetation. There should be no impact on any property listed on the National Register of Historic Places. See Study Area Photos in Appendix B.

C. National or State Parks

There are no state or national parks within the study 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."*

Table 2 on the following page lists the 5 lakes and ponds within the 8-mile study area that have been rated as significant or outstanding for scenic quality, as determined by the MWLA. Map 3: Vegetated Viewshed A indicates that all five of these waterbodies may have views of at least the tips of some of the turbines. However, cross sectional and modeling analysis determined that views of the Project from Alligator Lake would be screened by topography and shoreline vegetation. The analysis also determined that one blade may be visible from a small portion of Narraguagus Lake.

NARRAGUAGUS LAKE²²

Existing Character and Landscape Context. Narraguagus Lake (426 acres, elevation 224), 5.1 miles south of the Project, is located in three unorganized townships: T16 MD, T10 SD, and T9 SD. The lake is surrounded by low hills that create an undulating sense of enclosure throughout much of its length. The most visible landform seen from the lake is the partially bald face of Tunk Mountain (el. 1157), which forms a distinctive focal point 2.3 miles to the southeast. See photographs of existing conditions in Appendix B. The Bull Hill turbines are the most prominent cultural elements on the lake; 14-19 turbines may be visible from varying locations on the lake, with the closest seen at a distance of 2.0 miles. Up to 6 Hancock turbines may be visible, with the closest seen at a distance of approximately 4.7 miles.

While the majority of the shoreline is undeveloped, there are half a dozen cottages on the northwestern corner and western shoreline, accessed from a logging road on the west side of the lake. The camps are all oriented toward the east and do not have views of the Bull Hill or Hancock turbines. According to the Maine Atlas and Gazetteer²³ and the Department of Agriculture, Conservation, and Forestry,²⁴ there are no public boat launches on the lake.

²² An abbreviated description of Narraguagus Lake is provided, due to the limited Project visibility. Additional detail on Narraguagus Lake can be found in the VIA for the Bull Hill and Hancock Wind Projects.

²³ DeLorme. Maine Atlas & Gazetteer. Freeport, Maine. 2011.

²⁴ Maine Division of Parks and Public Lands, Boating Facility Site List:
www.maine.gov/doc/parks/programs/boating/sites/waterbody.html

Table 2: Lakes and Ponds within the 8-mile Study Area

WATERBODY / LOCATION	SIZE (acres)	DIST* (miles)	PERCENT OF WATERBODY THAT MAY HAVE PROJECT VISIBILITY**	PROJECT TURBINES VISIBLE WITHIN 8 MILES	SCENIC RATING
Alligator Lake, T34 MD	1159	6.3	4%	0***	O
Narraguagus Lake, T16 MD	426	5.1	22%	1***	S
Upper Lead Mtn. Pond, T28	1021	3.7	26%	5± total: 1 nacelle, 4 blades only	S
Middle Lead Mtn. Pond, T28	575****	2.9	26%	Blades of up to 4 turbines	S
Lower Lead Mtn. Pond, T28		2.0	35%	7± total: 4 nacelles, 3± blades only	
Myrick Pond, T10 SD	45	7.6	0	0	S

* Denotes distance from the closest shoreline to the closest turbine.
 ** Indicates where the top of at least one turbine blade may be visible, based upon WindPro viewshed mapping and assumed 40' maximum tree heights. Viewshed mapping for nacelles (assuming 40' tree heights) shows considerably less visibility (e.g., nacelles will not be visible from either Alligator Lake or Narraguagus Lake).
 *** Viewshed mapping for Alligator and Narraguagus Lakes indicates there may be visibility of portions of blades within 8 miles. However, more refined computer modeling that assumes tree heights of up to 60' along the shoreline indicates that there will be almost no views of turbines from these two waterbodies. (This is consistent with the Adequacy Review of the Weaver Wind Project that was conducted by James Palmer, May 5, 2015.) The model for Narraguagus Lake does show that a small portion of the blades of one turbine may be visible at a distance of 6.3 miles from the southern shore in an area where the Bull Hill turbines are already visible.
 **** IF&W reports the acreage of both ponds to be 486 acres; however, USGS mapping total shows a total of 575 acres.

Most of the area surrounding Narraguagus Lake is either private timberland or held by The Nature Conservancy for habitat preservation as part of the Spring River Block. Ongoing commercial logging operations have created a network of roads within 0.5 mile of the waterfront on the west, south, and east sides. The existing character of the area surrounding Narraguagus Lake is rated as Low-Medium.

Significance. The MWLA notes that the lake is accessible and undeveloped and received a resource rating of 'significant' for its scenic resources. LURC's Comprehensive Land Use Plan includes Narraguagus Lake in Management Class 7, which consists of all lakes not classified into the other six management classes, including many lakes that have multiple outstanding or significant resource values identified in the Assessment. No visitation data is available for Narraguagus Lake. Based upon field observations and level of development, use levels appear to be relatively low and visitation is expected to be primarily from the local population (i.e., within a 1-2 hour drive). Based upon Table 1, the rating of significance is Low-Medium.

Visual Impact. Viewshed analysis (which assumed a tree height of 40 feet) indicates that the blades of up to five turbines may be visible from the eastern half of the lake. However, 3D modeling analysis (which superimposes a computer model of the Project on an actual photograph taken from the same location as the model and reflects higher shoreline tree height) indicates that the top of the blades of only one turbine may be visible from the lake. The accuracy of the computer model was confirmed by using several of the existing Bull Hill turbines as reference points in aligning the computer model with the photograph.

The visual impact on Narraguagus Lake would be almost non-detectable and limited to a view of a portion of the blades of one turbine at a distance of 6.3 miles. If the blades were visible, they would seem insignificant in relationship to the existing Bull Hill and Hancock turbines that are seen at a much closer distance.

Cumulative Impact. The VIA for the Hancock Wind Project determined that the combined Bull Hill and Hancock turbines would be visible over less than half the surface of the lake in the northeast and northern parts of the lake. The blades of the Weaver turbine that may be visible would be seen in the same area where the 14 - 19 Bull Hill turbines and 6 Hancock turbines are seen. The cumulative effect of the visibility from one additional set of turbine blades at a distance of 6.3 miles should be minimal.

Potential Effect on Public Use. The additional turbine blade should be scarcely noticeable to the people who fish, ice fish, or boat on the lake. The presence of the Weaver turbines will have virtually no effect on the character of Narraguagus Lake. It will not block views of the surrounding low hills, nor will it be seen in conjunction with Lead Mountain to the east. Based on its limited visibility, the additional turbine should not have a significant effect on recreational users of the lake, or people's desire to return to there for recreational pursuits.

Conclusion. If the turbine blades are visible, they would be seen as relatively small objects at or just above the trees that cover the low ridge on the opposite side of the lake. The turbine blades should be minimally noticeable to the average viewer due to its distance, relative size, the filtering effect of the intervening vegetation, and the presence of the Bull Hill and Hancock turbines. The Weaver Wind Project should not have an unreasonable adverse effect on the scenic character of Narraguagus Lake or the recreational uses related to its scenic character.

UPPER LEAD MOUNTAIN POND

Existing Character and Landscape Context. Upper Lead Mountain Pond (1,021 acres, elevation 355), 3.7 miles north of the nearest Project turbine, is the largest waterbody in the study area with views of the Project that is designated as SRSNS. The lake is located in two unorganized townships: T28MD, and T22 MD. The most distinctive landforms visible from the Pond are Lead Mountain, (el. 1,475), 1.4 miles to the east and the Pinnacle (el. 925) located 2.0 miles to the north. See photographs of the Pond and Lead Mountain in Appendix B.

The northern and eastern shorelines are developed with numerous cottages located on either side of the access road. Most of the cottages are set back from the shoreline and well screened. There are also a few scattered cottages on the western shoreline. Most of the area surrounding the Pond is used for privately owned cottages or timberland. Aerial photography from 2011 shows evidence of commercial logging operations east of the Pond and cottage development below Lead Mountain. A boat access facility with a gravel ramp for small trailered boats is located along the southeastern shoreline. According to the Maine Atlas and Gazetteer and the Department of Agriculture, Conservation, and Forestry, this is the only public boat launch on the Pond.²⁵ The existing character of the area surrounding Upper Lead Mountain Pond is rated as Medium.

Significance. The MWLA notes that the lake is accessible and developed and received a resource rating of ‘significant’ for its scenic resources. Prior to the publication of the Assessment, the State Planning Office issued the Scenic Lakes Character Evaluation in Maine’s Unorganized Towns, which evaluated the scenic characteristics of all 1,509 lakes and ponds (with a surface area greater than 10 acres) in the Land Use Regulation Commission (LURC), now LUPC territory. The Evaluation was based on six criteria: relief, physical features, shoreline configuration, vegetation diversity, special features, and inharmonious development. A point system was developed to assign a rating to each of the criteria, depending upon their presence in the landscape. Table 3 provides a short description of each of the criteria and summarizes the findings for Upper Lead Mountain Pond.²⁷

A total of 118 lakes with a total of 50 or more points were identified as ‘Outstanding’ in the Evaluation. There were 162 lakes, including Upper Lead Mountain Pond, that achieved a score between 20 to 45 points and were identified as ‘distinctive’, which was the basis for the ‘Significant’ category.

²⁵ DeLorme. Maine Atlas & Gazetteer. Freeport, Maine. 2011.

²⁶ Maine Division of Parks and Public Lands, Boating Facility Site List: www.maine.gov/doc/parks/programs/boating/sites/503.html

²⁷ Maine State Planning Office. Scenic Lakes Character Evaluation in Maine’s Unorganized Towns. December, 1986. The ratings in the chart – from None to High – are taken from the SPO document.

Table 3: Visual Characteristics of Upper Lead Mountain Pond

FACTOR	DEFINITION	RATING	MAX. PTS.	SCORE
Relief	Complexity of relief Dramatic relief	Low	30	10
Physical Features	Cliffs, vertical ledges, slab ledges, rockslides, boulders, islands, beaches.	Medium	25	15
Shoreline Configuration	Relative complexity of the shoreline.	Low	15	5
Vegetation Diversity	Four possible types were identified: mixed hardwood/softwoods; softwoods; marsh; super-story trees.	Low	15	5
Special Features	Water clarity Opportunities for wildlife viewing	Medium	15	10
Inharmonious Development	Residential development, visible roads, powerlines, etc.	Low/None	-20	0
TOTAL				45

LUPC's Comprehensive Land Use Plan includes Upper Lead Mountain Pond in Management Class 7, which consists of all lakes not classified into the other six management classes, including many lakes that have multiple outstanding or significant resource values identified in the MWLA. LUPC's management objectives for lakes in Class 7 call for multiple uses, including resource conservation, recreation, and timber production, giving specific consideration to identified resource values when evaluating the merits of lake-related rezoning and permit applications. It is the Commission's intention that the majority of these lakes remain in Management Class 7 and be managed under applicable requirements.²⁸

IF&W surveyed the Pond in 2001 and issued the following report:

Upper Lead Mountain Pond is located several miles north of Route 9 (the "Airline"). Access is over Champion International gravel roads. A public boat launching site in fair condition is available along the southeastern shore.

The pond provides acceptable water quality for salmon. Although smelts appear to be reasonably abundant based on annual spring spawning runs up several tributaries, salmon growth rate is generally below average.

White perch provide a fair fishery in the summer. Those anglers familiar with the location of the 'perch holes' make good catches of 10-12 inch perch on same days. A limited fishery for 8-10 inch brook trout exists in the winter and spring.²⁹

²⁸ Maine Land Use Regulation Commission. 2010 Comprehensive Land Use Plan. Appendix C – Lake Management Program. 2010.

²⁹ Maine Department of Inland Fisheries and Wildlife. Upper Lead Mountain Pond, T22 MD and T28 MD, Hancock Co. Surveyed August 1942. Revised 1953, 1969, 1994.

The Market Decisions intercept survey indicated that over half of the respondents from Upper and Lower Lead Mountain Ponds were from the local area (within 1-2 hour driving time), which translates into a Low rating for visitor catchment. The rating of 'Significant' from the MWLA is equivalent to a Medium rating for Indicator 1. Based upon Table 1, Upper Lead Mountain Pond was assigned a significance rating of Low-Medium.

Public Uses. The primary recreational use of the Pond is for nature observation, viewing scenery, fishing, ice fishing, snowmobiling, boating, swimming, and seasonal camps. A boat launch on the southeastern shoreline provides formal access for the general public. The lake bottom is rocky, with visible rocks protruding in places, which limits boating activity.

Nearby Lead Mountain, a 1,475-foot peak on private land, is a local attraction, offering a relatively easy, 1.5-mile hike on old tote roads through mixed woods, with an elevation gain of 1,100 feet. On clear days, views from the summit can extend south as far as Acadia National Park. The mountain is not a SRSNS.

Viewer Expectations. People who use Upper Lead Mountain Pond are expected to have moderate to high expectations of scenic quality, given the nature of the waterbody, the relative lack of development, and the proximity to Lead Mountain. This was confirmed by the Market Decisions intercept survey, which reported that 93% of the respondents expected to see beautiful surroundings, and the Pond met their expectations.

While the Pond is developed with several dozen camps, survey respondents reported that they expected to see little development along its shoreline.³⁰ Most of the camps are relatively modest in size and set back from the water, leaving a substantial amount of vegetation. Lead Mountain Lodge (Oakum Lodge Compound) is located on a 3.5-acre peninsula on the eastern shoreline. This private set of buildings appears to be the only commercial establishment on the Pond.

SRSNS Value. The value of Upper Lead Mountain Ponds (as determined by Chapter 382.3.I) is based on a consideration of its significance rating (low-medium); the existing character of the surrounding area (medium); and the expectation of the typical user (high). The value of Upper Lead Mountain Pond is Medium.

Visual Impact. The Viewshed Maps indicate that the greatest Project visibility will occur at two small areas on the eastern edge of the Pond, where the nacelle of one turbine and the blades of up to four additional turbines would be visible over a horizontal arc of 18°. The visible turbines may be seen just above the southwesterly horizon over approximately 26% of the Pond at distances ranging from 4.6 to 6.0 miles.³¹

Photosimulation 2, based on a photograph taken from the boat launch, illustrates the relative visibility of the Project on Upper Lead Mountain Pond. From this general area, the blades of up

³⁰ The average rating for expectation of development on the seven-point scale (with 1 being undeveloped and 7 being developed) was 2.1 with 40% assigning a score of 1 (or undeveloped).

³¹ The viewshed maps assume a maximum tree height of 40 feet. However, this number is generally found to be overly conservative and does not account for the actual screening potential of existing trees.

to 5 turbines may be visible at or just above the treeline. As seen in the photosimulation, the trees on the low ridge at the southwestern end of the Pond would filter the view of the blades and significantly reduce their visibility. As noted in the Viewshed Maps, the degree of visibility would decrease as the observer moves south toward the Project, which effectively elevates the apparent height of the trees between the observer and the Project. No turbines would be seen from the southern and western halves of the Pond.

Lead Mountain, immediately to the east of Upper Lead Mountain Pond is the predominant focal point for the Pond. Since the Project is located to the southwest, none of the turbines will block or interfere with views of the mountain, nor will they be seen in conjunction with the peak.

If the red warning lights on the nacelles were activated (estimated to be very infrequently), several (2 to 3) of the lights may be visible from the eastern side of the lake, filtered through the evergreen trees on the low hills to the south. Visibility of the lights will depend on the height and location of individual trees on the low ridges surrounding the Pond.

Boating use on the Pond at night is expected to be very low, based upon the inherent hazards from submerged rocks and other obstacles. The Market Decisions' intercept survey reported that 50% of the respondents at Upper Lead Mountain Pond indicated that their plans for visiting the lake included star gazing or looking at the night sky. It is assumed that the majority of those observations would occur at or near the shoreline and not on the water.

The presence of the turbines will not have an effect on the lake's physical features, its shoreline configuration, or its vegetation diversity, characteristics that gave it the majority of the points in the Scenic Lakes Character Evaluation (summarized in Table 3 above). If the turbines were noticeable enough to be considered 'inharmonious development', the points subtracted from the Evaluation would not change the total score that resulted in a rating of 'Significant.'

Cumulative Effect. The existing Bull Hill turbines are not visible from Upper Lead Mountain Pond. Four of the Hancock turbines may be visible at the tree line from the northeasterly end of the Pond. There will be a small area (approximately 200 acres) in the northeastern corner of the Pond where 8 - 9 turbines from both the Hancock and Weaver Wind Projects may be visible at the treeline at distances of 3.8 to 4.2 miles. The cumulative impacts on the scenic character or existing uses related to scenic character from both projects should be low.

Potential Effect on Public Use. The primary impact will be on the people who fish, ice fish, or boat on the lake. The presence of the turbines will have a very minor effect on the character of Upper Lead Mountain Pond by introducing man-made elements in a portion of the view within a largely natural landscape. The turbines will not block views of the surrounding low hills, nor will they be seen in conjunction with Lead Mountain to the east.

None of the respondents to the Market Decisions intercept survey indicated that the proposed addition of wind turbines would have any effect on their enjoyment of Upper Lead Mountain Pond; 88% indicated that the proposed Project would have no effect on their likelihood of returning to the Pond. Based upon the results of the survey, the limited visibility of a few

turbine blades on the horizon should not have a significant effect on recreational users of the resource, or people's desire to return to the Pond for recreational pursuits.

Significance of Impacts. The significance of the impacts, as determined by Chapter 382.I, is based on consideration of the purpose and context of the Project (low-medium); the extent, nature and duration of public uses of the SRSNS (low-medium); the impact of the proposed development on public use and enjoyment (low); the scope and scale of potential impacts of the proposed development (low); and any cumulative impacts on the scenic character or existing uses related to scenic character (low). Based upon consideration of these factors, the significance of the visual impact on Upper Lead Mountain Pond is determined to be low.

Conclusion. Where turbine blades are visible, they would be seen as relatively small objects at or just above the trees that cover the low ridges to the south. The turbine blades should be minimally noticeable to the average viewer due to their distance, relative size, and the filtering effect of the intervening vegetation. The Weaver Wind Project should not compromise views from Upper Lead Mountain Pond. The Project should not have an unreasonable adverse effect on its scenic character or the recreational uses related to the scenic character of the Pond.

LOWER AND MIDDLE LEAD MOUNTAIN POND

Existing Character and Landscape Context. Lower Lead Mountain Pond and Middle Lead Mountain Pond (575 acres combined), elevation 341, are 2.0 and 2.9 miles north of the nearest Project turbine, respectively. The Ponds are located in T28 MD and both are rated as having significant scenic resources in the MWLA. The shorelines of both Ponds are highly configured (complex). A large unnamed island separates the two waterbodies. Portions of the Project will be visible from both Ponds. The most distinctive landform visible from the Ponds is Lead Mountain, 3.5± miles to the east. See photographs of these resources in Appendix B.

The Ponds are lightly developed, with a dozen or so homes and summer camps located along the shoreline, primarily at the southern end of Lower Lead Mountain Pond. Public boat access is provided at the end of a cove at the southern portion of Lower Lead Mountain Pond. Facilities include a gravel ramp and a small parking area on a 1.87-acre parcel owned by Maine Bureau of Parks and Lands. According to the Maine Atlas and Gazetteer³² and the Department of Agriculture, Conservation, and Forestry,³³ this is the only public boat launch on either Pond. With the exception of the private camps, most of the area surrounding Lower and Middle Lead Mountain Ponds is commercial timberland. The existing character of the area surrounding the Ponds is rated as Medium.

Significance. The MWLA notes that the Ponds are accessible and developed and received a resource rating of 'significant' for their scenic resources. Prior to the publication of the Assessment, the State Planning Office issued the Scenic Lakes Character Evaluation in Maine's Unorganized Towns, which evaluated the scenic characteristics of all 1,509 lakes and ponds

³² DeLorme. Maine Atlas & Gazetteer. Freeport, Maine. 2011.

³³ Maine Division of Parks and Public Lands, Boating Facility Site List: www.maine.gov/doc/parks/programs/boating/sites/503.html

(with a surface area greater than 10 acres) in LUPC territory. The Evaluation was based on six criteria: relief, physical features, shoreline configuration, vegetation diversity, special features, and inharmonious development. A point system was developed to assign a rating to each of the criteria, depending upon their presence in the landscape. Table 4 provides a short description of each of the criteria and summarizes the findings for Lower and Middle Lead Mountain Ponds.³⁴

A total of 118 lakes with a total of 50 or more points were identified as ‘Outstanding’ in the Evaluation. There were 162 lakes, including Lower and Middle Lead Mountain Ponds, that achieved a score between 20 to 45 points and were identified as ‘distinctive’, which was the basis for the ‘Significant’ rating. The Comprehensive Land Use Plan includes Lower and Middle Lead Mountain Ponds in Management Class 7, which consists of all lakes not classified into the other six management classes, including many lakes that have multiple outstanding or significant resource values identified in the Wildlands Lake Assessment.

LUPC’s management objectives for lakes in Class 7 call for multiple uses, including resource conservation, recreation, and timber production, giving specific consideration to identified resource values when evaluating the merits of lake-related rezoning and permit applications. It is the Commission’s intention that the majority of these lakes remain in Management Class 7 and be managed under applicable requirements.³⁵

Table 4: Visual Characteristics of Lower and Middle Lead Mountain Ponds

FACTOR	DEFINITION	RATING	MAX. PTS.	SCORE
Relief	Complexity of relief Dramatic relief	Low	30	10
Physical Features	Cliffs, vertical ledges, slab ledges, rockslides, boulders, islands, beaches.	Medium	25	15
Shoreline Configuration	Relative complexity of the shoreline.	Medium	15	10
Vegetation Diversity	Four possible types were identified: mixed hardwood/softwoods; softwoods; marsh; super-story trees.	Medium	15	10
Special Features	Water clarity Opportunities for wildlife viewing	None	15	0
Inharmonious Development	Residential development, visible roads, powerlines, etc.	Low/None	-20	0
TOTAL				45

³⁴ Maine State Planning Office. Scenic Lakes Character Evaluation in Maine’s Unorganized Towns. December, 1986. The ratings in the chart – from None to High – are taken from the SPO document.

³⁵ Maine Land Use Regulation Commission. 2010 Comprehensive Land Use Plan. Appendix C – Lake Management Program. 2010.

Maine Department of Inland Fisheries and Wildlife surveyed the ponds in 2001 and issued the following report:

These interconnected waters (Lower and Middle Lead Mountain Ponds) lie a short distance downstream from Upper Lead Mountain Pond. Access to the southwestern end is over a good quality dirt/gravel road which heads north off Route 9, the "Airline". An adequate public boat launching area is present. The shoreline is lightly developed with camps.

The pond provides suitable habitat for brown trout which were experimentally introduced in 1999. Angler reports and a summer, 2001 check-netting indicate that these fish are performing reasonably well...Brown trout have provided a satisfactory fishery in Upper Lead Mountain Pond, and they will probably do the same here.

An unusual feature of this pond is that it has two outlets, Starvation Brook which flows into the East Branch of the Union River and the Sevenmile Brook, which is a tributary to the Middle Branch. The lower end of Sevenmile Brook supports brook trout.³⁶

The Market Decisions intercept survey indicated that over half of the respondents who participated in the survey were from the local area (within 1-2 hour driving time), which translates into a Low rating for visitor catchment. The rating of 'Significant' for scenic quality from the MWLA is equivalent to a Medium rating for Indicator 1. Based upon Table 1, Lower and Middle Lead Mountain Ponds are rated as Low-Medium for significance.

Public Uses. The primary recreational use of the lake appears to be for nature observation, viewing scenery, fishing, boating, swimming, ice fishing, snowmobiling, and seasonal camps. Public recreational use of the lake is expected to be light to moderate, primarily used by camp owners, renters, and fishermen. The lake bottom is rocky, with visible rocks protruding in places, which limits boating activity.

Viewer Expectations. People who use Lower Lead Mountain Pond are expected to have moderate to high expectations of scenic quality, given the nature of the waterbody, the highly configured shoreline, the relative lack of development, and the prominence of Lead Mountain. The majority of the Pond is lightly developed, with the greatest concentration of seasonal and year-round homes at the southern end near the boat launch. This was confirmed by the intercept survey, which reported that 93% of the respondents expected to see beautiful surroundings, and the Pond met their expectations.

SRSNS Value. The value of Lower and Middle Lead Mountain Ponds (as determined by Chapter 382.3.I) is based on a consideration of its significance rating (low-medium); the existing character of the surrounding area (low-medium); and the expectation of the typical user (high). The value of Lower and Middle Lead Mountain Ponds is Medium.

³⁶ Maine Department of Inland Fisheries and Wildlife. Lower and Middle Lead Mountain Pond, T28 MD, Hancock Co. Surveyed August 1942. Revised 1953, 2001.

Visual Impact. Map 4: Vegetated Viewshed A for Nacelle indicates that the greatest concentration of potentially visible turbines would be at the northeasterly corner of Lower Lead Mountain Pond, where the nacelles of up to 15 turbines may be visible at distances ranging from 2.9 to 5.0 miles over 28% of the Pond.³⁷ However, this number overstates the potential visibility since it does not take into account the size of the mature trees that are found along the shoreline. James Palmer, in his peer review of the 2015 Weaver VIA, noted: “There were emergent tree tops as high as 75 feet, but the solid forest canopy appeared to be at approximately 60 feet. Therefore the height of the tree canopy in the visualization is set at 60 feet.”³⁸ WindPro modeling and cross sectional analysis used to prepare the photosimulation indicates that nacelles of four turbines and the blades of up to 3 turbines would be seen above the southerly horizon within 8 miles.

Photosimulation 1 illustrates the visual impact of the Project at a point between the northeastern end of Lower Lead Mountain Pond and the northwestern end of Middle Lead Mountain Pond, where the most turbines would be visible. From this vantage point portions of 7 turbines may be visible (nacelle and blades of 4 turbines as seen in Photosimulation 1 Right) and blades of 3 turbines as seen in Photosimulation 1 Left) within 8 miles. The four closest turbines would be the most visible, while the blades of the more distant three turbines may be harder to discern, given the distance, the rolling topography, and the intervening vegetation. As seen in Photosimulation 1 Left, the trees on the low ridges that surround the Pond would partially obscure the blades of the three furthest turbines and significantly reduce their visibility. Both sets of turbines combined would be seen over a horizontal arc of 18° from this viewpoint, which represents approximately 5% of the 360-degree view that a person on the water would see from this end of the Pond.

The number of visible turbines within 8 miles would decrease as the observer moves south (toward the boat launch) and the height of the trees in the foreground and midground increase in relative size. In the middle of the Pond the blades of 5± turbines would be visible; none would be seen in the vicinity of the boat launch where most of the camps are located. Blades tips of up to 4 turbines may be visible in the northern and eastern edges of Middle Lead Mountain Pond. For most of Middle Lead Mountain Pond, the vegetation on the land between Lower and Middle Lead Mountain Ponds will screen views of the Project.

If activated, up to 4 of the red warning lights on the turbines within 8 miles may be visible from the northeastern end of Lower Lead Mountain Pond and far eastern edge of the Middle Lead Mountain Pond. Visibility of the lights is expected to be variable and will depend on the height and location of individual trees on the low ridges surrounding the Pond. Boating use on the Pond at night is expected to be very low, based upon the inherent hazards from submerged rocks and other obstacles. The Market Decisions’ intercept survey reported that 14% of the respondents at Lower Lead Mountain Pond indicated that their plans for visiting the Pond included star gazing or looking at the night sky. It is assumed that the majority of those observations would occur at or near the shoreline and not on the water.

³⁷ The viewshed maps assume a maximum tree height of 40 feet. However, this number is generally found to be overly conservative and does not account for the actual screening potential of existing tree cover.

³⁸ Palmer, James R. Adequacy Review of the Weaver Wind Project Visual Impact Assessment. Prepared for the Maine Department of Environmental Protection. Augusta, Maine. May 5, 2015.

The presence of the turbines will not have an effect on the Pond's physical features, its shoreline configuration, or its vegetation diversity, characteristics that gave it the majority of the points in the Scenic Lakes Character Evaluation (summarized in Table 4). If the turbines were noticeable enough to be considered 'inharmonious development', the points subtracted from the Evaluation would not change the total score that resulted in a rating of 'Significant.'

CH. 382.3.G.(2)(a) states: *There is a rebuttable presumption that placement of turbines within three miles of viewpoints within the SRSNS would cause a high impact to the scenic character of the SRSNS. This presumption may be rebutted by evidence showing that views of the turbines would be limited by intervening topographic features, or other mitigating factors.* As noted above, there are four turbines that would be visible within three miles from a portion of Lower Lead Mountain Pond. While the turbines will be visible, as shown in Photosimulation 1, they will not cause a high impact to the scenic character of the Pond for the following reasons:

- The visible turbines will occupy approximately 11-degrees (approximately 3%) of the total 360-degree view from the Pond.
- The topography seen in context with the turbines is relatively flat, with no notably change in elevation or focal point.
- Seventy percent (70%) of those interviewed in the intercept survey said that the presence of the turbines would not change their enjoyment of Lower Lead Mountain Pond. Ninety percent (90%) of those interviewed said that the presence of the turbines would either have no effect on their decision to return to Lower Lead Mountain Pond or would increase their desire to return.

Cumulative Effect. None of the Bull Hill turbines are visible within 8 miles of Lower Lead Mountain Pond³⁹. The blades of up to 9 of the Hancock Wind turbines may be visible at or just above the tree line from portions of the Pond at distances of more than 6 miles. At that distance, the turbine blades will be barely recognizable. In his peer review of the Hancock Wind Project, James Palmer describes the potential visibility of wind turbine blades: *"While there may be a line-of-sight to just an upraised blade tip, it may not be noticeable and would never be visually dominant... Within two or three miles of a turbine, 20 or 30 feet of the blade may be noticeable, but at further distance the Casual Observer is unlikely to be aware of them."*⁴⁰ The 7 visible Weaver turbines (4 nacelle and blades, 3 blades only) will be closer to the viewer (2.9 to 5.0 miles). Based upon the viewshed map, up to 16 turbines (12 blades only) from the combined Hancock and Weaver Wind Projects may be visible from the northeastern portion of Lower Lead Mountain Pond. The two projects will be seen as two separate clusters of blades, each occupying a viewing arc of 18°, separated by an arc of approximately 25°.

³⁹ Several of the Bull Hill turbines are slightly visible from Lower Lead Mountain Pond; however they are all located more than 8 miles from the pond.

⁴⁰ Palmer, James F. Review of the Hancock Wind Project Visual Impact Assessment, for Maine DEP. April 22, 2013. P. 30.

Viewshed mapping indicates that neither the Hancock nor the Bull Hill turbines would be visible from Middle Lead Mountain Pond, so there will be no cumulative turbine visibility on the Pond.

Potential Effect on Public Use. The presence of the turbines will have a minor effect on the character of Lower Lead Mountain Pond by adding a relatively small number of man-made elements in a portion of the view within a largely natural landscape. The nacelles and blades of three turbines will be prominently visible from the northern portion of the Ponds at distances of 2.9 to 5 miles. The blades of up to four additional turbines may also be visible from this part of the Pond. The turbines will not block views of the surrounding low hills, nor will they be seen in conjunction with Lead Mountain to the east.

The primary impact will be felt by people who use the Pond for enjoying the scenery, boating, fishing, and snowmobiling. Eighty percent (80%) of those interviewed in the intercept survey said that the presence of the turbines would not change their enjoyment of Lower Lead Mountain Pond. Thirteen percent (13%) indicated that the presence of the turbines would have a very positive effect on their enjoyment of the Pond. All those interviewed said that the presence of the turbines would either have no effect on their decision to return to Lower Lead Mountain Pond (73%) or would increase their desire to return (27%). Based upon the survey, the limited visibility of the turbines should not have a significant effect on recreational users of the resource, or people's desire to return to the Pond for recreational pursuits.⁴¹

Conclusion. Portions of seven turbines will be visible within 8 miles from the northeastern ends of Lower and Middle Lead Mountain Ponds. The turbines will not interfere with or be seen in conjunction with the easterly view toward Lead Mountain, which is the focal point of the Pond. The Weaver Wind Project will not significantly compromise views from Lower or Middle Lead Mountain Pond. The Project will not have an unreasonable adverse effect on its scenic character or the recreational uses related to the scenic character of the Pond.

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 West Branch Union River from Graham Lake to the headwaters of Great Pond is recognized as a scenic river and rated as a 'B' river in the Maine Rivers Study. This 24-mile river segment is almost entirely within the 8-mile study area, consistently 6.5 to 7.5 miles from the Project. The Rivers Study provides this description of its scenic values: "The river has a regionally significant diversity of geomorphic, vegetative, and hydrologic elements combining to produce areas of outstanding scenery in the vicinity of the flowage."

Viewshed mapping indicates that several turbines may be visible in a limited area near the confluence of the West and East Branches Union River. However, these turbines are greater than eight miles from the river.

⁴¹ In the Intercept Survey completed as part of the Bull Hill VIA, respondents were asked to evaluate the impact of seeing turbine blades on the horizon. See discussion under Narraguagus Lake earlier. Research Report: Bull Hill Wind Power Project Intercepts. Market Decisions, Portland, Maine. October 2010.

There are no other river or stream segments identified as having unique or outstanding scenic attributes in the study area. The Narraguagus River, which has its headwaters east of the Project, is rated an 'A' river by the Maine Rivers Study but is not recognized for scenic resources. The East Branch Union River, which originates in Rocky Pond north of the Project, is rated as a 'C' river by the Maine Rivers Study, but is not recognized for scenic resources.

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.

There are no viewpoints on trails used exclusively for pedestrian use that qualify under this section.

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

There are no scenic turnouts on the 4.0-mile section of the Blackwoods Scenic Byway in the study area.

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 scenic viewpoints as defined by the WEA in the study area. The summit of Tunk Mountain, which was considered as part of the Bull Hill and Hancock Wind Project VIAs, is beyond the 8-mile study area.

7.0 ASSOCIATED FACILITIES

The associated facilities for the Weaver Wind Project include the access road, the electrical collector lines, and the meteorological towers.

7.1 Regulatory Requirements

The analysis of associated facilities follows the procedures and standards outlined in the WEA for generating facilities, unless the DEP determines that "application of the standard in subsection 1 to the development may result in unreasonable adverse effects due to the scope, scale, location or other characteristics of the associated facilities." 35-A MRSA § 3452.2. The

Project's associated facilities are similar in nature, scope, and appearance to similar facilities that are presently found in and near the study area. There should not be an unreasonable adverse effect on scenic character and existing uses of SRSNS due to the scope, scale, location, or other characteristics of these facilities. The associated facilities would also not have an adverse visual effect on any locally designated scenic resources that would not be reviewed under the Wind Energy Act. These findings are based on the following:

- None of the associated facilities will be visible from any SRSNS.
- The Project will utilize the existing Line 66 transmission line and therefore does not require construction of a new generator lead line.
- Access roads will be similar in character to the existing timber haul roads that characterize this area. In most locations access roads will be screened by existing vegetation and not highly visible from outside the immediate area.
- A substation will be built adjacent to the Bull Hill/Hancock substation and will be similar in appearance to that substation.
- The majority of the collector system will be located underground, alongside Project roads
- The Project will utilize the O&M building permitted as part of the Hancock Project.

Based upon our determination of the potential visibility of the associated facilities, they are evaluated under the standards of the Wind Energy Act, 35-A MRSA § 3452.1. If the Department determines otherwise, then the VIA will be supplemented to assess the visual impact of each of the associated facilities under the traditional Site Law standards.

7.2 Methodology

To be consistent with the evaluation of the Project's generating facilities, the evaluation of the associated facilities considered an 8-mile viewshed from each of the components. However, as noted below, most of the associated facilities are not visible in the outer limits of this range due to their form and scale, and a 3-mile study area would be more appropriate.

7.3 Access Roads

To the greatest extent possible the Project will utilize gravel haul roads that currently exist in the Project area. As noted in Figures 2 and 3, the Project area has an extensive system of existing roads resulting from previous and ongoing timber harvesting operations. Approximately 4 miles of existing 24-foot wide access roads will be upgraded to provide construction and maintenance access to the Project areas and to connect turbine locations. Additionally, approximately 6 miles of new roads will be constructed to further connect turbine locations.

The topography and land use patterns for the Weaver site is very similar to the nature of the Hancock and Bull Hill sites. There are no SRSNS within 8 miles that would have views of the access roads. In most locations the access roads will be screened by existing vegetation and will not be highly visible from outside the immediate area. The only location where the general public will see the access roads will be on Route 9 near the intersection with Spectacle Pond

Road. The Applicant will maintain the access roads. Roads outside of the Project area, and therefore under the control of the landowner, will continue to be maintained by the landowner.

The access roads being proposed will not be of a scope/scale/magnitude to require analysis under traditional Maine DEP scenic standards.

7.4 Electrical Collection Lines

Power from each turbine will be collected in a 34.5 kilovolt (kV) collection line and flow to an interconnect facility adjacent to the existing Bull Hill/Hancock substation in T16MD. Over 90% of the approximately 14.5-mile collector lines will be located underground, although some above-ground lines (approximately 1.3 miles) will also be installed in wooded areas where roadways do not exist. These occur A) in the northernmost line of six turbines, where an overhead collector line will extend south to the underground line in the Spectacle Pond Road (3,000'±), B) in the easternmost line of four turbines, where an overhead collector line will extend north to the underground line in an unnamed access road (3,600'±) and C) in a small section along Spectacle Pond Road (150'±).

The underground collector lines will be buried in trenches generally located within Project roads, thereby minimizing their potential visual impact. The collection lines will not be visible from any SRSNS. A new substation will be built adjacent to the existing Bull Hill/Hancock substation to step up the power and transmit it to Emera's Line 66. The access roads and substation being proposed will not be of a scope/scale/magnitude to require analysis under traditional Maine DEP scenic standards.

7.5 Meteorological Towers

The Project will include up to five permanent meteorological (met) towers, each with a height of 122m (400 feet), slightly taller than the mounted height of the nacelles (384 feet). They will be located within close proximity to the proposed wind turbines; thus the viewshed mapping for the turbines nacelles will be a good indication of maximum potential visibility of the met towers. During construction, up to eight temporary met towers with a maximum height of 122m (400 feet) will be installed at the turbine pad locations and removed prior to completion of construction.

The towers may be freestanding or of a guyed lattice construction with a triangular cross section approximately 18 inches across. Their slim profile will greatly reduce their visibility at distances greater than one mile. The towers will be painted alternating bands of white and aviation orange to comply with FAA regulations for aircraft visibility.⁴²

All towers will be lit according to FAA requirements. Any lighting required will be seen in context with the lights required for the turbines. The radar-assisted lighting system described in Section 4.2 above will also be used on the permanent met towers. With the exception of the

⁴² Advisory Circular AC 70/7460-1K, Obstruction Marking and Lighting. United States Department of Transportation Federal Aviation Administration. February 1, 2007.

warning lights, the meteorological towers should not be visible from any SRSNS, since they all are several miles from these scenic resources. The met towers being proposed will not be of a scope/scale/magnitude to require analysis under traditional Maine DEP scenic standards.

7.6 Operations and Maintenance Facility

The Project will utilize the O&M building permitted as part of the Hancock Project.

7.7 Associated Facilities Conclusion

The associated facilities for the Weaver Wind Project include the access roads, the meteorological towers, and collector lines. None of these associated facilities will be visible from any scenic resource of state or national significance. 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.

8.0 SUMMARY

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. The summary presented in Table 5 is based upon the information provided in the Visual Impact Assessment, the intercept survey conducted by Market Decisions, recent indicator-based evaluations of Maine wind projects performed by Dr. James F. Palmer⁴³, and other information on use patterns.

The goal of the intercept survey assessment is to better understand the views of users regarding the potential impacts of the Project on their use and enjoyment of SRSNSs from where the Project likely would be visible. The survey was designed to address specific portions of the WEA Evaluation Criteria:

- C. *The expectations of the typical viewer*
- E. *The extent, nature and duration of potentially affected public uses of the SRSNS and the potential effect of the generating facilities' presence on the public's continued use and enjoyment of the SRSNS.*

⁴³ This section and the Summary of Evaluation Criteria is based upon the Review of the Hancock Wind Project Visual Assessment, prepared for Department of Environmental Protection by James F. Palmer, April 22, 2013, and upon the Review of the Bingham Wind Project Visual Assessment, Part 2: Independent Analysis, prepared for Department of Environmental Protection by James F. Palmer, August 23, 2013.

8.2 Evaluation Criteria

The first five criteria in the WEA evaluate the 8-mile study area, the immediate Project area, the quality of the resource, existing use patterns and viewer expectations, and the purpose of the Project. Table 5 presents a listing of all the SRSNSs that have been evaluated in this VIA. A rating of None, Low, Medium, or High has been given to each of these first five criteria that reflects the relative significance of each SRSNS. CH. 382.B provides additional direction to the Department regarding evaluation criteria for SRSNSs.

A. Resource Significance: CH. 382: B stipulates: *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.*

While the historic structures in Eastbrook and Aurora are on the National Register of Historic Places, the nomination forms did not discuss how their landscape setting affected their designation or value. There is no evidence that the National Register designation considered the scenic character of the structures' settings or any uses related to scenic character of the property as factors in the listing. The resource significance ratings for these three structures are Low, based on their evaluation of local significance on their nomination forms.

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 Wildland Lakes Assessment, a Coastal Scenic Inventory published by DACF, or other federal, state or local government assessment process.*

Narraguagus Lake and the Lead Mountain Ponds are rated as Significant by the Maine Wildlands Lake Assessment. The intercept survey identified the majority of the respondents to the Lead Mountain Ponds as either full-time residents or from Maine communities within a 1-2 hour drive. The scenic quality of these Ponds is rated as medium, based on their state

designation in the Wildlands Lake Assessment. As determined in Table 1, the significance of these lakes are rated as low-medium, based upon the rating of medium for scenic quality and low for visitor use. There is no evidence of high scenic value of the viewshed associated with these lakes that would elevate their significance; i.e., there are no lands that would be affected by the Project that have been protected by public ownership, conservation easement, or other restrictions specifically for the protection of scenic values. Likewise, there is little evidence of the degradation of the scenic character of the SRSNSs that would decrease their significance.

Rivers: The West Branch Union River was identified in the Maine Rivers Study as Significant on a 'B' river. The resource significance of the West Branch Union River is rated as Medium.⁴⁴

B. Existing Character of the 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.

In all cases the surroundings have been noted as Medium, which is typical of what the visitor would encounter in this part of Maine.

C. Expectation of the Typical Viewer: 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.

In addressing this criterion, the VIA takes into account two factors: the Recreation Opportunity

⁴⁴ A rating of High would be given to rivers whose scenic resources were identified a Unique by the Maine Rivers Study; a Low rating would be given to Significant rivers in the 'C' or 'D' category.

Spectrum (ROS) classification for the scenic resources⁴⁵ and the results of the intercept survey conducted on the Lead Mountain Ponds. Two ROS classes have been identified:

Semi-Primitive Motorized (SPM). Moderate probability of experiencing isolation from human development, use, and impact...Natural appearing setting may have moderately dominant alterations but would not draw the attention of motorized observers on trails and primitive roads within the area. Structures are rare and isolated. Resources in this class include Alligator Lake, Lead Mountain Ponds, Narraguagus Lake, Myrick Pond, and West Branch Union River.

Semi-Developed Natural (SDN) (aka Rural Natural). About equal probability of encountering other user groups and isolation from sights and sounds of people. Natural appearing setting may have obvious modifications, ranging from easily noticed to strongly dominant. However these alterations remain unnoticed or visually subordinate from visually scenic and heavily traveled routes and use areas. Structures generally are scattered, remaining visually subordinate or unnoticed by observers on visually scenic or heavily traveled routes. Structures may include power lines, microwave installations, etc. Resources in this class include the historic resources in Eastbrook and the Aurora Schoolhouse.

A question of user expectation was posed in the intercept survey. As noted above, the majority of the respondents anticipated a high level of scenic quality. While relatively few people were interviewed for the survey, the Expectation of the Typical Viewer for the Lead Mountain Ponds was rated at High.

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.*

⁴⁵ Palmer characterized most of the scenic resources in Table 5 as ROS Class Medium, based upon the ROS Remoteness Class and a rating of remoteness.

(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.*

This criteria was rated as Low-Medium, based upon the following:

- The Project will make a moderate contribution toward achieving the State's energy goals.
- The Project will be seen in the context of two other wind energy projects: Bull Hill, a 19-turbine 34 MW project that went on line in October 2012, and Hancock Wind Project, a 17-turbine 51 MW project that went on line in December 2016. The Project will utilize an existing transmission line in close proximity to the turbines.
- The topography in the immediate vicinity consists of relatively low rolling hills with no prominent landforms. The area surrounding the Project is comprised of commercial timberland, with an extensive road network for woodland management.

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.

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.*

In responding to E.1, Extent, Nature & Duration of Uses, the VIA examined existing conditions of the scenic resources, relative number of users, the potential for access, the type and extent of facilities, typical length of stay, and applicable information from the intercept survey. Most of the resources were rated as Low, based upon field observation and knowledge of the site. Based upon the survey information and the distance from major population centers, the Lead Mountain Ponds were rated as Low-Medium.

E.2. Effect on continued use and enjoyment: In responding to E.2, Effect on Continued Use and Enjoyment, the VIA relied upon the Market Decisions' Intercept Survey and field

observations by TJD&A. A rating of None was assigned to those resources where the Project will not be visible. For Narraguagus Lake, the rating of None is based on the minimal visibility that the blades from one turbine would have on the lake, and the presence of the much more visible Bull Hill turbines; i.e., if the casual observer will not see the turbine blades, it should have no effect on their continued use and enjoyment of the resource.

For the Lead Mountain Ponds, the rating is based upon the response to the Market Decisions' Intercept Survey, which found the Project should have a relatively minor effect on people's continued use or enjoyment. Eighty percent (80%) of those interviewed said that the presence of the turbines would not change their enjoyment of Lower Lead Mountain Pond; thirteen percent (13%) indicated that the turbines would have a very positive affect on their enjoyment of the Pond. All of those interviewed said that the presence of the turbines would either have no effect on their decision to return to Lower Lead Mountain Pond (73%) or would increase their desire to return (27%).

None of those interviewed said that the presence of the turbines would change their enjoyment of Upper Lead Mountain Pond. Eighty-eight percent (88%) of those interviewed said that the presence of the turbines would have no effect on their decision to return to Upper Lead Mountain Pond. The effect on continued use and enjoyment was rated as low-none for both Upper and Lower/Middle Lead Mountain Ponds.

F. Scope and scale of project views: 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 None was assigned to those resources where the Project will not be visible. For Narraguagus Lake, the scope and scale of the view of the blades from one turbine was rated as Minimal, since it is unlikely that the casual observer would notice it at a distance of 6.3 miles.

For the Lead Mountain Ponds, the rating is based on the number of turbines visible, their position in the landscape, the angle of view that they are seen over, the presence of other turbines in the landscape, the percentage of the waterbody that may be affected by views of the turbines, and the distance from the observer. Only turbines within eight miles of the resource are considered. The rating was also informed by the methodology developed by Palmer and presented as part of the peer review of the Hancock VIA.

Upper Lead Mountain Pond was rated as Low, based upon the minimal views of the turbines and the relatively low percentage of the Pond that would be affected. Lower/Middle Lead Mountain Pond was rated as Low-Medium, based upon the proximate views of three turbines and relatively low percentage of the Pond that would be affected.

8.3 Effect on Scenic Character

Effect on Scenic Character evaluates the Project at two levels: a) overall scenic impacts on individual SRSNSs, and b) the scenic impact of the Project as a whole (presented in 9.0). Table 5 summarizes the Project's effect on individual SRSNSs, consistent with Chapter 382.I.

The evaluation of impacts to SRSNSs is a composite finding, based on 1) the Value of the Resources (see Table 6), based on significance of the resource (derived from Table 1), existing character, and viewer expectations; and 2) the Significance of the Impacts (see Table 7), based on project purpose and context; extent, nature duration of public uses; impact on continuing use and enjoyment of those uses; scope and scale of potential impact; and cumulative impacts).

Table 5: Summary of Evaluation Criteria

Scenic Resource of State or National Significance	Scenic Impact Evaluation Criteria						
	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
6B Historic Sites							
Eastbrook Baptist Church / Town	Low	Medium	Medium	Low-Medium	Low	None	None
Brick School House	Low	Medium	Medium	Low-Medium	Low	None	None
6D. Great Ponds							
Alligator Lake	High	Medium	Medium	Low-Medium	Low	None	None
Narraguagus Lake	Low-Med	Medium	High	Low-Medium	Low	None	Minimal
Upper Lead Mtn. Pond	Low-Med	Medium	High	Low-Medium	Low-Medium	Low-None	Low
Lower/Middle Lead Mtn. Pond	Low-Med	Medium	High	Low-Medium	Low-Medium	Low-None	Low-Medium
Myrick Pond	Low	Medium	Medium	Low-Medium	Low	None	None
6D. Rivers							
West Branch Union River	Low-Medium	Medium	Medium	Low-Medium	Low	None	None

Table 6: Value of Resource

	Criterion			Resource Value
	Resource Significance	Existing Character	Viewer Expectation	
Narraguagus Lake	Low-Med	Medium	High	Medium
Upper Lead Mt Pond	Low-Med	Medium	High	Medium
Lower/Middle Lead Mt Pond	Low-Med	Medium	High	Medium

Table 7: Significance of Impact

	Criterion					Impact Significance
	D. Purpose Context	E.1 Public Uses	E.2 Enjoyment Cont Use	F. Scope Scale	Cumul Impacts	
Narraguagus Lake	Low-Medium	Low	None	Low-None	Low	Low
Upper Lead Mt Pond	Low-Medium	Low-Medium	Low-None	Low	Low	Low
Lower/Middle Lead Mt Pond	Low-Medium	Medium	Low-None	Low-Medium	Low-Medium	Low-Medium

Narraguagus Lake. The overall scenic impact on Narraguagus Lake is rated as Minimal. The Resource Value of the Lake is rated as Medium, in consideration of its significance (low-medium from Table 1); its existing character (medium); and viewer expectation (high).

The significance of the Project impact on Narraguagus Lake is rated as Low, based on the limited number of turbine blades (one) that may be seen, the lack of visibility of a turbine nacelle, the distance of the closest turbine to the lake (5.1 miles), lack of interference with prominent features, and the nature of the existing views from the lake, which already contains multiple turbines that will appear much larger than the blades from the single Weaver turbine.

Pursuant to Chapter 382.3.I, a low scenic impact to a SRSNS of medium value will be considered to not constitute an unreasonable adverse effect on scenic character or existing uses related to scenic character.

Upper Lead Mountain Pond. The overall scenic impact on Upper Lead Mountain Pond is rated as Low. The Resource Value of the Pond is rated as Medium, in consideration of its significance (low-medium from Table 1); its existing character (medium); and viewer expectation (high).

The significance of the Project impact on Upper Lead Mountain Pond is rated as Low, based on the limited number of turbine hubs (1) that would be visible, the percentage of the lake where a nacelle would be visible (< 33%), the distance of the closest turbine to the lake (3.7 miles), the lack of interference with prominent features, the nature of the existing views from the lake, the limited visibility that the Project would have, primarily in the background viewing distance. The Intercept survey indicated that the Project would have low to no effect on the continuing use and enjoyment of the Pond.

Pursuant to Chapter 382.3.I, a low scenic impact to a SRSNS of medium value will be considered to not constitute an unreasonable adverse effect on scenic character or existing uses related to scenic character.

Lower /Middle Lead Mountain Ponds. The overall scenic impact on Lower /Middle Lead Mountain Ponds is rated as Low-Medium. The Resource Value of the Pond is rated as Medium, in consideration of its significance (low-medium from Table 1); its existing character (medium); and viewer expectation (high).

The significance of the Project impact on Lower/Middle Lead Mountain Pond is rated as Low-Medium, based on the limited number of turbine hubs (3) that would be visible, the percentage of the lake where hubs would be visible (< 33%), the distance of the closest turbine to the lake (2.0 miles), interference with prominent features (none), the nature of the existing views from the lake. The Intercept survey indicated that the Project would have low to no effect on the continuing use and enjoyment of the Pond.

Pursuant to Chapter 382.3.I, a low scenic impact to a SRSNS of medium value will be considered to not constitute an unreasonable adverse effect on scenic character or existing uses related to scenic character.

9.0 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.*

As noted above, all three waterbodies where there may be views of the Project have been rated as medium value.

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

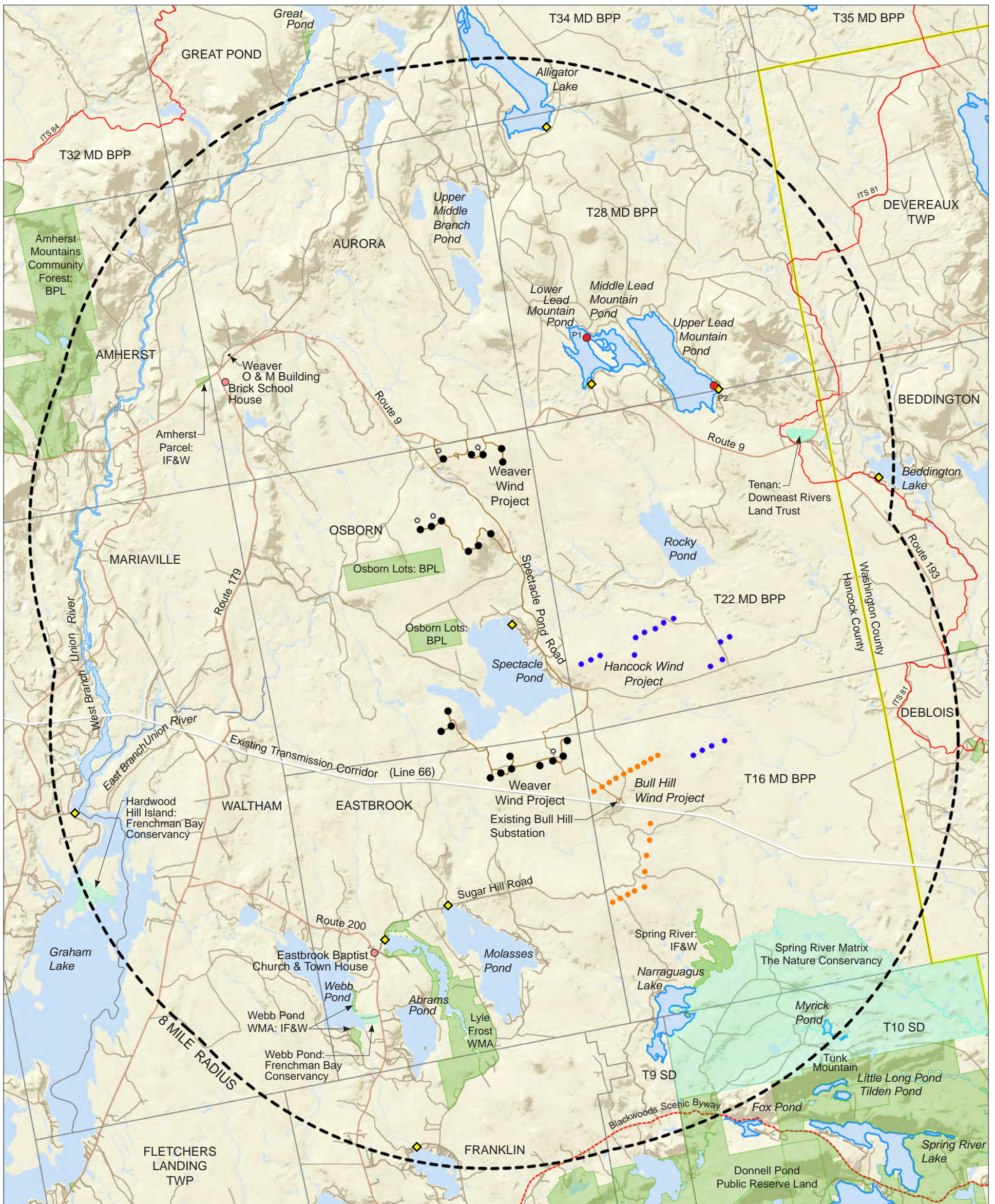
The visual impact assessment examined the criteria established by Chapter. 382.I and determined that the Project would have a minimal scenic impact on Narraguagus Lake; a low scenic impact on Upper Lead Mountain Pond; and a low-medium impact on Lower/Middle

Lead Mountain Pond. This information was used to conclude that the Project would not significantly compromise views from these resources such that it would have an unreasonable adverse effect on their scenic character or the existing uses related to their scenic character.

- Six of the eight categories of Scenic Resources of State or National Significance (SRSNS) identified by the Wind Energy Act will not be impacted by the Project.
- The Project will not be visible from either the **Eastbrook Baptist Church and Townhouse** in Eastbrook, or the **Brick School House** in Aurora, three structures on the National Register of Historic Places within eight miles of the Project. Both of these resources are considered to be low value SRSNS.
- The upper portion of the blades from one turbine may be visible at a distance of 6.3 miles from **Narraguagus Lake**, which is a medium value SRSNS. At that distance, the blade would be almost non-detectable to the casual observer. The overall scenic impact to Narraguagus Lake will be minimal.
- The cumulative visual impact of the Weaver Wind Project on Narraguagus Lake, added to the existing impact created by the Bull Hill Project and the anticipated impacts from the Hancock Project, should be minimal.
- At a maximum, blades and nacelle of one turbine and portions of blades of four turbines may be visible from 26% of **Upper Lead Mountain Pond**, a significant scenic resource, at a distance of 4.6 to 6.1 miles. Upper Lead Mountain Pond is considered a medium value SRSNS. The overall scenic impact on the Pond will be low.
- The cumulative visual impact of the Weaver, Bull Hill, and Hancock Projects on Upper Lead Mountain Pond will be minimal. The Bull Hill turbines are not visible from the Pond. The Hancock turbines will be minimally visible.
- An observer on **Lower Lead Mountain Pond**, a significant scenic resource, will see the nacelles and blades of 4 turbines and the blades of additional three turbines at or above the tree line at a distance of 2.9 to 5.0 miles. At a maximum, portions of turbines will be visible from 35% of the Pond. Lower Lead Mountain Pond is a medium value SRSNS. The overall scenic impact to the Ponds will be low-medium.
- The cumulative visual impact of the Bull Hill, Hancock, and Weaver Wind Projects on Lower Lead Mountain Pond will be low-medium. None of the Bull Hill turbines are within 8 miles. In addition to the 7 turbines that may be visible, the blades from nine of the Hancock turbines may be visible from the northern portion of the Pond
- The Project will not be visible from any other SRSNS within the 8-mile study area, including Alligator Lake, Myrick Pond, and the West Branch Union River.

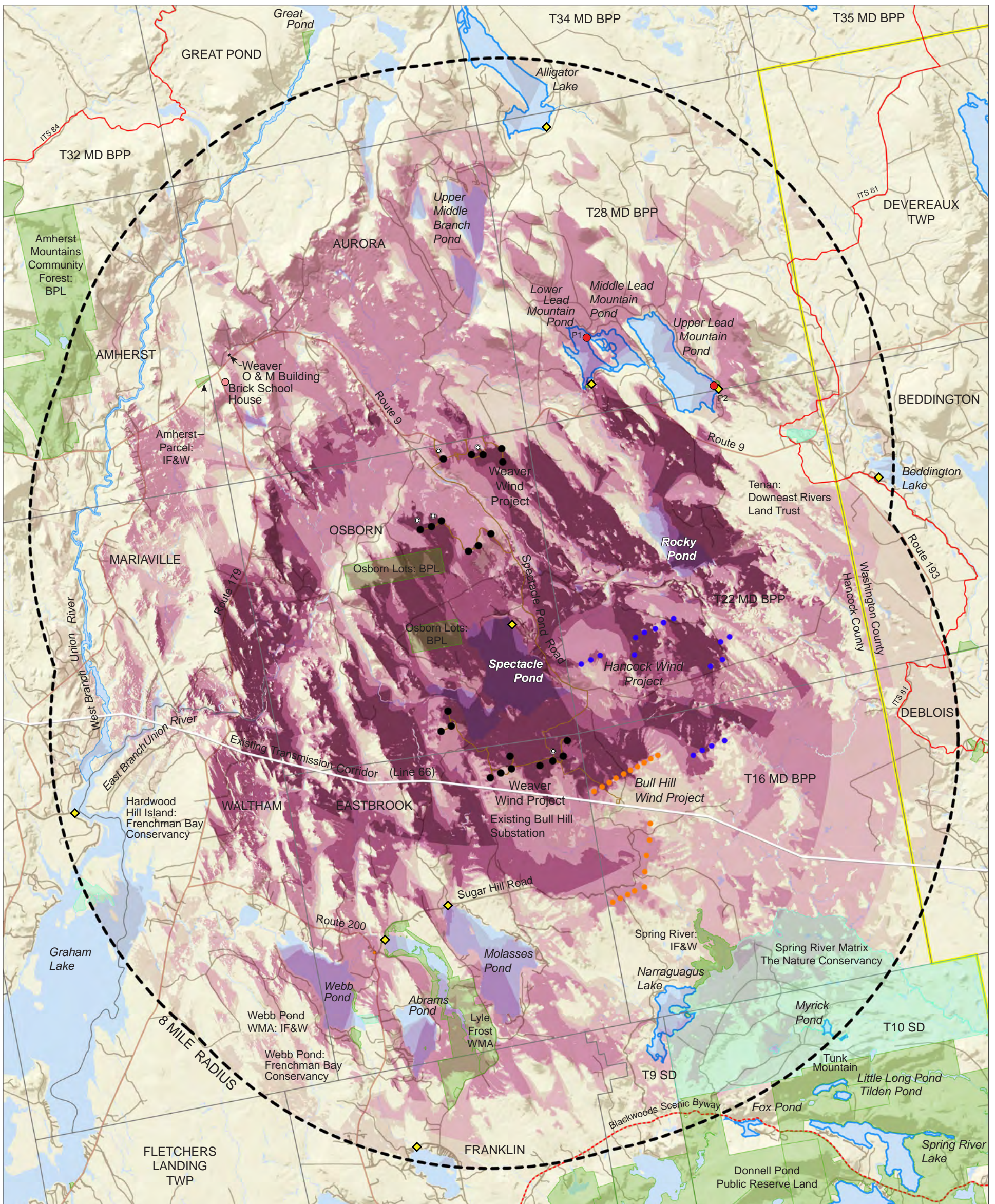
- The Project will not be visible from any National Natural Landmarks, federally designated wilderness areas, National Parks, State Parks, or MDOT scenic turnouts. There are no coastal viewpoints within the 8-mile study area.
- The associated facilities for the Project (i.e., the access roads, the above and underground electrical collection system, and met towers) will have no impact on views from SRSNS. The Project will add a substation adjacent to the existing Bull Hill/Hancock Substation. The O&M facility that was approved for the Hancock Wind Project will be used for the Weaver O&M facility. No new generator lead lines are proposed. The associated facilities are located in actively managed timberland that is generally out of view from the surrounding area. 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 range from minimal to low-medium. The Weaver Wind Project will not have an unreasonable adverse impact on scenic values and existing uses of SRSNS. 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.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.*



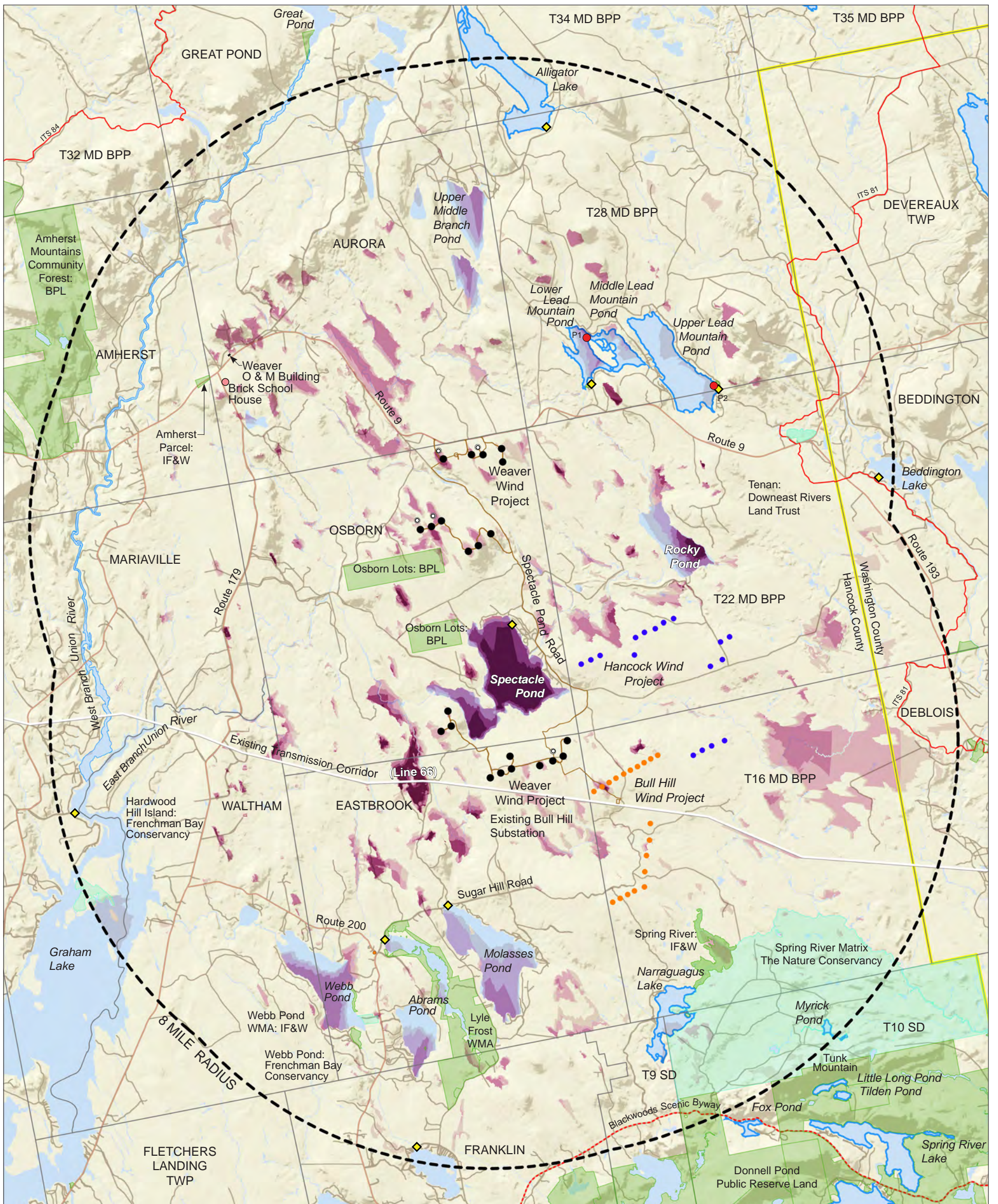
LEGEND		NOTES	
<p>MAP 1: PROJECT STUDY AREA MAP</p> <hr/> <p>WEAVER WIND PROJECT</p>	● Weaver Wind Turbines (Proposed)	<p>WEAVER WIND SPECIFICATIONS:</p> <p style="text-align: center;">Vestas V126</p>	<p>WEAVER WIND, LLC</p> <p>NORTH</p> <p>0 1 2 3 MILES</p> <p>Appendix A</p> <p>2018.09.25 Page of 11</p>
	○ Weaver Wind Permanent Met Towers (Proposed)		
	● Hancock Wind Turbines (Existing)		
	● Bull Hill Turbines (Existing)		
	— Proposed Access Roads		
	••• Proposed Collector Line		
	— Existing Transmission Corridor (Line 66)		
	— County Lines		
	— Municipal Boundaries		
	■ Public Conservation Lands from ME OGIS		
	■ Private Conservation Lands from ME OGIS		
	— Interconnected Trail System (ITS)		
	◆ Boat Launch		
	● Structure on National Register		
	■ Scenic Lake, Pond, or River		
— Scenic Byway			
● P# Photosimulation Location			

Weaver Wind Project Turbine layout as of 01.21.15

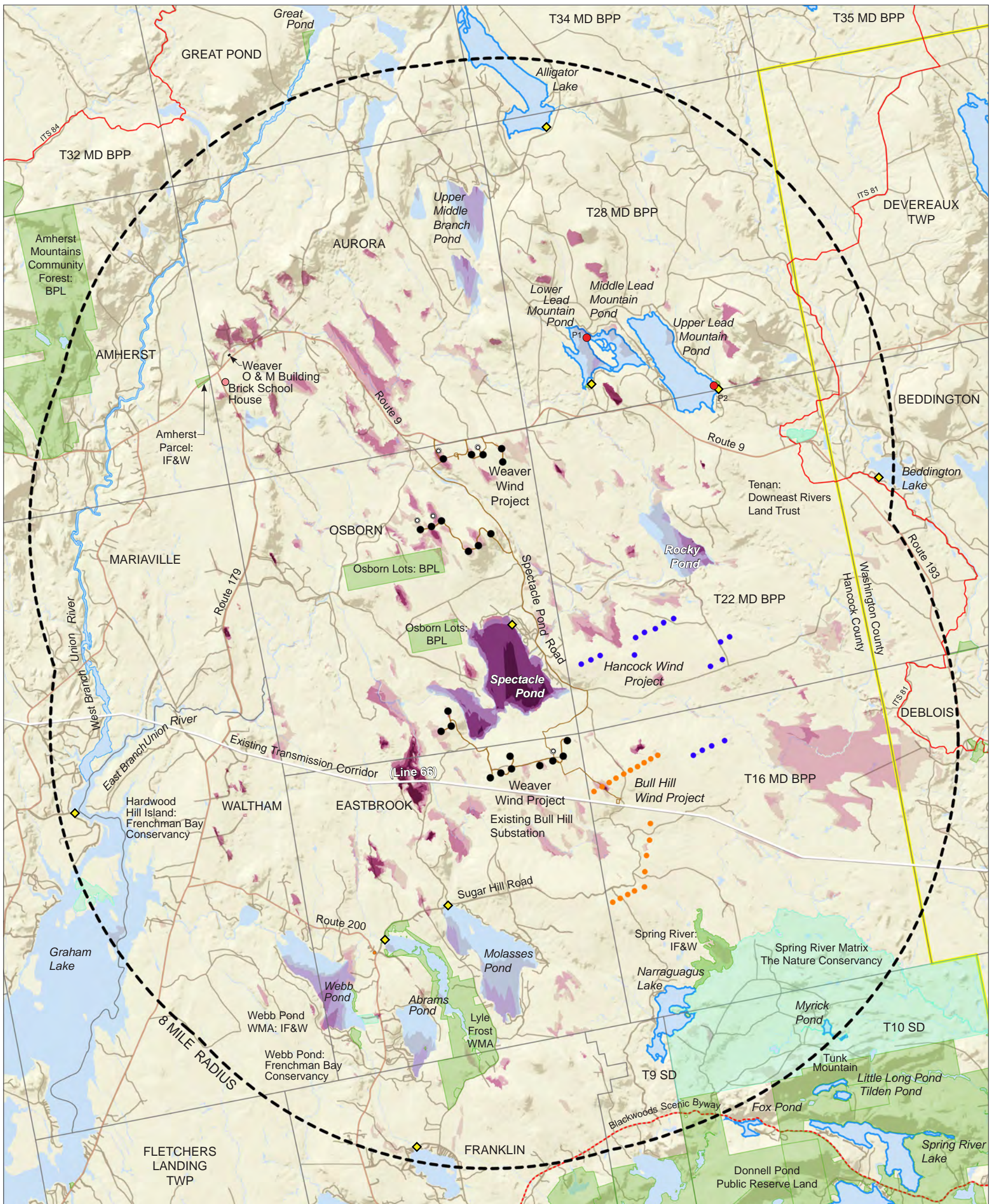


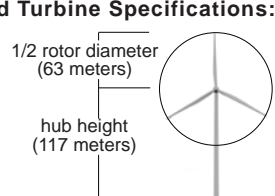



<h3>MAP 2: TOPOGRAPHIC VIEWSHED FOR BLADES</h3>	LEGEND <ul style="list-style-type: none"> ● Weaver Wind Turbines (Proposed) ○ Weaver Wind Permanent Met Towers (Proposed) ● Hancock Wind Turbines (Existing) ● Bull Hill Turbines (Existing) — Proposed Access Roads ••• Proposed Collector Line — Existing Transmission Corridor (Line 66) — County Lines — Municipal Boundaries ■ Public Conservation Lands from ME OGIS ■ Private Conservation Lands from ME OGIS — Interconnected Trail System (ITS) ◆ Boat Launch ○ Structure on National Register ■ Scenic Lake, Pond, or River — Scenic Byway ● P# Photosimulation Location 		TURBINE VISIBILITY NOTES	
	WEAVER WIND PROJECT			<p>This viewshed map:</p> <ul style="list-style-type: none"> ● accounts for the screening effects of topography only. ● shows where the viewer may see at least blade tips if no vegetation was present. <p>Potential turbine visibility needs to be confirmed with field investigations and other visualization techniques.</p> <p>Weaver Wind Turbine Specifications:</p> <p style="text-align: center;">Vestas V126</p>
		WEAVER WIND, LLC NORTH Appendix A 2018.09.25 Page 2 of 11		

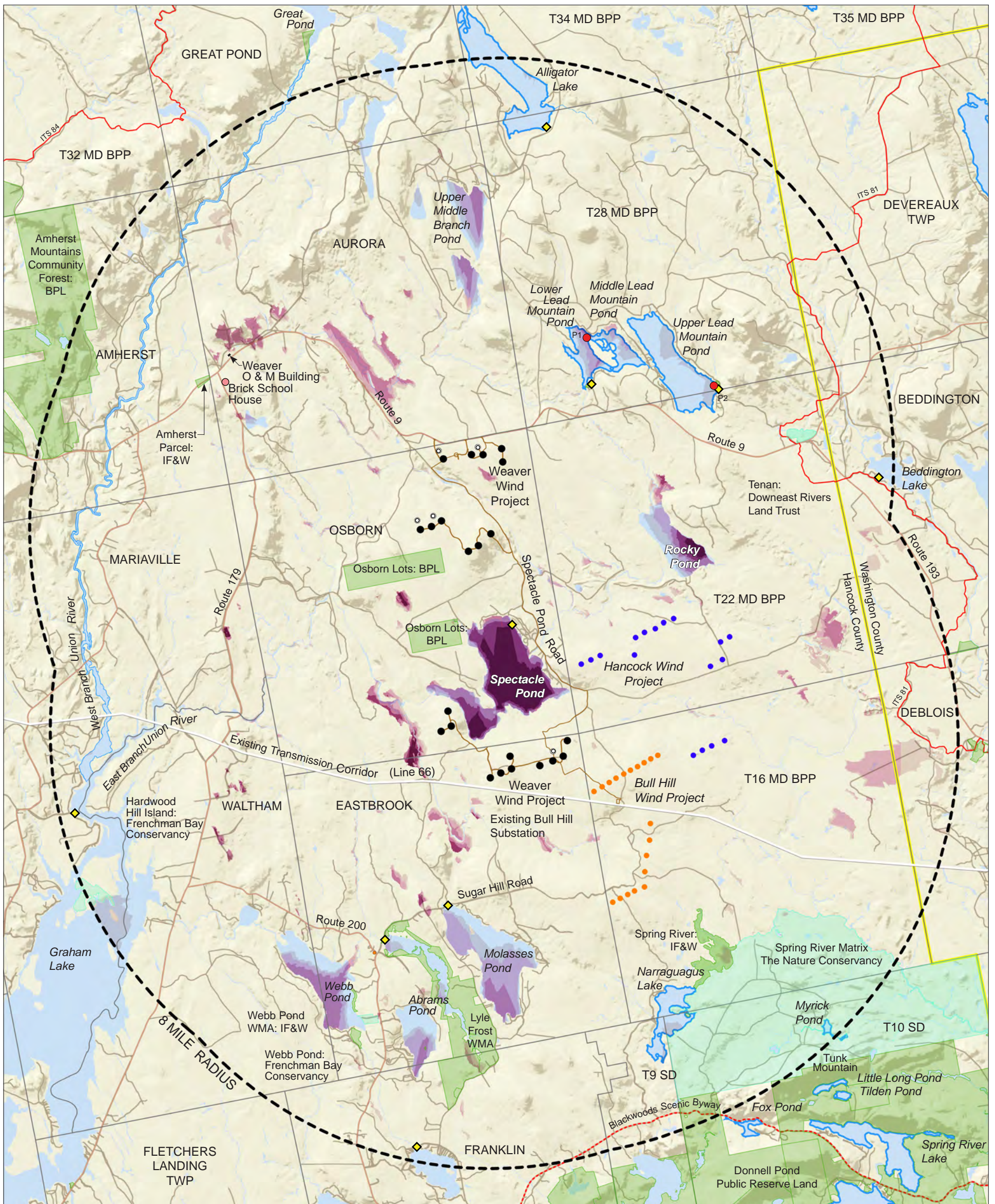
Weaver Wind Project Turbine layout as of 01.21.15

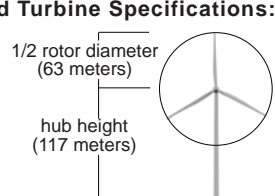



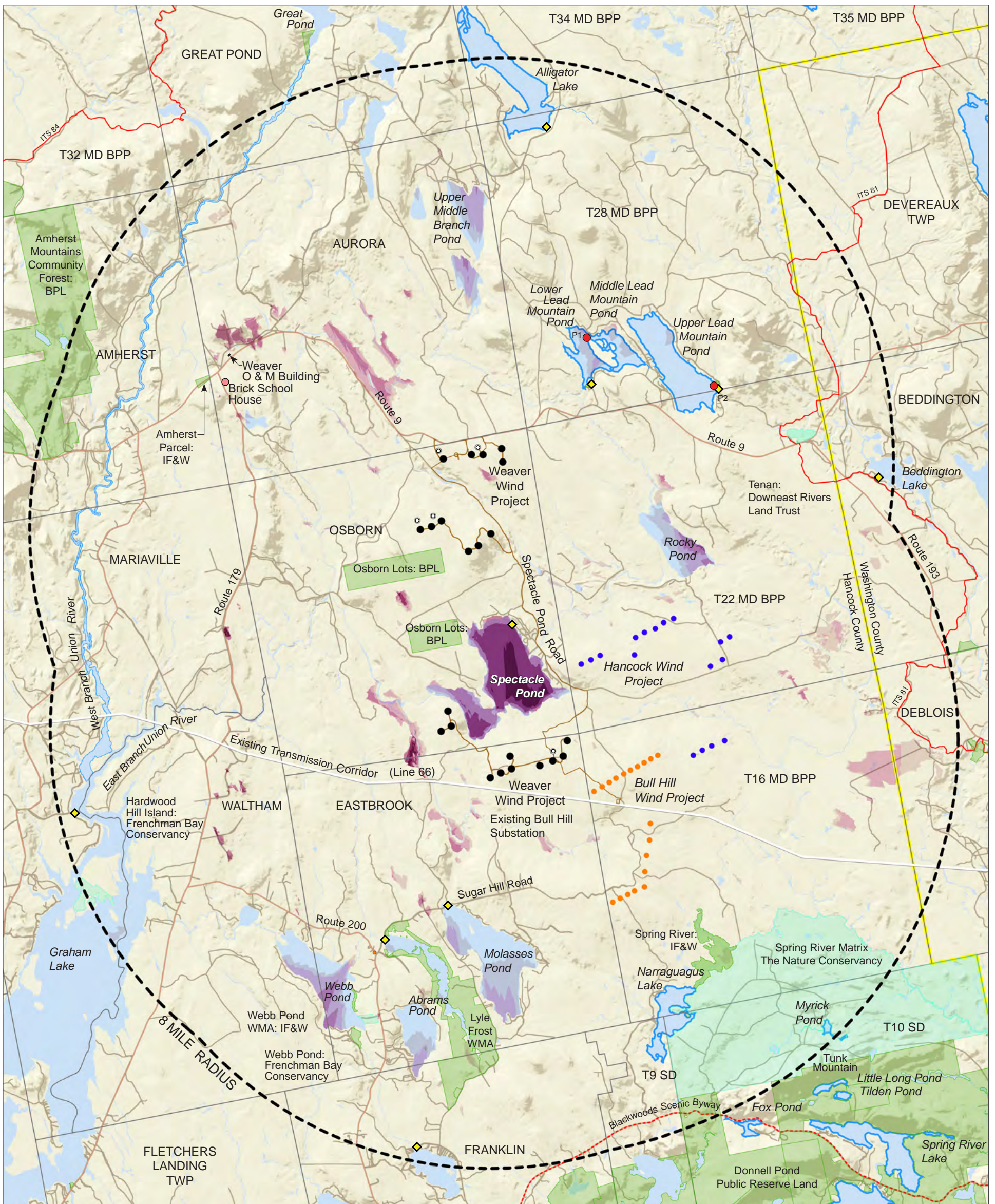
<h3>MAP 3: VEGETATED VIEWSHED A FOR BLADES</h3>	LEGEND <ul style="list-style-type: none"> ● Weaver Wind Turbines (Proposed) ○ Weaver Wind Permanent Met Towers (Proposed) ● Hancock Wind Turbines (Existing) ● Bull Hill Turbines (Existing) — Proposed Access Roads ••• Proposed Collector Line — Existing Transmission Corridor (Line 66) — County Lines — Municipal Boundaries ■ Public Conservation Lands from ME OGIS ■ Private Conservation Lands from ME OGIS — Interconnected Trail System (ITS) ◆ Boat Launch ● Structure on National Register ■ Scenic Lake, Pond, or River — Scenic Byway ● P# Photosimulation Location 		TURBINE VISIBILITY NOTES <ul style="list-style-type: none"> 1-5 6-10 11-15 16-20 20-22 		<p>This viewshed map:</p> <ul style="list-style-type: none"> • accounts for the screening effects of topography as well as 3 types of existing vegetation. Landcover data from Maine OGIS. The heights for the forest cover types are as follows: <ul style="list-style-type: none"> - Deciduous: 40' - Evergreen: 40' - Mixed: 40' * All other forest cover types are set to 0'. • shows where the viewer may see at least blade tips if vegetation was present. <p>Potential turbine visibility needs to be confirmed with field investigations and other visualization techniques.</p> <p>Weaver Wind Turbine Specifications:</p> <div style="text-align: center;"> <p>Vestas V126</p> </div>	<p>WEAVER WIND, LLC</p> <p>tjd&a</p> <p>NORTH</p> <p>0 1 2 3 MILES</p> <p>Appendix A</p> <p>2018.09.25 Page 3 of 11</p>
	<h3>WEAVER WIND PROJECT</h3>					

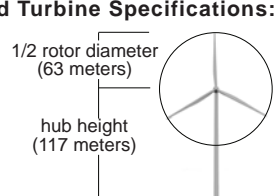



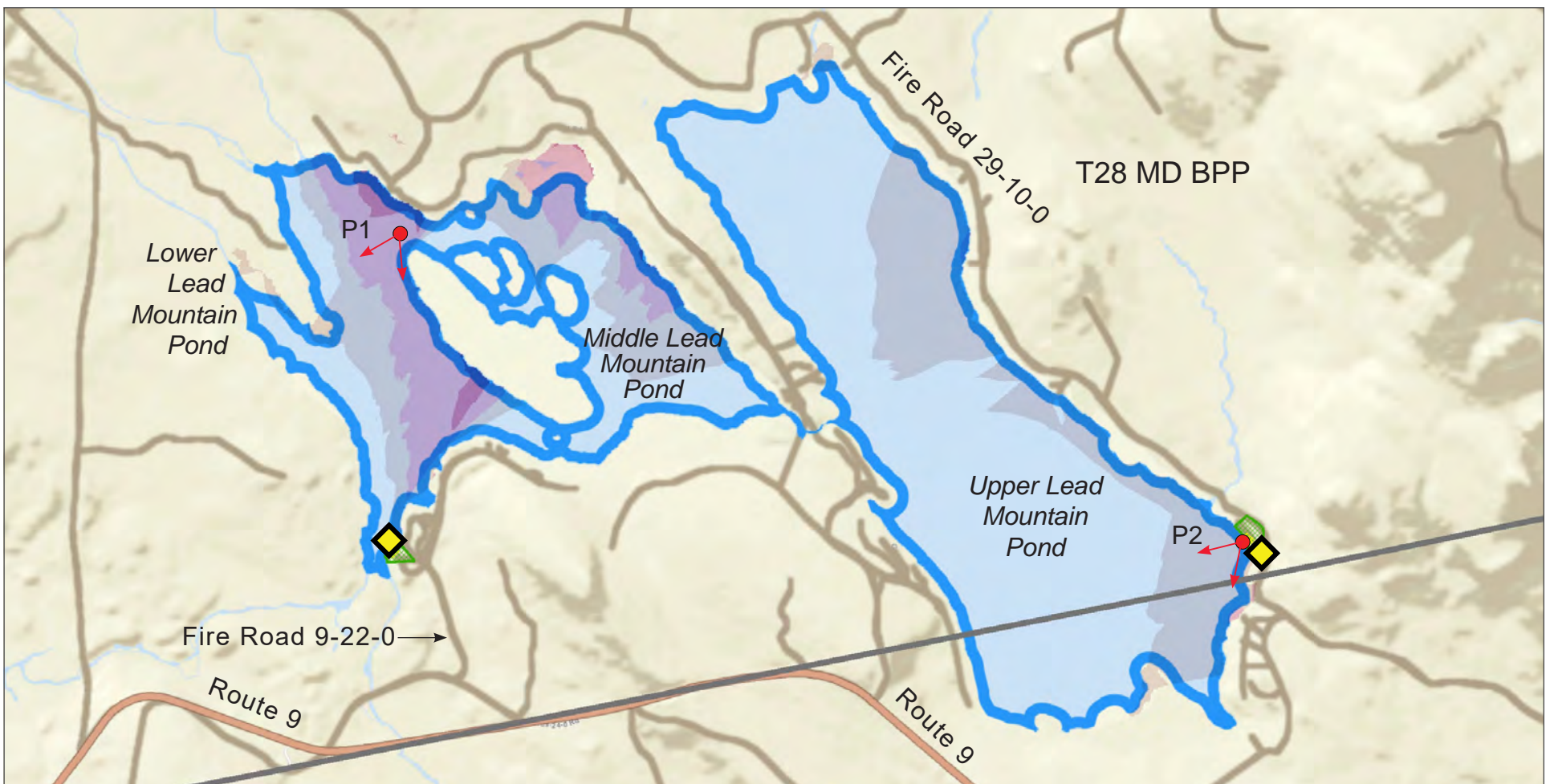
<h3>MAP 4: VEGETATED VIEWSHED A FOR NACELLES</h3>	LEGEND <ul style="list-style-type: none"> ● Weaver Wind Turbines (Proposed) ○ Weaver Wind Permanent Met Towers (Proposed) ● Hancock Wind Turbines (Existing) ● Bull Hill Turbines (Existing) — Proposed Access Roads ••• Proposed Collector Line — Existing Transmission Corridor (Line 66) — County Lines — Municipal Boundaries ■ Public Conservation Lands from ME OGIS ■ Private Conservation Lands from ME OGIS — Interconnected Trail System (ITS) ◆ Boat Launch ● Structure on National Register ■ Scenic Lake, Pond, or River — Scenic Byway ● P# Photosimulation Location 	TURBINE VISIBILITY NOTES <table border="1"> <tr> <td style="background-color: #f0e68c; width: 20px;"></td> <td>1-5</td> </tr> <tr> <td style="background-color: #f0a0a0; width: 20px;"></td> <td>6-10</td> </tr> <tr> <td style="background-color: #e68c8c; width: 20px;"></td> <td>11-15</td> </tr> <tr> <td style="background-color: #8c8c8c; width: 20px;"></td> <td>16-20</td> </tr> <tr> <td style="background-color: #404040; width: 20px;"></td> <td>20-22</td> </tr> </table>		1-5		6-10		11-15		16-20		20-22	This viewshed map: <ul style="list-style-type: none"> • accounts for the screening effects of topography as well as 3 types of existing vegetation. Landcover data from Maine OGIS. The heights for the forest cover types are as follows: <ul style="list-style-type: none"> - Deciduous: 40' - Evergreen: 40' - Mixed: 40' * All other forest cover types are set to 0'. • shows where the viewer may see nacelles if vegetation was present. <p>Potential turbine visibility needs to be confirmed with field investigations and other visualization techniques.</p> Weaver Wind Turbine Specifications: <div style="text-align: center;">  <p>1/2 rotor diameter (63 meters) hub height (117 meters) Vestas V126</p> </div>	WEAVER WIND, LLC  NORTH   MILES Appendix A 2018.09.25 Page 4 of 11
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	16-20													
	20-22													
WEAVER WIND PROJECT														



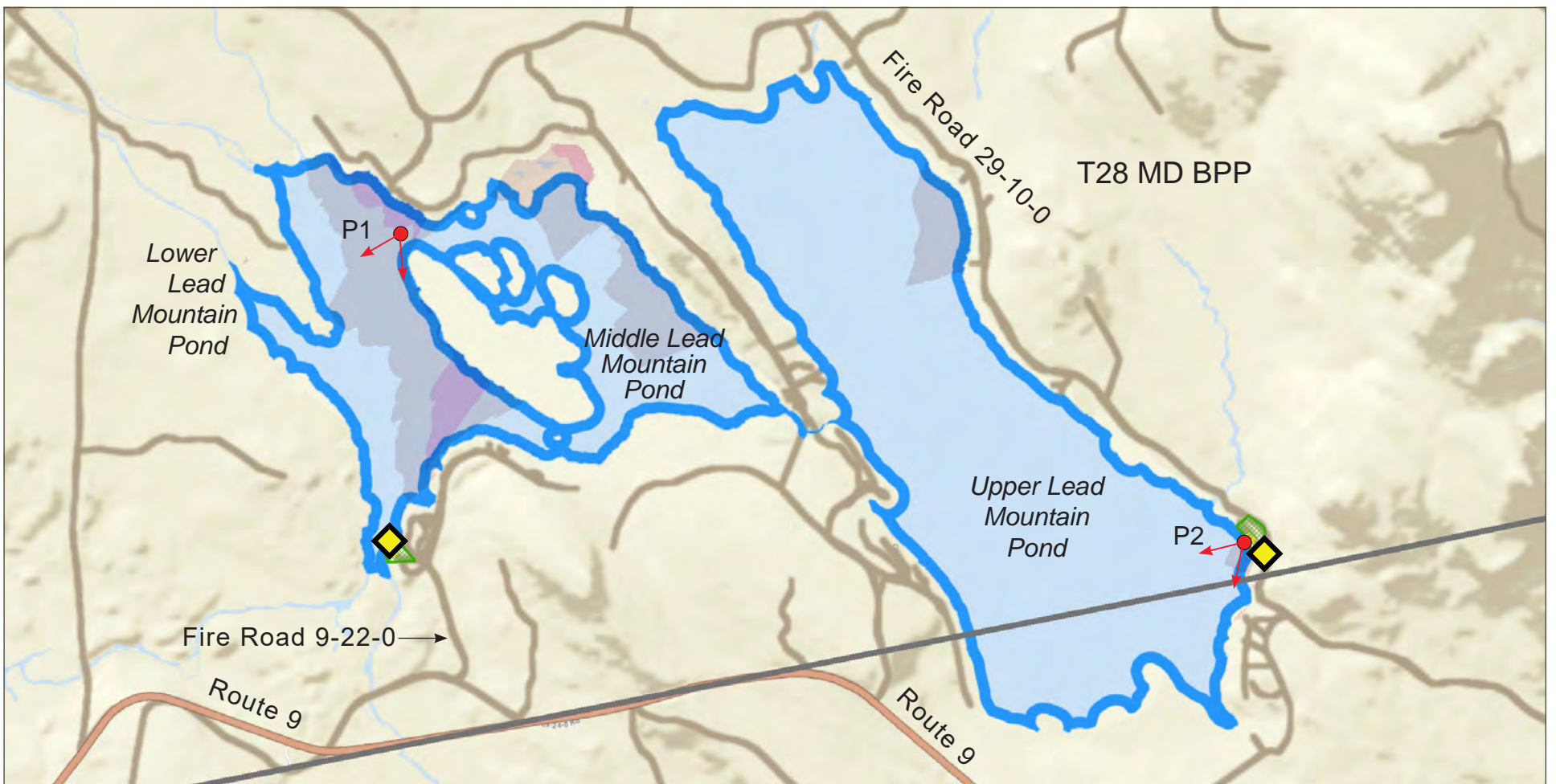
<h3>MAP 5: VEGETATED VIEWSHED B FOR BLADES</h3>	LEGEND <ul style="list-style-type: none"> ● Weaver Wind Turbines (Proposed) ○ Weaver Wind Permanent Met Towers (Proposed) ● Hancock Wind Turbines (Existing) ● Bull Hill Turbines (Existing) — Proposed Access Roads ••• Proposed Collector Line — Existing Transmission Corridor (Line 66) — County Lines — Municipal Boundaries ■ Public Conservation Lands from ME OGIS ■ Private Conservation Lands from ME OGIS — Interconnected Trail System (ITS) ◆ Boat Launch ● Structure on National Register ■ Scenic Lake, Pond, or River — Scenic Byway ● P# Photosimulation Location 		TURBINE VISIBILITY NOTES <table border="1"> <tr> <td style="background-color: #f0e68c; width: 20px;"></td> <td>1-5</td> </tr> <tr> <td style="background-color: #f0a0a0; width: 20px;"></td> <td>6-10</td> </tr> <tr> <td style="background-color: #e68c8c; width: 20px;"></td> <td>11-15</td> </tr> <tr> <td style="background-color: #a08c8c; width: 20px;"></td> <td>16-20</td> </tr> <tr> <td style="background-color: #8c8c8c; width: 20px;"></td> <td>20-22</td> </tr> </table>			1-5		6-10		11-15		16-20		20-22	<p>This viewshed map:</p> <ul style="list-style-type: none"> accounts for the screening effects of topography as well as 8 types of existing vegetation. Landcover data from Maine OGIS. The heights for the forest cover types are as follows: <ul style="list-style-type: none"> - Deciduous: 40' - Evergreen: 40' - Mixed: 40' - Scrub Shrub: 10' - Forested Wetland: 20' - Light Partial Cut: 40' - Heavy Partial Cut: 40' - Forest Regeneration: 20' shows where the viewer may see at least blade tips if vegetation was present. <p>Potential turbine visibility needs to be confirmed with field investigations and other visualization techniques.</p> <p>Weaver Wind Turbine Specifications:</p> <div style="text-align: center;">  <p>1/2 rotor diameter (63 meters)</p> <p>hub height (117 meters)</p> <p>Vestas V126</p> </div>	<p>WEAVER WIND, LLC</p> <p>tjd&a</p> <p>NORTH</p>  <p>0 1 2 3 MILES</p> <p>Appendix A</p> <p>2018.09.25 Page 5 of 11</p>
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<h3>WEAVER WIND PROJECT</h3>																



<h3>MAP 6: VEGETATED VIEWSHED B FOR NACELLES</h3>	<h4>LEGEND</h4> <ul style="list-style-type: none"> ● Weaver Wind Turbines (Proposed) ○ Weaver Wind Permanent Met Towers (Proposed) ● Hancock Wind Turbines (Existing) ● Bull Hill Turbines (Existing) — Proposed Access Roads ••• Proposed Collector Line — Existing Transmission Corridor (Line 66) — County Lines — Municipal Boundaries ■ Public Conservation Lands from ME OGIS ■ Private Conservation Lands from ME OGIS — Interconnected Trail System (ITS) ◆ Boat Launch ● Structure on National Register ■ Scenic Lake, Pond, or River — Scenic Byway ● P# Photosimulation Location 		<h4>TURBINE VISIBILITY NOTES</h4> <table border="1"> <tr> <td style="background-color: #f0e68c; width: 20px;"></td> <td>1-5</td> </tr> <tr> <td style="background-color: #f0a0d0; width: 20px;"></td> <td>6-10</td> </tr> <tr> <td style="background-color: #d080c0; width: 20px;"></td> <td>11-15</td> </tr> <tr> <td style="background-color: #a060b0; width: 20px;"></td> <td>16-20</td> </tr> <tr> <td style="background-color: #804090; width: 20px;"></td> <td>20-22</td> </tr> </table>			1-5		6-10		11-15		16-20		20-22	<p>This viewshed map:</p> <ul style="list-style-type: none"> accounts for the screening effects of topography as well as 8 types of existing vegetation. Landcover data from Maine OGIS. The heights for the forest cover types are as follows: <ul style="list-style-type: none"> - Deciduous: 40' - Evergreen: 40' - Mixed: 40' - Scrub Shrub: 10' - Forested Wetland: 20' - Light Partial Cut: 40' - Heavy Partial Cut: 40' - Forest Regeneration: 20' shows where the viewer may see nacelles if vegetation was present. <p>Potential turbine visibility needs to be confirmed with field investigations and other visualization techniques.</p> <p>Weaver Wind Turbine Specifications:</p> <div style="text-align: center;">  <p>1/2 rotor diameter (63 meters)</p> <p>hub height (117 meters)</p> <p>Vestas V126</p> </div>	<p>WEAVER WIND, LLC</p> <p>tjd&a</p> <p>NORTH</p>  <p>0 1 2 3 MILES</p> <p>Appendix A</p> <p>2018.09.25 Page 6 of 11</p>
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	11-15															
	16-20															
	20-22															
<h3>WEAVER WIND PROJECT</h3>																

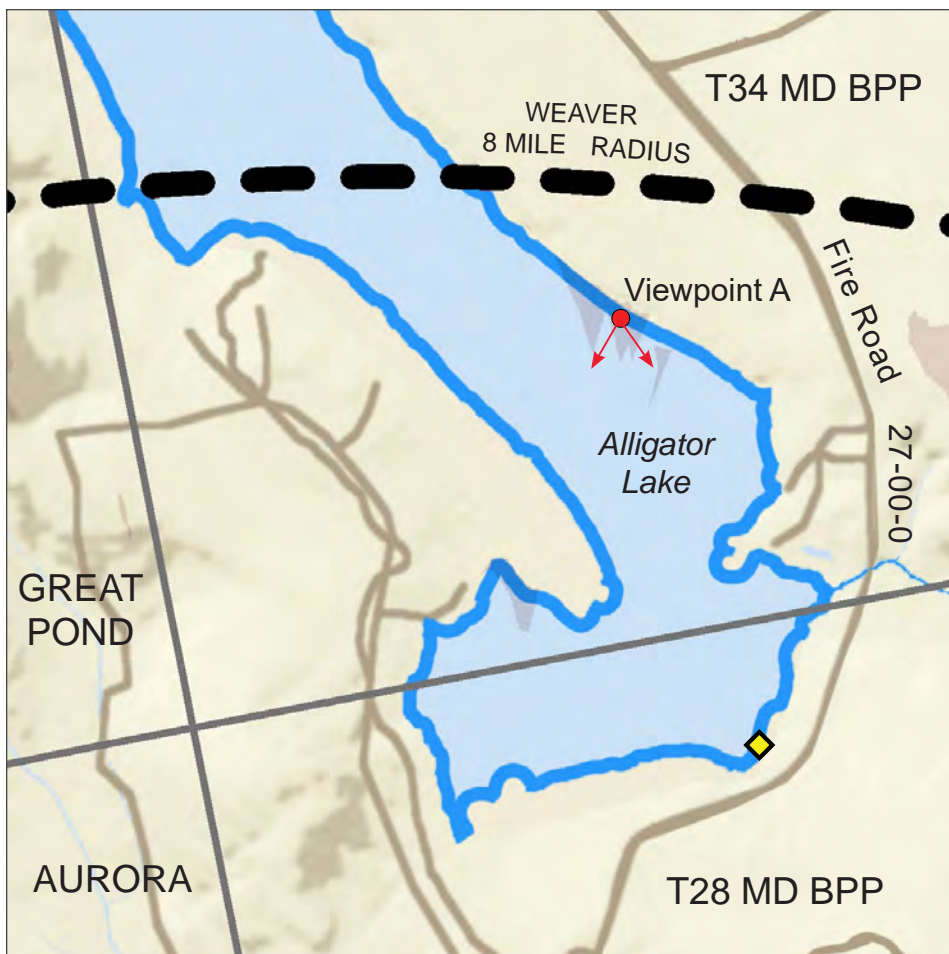


ENLARGEMENT OF MAP 3: BLADES. This enlargement indicates that turbine blades may be visible in the following locations: blades of approximately 20 turbines at the northern end of Lower Lead Mountain Pond; blades of approximately 15 turbines from Middle Lead Mountain Pond; and blades of approximately 10 turbines from Upper Lead Mountain Pond. These numbers overstate the potential impact as a result of the viewshed analysis being based upon an assumed tree height of 40' maximum. Field investigations indicate average tree height is approximately 50-60 feet. Computer modeling, which takes into account more realistic tree heights was used as the basis for the photosimulations. The modeling illustrates that blades of 7 turbines (including 4 nacelles) may be visible from VP1 on Lower Lead Mountain Pond; blades of 4 turbines would be visible from Middle Lead Mountain Pond; and blades of 5 turbines (including one nacelle) would be visible from Upper Lead Mountain Pond.

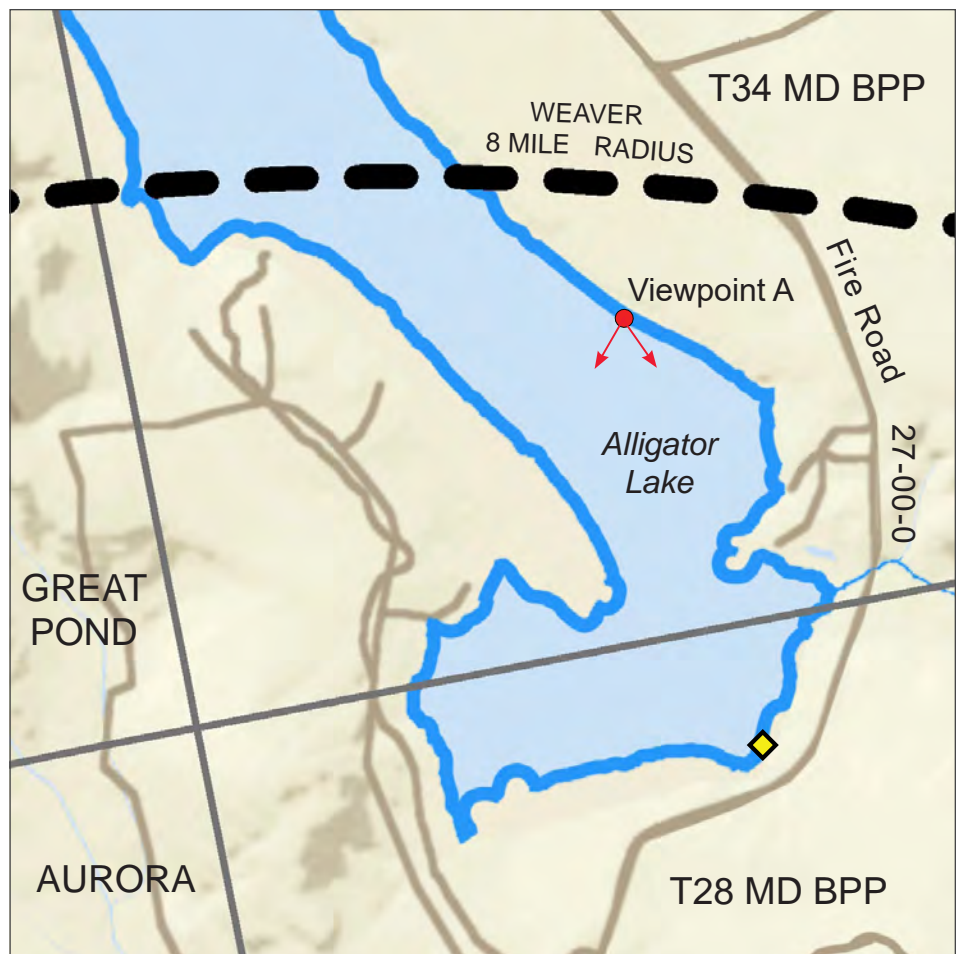


ENLARGEMENT OF MAP 4: NACELLES. This enlargement indicates that towers and nacelles only may be visible in the following locations: nacelles of approximately 15 turbines at the northern end of Lower Lead Mountain Pond; nacelles of approximately 10 turbines from Middle Lead Mountain Pond; and nacelles of approximately 5 turbines from Upper Lead Mountain Pond. These numbers overstate the potential impact as a result of the viewshed analysis being based upon an assumed tree height of 40' maximum. Computer modeling, which takes into account more realistic tree heights and was used as the basis for the photosimulations, indicate that up to 4 nacelles may be visible from VP1 on Lower Lead Mountain Pond; no nacelles would be visible from Middle Lead Mountain Pond; and one nacelle would be visible from Upper Lead Mountain Pond.

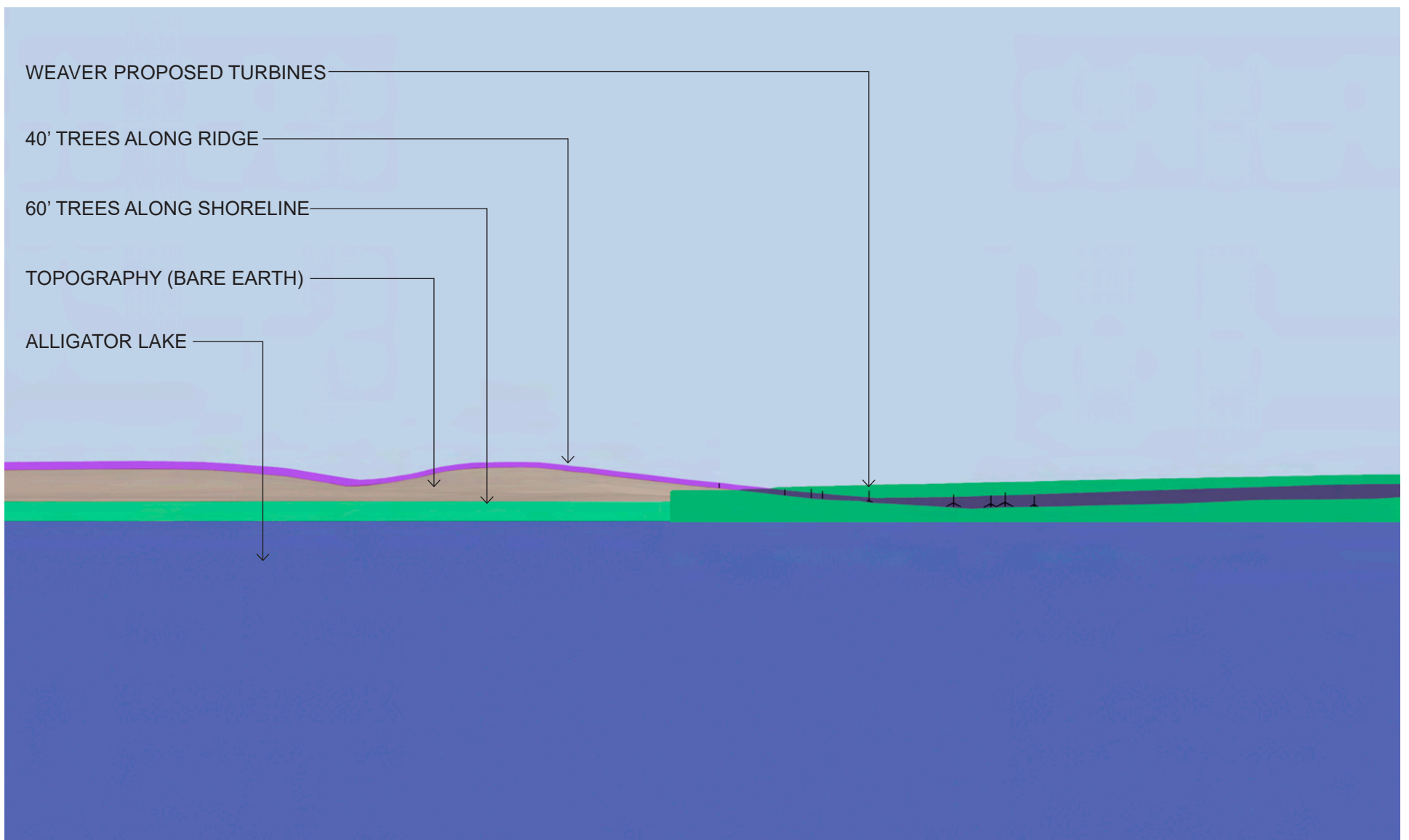
LEGEND		TURBINE VISIBILITY		NOTES
LEAD MOUNTAIN PONDS MAP 7: VEGETATED VIEWSHED A FOR BLADES AND NACELLES WEAVER WIND PROJECT	Municipal Boundaries Public Conservation Lands from ME OGIS Boat Launch Scenic Lake, Pond, or River Photosimulation Location	1-5 6-10 11-15 16-20 20-22	<p>These viewshed maps:</p> <ul style="list-style-type: none"> account for the screening effects of topography as well as 3 types of existing vegetation. Landcover data from Maine OGIS. The heights for the forest cover types are as follows: - Deciduous: 40' - Evergreen: 40' - Mixed: 40' * All other forest cover types are set to 0'. shows in Map 3 For Blades where the viewer may see at least blade tips if vegetation was present. shows in Map 4 For Nacelles where the viewer may see nacelles if vegetation was present. <p>Potential turbine visibility needs to be confirmed with field investigations and other visualization techniques.</p> <p>Weaver Wind Turbine Specifications:</p> <p>Vestas V126</p>	<p>WEAVER WIND, LLC</p> <p>NORTH</p> <p>0 MILE 0.5</p> <p>Appendix A</p> <p>2018.09.25 Page 7 of 11</p>



ENLARGEMENT OF MAP 3: BLADES: This enlargement indicates that blades of up to ten turbines may be visible from two locations in the southern half of Alligator Lake. The map overstates the potential impact as a result of the viewshed analysis being based upon an assumed tree height of 40' maximum. 3D modeling analysis (see below), which assigns a more realistic height of 60' to trees along the shoreline, indicates no turbines would be visible from Alligator Lake.

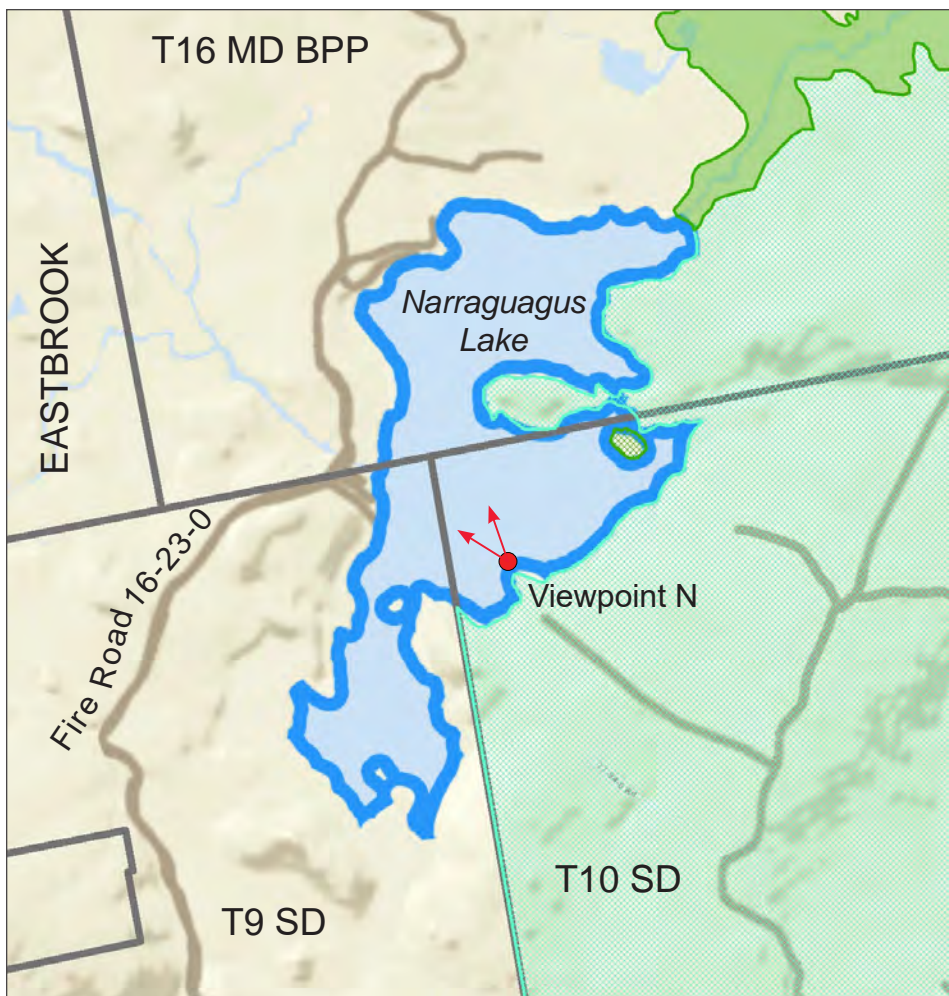


ENLARGEMENT OF MAP 4: NACELLES: This enlargement indicates that none of the nacelles would be visible from Alligator Lake. This was confirmed in 3D modeling analysis.

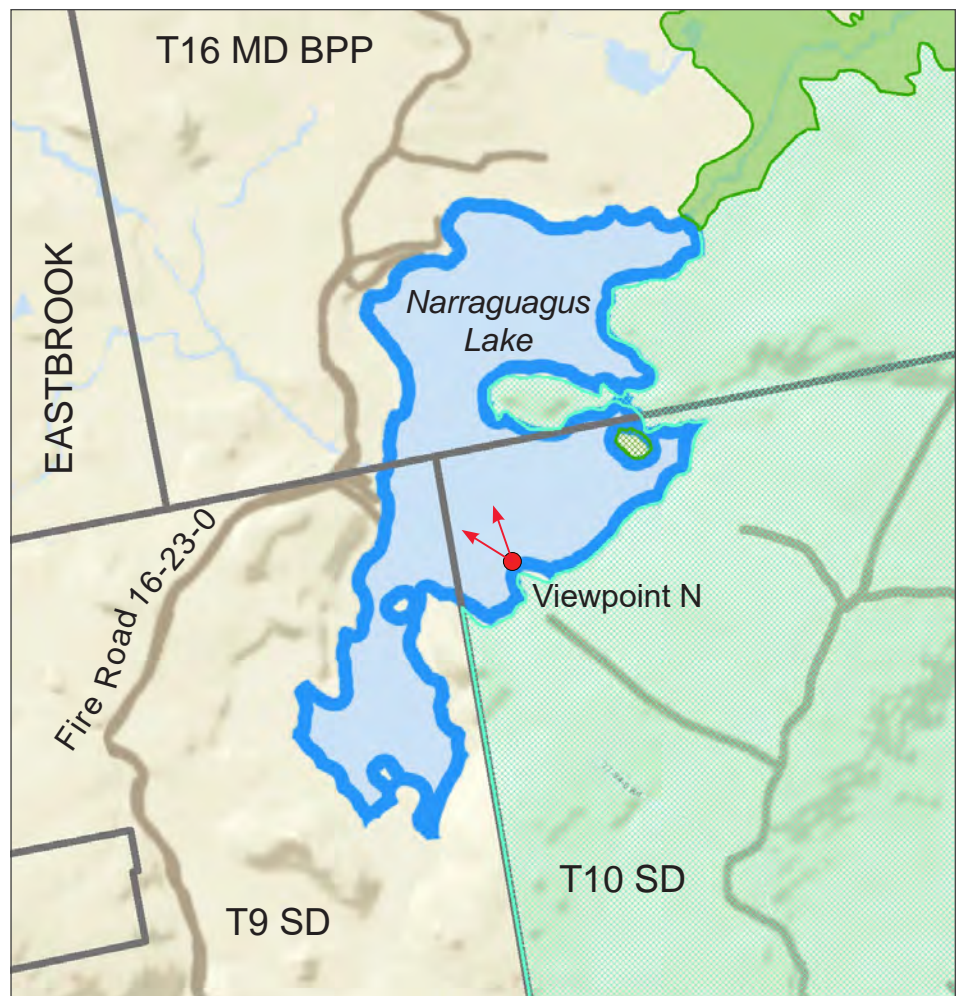


3D modeling analysis from Viewpoint A on Alligator Lake looking south toward the Weaver Wind Project. The model shows how topography (depicted as brown), trees along the ridges (depicted as 40' tall transparent purple 'walls') and trees along the shoreline (depicted as 60' tall transparent green 'walls') will screen Project turbines (black pointed objects) from view.

LEGEND		TURBINE VISIBILITY		NOTES
ALLIGATOR LAKE MAP 8: VEGETATED VIEWSHED A FOR BLADES AND NACELLES	Municipal Boundaries Boat Launch Scenic Lake, Pond, or River Photosimulation Location	1-5 6-10 11-15 16-20 20-22	<p>These viewshed maps:</p> <ul style="list-style-type: none"> account for the screening effects of topography as well as 3 types of existing vegetation. Landcover data from Maine OGIS. The heights for the forest cover types are as follows: - Deciduous: 40' - Evergreen: 40' - Mixed: 40' * All other forest cover types are set to 0'. shows in Map 3: Blades where the viewer may see at least blade tips if vegetation was present. shows in Map 4: Nacelles where the viewer may see nacelles if vegetation was present. <p>Potential turbine visibility needs to be confirmed with field investigations and other visualization techniques.</p> <p>Weaver Wind Turbine Specifications:</p> <p>Vestas V126</p>	<p>WEAVER WIND, LLC</p> <p>NORTH</p> <p>0 MILE 0.5</p> <p>Appendix A</p> <p>2018.09.25 Page 8 of 11</p>
	WEAVER WIND PROJECT			



ENLARGEMENT OF MAP 3: BLADES: This enlargement indicates that blades of up to five turbines may be visible from the mid-section and southern end of Narraguagus Lake. These numbers overstate the potential impact for two reasons: A) at a distance of 6+/- miles, observers are unlikely to notice the relatively thin blades; and B) the viewshed map is based upon an assumed tree height of 40'. WindPro 3D modeling analysis (see below), which takes into account actual tree heights along the shoreline, indicates the potential for blades from one turbine may be visible from Narraguagus Lake.

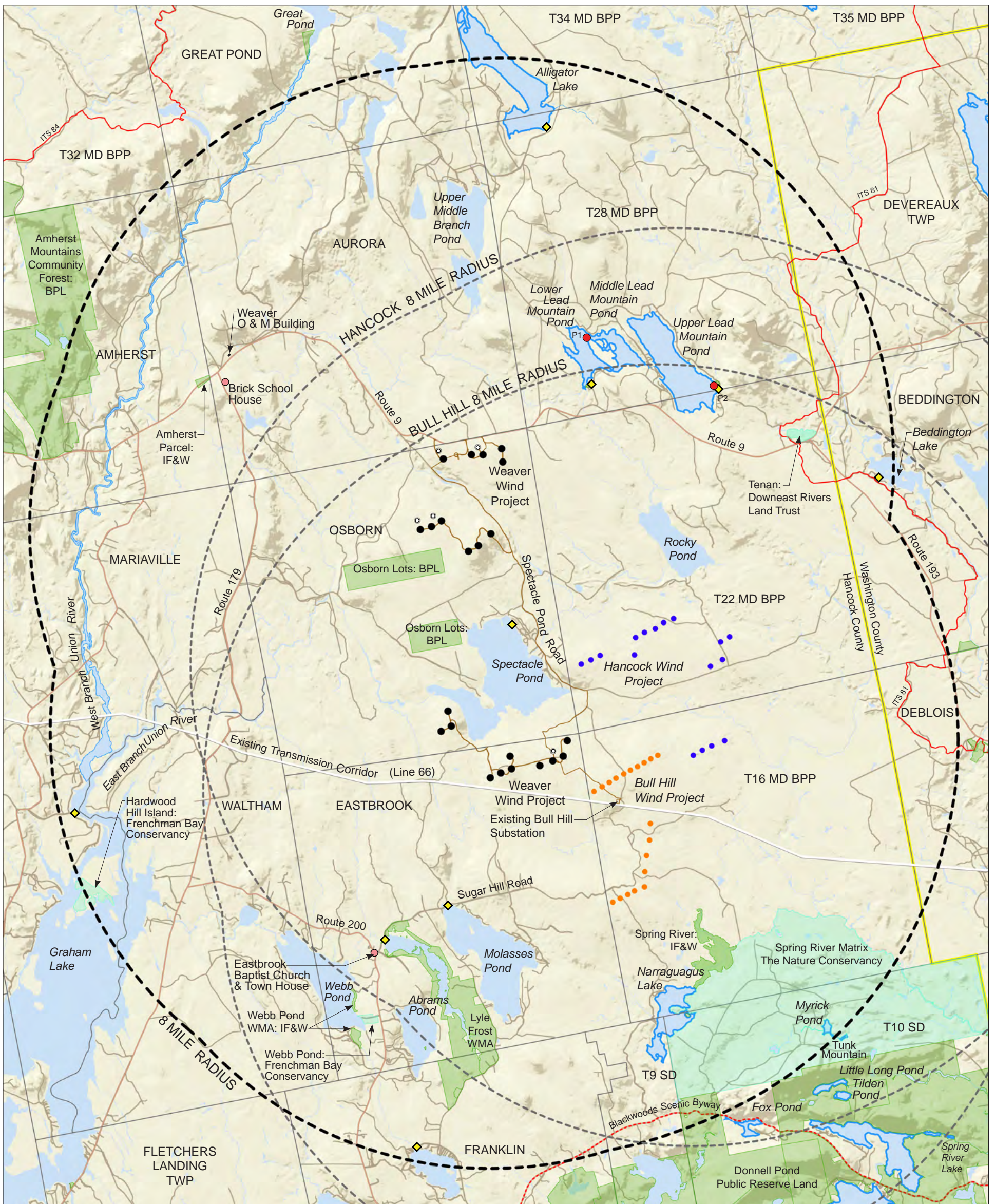


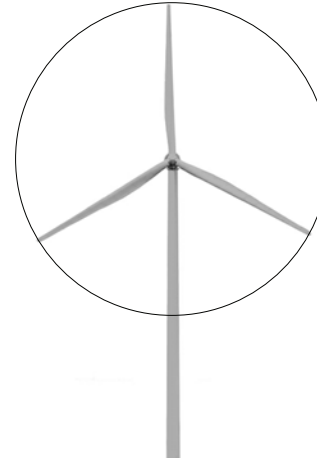

ENLARGEMENT OF MAP 4: NACELLES: This enlargement indicates that none of the nacelles would be visible from any portion of Narraguagus Lake. This was confirmed in the WindPro 3D modeling analysis.



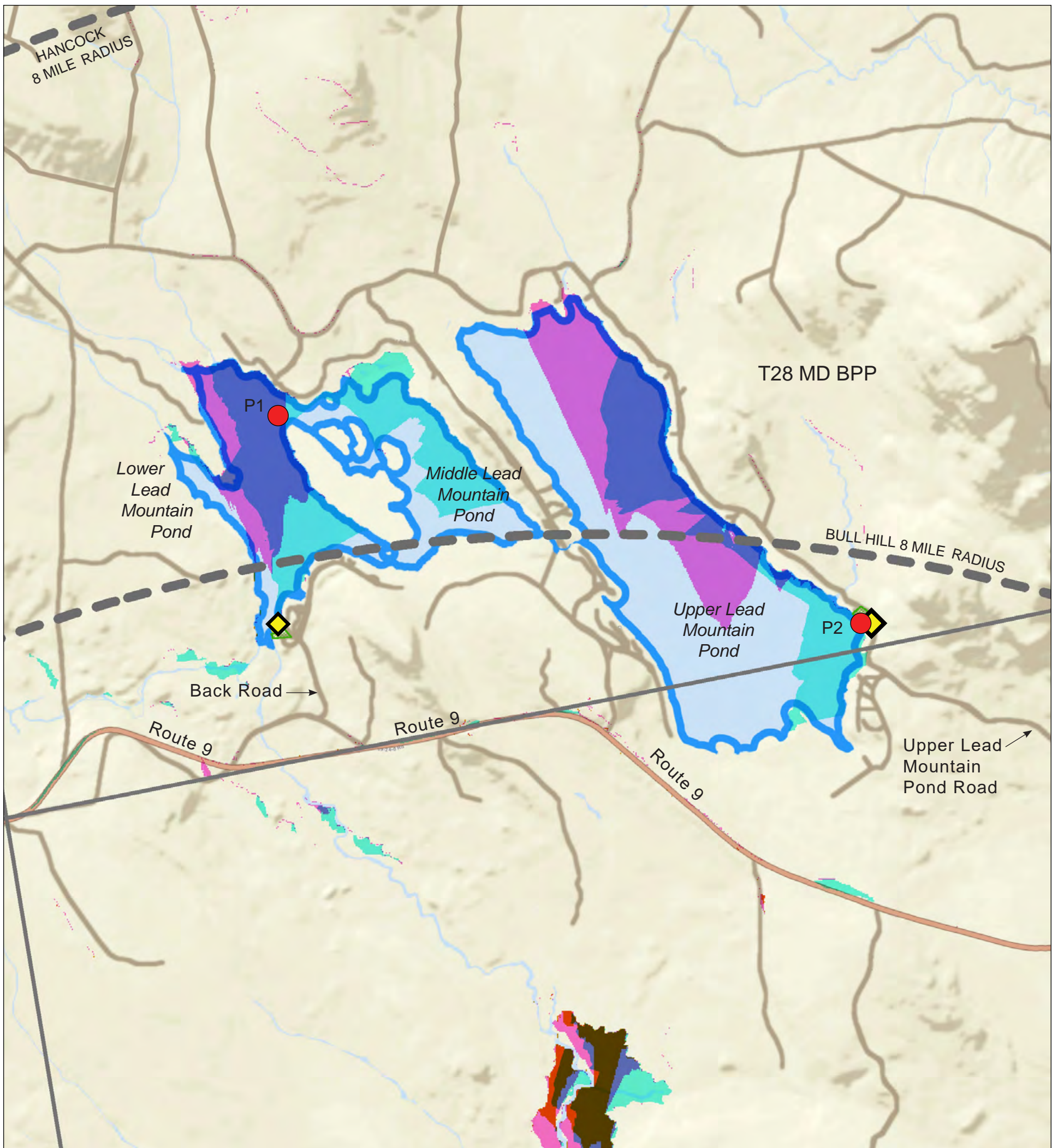
Computer Model Overlay: This image is based on a WindPro 3D computer model of the Weaver Wind Project from Viewpoint N. The portion of a red circle shown above the treeline indicates the visible blade path of one of the proposed Weaver Wind turbines seen at a distance of 6.3 miles from this viewpoint. Portions of six existing Bull Hill turbines are visible in this image at distances of 2.9 to 3.3 miles.

LEGEND		TURBINE VISIBILITY		NOTES
NARRAGUAGUS LAKE MAP 9: VEGETATED VIEWSHED A FOR BLADES AND NACELLES WEAVER WIND PROJECT	Municipal Boundaries	1-5	<ul style="list-style-type: none"> account for the screening effects of topography as well as 3 types of existing vegetation. Landcover data from Maine OGIS. The heights for the forest cover types are as follows: - Deciduous: 40' - Evergreen: 40' - Mixed: 40' * All other forest cover types are set to 0'. shows in Map3: Blades where the viewer may see at least blade tips if vegetation was present. shows in Map 4: Nacelle where the viewer may see nacelles if vegetation was present. Potential turbine visibility needs to be confirmed with field investigations and other visualization techniques.	WEAVER WIND, LLC NORTH Appendix A 2018.09.25 Page 9 of 11
	Public Conservation Lands from ME OGIS	6-10		
	Private Conservation Lands from ME OGIS	11-15		
	Scenic Lake, Pond, or River	16-20		
	Boat Launch	20-22		
WindPRO Draft Location		Weaver Wind Turbine Specifications: Vestas V126		



LEGEND		NOTES	
<p>MAP 10: 8 MILE PROJECT STUDY AREAS FOR WEAVER, HANCOCK, AND BULL HILL WIND PROJECTS</p> <p>WEAVER WIND PROJECT</p>	● Weaver Wind Turbines (Proposed)	<p>NOTES</p> <p>Weaver Wind Turbine Specifications:</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>1/2 rotor diameter (63 meters) 206.7'</p> <p>hub height (117 meters) 383.9'</p> </div>  </div> <p style="text-align: center;">Vestas V126</p>	<p>WEAVER WIND, LLC</p> <p>tjd&a</p> <p>NORTH</p>  <p>0 1 2 3 MILES</p> <p>Appendix A</p> <p>2018.09.25 Page 10 of 11</p>
	○ Weaver Wind Permanent Met Towers (Proposed)		
	● Hancock Wind Turbines (Existing)		
	● Bull Hill Turbines (Existing)		
	— Proposed Access Roads		
	••• Proposed Collector Line		
	— Existing Transmission Corridor (Line 66)		
	— County Lines		
	— Municipal Boundaries		
	■ Public Conservation Lands from ME OGIS		
■ Private Conservation Lands from ME OGIS			
— Interconnected Trail System (ITS)			
◆ Boat Launch			
● Structure on National Register			
■ Scenic Lake, Pond, or River			
— Scenic Byway			
● P# Photosimulation Location			

Weaver Wind Project Turbine layout as of 01.21.15



LEGEND		TURBINE VISIBILITY NOTES				
<p>MAP 11: COMBINED VISIBILITY FOR WEAVER, HANCOCK, AND BULL HILL WIND PROJECTS</p> <p>WEAVER WIND PROJECT</p>	<p>— Municipal Boundaries</p> <p>Public Conservation Lands from ME OGIS</p> <p>◆ Boat Launch</p> <p>Scenic Lake, Pond, or River</p> <p>● P# Photosimulation Location</p>	<p>WEAVER ONLY</p> <p>HANCOCK ONLY</p> <p>WEAVER/HANCOCK COMBINED</p> <p>BULL HILL ONLY</p> <p>HANCOCK/BULL HILL COMBINED</p> <p>BULL HILL/WEAVER COMBINED</p> <p>WEAVER/BULL HILL/HANCOCK COMBINED</p>	<p>This viewshed map:</p> <ul style="list-style-type: none"> accounts for the screening effects of topography as well as 8 types of existing vegetation. Landcover data from Maine OGIS. The heights for the forest cover types are as follows: <ul style="list-style-type: none"> - Deciduous: 40' - Evergreen: 40' - Mixed: 40' - Scrub Shrub: 10' - Forested Wetland: 20' - Light Partial Cut: 40' - Heavy Partial Cut: 40' - Forest Regeneration: 20' shows where any portion of the project may be visible. <p>Potential turbine visibility needs to be confirmed with field investigations and other visualization techniques.</p> <p>Turbine Specifications:</p> <table border="0"> <tr> <td> <p>WEAVER WIND</p> <p>1/2 rotor diameter (63m)</p> <p>hub height (117m)</p> <p>Vestas V126</p> </td> <td> <p>HANCOCK WIND</p> <p>1/2 rotor diameter (58.5m)</p> <p>hub height (116.5m)</p> <p>Vestas V117</p> </td> <td> <p>BULL HILL WIND</p> <p>1/2 rotor diameter (50m)</p> <p>hub height (95m)</p> <p>Vestas V100</p> </td> </tr> </table>	<p>WEAVER WIND</p> <p>1/2 rotor diameter (63m)</p> <p>hub height (117m)</p> <p>Vestas V126</p>	<p>HANCOCK WIND</p> <p>1/2 rotor diameter (58.5m)</p> <p>hub height (116.5m)</p> <p>Vestas V117</p>	<p>BULL HILL WIND</p> <p>1/2 rotor diameter (50m)</p> <p>hub height (95m)</p> <p>Vestas V100</p>
	<p>WEAVER WIND</p> <p>1/2 rotor diameter (63m)</p> <p>hub height (117m)</p> <p>Vestas V126</p>	<p>HANCOCK WIND</p> <p>1/2 rotor diameter (58.5m)</p> <p>hub height (116.5m)</p> <p>Vestas V117</p>	<p>BULL HILL WIND</p> <p>1/2 rotor diameter (50m)</p> <p>hub height (95m)</p> <p>Vestas V100</p>			
<p>WEAVER WIND, LLC</p> <p>tjd&a</p> <p>NORTH</p> <p>0 1 2 3 MILES</p> <p>Appendix A</p> <p>2018.09.25 Page 11 of 11</p>						



Panoramic view looking southeast over blueberry barrens on Silsby Hill Road in Aurora toward the Weaver Wind Project. The Bull Hill Wind Project is visible in the background. The Weaver turbines would be visible in front of Bull Hill at distances of 5.1 to over 8 miles.



The Bureau of Parks and Lands owns the Amherst Mountains Community Forest (AMCF) with access off Route 9 in Amherst. The portion of the AMCF within the Project study area will not have views of the turbines.



Communications tower on Silsby Hill in Aurora.



Panoramic view looking north to east from Route 179 toward blueberry barrens and the Brick School House in Aurora. The Brick School House is on the National Register of Historic Places. The Project will not be visible from the structures or its immediate surroundings due to intervening vegetation.



View of the interior of the Brick School House.



View looking southeast at the Brick School House, built in 1827. The structure now houses a museum open on Sundays. The Project will not be visible from the schoolhouse due to intervening vegetation behind the structure.



A portion of the panoramic view looking east to southeast toward the Project area from the Whaleback pull-off on Route 9 (Airline Road) in Aurora. Up to five turbines would be visible from this location in the center of the photo at distances of 1.9 to 3.5 miles. Route 9 is not a designated scenic byway; this pull-off is not considered a SRSNS.



Continued panoramic view looking northeast to east from the Whaleback pull-off on Route 9 in Aurora toward the Middle Branch Union River.



Panoramic view looking east to southeast on Route 9 (Airline Road) near the town line between Aurora and Osborn. Five Project turbines would be visible in this area approximately 1,300 to 3,000 feet south of the road (right of road in photo).



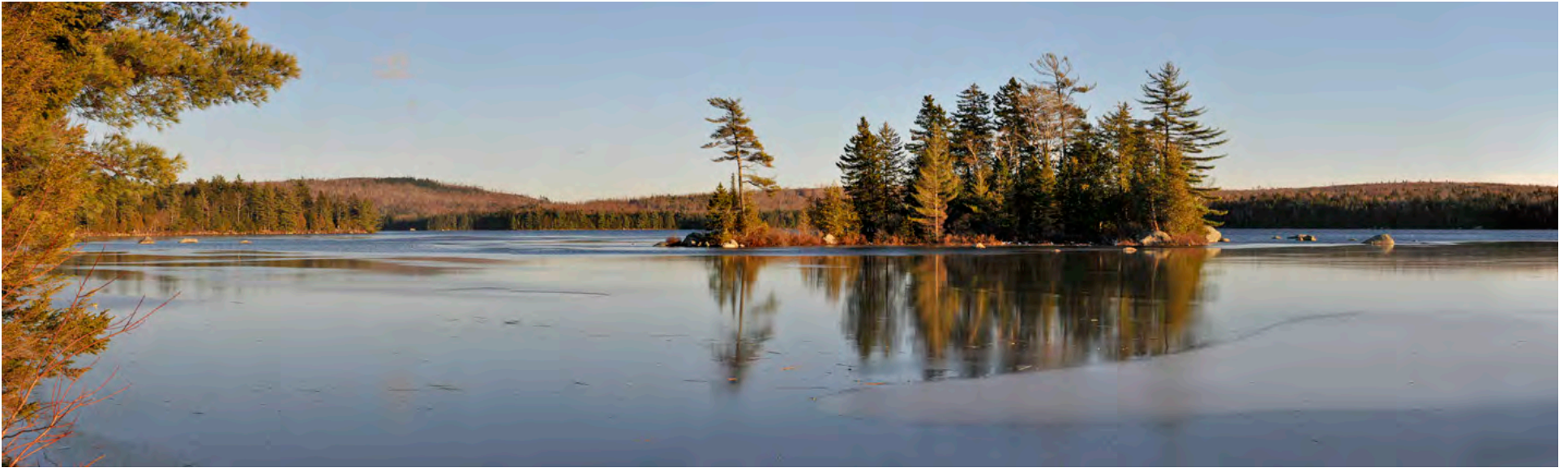
Panoramic view from the same location looking the opposite direction (southwest to northwest) on Route 9 (Airline Road). Five Project turbines would be visible in this area approximately 1,300 to 3,000 feet south of the road (left of road in photo).



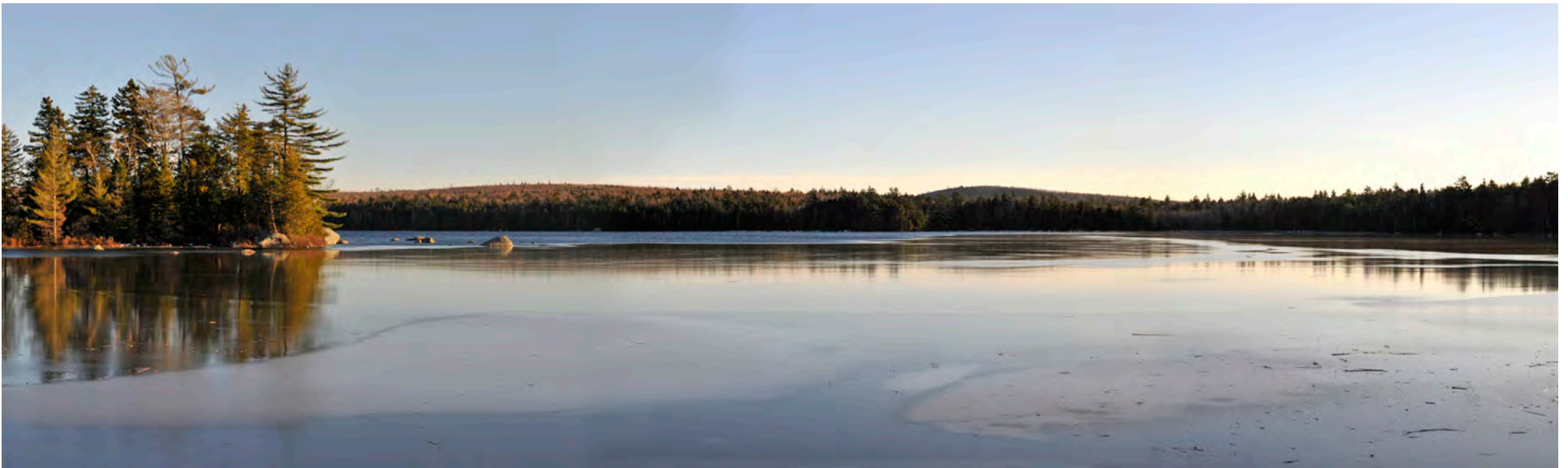
Panoramic view looking west to north from the boat launch at the southern end of Alligator Lake. The lake is rated as 'Outstanding' for scenic resources in the [Maine Wildlands Lake Assessment](#). Project turbines would not be visible from the lake.



Continuation of the panoramic view from the boat launch at the southern end of Alligator Lake, looking north to northeast.



Panoramic view looking south east from a cove at the southwestern end of Alligator Lake. The lake is rated as 'Outstanding' for scenic resources in the [Maine Wildlands Lake Assessment](#). Project turbines would not be visible from the lake.



Continuation of the panoramic view from the cove at the southwestern end of Alligator Lake, looking south.



Panoramic View looking southwest from the boat launch at the southeastern end of Upper Lead Mountain Pond. Blades and nacelle of one turbine and the blades of up to four turbines would be visible above the tree line from this location at distances of 4.6 to 6.1 miles. The pond is rated 'Significant' for scenic resources in the [Maine Wildlands Lake Assessment](#). See Photosimulation 2 for a representation of this view with turbines in place.



The public boat launch on the southeastern end of Upper Lead Mountain Pond. Interviews for the Market Decisions intercept survey were conducted at the boat launches at both Upper and Lower Lead Mountain Ponds.



View from the midpoint of the eastern shore of Upper Lead Mountain Pond looking southwest in the direction of the Project.



Panoramic view looking south to southwest from the northeastern end of Lower Lead Mountain Pond toward the proposed Weaver Wind Project. Up to seven Weaver turbines would be visible above the tree line from this location at distances of 2.8 to 5.2 miles. Three Hancock turbines are visible from this location. The pond is rated 'Significant' for scenic resources in the [Maine Wildlands Lake Assessment](#). See Photosimulation 1 for a representation of this view with turbines in place.



Panoramic view of the public boat launch at the southern end of Lower Lead Mountain Pond. Turbines would not be visible from this end of the pond. Interviews for the Market Decisions intercept survey were conducted at the boat launches at both Upper and Lower Lead Mountain Ponds and on the Lower Lead Mountain Pond.



Panoramic view from Middle Lead Mountain Pond looking southwest toward the island that separates Lower and Middle Lead Mountain Ponds. The ponds are considered as one waterbody and rated 'Significant' for scenic resources in the [Maine Wildlands Lake Assessment](#).



Panoramic view from the northwestern end of Middle Lead Mountain Pond where it joins Lower Lead Mountain Pond, looking east toward Lead Mountain. The Project would not be visible looking in this direction.



Panoramic view looking north to northeast from Abbott Lane in Eastbrook in the direction of the Project. Up to 12 Weaver turbines would be visible at this location at distances of 3.1 to 7.7 miles. Bull Hill turbines are currently visible from this location at a distance of 4+ miles.



View looking east near the intersection of Sugar Hill Road and Abbott Lane in Eastbrook toward the Bull Hill turbines at distances of 4.2 to 5.5 miles.



View looking east from Sugar Hill Road in Eastbrook toward a Bull Hill turbine.



Panoramic view looking southeast from the boat launch on the northern shoreline of Spectacle Pond in Osborn. Nacelles and blades of eight Weaver turbines and blade tips of three Weaver turbines (heavily screened by vegetation on right in image) would be visible from this viewpoint at distances of 2.3 to 3.3 miles. Portions of six Bull Hill turbines are visible from this area. Spectacle Pond is not rated for scenic resources in the [Maine Wildlands Lake Assessment](#).



Panoramic view looking southeast to southwest from the northern shoreline of Spectacle Pond in Osborn. Up to eleven Weaver turbines will be visible from this viewpoint at distances of 2.1 to 3.3 miles. Eleven Bull Hill turbines are visible at distances of 4.2 to 6.3 miles. Spectacle Pond is not rated for scenic resources in the [Maine Wildlands Lake Assessment](#).



Panoramic view looking northeast from the southwest shoreline of Abrams Pond in Eastbrook. Blade of three Weaver turbines would be visible from this viewpoint at distances of 5.7 to 6.3 miles. Abrams Pond is not rated for scenic resources in the [Maine Wildlands Lake Assessment](#).



Panoramic view looking north to northeast from the southern shoreline of Webb Pond in Eastbrook. Up to 13 turbines will be visible from this viewpoint on the pond at distances of 6.0 to 7.6 miles. Webb Lake is not rated for scenic resources in the [Maine Wildlands Lake Assessment](#).



Panoramic view looking southeast from the R. Lyle Frost Wildlife Management Area boat launch on the northern end of the Scammon Pond. The Project will not be visible from the boat launch or from the majority of the pond.



Panoramic view looking northeast from the shoreline of Scammon Pond south of the boat launch. The Project will not be visible from this viewpoint due to intervening shoreline vegetation.



Panoramic view looking north from a point near Lewis Lane on the northwest shoreline of Molasses Pond in Eastbrook. Portions of four turbines may be visible at or slightly above the tree line from this location at distances of 3.1 to 3.9 miles. Molasses Pond is not rated for scenic resources in the [Maine Wildlands Lake Assessment](#).



Panoramic view looking east to southeast from the public beach and boat launch on the northern shore of Molasses Pond in Eastbrook. The Project will not be visible from this viewpoint.



The Eastbrook Baptist Church on East Brook Road in the village of Eastbrook is on the National Register of Historic Places. The Project will not be visible from this structure due to intervening vegetation.



The adjacent Eastbrook Townhouse on East Brook Road in the village of Eastbrook is on the National Register of Historic Places. The Project will not be visible from this structure due to intervening vegetation.



Panoramic view looking northeast from the Eastbrook Baptist Church in the direction of the Weaver Project. The Weaver turbines will not be visible from this location due to intervening topography and vegetation.



Panoramic view looking northwest to north from southeastern shoreline of Narraguagus Lake. The scenic resources of the lake are rated as 'Significant' in the [Maine Wildlands Lake Assessment](#). The Bull Hill Wind Project is visible from this location at distances of 3.0 to 5.8 miles. The upper portions of blades from one turbine may be visible from this viewpoint at a distance of 6.3 miles. See page 9 of Appendix A.



View looking northwest from Myrick Pond, which is rated as 'Significant' in the [Maine Wildlands Lake Assessment](#). The Project will not be visible from the pond.



View looking east on the Blackwoods Scenic Byway (Route 182). The Weaver Wind Project will not be visible from the byway.



Photosimulation 1: Panoramic view looking south to southwest from the northern end of Lower Lead Mountain Pond in T28 MD toward the proposed Weaver Wind Project. Up to seven Weaver Wind turbines would be visible above the tree line from this location at distances of 2.9 to 5.0 miles. Four proposed Weaver turbines in the background are beyond eight miles from this viewpoint. Portions of three existing Hancock Wind turbines (nacelle and blades of two turbines and blades of 1 turbine) are visible from this viewpoint to the south to southeast at a distance of 6.6 to 6.7 miles (on left in background). No turbines from the existing Bull Hill Wind Project are visible from this location.

LEGEND	VIEWPOINT LOCATION MAP	TECHNICAL INFORMATION	<h2 style="text-align: center;">Photosimulation 1</h2> <h3 style="text-align: center;">Lower Lead Mountain Pond</h3>																														
<ul style="list-style-type: none"> ● Weaver Wind Turbines (Proposed) ● Weaver Wind Turbines (Proposed) Visible from Photosimulation Locations ● Hancock Wind Turbines (Existing) ● Bull Hill Turbines (Existing) — Proposed Access Roads ••• Proposed Collector Line — Existing Transmission Corridor (Line 66) — County Lines — Municipal Boundaries ■ Public Conservation Lands from ME OGIS — Interconnected Trail System (ITS) ◆ Boat Launch ■ Scenic Lake or Pond ➔ P# Photosimulation Location 		<table border="0"> <tr> <td>Turbine Model:</td> <td>Vestas V126</td> </tr> <tr> <td>Hub Height:</td> <td>117m (384 ft)</td> </tr> <tr> <td>Rotor Diameter:</td> <td>126m (413 ft)</td> </tr> <tr> <td>View Coordinates:</td> <td>Latitude: 44.860257°, Longitude: -68.176214°</td> </tr> <tr> <td>Viewer Elevation:</td> <td>103m (338 ft)</td> </tr> <tr> <td>Direction of View:</td> <td>South to Southwest</td> </tr> <tr> <td>Degree of View of Turbines within 8 miles:</td> <td>18°±</td> </tr> <tr> <td>Focal Length:</td> <td>Digital equivalent to 50mm normal lens</td> </tr> <tr> <td>Closest Visible Turbine:</td> <td>2.9 miles</td> </tr> <tr> <td>Furthest Visible Turbine within 8 miles:</td> <td>5.0 miles</td> </tr> <tr> <td>Turbines Visible: within 8 miles:</td> <td>7±</td> </tr> <tr> <td>Date of Photo:</td> <td>08.27.14</td> </tr> <tr> <td>Time of Photo:</td> <td>10:15 am</td> </tr> </table>	Turbine Model:	Vestas V126	Hub Height:	117m (384 ft)	Rotor Diameter:	126m (413 ft)	View Coordinates:	Latitude: 44.860257°, Longitude: -68.176214°	Viewer Elevation:	103m (338 ft)	Direction of View:	South to Southwest	Degree of View of Turbines within 8 miles:	18°±	Focal Length:	Digital equivalent to 50mm normal lens	Closest Visible Turbine:	2.9 miles	Furthest Visible Turbine within 8 miles:	5.0 miles	Turbines Visible: within 8 miles:	7±	Date of Photo:	08.27.14	Time of Photo:	10:15 am	<h2 style="text-align: center;">Weaver Wind Project</h2> <p style="text-align: center;"><i>Visual Impact Assessment</i></p>	<table border="0"> <tr> <td style="text-align: center;">tjd&a</td> <td style="text-align: center;">2018.10.24</td> <td style="text-align: center;">Page 2 of 9</td> </tr> </table>	tjd&a	2018.10.24	Page 2 of 9
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Existing Conditions 1 LEFT: Normal view looking south from the northern end of Lower Lead Mountain Pond. Portions of three existing Hancock Wind turbines (nacelle and blades of two turbines and blades of 1 turbine) are visible from this viewpoint to the south to southeast at a distance of 6.6 to 6.7 miles. There are no Bull Hill turbines visible from this location. Viewer should hold this image, when printed at 11" x 17", approximately 21" from eye to replicate actual view. See Existing Conditions 1 RIGHT for continuation of this view. (Note : The visible existing Hancock wind turbines were photosimulated into this existing conditions image because the photograph was taken prior to the Hancock Project being commercially operational in December 2016.)



Photosimulation 1 LEFT: Normal view looking south from Lower Lead Mountain Pond toward the proposed Weaver Wind Project. In this portion of the view, blades of three turbines from the proposed Weaver Wind Project would be visible at or slightly above the tree line from this location at distances of 4.5 to 5.0 miles. The four Weaver turbines seen in the background are beyond eight miles from this viewpoint. Portions of three existing Hancock Wind turbines (nacelle and blades of two turbines and blades of 1 turbine) are visible from this viewpoint to the south to southeast at a distance of 6.6 to 6.7 miles (background left). There are no Bull Hill turbines visible from this location. Viewer should hold this image, when printed at 11" x 17", approximately 21" from eye to replicate actual view. See Photosimulation 1 RIGHT for continuation of this view.

Lower Lead Mountain Pond

2018.10.24

Proposed Conditions 1 LEFT

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Existing Conditions 1 RIGHT: Normal view looking southwest from the northern end of Lower Lead Mountain Pond. There are no existing Hancock or Bull Hill turbines visible looking in this direction from this location. Viewer should hold this image, when printed at 11" x 17", approximately 21" from eye to replicate actual view. See Existing Conditions 1 LEFT for continuation of this view.

Lower Lead Mountain Pond 2018.10.24

Existing Conditions 1 RIGHT Page 5
5 of 9



Photosimulation 1 RIGHT: Normal view looking southwest from Lower Lead Mountain Pond toward the proposed Weaver Wind Project. In this portion of the view, blades and nacelles of four turbines would be visible at or slightly above the tree line from this location at distances of 2.9 to 3.9 miles. There are no existing Hancock or Bull Hill turbines visible looking in this direction from this location. Viewer should hold this image, when printed at 11" x 17", approximately 21" from eye to replicate actual view. See Photosimulation 1 LEFT for continuation of this view.

Lower Lead Mountain Pond

2018.10.24

Proposed Conditions 1 RIGHT

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Photosimulation 2: Panoramic view looking southwest from Upper Lead Mountain Pond boat launch in T28 MD toward the proposed Weaver Wind Project. Blades and nacelle of one turbine and the blades of up to four turbines would be visible above the tree line from this location at distances of 4.6 to 6.1 miles.

LEGEND	VIEWPOINT LOCATION MAP	TECHNICAL INFORMATION																												
<ul style="list-style-type: none"> ● Weaver Wind Turbines (Proposed) ● Weaver Wind Turbines (Proposed) Visible from Photosimulation Locations ● Hancock Wind Turbines (Existing) ● Bull Hill Turbines (Existing) — Proposed Access Roads ⋯ Proposed Collector Line — Existing Transmission Corridor (Line 66) — County Lines — Municipal Boundaries — Public Conservation Lands from ME OGIS — Interconnected Trail System (ITS) ◆ Boat Launch ▭ Scenic Lake or Pond ➔ P# Photosimulation Location 		<table border="0"> <tr> <td>Turbine Model:</td> <td>Vestas V126</td> </tr> <tr> <td>Hub Height:</td> <td>117m (384 ft)</td> </tr> <tr> <td>Rotor Diameter:</td> <td>126m (413 ft)</td> </tr> <tr> <td>View Coordinates:</td> <td>Latitude: 44.846218°, Longitude: -68.122823°</td> </tr> <tr> <td>Viewer Elevation:</td> <td>108m (354 ft)</td> </tr> <tr> <td>Direction of View:</td> <td>Southwest</td> </tr> <tr> <td>Degree of View of Turbines within 8 miles:</td> <td>18°±</td> </tr> <tr> <td>Focal Length:</td> <td>Digital equivalent to 50mm normal lens</td> </tr> <tr> <td>Closest Visible Turbine:</td> <td>4.6 miles</td> </tr> <tr> <td>Furthest Visible Turbine within 8 miles:</td> <td>6.1 miles</td> </tr> <tr> <td>Turbines Visible: within 8 miles:</td> <td>5±</td> </tr> <tr> <td>Date of Photo:</td> <td>08.27.14</td> </tr> <tr> <td>Time of Photo:</td> <td>11:00 am</td> </tr> </table>	Turbine Model:	Vestas V126	Hub Height:	117m (384 ft)	Rotor Diameter:	126m (413 ft)	View Coordinates:	Latitude: 44.846218°, Longitude: -68.122823°	Viewer Elevation:	108m (354 ft)	Direction of View:	Southwest	Degree of View of Turbines within 8 miles:	18°±	Focal Length:	Digital equivalent to 50mm normal lens	Closest Visible Turbine:	4.6 miles	Furthest Visible Turbine within 8 miles:	6.1 miles	Turbines Visible: within 8 miles:	5±	Date of Photo:	08.27.14	Time of Photo:	11:00 am	<h2>Photosimulation 2</h2> <h3>Upper Lead Mountain Pond</h3>	
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			<h2>Weaver Wind Project</h2> <h3>Visual Impact Assessment</h3>																											
				2018.10.24	Page 7 of 9																									



Existing Conditions 2A: Normal view looking southwest from Upper Lead Mountain Pond boat launch. There are no existing Hancock or Bull Hill turbines visible looking in this direction from this location. Viewer should hold this image, when printed at 11" x 17", approximately 21" from eye to replicate actual view.



Photosimulation 2A: Normal view looking southwest from Upper Lead Mountain Pond boat launch toward the proposed Weaver Wind Project. Blades and nacelle of one turbine and the blades of four turbines would be visible at or slightly above the tree line from this location at distances of 4.6 to 6.1 miles. Viewer should hold this image, when printed at 11" x 17", approximately 21" from eye to replicate actual view.



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Research Report

Weaver Wind Project Lower and Upper Lead Mountain Ponds Intercept Surveys

November 2014

Prepared for:

Terrence J. DeWan & Associates

Prepared by:

Dr. Brian Robertson, Research Director
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I. Summary

First Wind is in the process of conducting a visual impact assessment for the proposed Weaver Wind Project in Hancock County, Maine. The goal of the survey assessment is to better understand the views of users regarding the potential impacts of the proposed project on their use and enjoyment of scenic resources of state or national significance (SRSNS) from where the proposed project likely would be visible.

The user survey was designed to address specific portions of the Evaluation Criteria found in §3452.3 of the Wind Energy Act:

- C. The expectations of the typical viewer
- E. The extent, nature and duration of potentially affected public uses of the SRSNS and the potential effect of the generating facilities' presence on the public's continued use and enjoyment of the SRSNS

First Wind requested that the survey be conducted at two locations:

- Lower Lead Mountain Pond
- Upper Lead Mountain Pond

Surveys were conducted between September 5 and September 18, 2014 and between October 3 and October 6, 2014.

First Wind engaged Market Decisions to finalize and conduct the survey and evaluate the results. Market Decisions interviewed 15 respondents who visited either Lower Lead Mountain Pond or Upper Lead Mountain Pond. Interviewers were stationed at the public boat launches on each pond.

II. Methodology

The survey used in this research was developed by Market Decisions. The survey was designed to be administered in person at the public boat launches on Lower Lead Mountain and Upper Lead Mountain Ponds. The survey included a total of 54 questions including demographic information. The survey assessed:

- Prior visits to the area and use of scenic and recreational resources
- Patterns of use/visitation in the area
- Activities in which respondents are engaged or planning
- Reason for their current visit to the area
- Importance of key attributes to their visit
- Expectations for the area
- General assessment of scenic value and quality
- Assessment of the scenic value (with and without the wind turbines)
- Impact of the project on use and enjoyment of the scenic resources
- Impact of other human activity on enjoyment
- General views of wind power development

For the most important set of questions, respondents were asked to rate the scenic value of the views from two areas (one area on Lower Lead Mountain Pond and one area on Upper Lead Mountain Pond) on the pond, by evaluating a series of photo-simulations of the view:

- A current view from Lower Lead Mountain Pond
- A view from same location but showing the additional wind turbines that are being proposed
- A current view from Upper Lead Mountain Pond
- A view from same location but showing the additional wind turbines that are being proposed

Respondents were asked to evaluate both locations if they had visited.

- Respondents interviewed at Lower Lead Mountain Pond evaluated the views at Lower Lead Mountain Pond and also evaluated the views at Upper Lead Mountain Pond if they had visited.
- Respondents interviewed at Upper Lead Mountain Pond evaluated the views at Upper Lead Mountain Pond and also evaluated the views at Lower Lead Mountain Pond if they had visited.

Respondents were then asked a series of questions about how the presence of the additional wind turbines would impact their use and enjoyment of these water resources. A copy of the survey is provided in the Appendix.

The survey was administered over two weekends:

- September 5 and 8, 2014
- October 3 and October 6, 2014

The weather conditions varied over the study period and consisted of days that were mostly sunny, partly sunny, as well as cloudy days along with periods of rain.

On each day, two Market Decisions interviewers went to the public boat launches; one conducted interviews at the public boat launch on Lower Lead Mountain Pond while the other conducted interviews on Upper Lead Mountain Pond.

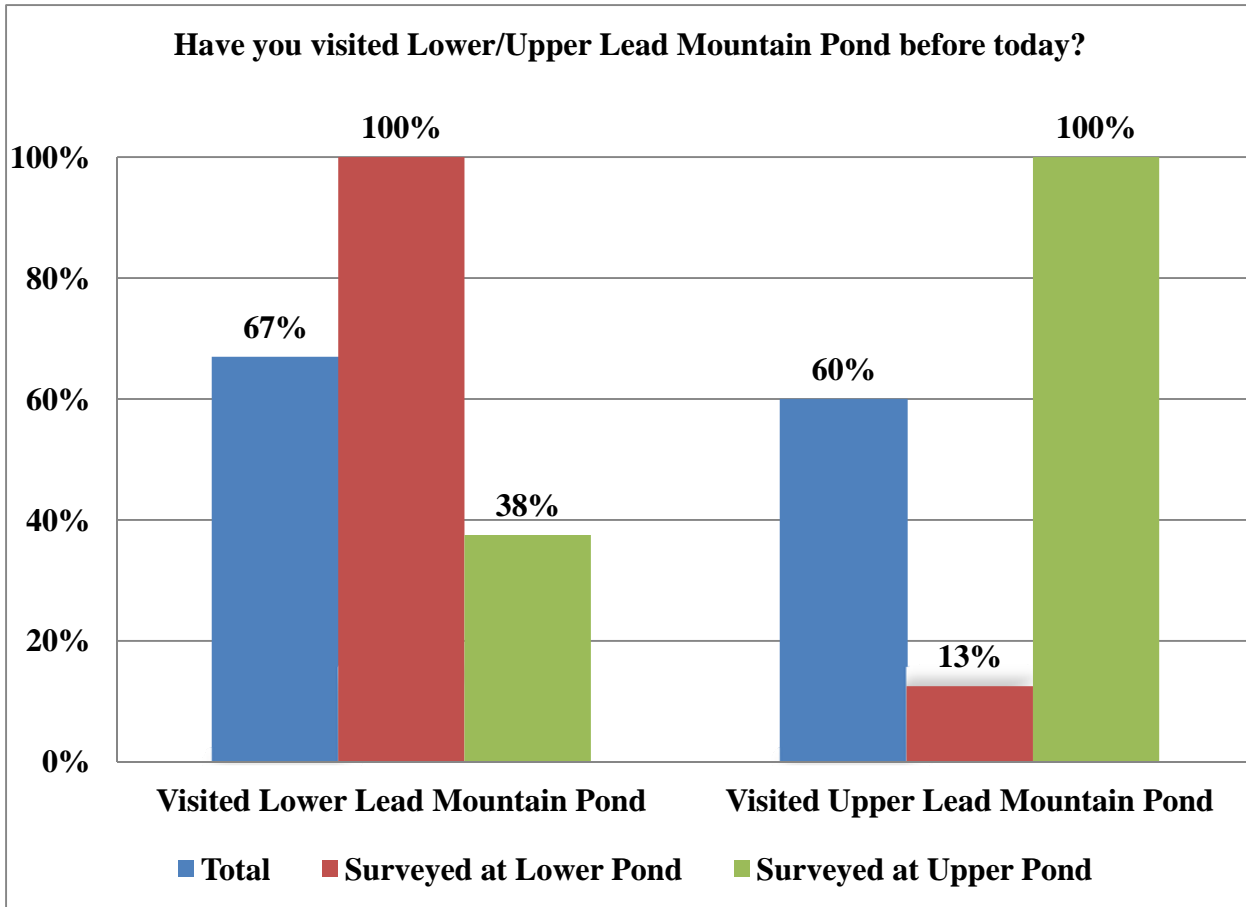
Interviewers conducted interviews from 9:30 to 5:30 PM on Fridays, 8:30 AM to 5:30 PM on Saturdays, 8:30 AM to 5:30 PM on Sundays, and from 9:00 AM to 5:00 PM on Mondays.

Multiple adults from each party interviewers met were invited to participate as they were willing. Children were not interviewed.

A total of 25 people were observed during the survey period on the two ponds, all adults. In addition, interviewers observed seven boats and two kayaks on Lower Lead Mountain Pond and three boats on Upper Lead Mountain Pond. In all, 15 interviews were completed among adults with seven completed at Lower Lead Mountain Pond and eight at Upper Lead Mountain Pond.

III. Survey Results

Prior Visits to Lower and Upper Lead Mountain Pond



Sixty-seven percent of respondents visited Lower Lead Mountain Pond prior to the interview date with a median of eight visits during the past year. Sixty percent of respondents visited Upper Lead Mountain Pond prior to the interview with a median of 12 visits during the past year.

Respondents visited the ponds year round with Summer (100%) and Fall (87%) being the most popular seasons to visit, followed by Spring (80%) and Winter (73%).

Reasons for Visit to Lower and Upper Lead Mountain Pond

When asked their plans for their visit to Lower and Upper Lead Mountain Ponds, 73% indicated they visited for nature observation or bird watching, 67% for viewing the scenery, 53% for hiking and walking, and 33% for stargazing. Nearly half (47%) visited for canoeing or kayaking and 27% for boating. Seven percent indicated they were visiting to fish from a boat and 7% to fish from shore.

When asked what prompted their visit to Lower or Upper Lead Mountain Pond respondents indicated that they had property in the area and were up to enjoy the weekend or holiday.

Thinking about your visit to Lower/Upper Lead Mountain Pond, what are your plans for today?

	Total	Lower Pond	Upper Pond
Nature observation or bird watching	73%	57%	88%
Viewing the scenery	67%	57%	75%
Hiking or Walking	53%	57%	50%
Canoeing or kayaking	47%	71%	25%
Stargazing or looking at the night sky	33%	14%	50%
Boating - sail or motor	27%	29%	25%
Picnicking	13%		25%
Camping	13%		25%
Fishing from a boat	7%	14%	
Fishing from the shore or standing in water	7%		13%
Other	53%	43%	63%
Total	100%	100%	100%

What prompted you to come out to Lower/Upper Lead Mountain Pond today??

ID	Location	COMMENT
1	Lower	Do some chores at camp
2	Lower	hiking, boating, take the survey, check on camp
3	Lower	Take the survey, visit camp
4	Lower	Enjoying the pond, closing the cabin for the winter.
5	Lower	Do the survey
9	Lower	Camp
15	Lower	Long weekend
6	Upper	I own property here
7	Upper	Visiting camp
8	Upper	Out riding on our ATV
10	Upper	Own camp
11	Upper	Holiday weekend
12	Upper	Close up camp, sister's visiting
13	Upper	Family owns camp
14	Upper	Own property

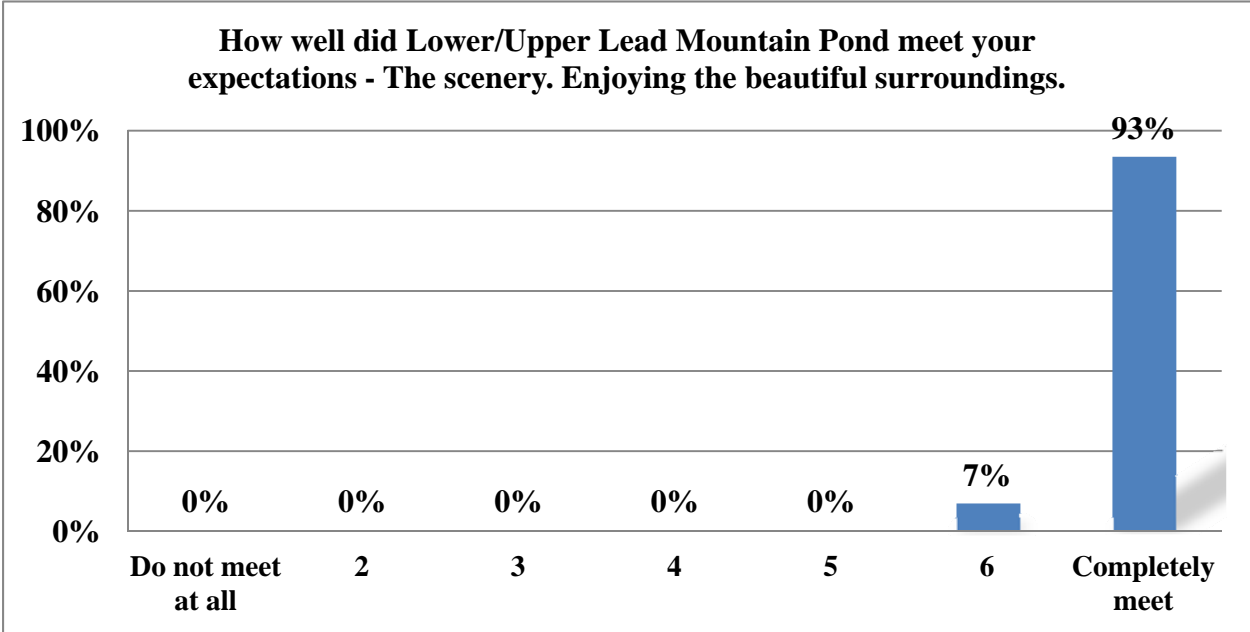
Expectations for Experience

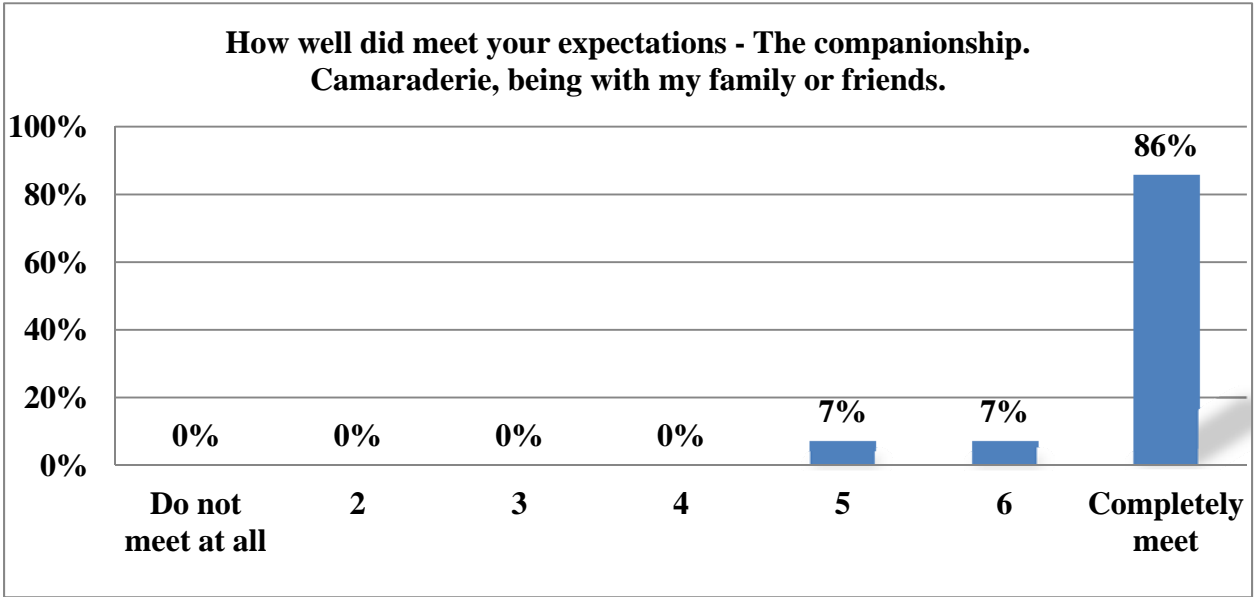
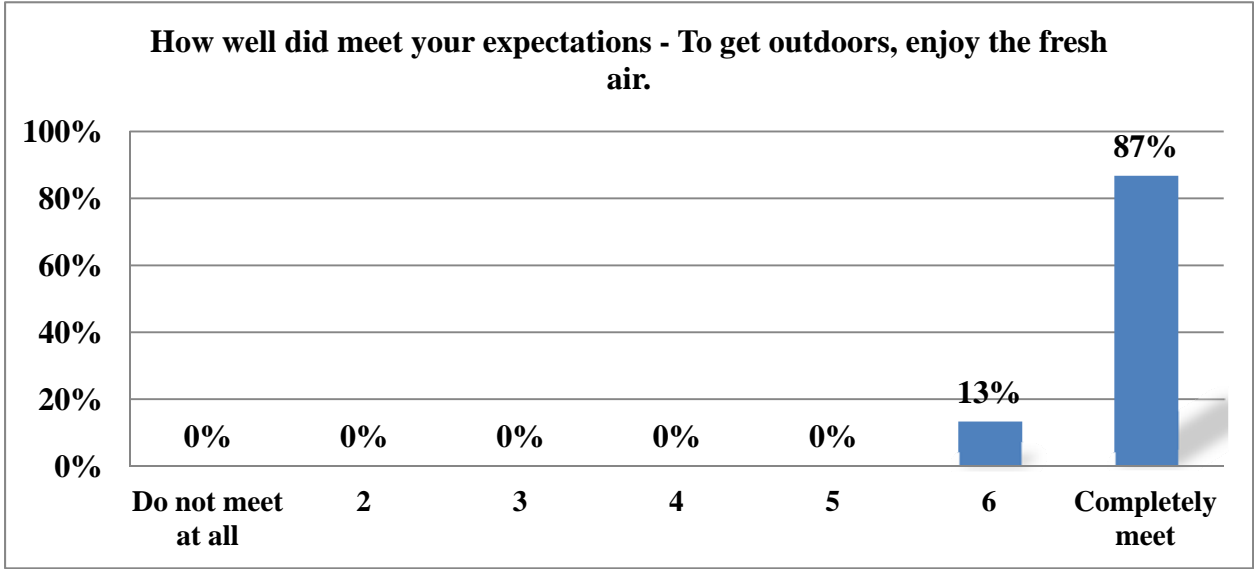
Respondents were asked to rate their expectations for their recreational experience while visiting Lower and Upper Lead Mountain Ponds. Respondents rated eight areas of expectation on a seven-point scale with one indicating their expectations were not met at all and a seven indicating their expectations were completely met. Overall, respondents indicated that in the eight areas measured, their expectations were almost completely met. Based on the average, the eight areas ranked in order are:

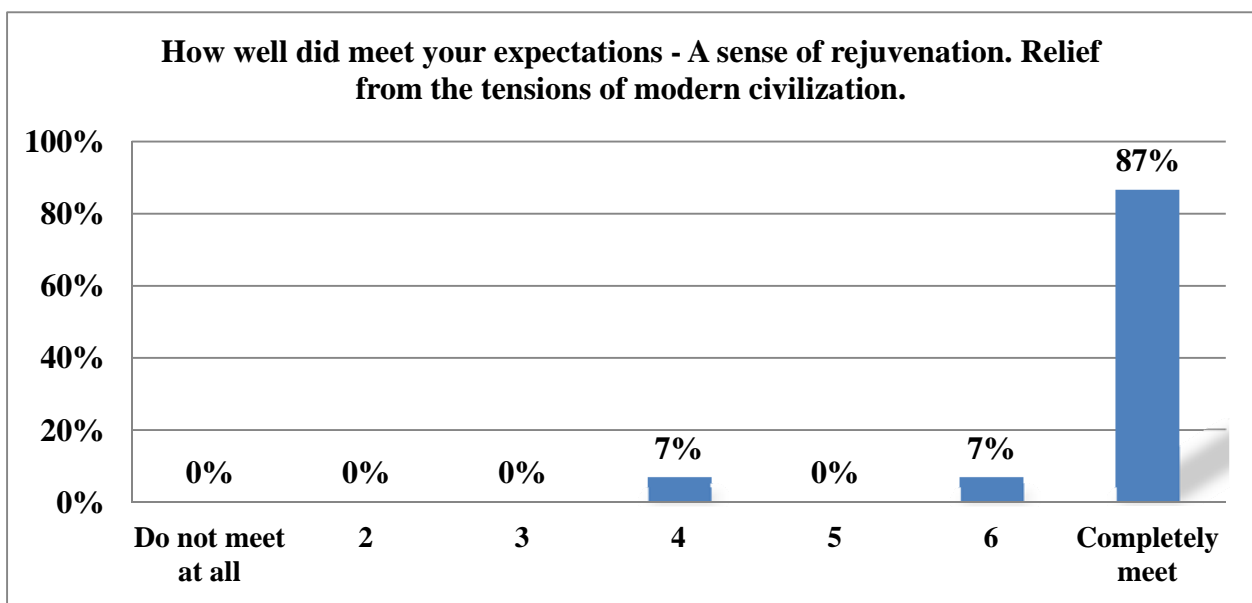
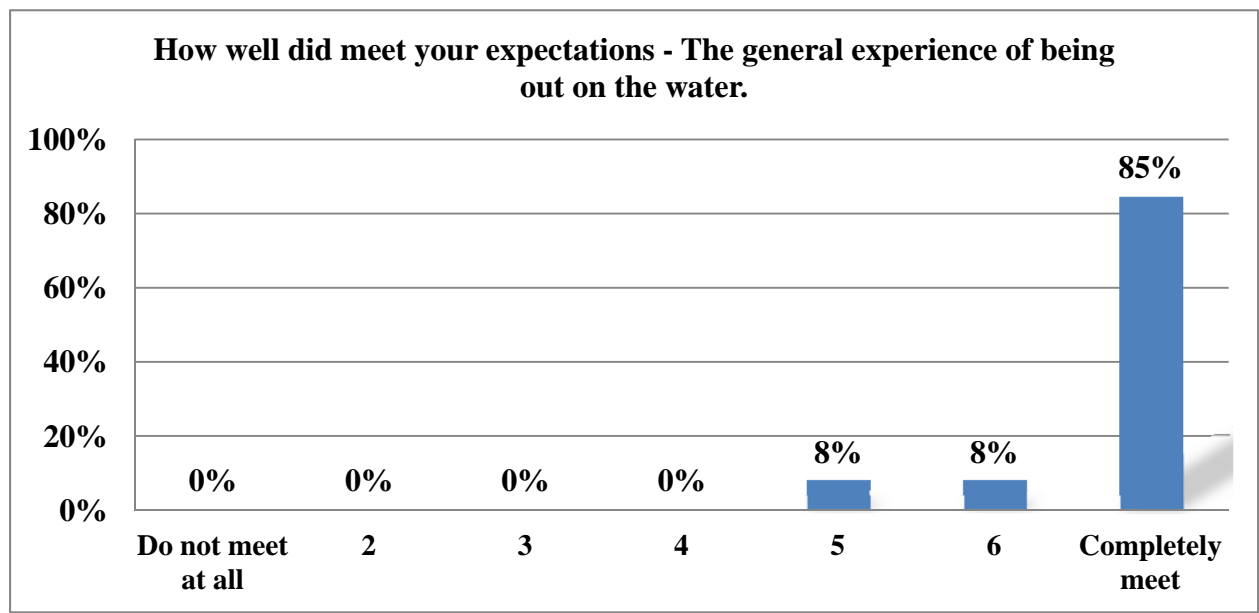
- **The scenery. Enjoying the beautiful surroundings.** (average of 6.9 with 93% rating as completely met expectations).
- **To get outdoors, enjoy the fresh air.** (average of 6.9 with 87% rating as completely met expectations).
- **The companionship. Camaraderie, being with my family or friends.** (average of 6.8 with 86% rating as completely met expectations).
- **The general experience of being out on the water.** (average of 6.8 with 85% rating as completely met expectations).
- **A sense of rejuvenation. Relief from the tensions of modern civilization.** (average of 6.7 with 87% rating as completely met expectations).
- **The enjoyment of being on a boat.** (average of 6.7 with 77% rating as completely met expectations).
- **Getting exercise.** (average of 6.3 with 73% rating as completely met expectations).
- **The quality of the fishing.** (average of 6.1 with 57% rating as completely met expectations).

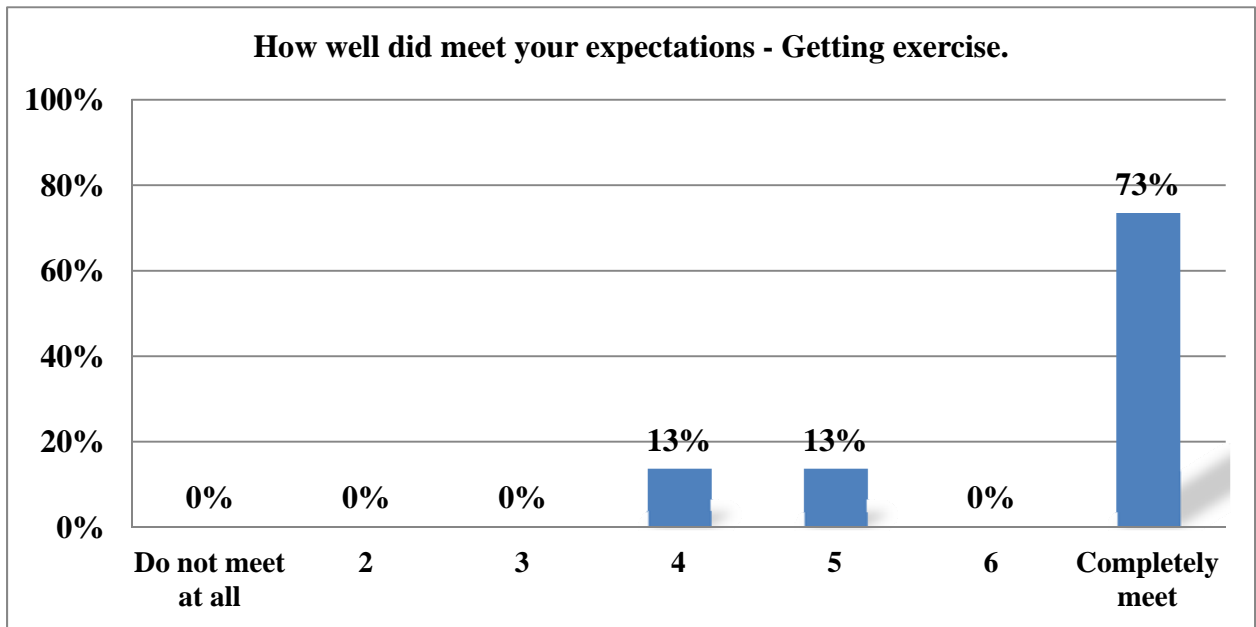
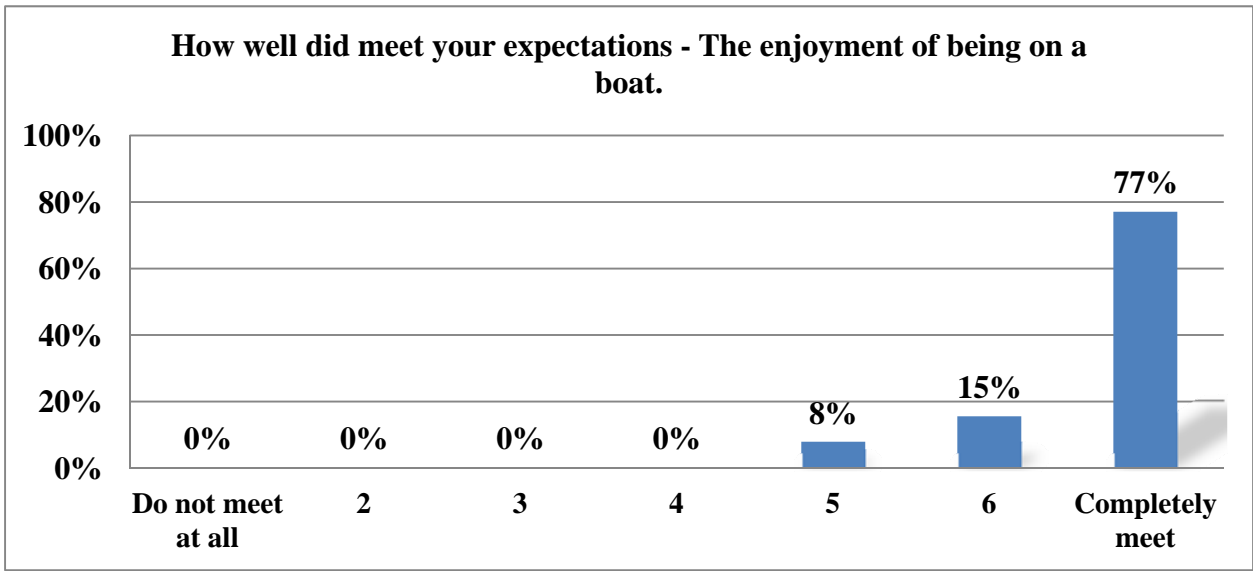
Please think about what is it that you look forward to when coming to Lower/Upper Lead Mountain Pond. I will ask you to rate about how well the area meets your expectations on a set of attributes. Please rate each on a seven point scale where 1 is the area did not meet my expectations AT ALL and 7 is the area COMPLETELY met my expectations.

	Average on 7-point scale		
	Total	Lower Pond	Upper Pond
The scenery. Enjoying the beautiful surroundings.	6.9	7.0	6.9
To get outdoors, enjoy the fresh air.	6.9	7.0	6.8
The companionship. Camaraderie, being with my family or friends.	6.8	7.0	6.6
The general experience of being out on the water.	6.8	6.7	6.9
A sense of rejuvenation. Relief from the tensions of modern civilization.	6.7	7.0	6.5
The enjoyment of being on a boat.	6.7	6.5	6.9
Getting exercise.	6.3	6.7	6.0
The quality of the fishing.	6.1	6.3	6.0

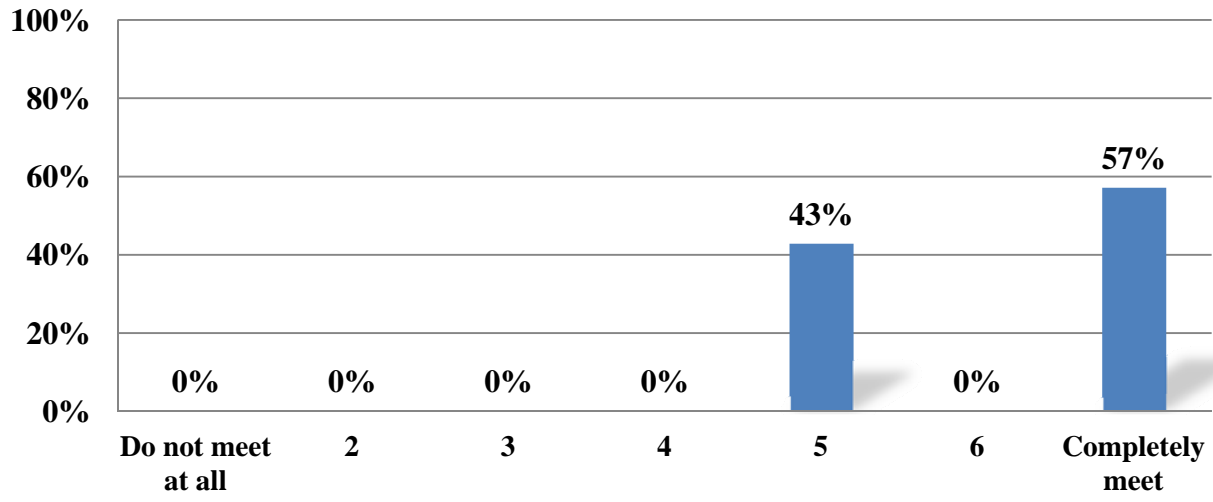








How well did meet your expectations - The quality of the fishing.



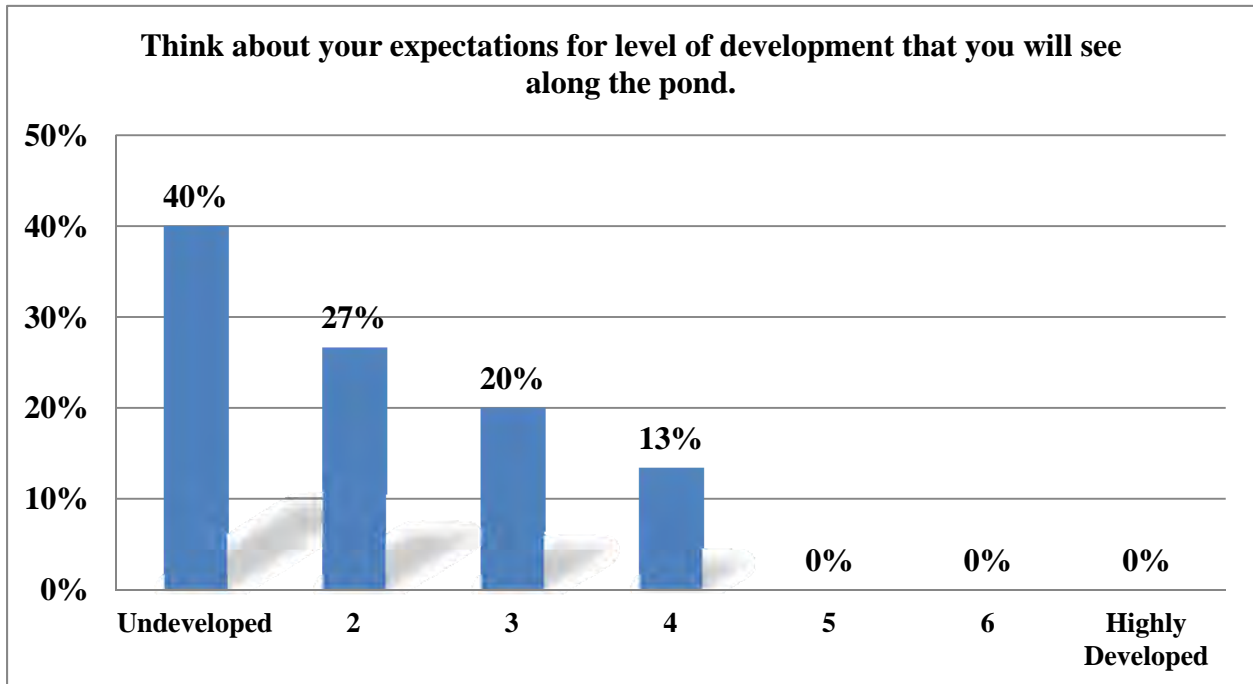
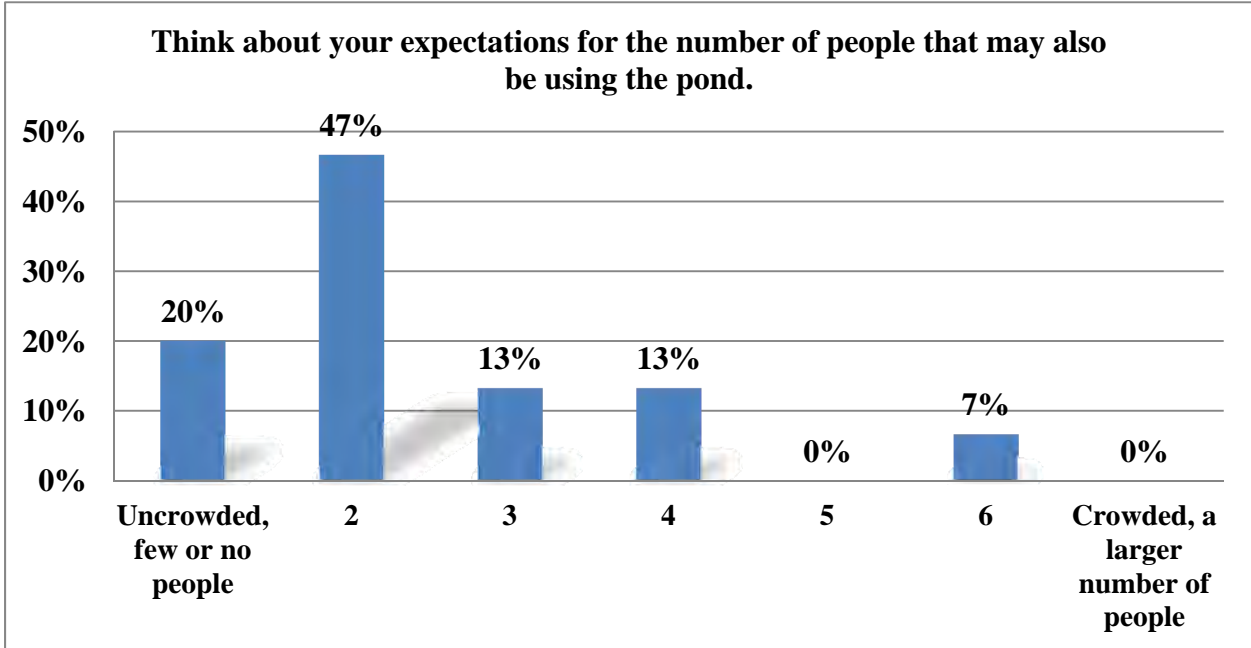
Respondents were asked to evaluate two additional aspects of their expectations of their visit to Lower or Upper Lead Mountain Pond; the number of boats and people they might see and the level of development. Both of these aspects were evaluated on a seven-point scale.

When asked about how many boats and people do you normally see on the water at any one time, respondents indicated that during the busiest times in the summer there may be as many as nine to ten but typically they expected to see two to three boats.

Respondents expected that a relatively low number of people would also be using the ponds. The average rating on the seven-point scale (with 1 being uncrowded and 7 being crowded) was 2.5 with 20% assigning a score of 1 (or uncrowded).

Respondents also expected to see little development along the shores of the pond. The average rating on the seven-point scale (with 1 being undeveloped and 7 being developed) was 2.1 with 40% assigning a score of 1 (or undeveloped).

	Total	Lower Lead Mountain Pond	Upper Lead Mountain Pond
<p>Think about your expectations for the number of people that may also be using the pond.</p> <p><i>Rate on a scale from 1 to 7 where 1 means you expect it to be uncrowded with few or no other people and 7 means you expect it to be crowded with a large number of people.</i></p>	2.5	2.6	2.4
<p>Think about your expectations for level of development that you will see along the pond.</p> <p><i>Rate on a scale from 1 to 7 where one means you expect the pond to be largely undeveloped and 7 means you expect it to largely or mostly developed.</i></p>	2.1	1.9	2.3



Impact of Human Activity on Experience

Respondents were asked to evaluate the impact of human activity on the quality of their experience being on Maine lakes and ponds. Respondents were read a list of eight types of human activity that can impact the landscape, and asked to indicate whether this type of activity would have a negative impact, no impact, or a positive impact on the quality of their experiences. Each was rated on a seven-point scale.

The average impact of these human activities ranged from a non or slightly positive impact for views of private docks along the shore or motorized craft on the lake or pond, to a significant negative impact that would be caused by the view of industrial facilities such as a biomass generator, paper mill, or landfill.

The table on the following page provides the average scores for the seven types of human activity in decreasing order of negative impact. On this scale an average score of four would indicate that on average, the human factor would not impact the quality of their experience on Maine's lakes or ponds.

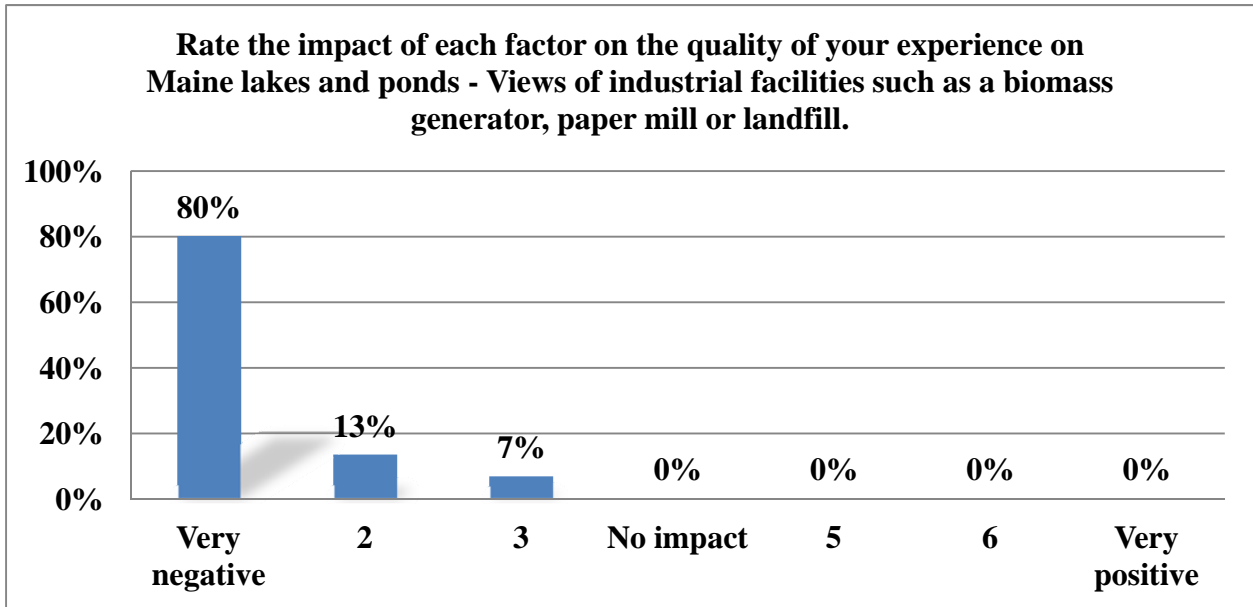
Two factors were rated as having a slight positive impact (on average) on their experience. The views of motorized craft on the lake or pond was rated an average of 4.4 while the views of private docks along the shore was had an average rating of 4.3 among respondents.

The human factor with the smallest negative impact would be wind power projects (an average of 3.3 on the seven point impact scale), followed by views of developed areas along the shore (3.1), and by views of downhill ski trails and facilities (3.1), and view of power-lines along the hill with an average of 3.1. In these cases respondents indicated that on average, there would be a slight to moderate negative impact caused by the human factor on the quality of their experience of being on the water in Maine.

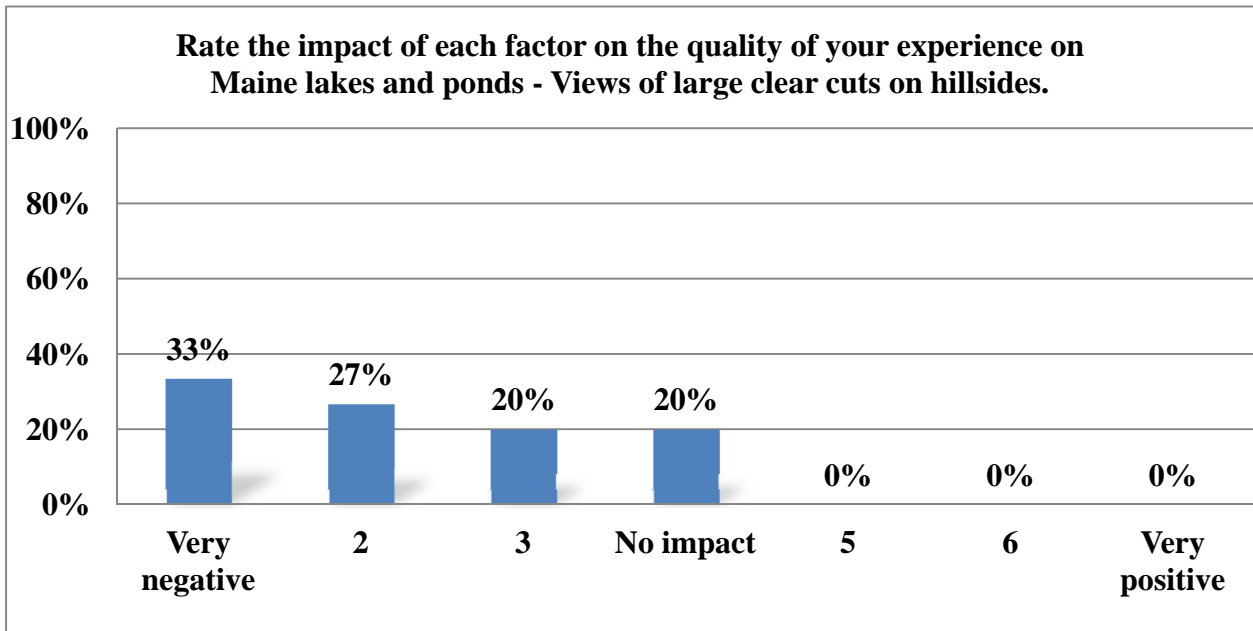
Views of roads have an average score of 2.3 on this seven-point scale or a larger negative impact. The human factor with the largest negative impact would be views of industrial facilities such as a biomass generator, paper mill, or landfill with respondents rating the impact on the quality of their experience as 1.3, on average.

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.

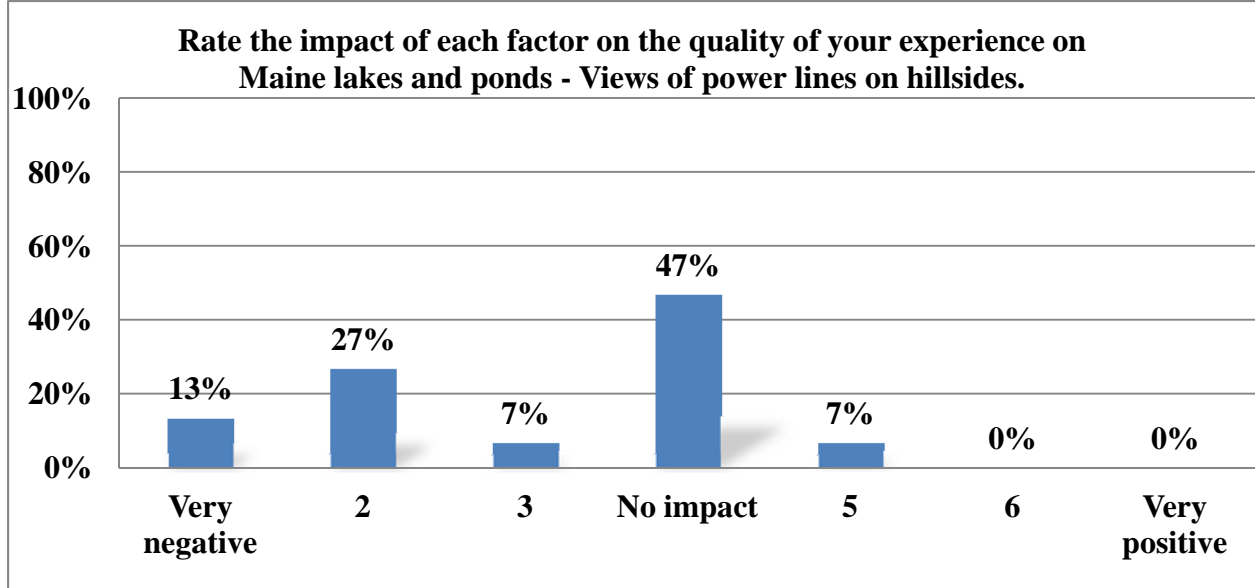
	Average (4 = no impact)		
	Total	Lower Pond	Upper Pond
Views of industrial facilities such as a biomass generator, paper mill or landfill.	1.3	1.6	1.0
Views of large clear cuts on hillsides.	2.3	2.6	2.0
Views of power lines on hillsides.	3.1	3.4	2.8
Views of downhill ski trails and facilities.	3.1	3.0	3.1
Views of developed areas along the shore.	3.1	2.9	3.4
Views of wind power projects.	3.3	3.9	2.9
Views of private docks along the shore.	4.3	3.9	4.6
Views of motorized craft on the lake or pond.	4.4	3.9	4.9



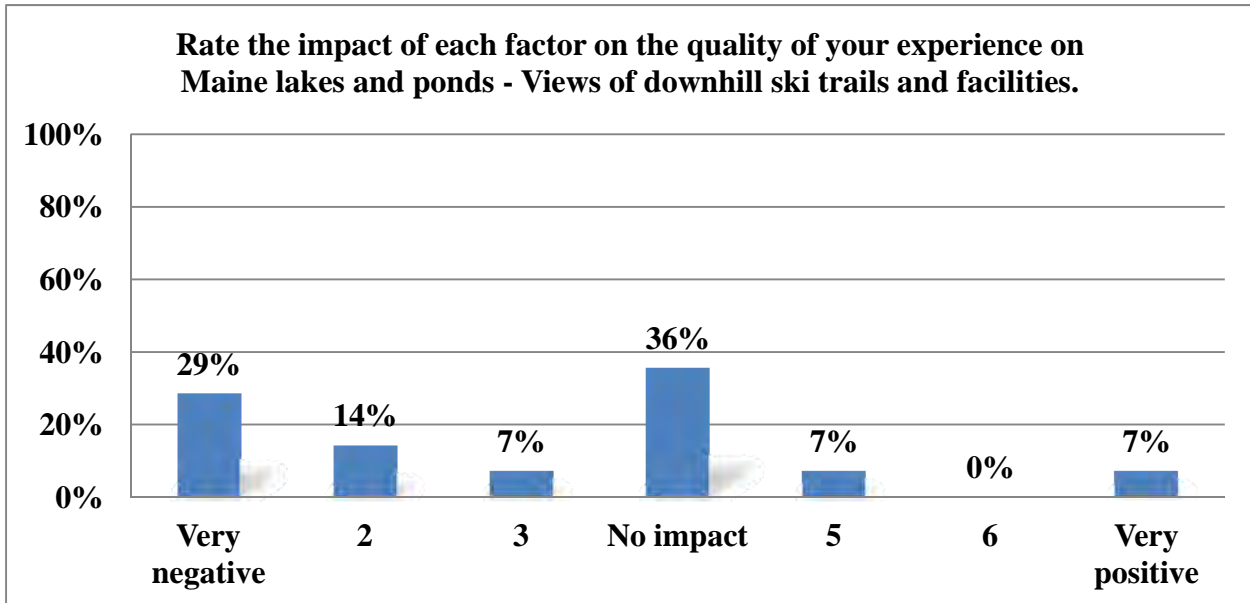
100% of respondents indicated that views of industrial facilities would have a negative impact on the quality of their experience.



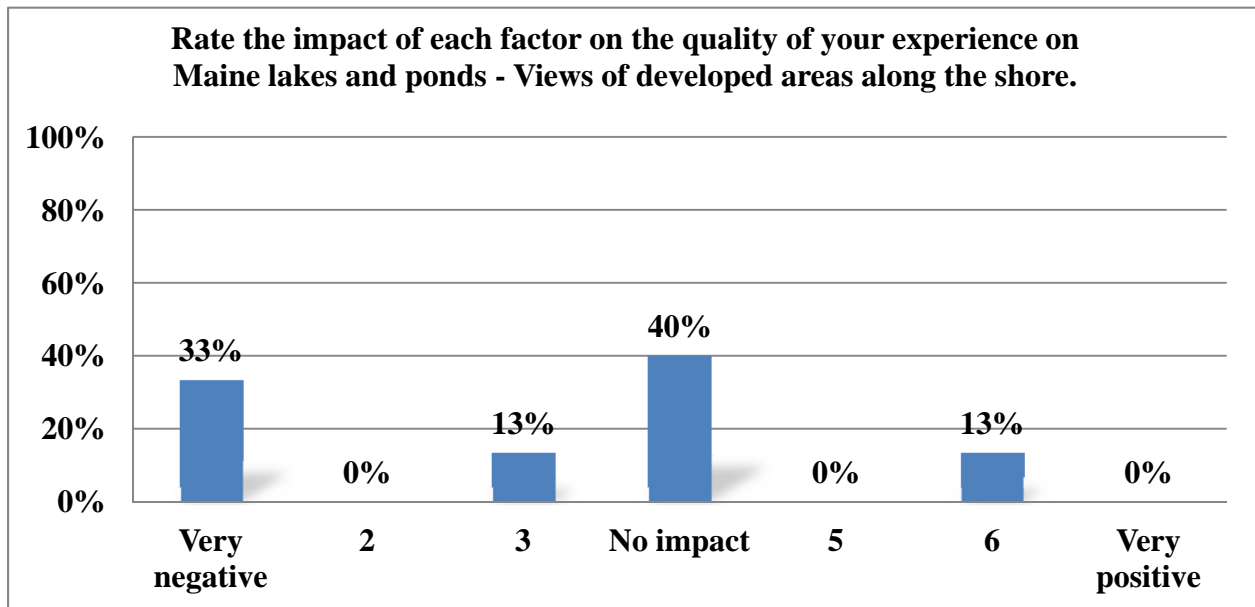
80% of respondents indicated that views of large clear cuts on hillsides would have a negative impact on the quality of their experience, while 20% indicate such views would have no impact on the quality of their hiking experience.



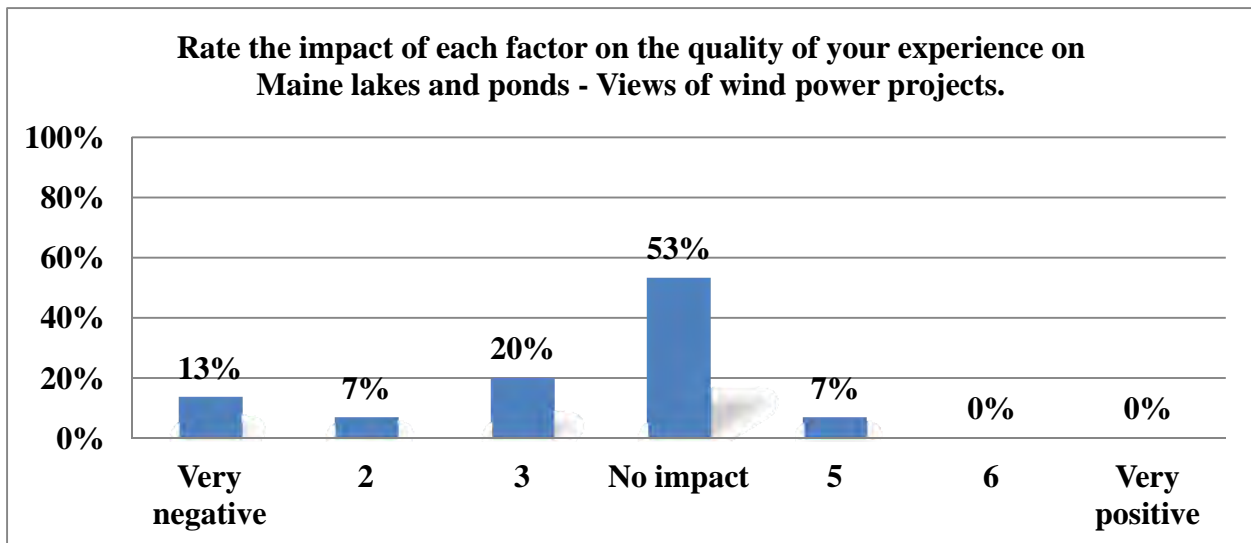
47% of respondents indicated that views of power lines would have a negative impact on the quality of their experience, while 54% indicate such views would have no impact or a positive impact on the quality of their experience.



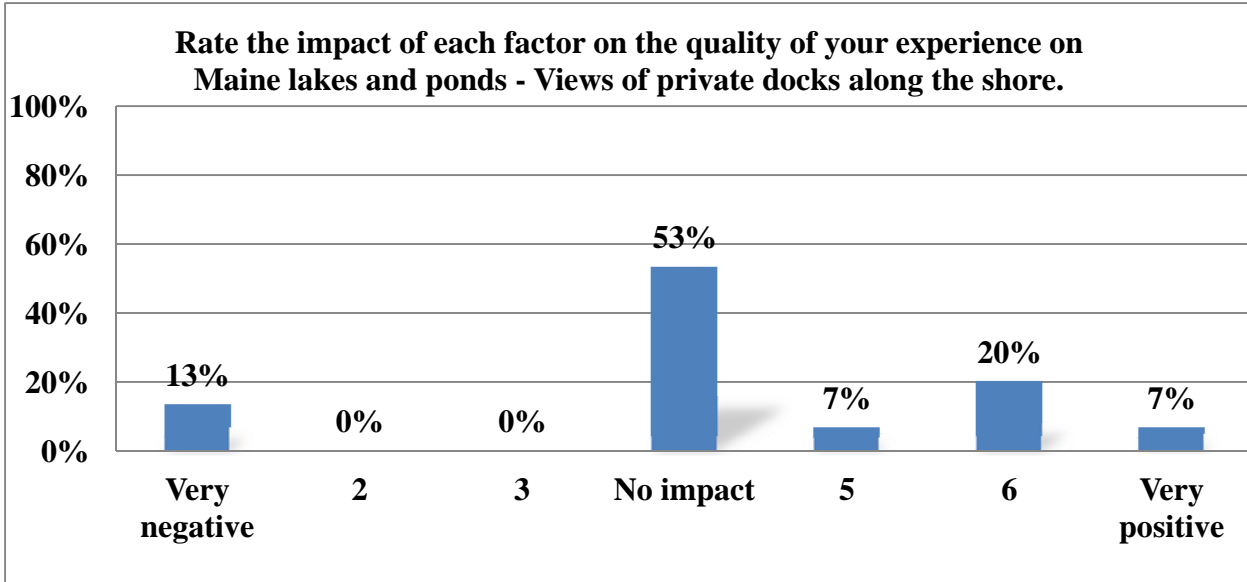
50% of respondents indicated that views of downhill ski trails and facilities would have a negative impact on the quality of their experience, while 50% indicate such views would have no impact or a positive impact on the quality of their experience.



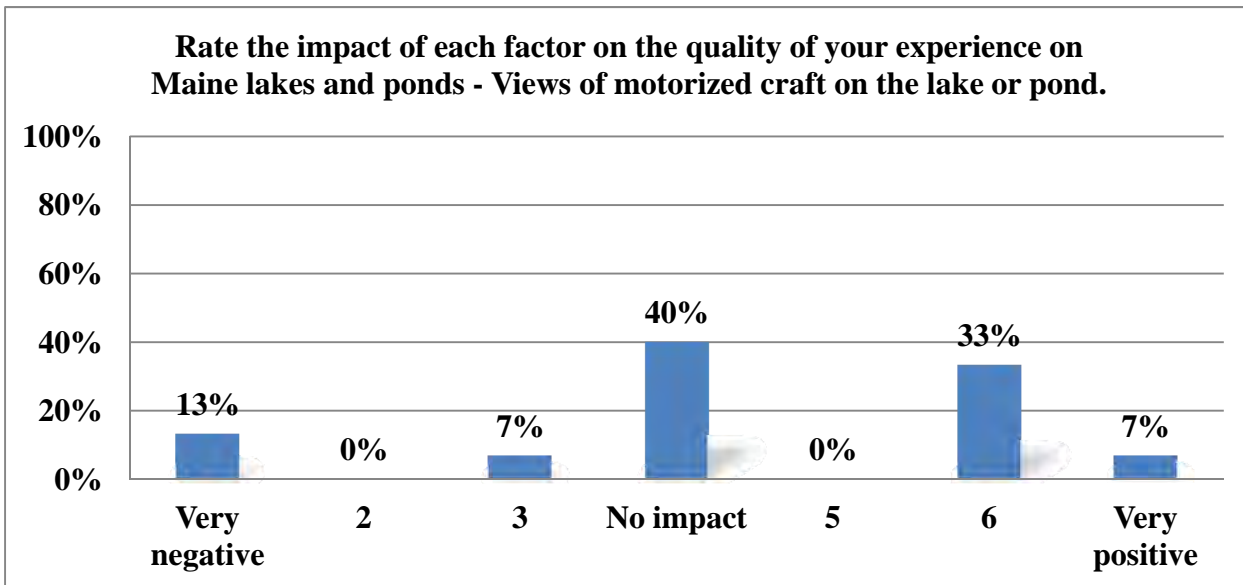
46% of respondents indicated that views of developed areas along the shore would have a negative impact on the quality of their experience, while 53% indicate such views would have no impact or a positive impact on the quality of their experience.



40% of respondents indicated that views of wind power projects would have a negative impact on the quality of their hiking experience, while 60% indicate such views would have no impact or a positive impact on the quality of their hiking experience.



13% of respondents indicated that views of private docks along the shore would have a negative impact on the quality of their experience, while 87% indicate such views would have no impact or a positive impact on the quality of their experience.



20% of respondents indicated that views of motorized craft of the lake or pond would have a negative impact on the quality of their experience, while 80% indicate such views would have no impact or a positive impact on the quality of their experience.

Scenic Value of Lower Lead Mountain Pond and Impact of Wind Turbines

Respondents were then handed two images to evaluate and were asked to rate the scenic value of both views. The two images represented the view from a point out on the water of Lower Lead Mountain Pond.

- The current view from the location
- The view from the location showing additional wind turbines that are being proposed.

Respondents first rated the current view. Respondents were then handed a photo simulation of the same view including the proposed wind turbines and asked to rate the scenic value of this view. Both views were rated on a seven-point scale where 1 represents the lowest scenic value and 7 represents the highest scenic value. Respondents were also asked the reason for their rating for both views.

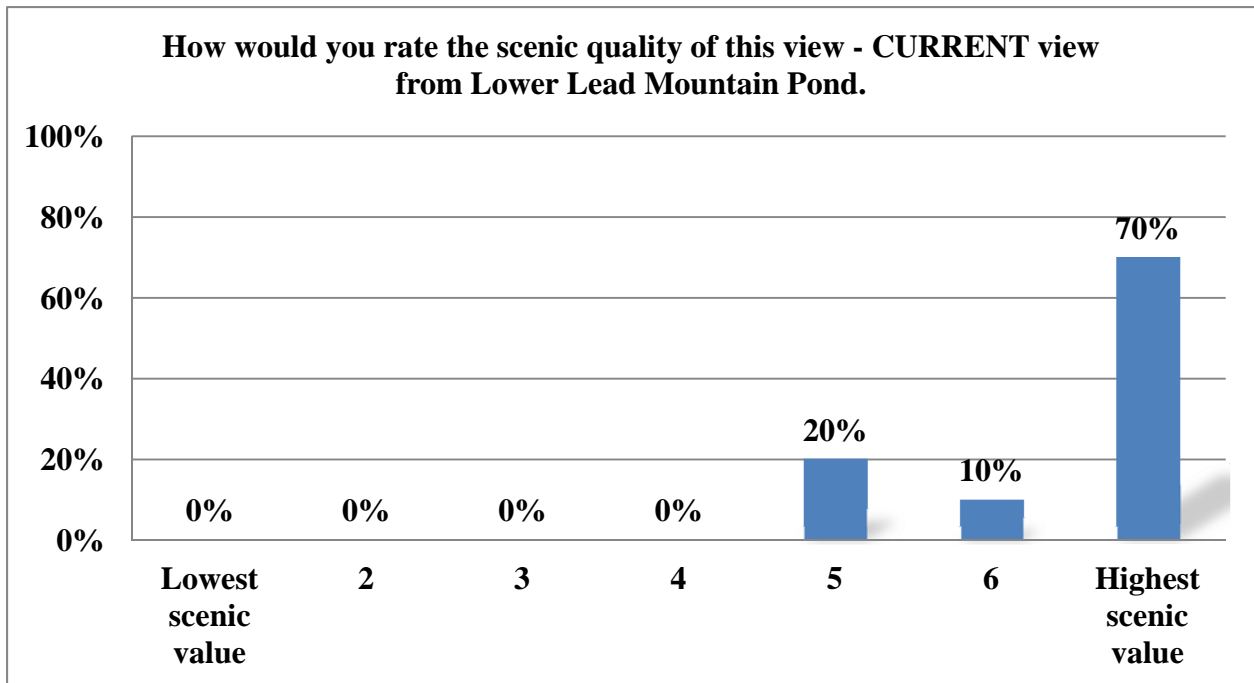
Next I would like you to take a look at the view Lower Lead Mountain Pond.

	Average
How would you rate the scenic quality of this view - CURRENT view from Lower Lead Mountain Pond.	6.5
How would you rate the scenic quality of this view - Lower Lead Mountain Pond View that includes wind turbines that may be built in the future.	5.1
Difference in Scores Between Views (<i>Negative Value = Decrease in Scenic Value, Positive Value = Increase in Scenic Value, 0 = No Change in Scenic Value</i>)	-1.4

The average rating of the initial view among all respondents was 6.5 with 70% of respondents rating the view as a seven, or highest scenic quality, 10% rating as a six, and 20% rating as a five on the seven-point scale. Respondents were then asked why they assigned the view the value that they did. Respondent comments are provided on the following page (sorted by whether they assigned it a high scenic value, neutral value, or low scenic value). Comments were similar in that they said it offered views, it was unspoiled without development.

The average rating of the second view (the view containing the proposed additional wind turbines) was 5.1. Thirty percent of respondents rated the view with wind turbines as a 7, or highest scenic quality, while 20% assigned a score of 6, and 20% assigned a score of 5 on the seven point scale. Ten percent of respondents assigned the view with wind turbines a score of 1, or lowest scenic quality while 10% assigned the view a score of 3 on the seven-point scale. Respondents indicated they didn't mind the turbines or they favored wind power.

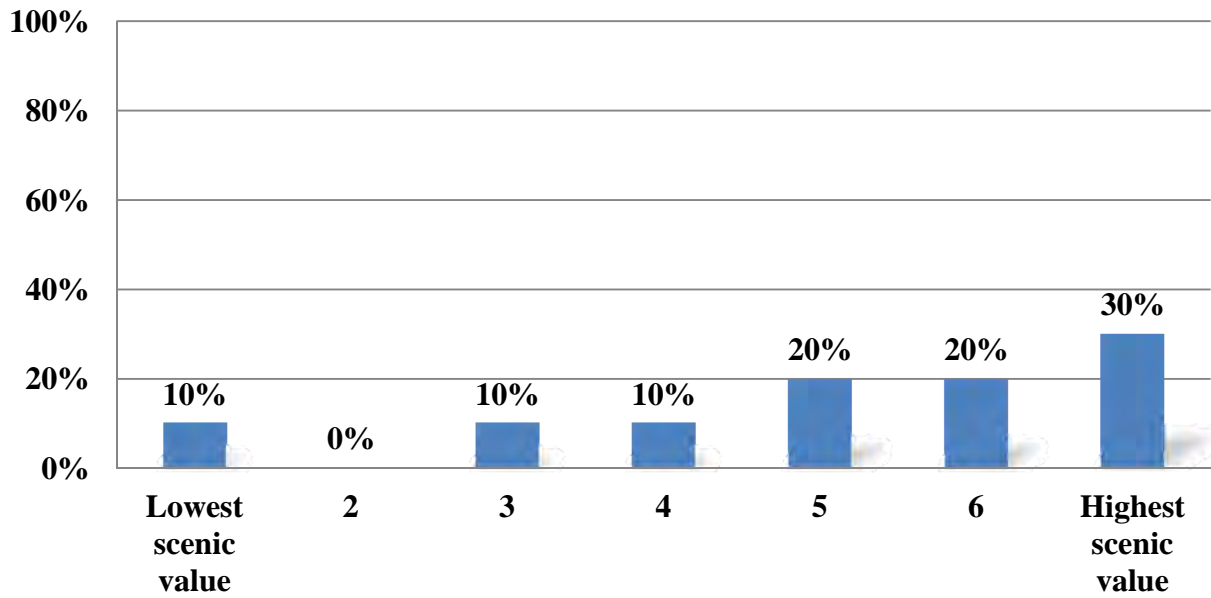
Overall, there was a 1.4 point drop in the average score between the two views from 6.5 to 5.1. Ten percent indicated the wind turbines would have a positive impact on the view while 20% indicated there were no differences in the scenic value of the two views. Thirty percent assigned a difference of one point between the two views (they indicated the second view was somewhat less scenic), 20% a difference of two and 20% indicated a difference of four between the two views (these respondents indicated that the second view was significantly less scenic).



**Why do you say that?
(Why did you assign it this rating to CURRENT View)**

ID	Rating	Comment
1	High	Unspoiled, natural
2	High	The winter, forest, knowing about the birds
3	High	Almost a view from camp. Pretty view
4	High	No development or camps
5	High	Looked at for 50 years
9	High	Nature of the land
15	High	The natural beauty of the thing. As the seasons change, it changes.
6	High	It's just a tree line.
10	High	No mountains
11	High	No development

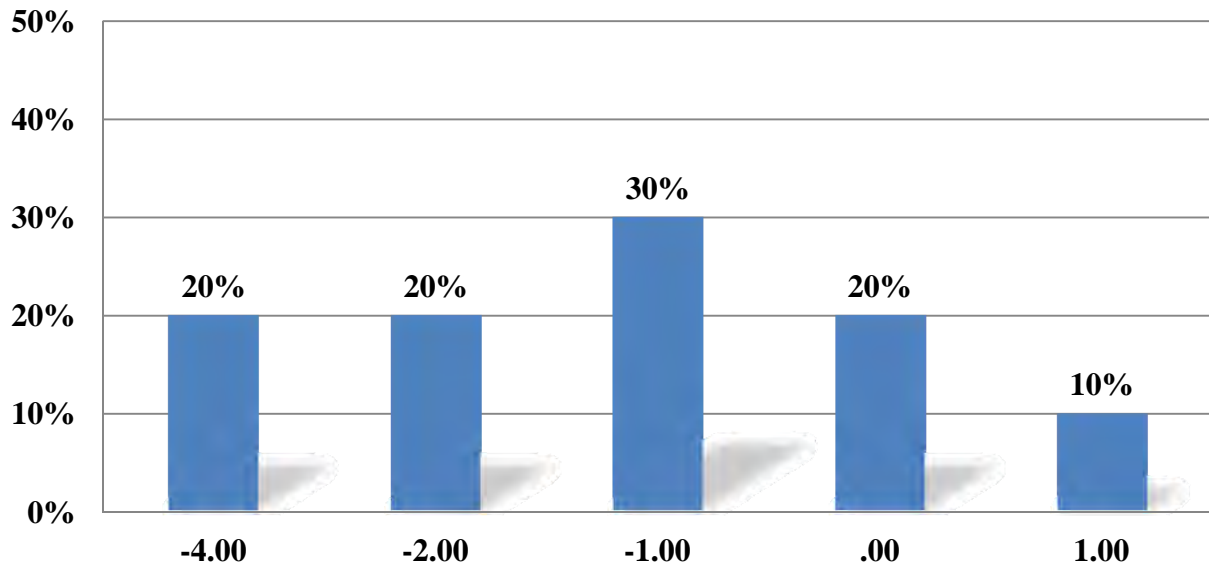
How would you rate the scenic quality of this view - Lower Lead Mountain Pond view that includes wind turbines that may be built in the future.



**Why do you say that?
(Why did you assign it this rating to View with the Wind Turbines)**

ID	Rating	Comment
1	High	Put a lot of people to work, won't change experience
2	High	Rather that than a nuclear plant
3	High	In favor or wind power, part of solution
5	High	First was all nature, but I believe in the wind project.
9	High	I don't mind it
15	High	It doesn't bother me because it's a natural way to tap into power.
10	Low	I don't like the wind towers
11	Low	You can see them
6	Neutral	I'm sure someone wouldn't want to see it but it doesn't affect me.

Difference in Scores Between Views (Negative Value = Decrease in Scenic Value, Positive Value = Increase in Scenic Value, 0 = No Change in Scenic Value).



Impact on Enjoyment and Use

Respondents were asked two questions about the impact of the proposed addition of wind turbines in regards to their enjoyment and use of Lower Lead Mountain Pond.

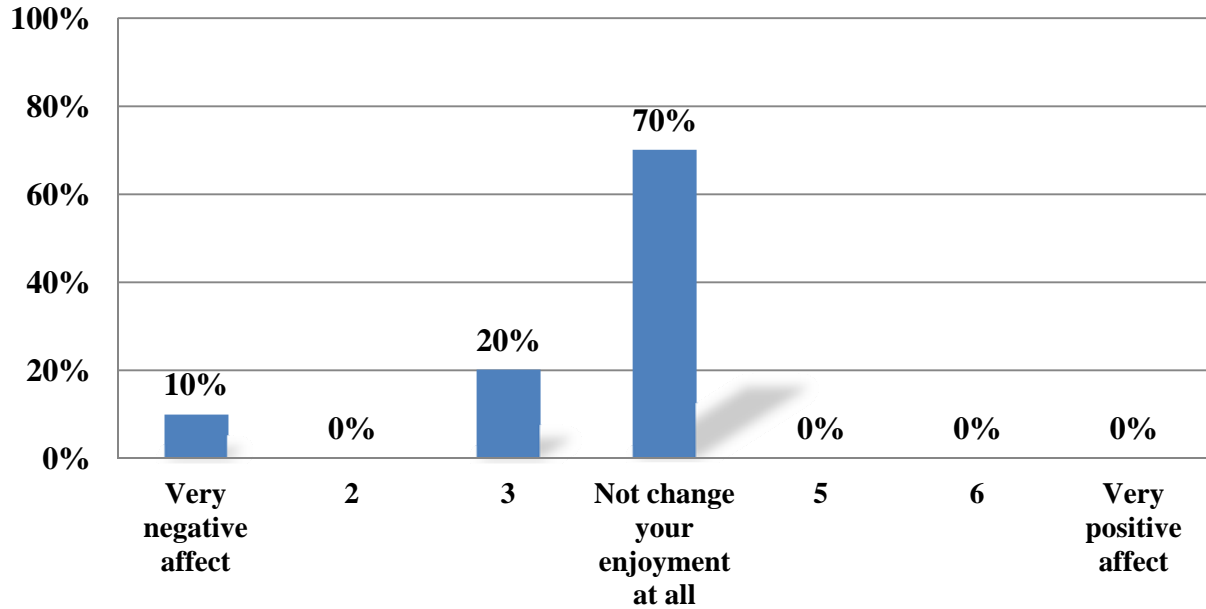
Respondents evaluated the impact of wind project on their enjoyment during future visits. Respondents rated the impact on a seven-point scale where 1 indicates a very negative effect and 7 represents a very positive effect on the enjoyment of their visit. On the scale, a 4 represents no change in enjoyment.

On average, respondents indicated that the proposed addition of wind turbines would have only a slightly negative effect on the enjoyment of their visit; a rating of 3.5, slightly below 'no change in enjoyment' (which would be a rating of 4). Seventy percent of respondents indicated that the proposed addition of wind turbines would have no impact on their enjoyment. Twenty percent indicated it would have a minor negative impact on their enjoyment, while 10% indicated it would have a very negative impact on their enjoyment. Respondents were then asked why they assigned the score to the impact on their enjoyment. Several respondents indicated there was an impact because they could see the turbines, while others indicated the presence of wind turbines would not bother them.

Respondents were then asked to evaluate how the proposed wind project might affect their likelihood of returning to Lower Lead Mountain Pond. Respondents rated the impact on a seven-point scale where 1 indicates they are less likely to return and 7 indicates they are more likely to return. On the scale, a 4 represents no change in their likelihood of returning to Lower Lead Mountain Pond.

On average, respondents indicated that the proposed wind project would actually have a slight positive impact on their likelihood of returning to Lower Lead Mountain Pond (rating as 5.4 on the 7 point scale). Fifty percent of respondents indicated it would have a very positive impact on their likelihood of returning while 40% of respondents indicated the proposed addition of wind turbines would have no impact on their likelihood of returning. Only 8% indicated the proposed wind turbines would have a negative impact on their likelihood to return to Lower Lead Mountain Pond. Respondents indicated that the wind turbines would not change their likelihood of returning and that they have been coming here for years.

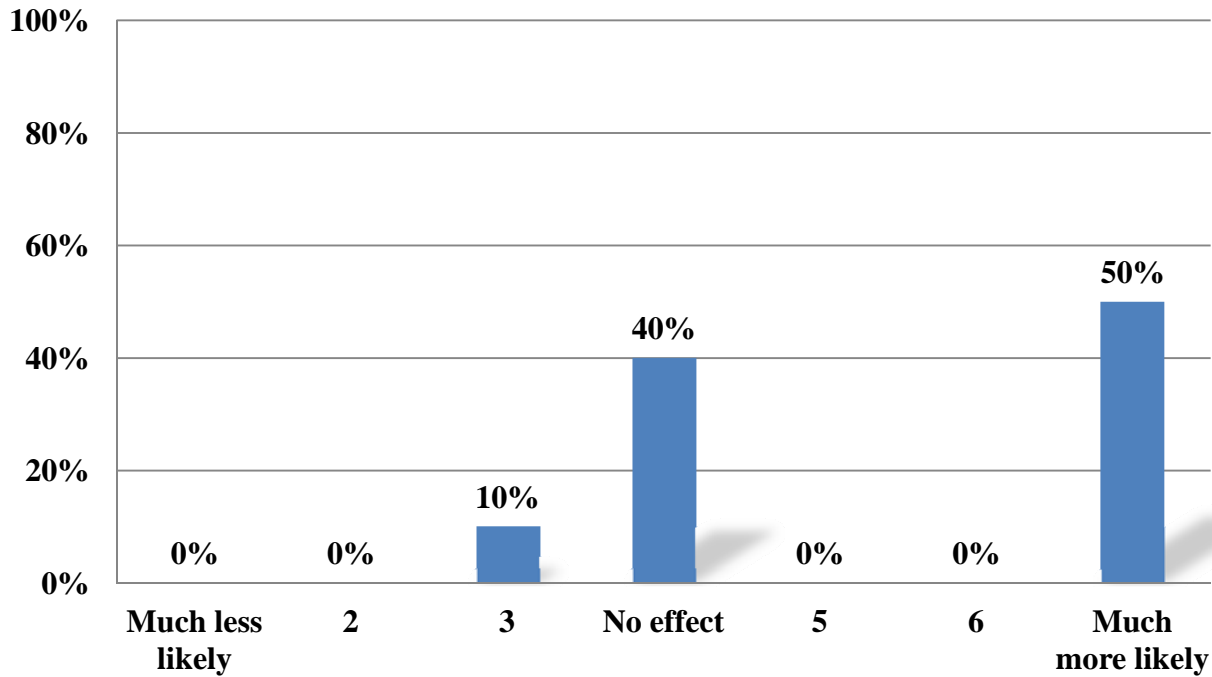
How would your enjoyment be affected by a change in the current Lower Lead Mountain Pond view compared to the view with the wind turbines?



**Why do you say that?
(Why does it have that impact on your enjoyment?)**

ID	Rating	Comment
4	Negative	Signs of encroachment on wilderness
11	Negative	I can see it
10	Negative	I don't like
1	No Impact	Not going to affect anything we do
2	No Impact	Lake, flora & fauna still here. No development on shore
3	No Impact	Wouldn't change enjoyment, how I use the area
9	No Impact	It wouldn't be something that would bother me
15	No Impact	It just doesn't. It has more benefits, not a giant smokestack.
6	No Impact	Wind turbines don't bother me.

How likely are you to return to Lower Lead Mountain Pond, given the change in the view?



**Why do you say that?
(Why does it have that impact on likelihood of returning?)**

ID	Rating	Comment
10	Negative	It's unlikely I'd be going there either way.
6	No Impact	I rarely go there.
11	No Impact	For what we use it for (fishing, kayaking) we'd still come back
1	Positive	Not effecting anything, love the place
2	Positive	Camp here, won't change enjoyment. Not ideal but necessary
3	Positive	I like the area and the pond, that view wouldn't change.
5	Positive	Coming for 50 years

Scenic Value of Upper Lead Mountain Pond and Impact of Wind Turbines

Respondents were then handed two images to evaluate, and were then asked to rate the scenic value of both views. The two images represented the view from the public boat launch on Upper Lead Mountain Pond.

- The current view from the location
- The view from the location showing additional wind turbines that are being proposed.

Respondents first rated the current view. Respondents were then handed a photo simulation of the same view including the proposed wind turbines and asked to rate the scenic value of this view. Both views were rated on a seven-point scale where 1 represents the lowest scenic value and 7 represents the highest scenic value. Respondents were also asked the reason for their rating for both views.

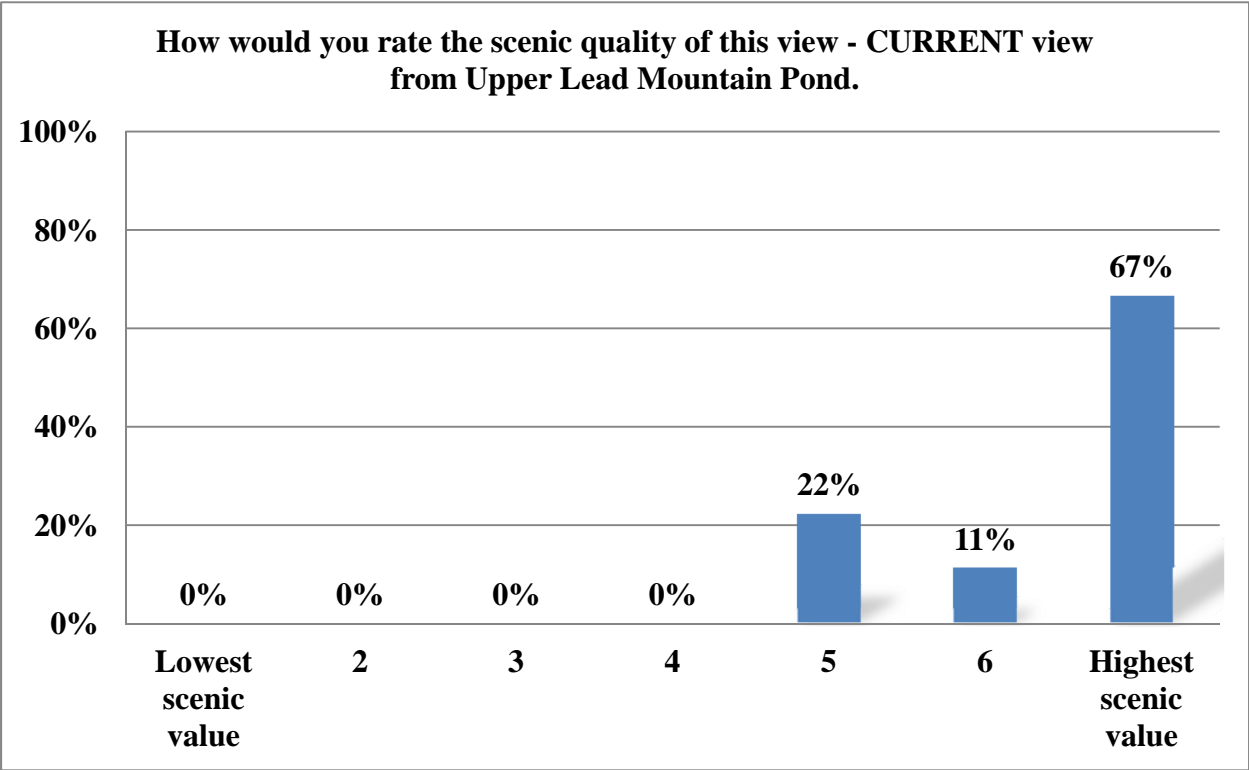
Next I would like you to take a look at the view Lower Lead Mountain Pond.

	Average
How would you rate the scenic quality of this view - CURRENT view from Upper Lead Mountain Pond.	6.4
How would you rate the scenic quality of this view - Upper Lead Mountain Pond View that includes wind turbines that may be built in the future.	5.9
Difference in Scores Between Views (<i>Negative Value = Decrease in Scenic Value, Positive Value = Increase in Scenic Value, 0 = No Change in Scenic Value</i>)	-0.6

The average rating of the initial view among all respondents was 6.4 with 67% of respondents rating the view as a seven, or highest scenic quality, 11% rating as a six and 22% rating as a five on the seven-point scale. Respondents liked the area because of its beauty and that it was untouched by development.

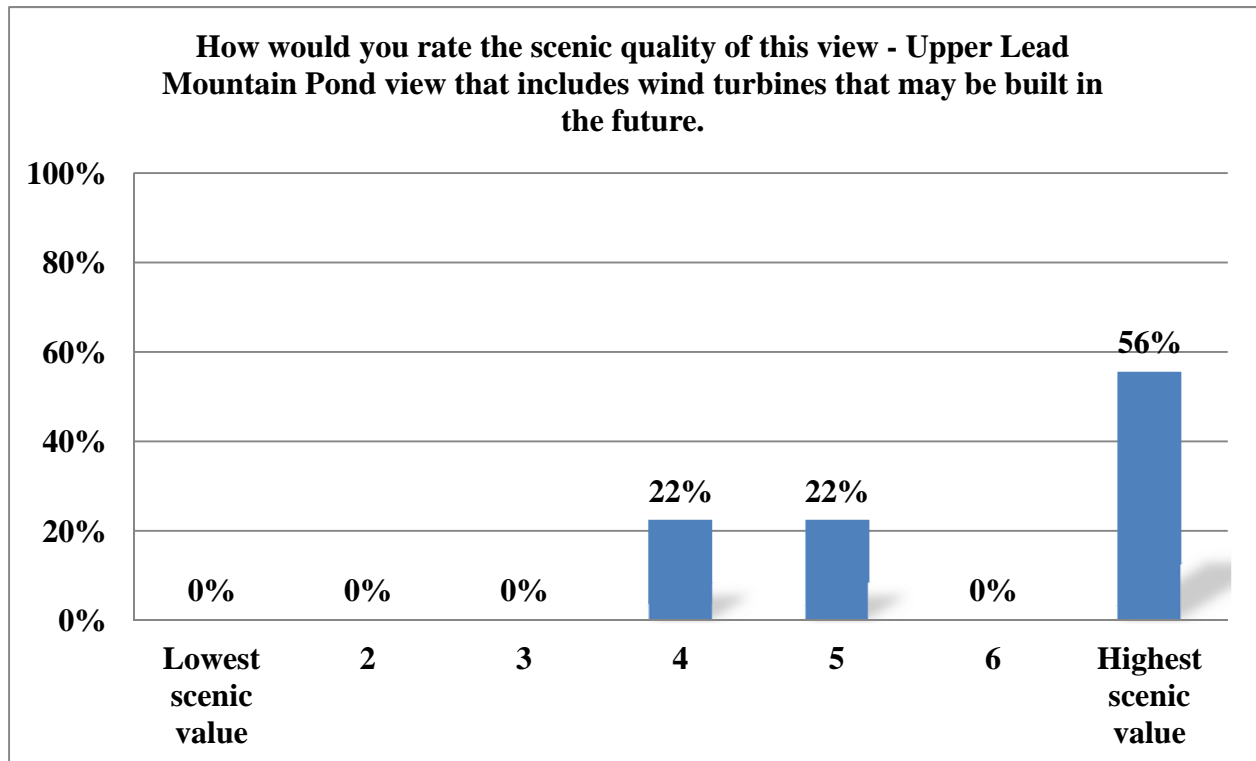
The average rating of the second view (the view containing the proposed additional wind turbines) was 5.9. Fifty-six percent of respondents rated the view with wind turbines as a 7, or highest scenic quality, while 22% assigned a score of 6 and 22% assigned a score of 4 on the seven point scale. Comments were split between those that indicated the turbines made no difference or did not bother them and the few respondents who did indicate they could notice the wind turbines in the view.

Overall, there was a 0.6 point drop in the average score between the two views from 6.4 to 5.9, or a slight change in the scenic value. Seventy-eight percent of respondents indicated there were no differences in the scenic value of the two views. Twenty-two percent assigned a difference of two to three points between the two views, indicating the second view was less scenic.



**Why do you say that?
(Why did you assign it this rating to CURRENT View)**

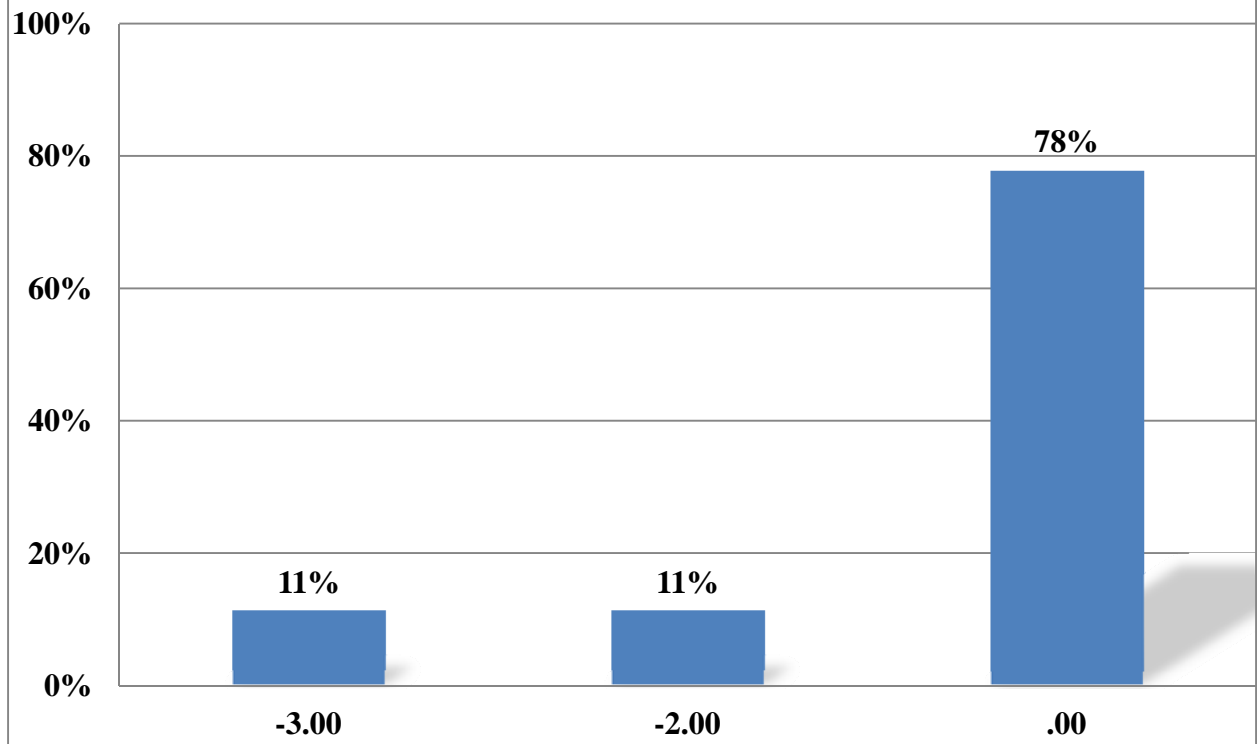
ID	Rating	Comment
9	High	Nature and seeing that
6	High	It's just a tree line
7	High	It's beautiful
8	High	You see nothing but nature. Remote, uninhabited
10	High	No mountains. Nothing wrong with it, I just like mountains.
11	High	Looks pretty, no one there
12	High	Untouched, can't see houses or power lines
13	High	All natural, no man stuff
14	High	I fell in love with the place the first time I visited.



**Why do you say that?
(Why did you assign it this rating to View with the Wind Turbines)**

ID	Rating	Comment
9	High	Didn't bother me
6	High	It's still just a tree line.
7	High	Wind turbines aren't noticeable.
10	High	No difference
11	High	looks pretty, no one there
13	High	Can't see windmills
14	High	I don't see anything derogative
8	Neutral	I could see them
12	Neutral	I don't like windmills. Strange place to put windmill. Impacts natural beauty.

Difference in Scores Between Views (Negative Value = Decrease in Scenic Value, Positive Value = Increase in Scenic Value, 0 = No Change in Scenic Value).



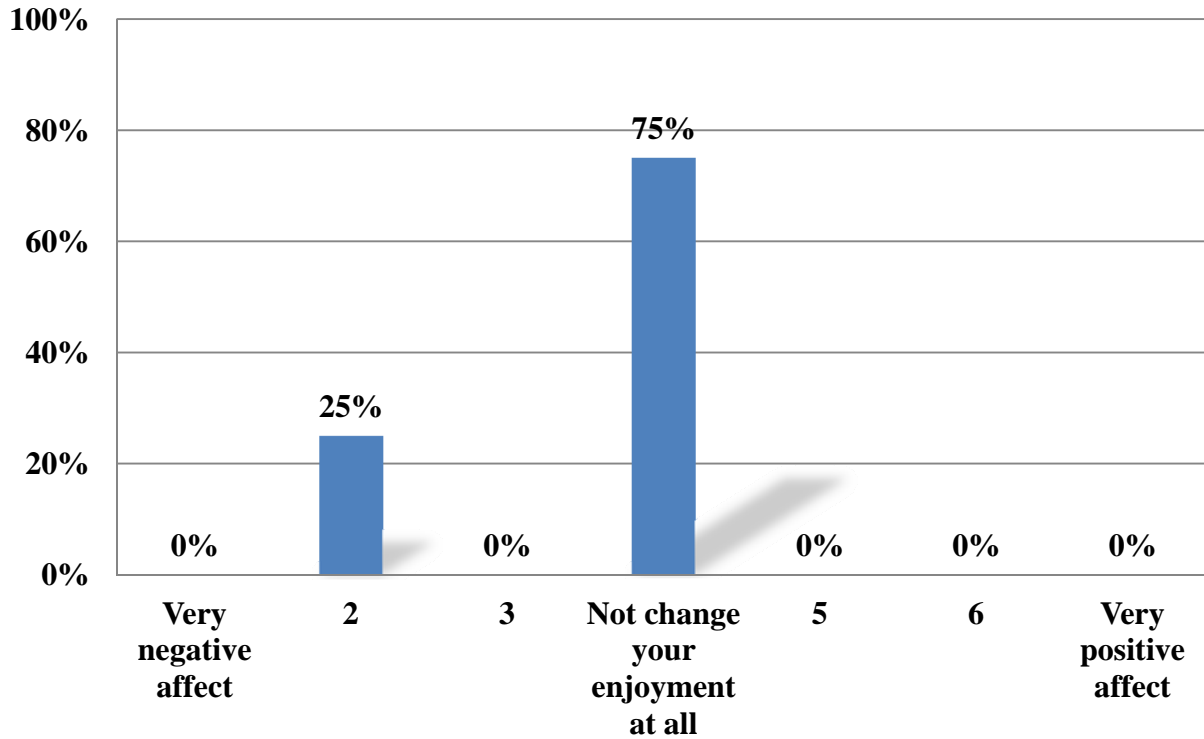
Impact on Enjoyment and Use

On average, respondents indicated that the proposed addition of wind turbines would have only a slightly negative effect on the enjoyment of their visit; a rating of 3.5, slightly below no change in their enjoyment of Upper Lead Mountain Pond (which would be a rating of 4). Seventy-five percent of respondents indicated that the proposed addition of wind turbines would have no impact on their enjoyment while 25% did indicate it would have a negative impact on their enjoyment. Some respondents didn't like the idea of seeing wind turbines, while others indicated that they really couldn't be seen.

Respondents were then asked to evaluate how the proposed wind project might affect their likelihood of returning to Upper Lead Mountain Pond. Respondents rated the impact on a seven point scale where 1 indicates they are less likely to return and 7 indicates they are more likely to return. On the scale, a 4 represents no change in their likelihood of returning to Upper Lead Mountain Pond.

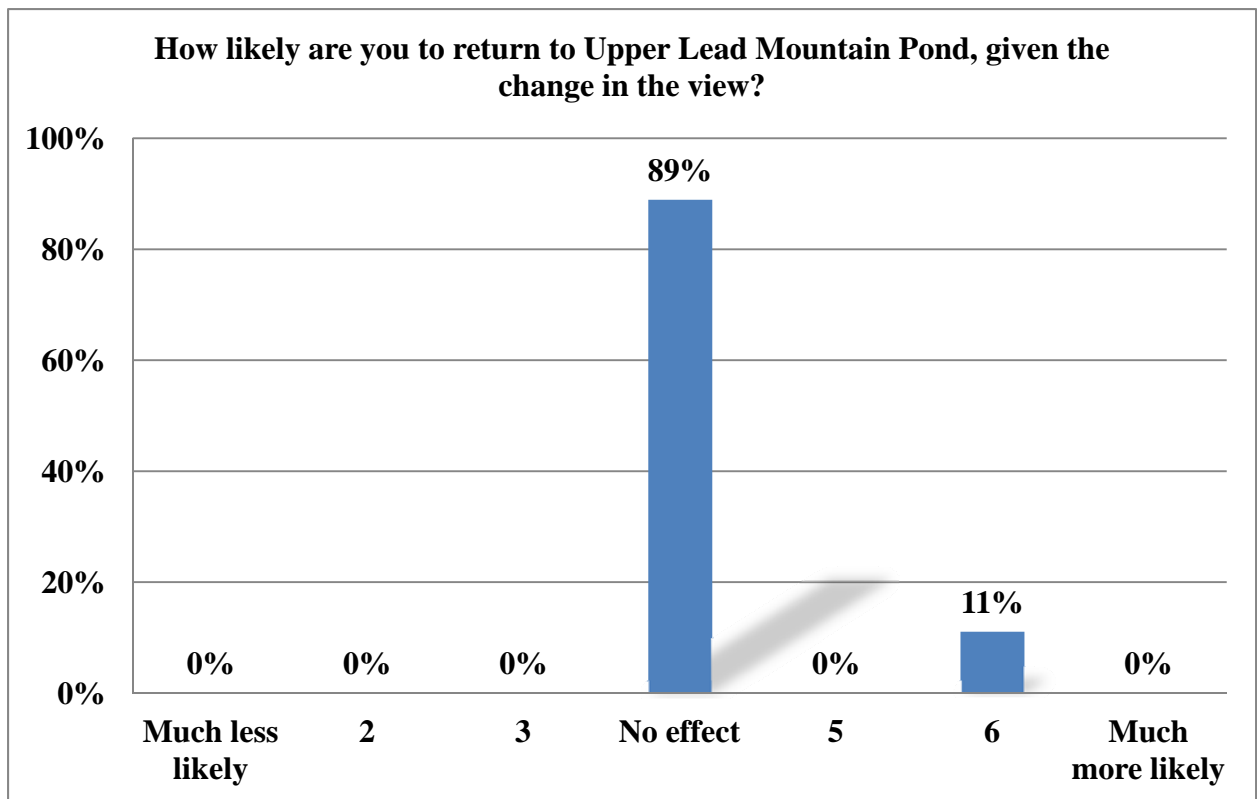
On average, respondents indicate that the proposed wind project would have no impact on their likelihood of returning to Lower Lead Mountain Pond (rating as 4.2 on the 7 point scale). Eleven percent of respondents indicated it would have a positive impact on their likelihood of returning while 89% of respondents indicated the proposed addition of wind turbines would have no impact on their likelihood of returning. Respondents indicated that the wind turbines would not change their likelihood of returning and that they own property in the area.

How would your enjoyment be affected by a change in the current Upper Lead Mountain Pond view compared to the view with the wind turbines?



**Why do you say that?
(Why does it have that impact on your enjoyment?)**

ID	Rating	Comment
8	Negative	I'm going to know in my mind that they're there. It's going to make me wonder what's going to come next.
12	Negative	I don't like the idea of seeing windmills on the horizon.
6	No Impact	I stay at the other end of the pond.
7	No Impact	Turbines aren't seen
11	No Impact	Can't see difference
13	No Impact	I think wind turbines are beautiful
14	No Impact	Don't see anything offensive
10	No Impact	If I knew they were there, even if I can't see them it would still



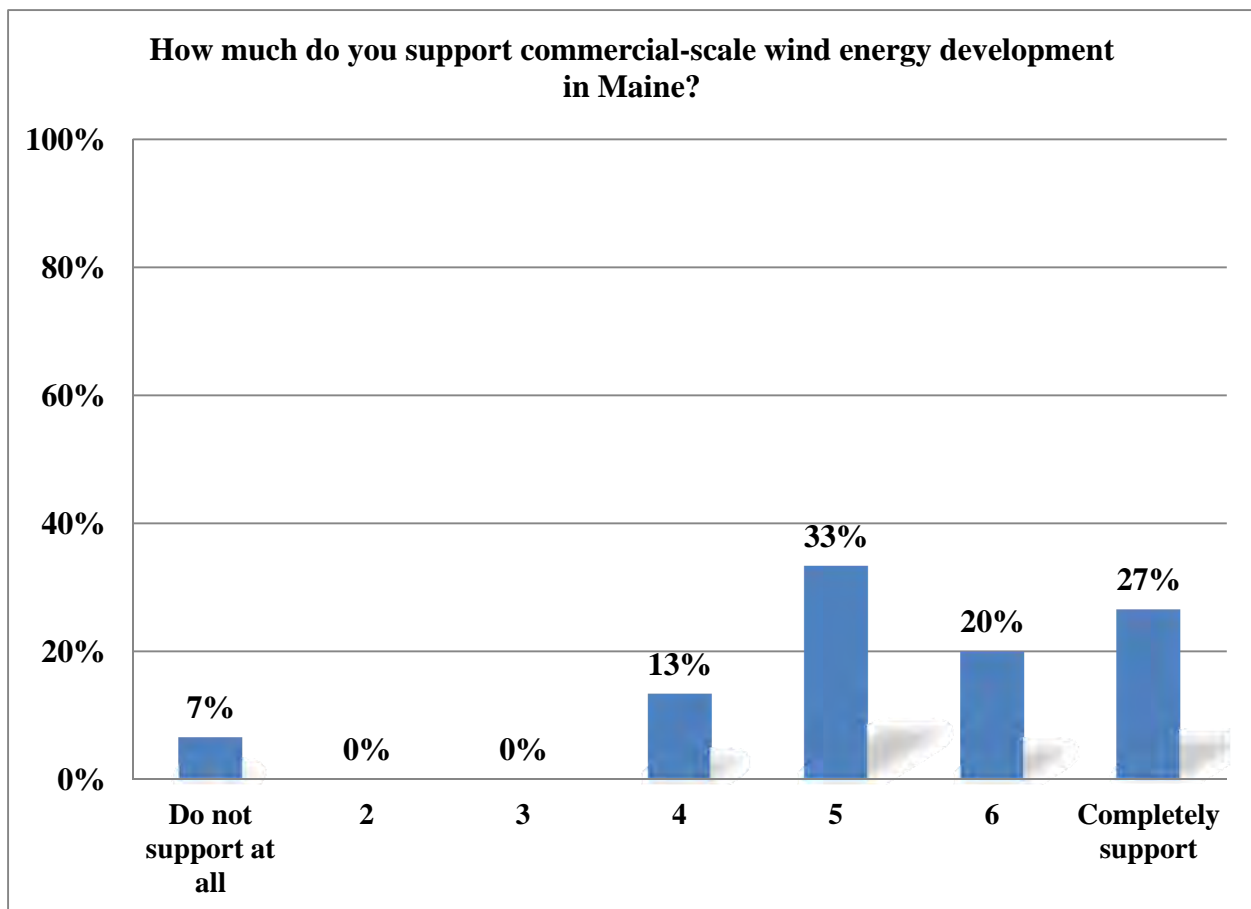
Why do you say that?
(Why does it have that impact on likelihood of returning?)

ID	Rating	Comment
6	No Impact	I own property here. I will still be here.
7	No Impact	Turbines are not seen
10	No Impact	Heavily invested here, own property.
11	No Impact	No difference in pictures
12	No Impact	I wouldn't like it but I wouldn't stop coming here.
13	No Impact	I enjoy seeing them
14	No Impact	No detraction
8	Positive	I'm still going to come but not happy about it.

General Views of Wind Power Development

Respondents were asked to indicate how appropriate wind development was for the state of Maine. Respondents rated their views on a seven-point scale where 1 indicates they believe it is very inappropriate and 7 indicates they believe wind power is very appropriate for Maine.

On average, respondents assigned a score of 5.3. Overall, 80% of respondents indicate they support commercial-scale wind energy development in Maine (rating as a 5, 6, or 7) while 7% oppose (rating as a 1, 2, or 3). Thirteen percent of respondents were neutral.



Demographics

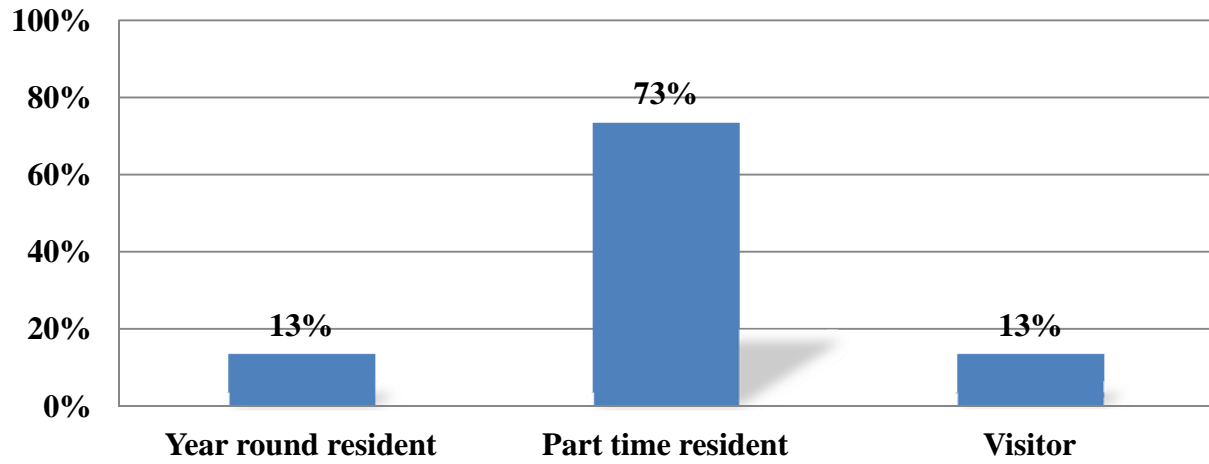
Seventy-three percent of respondents were full-time residents in the area, 13% part time residents, and 13% were visitors to the area. All part-time residents and visitors reported visiting the area in the Summer, 77% in the fall, 69% in the Spring, and 54% in the Winter. Nearly all (93%) owned a home or camp in the area.

The largest percentage of respondents (47%) was aged 55-64 while 27% were aged 65 and older and 27% under age 55. Most (64%) were male. Fifty-seven percent of respondents had a college degree with 43% holding a bachelor's or post-graduate degree.

Forty-seven percent of respondents were with one other person, while 27% were alone.

Most respondents were from Maine communities; Bangor, Islesford, Brunswick, Rumford, Old Town, Orrington, Bar Harbor, Hancock, Union, and Waterville, though three respondents were from out of state.

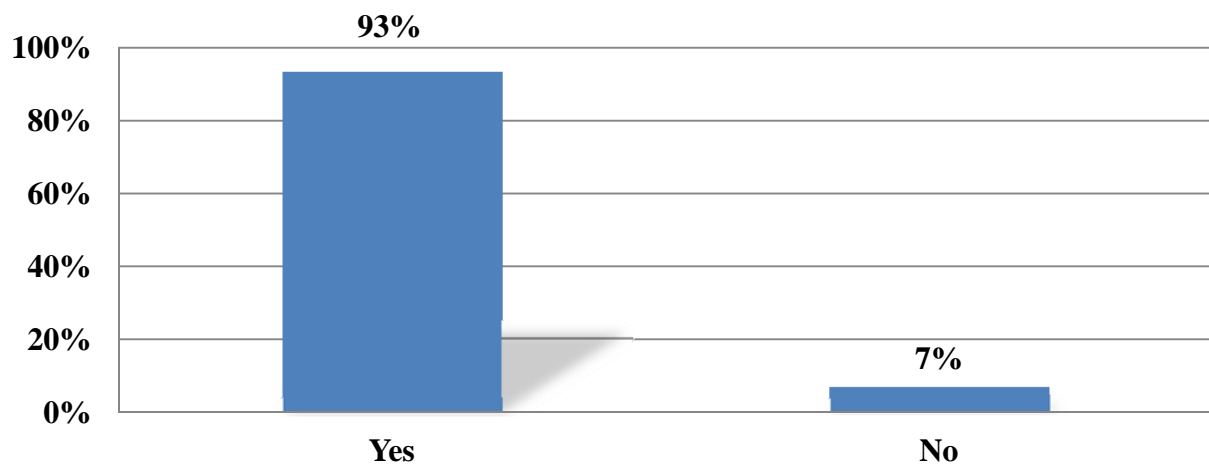
Are you a year round resident, part time resident, or visitor to this area?

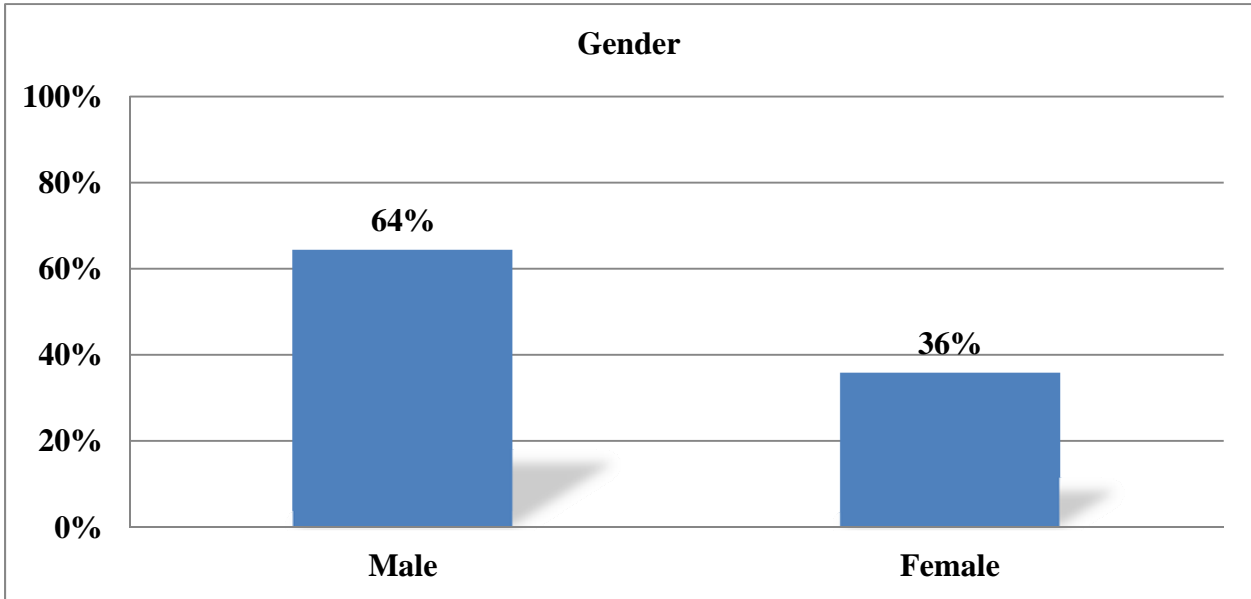
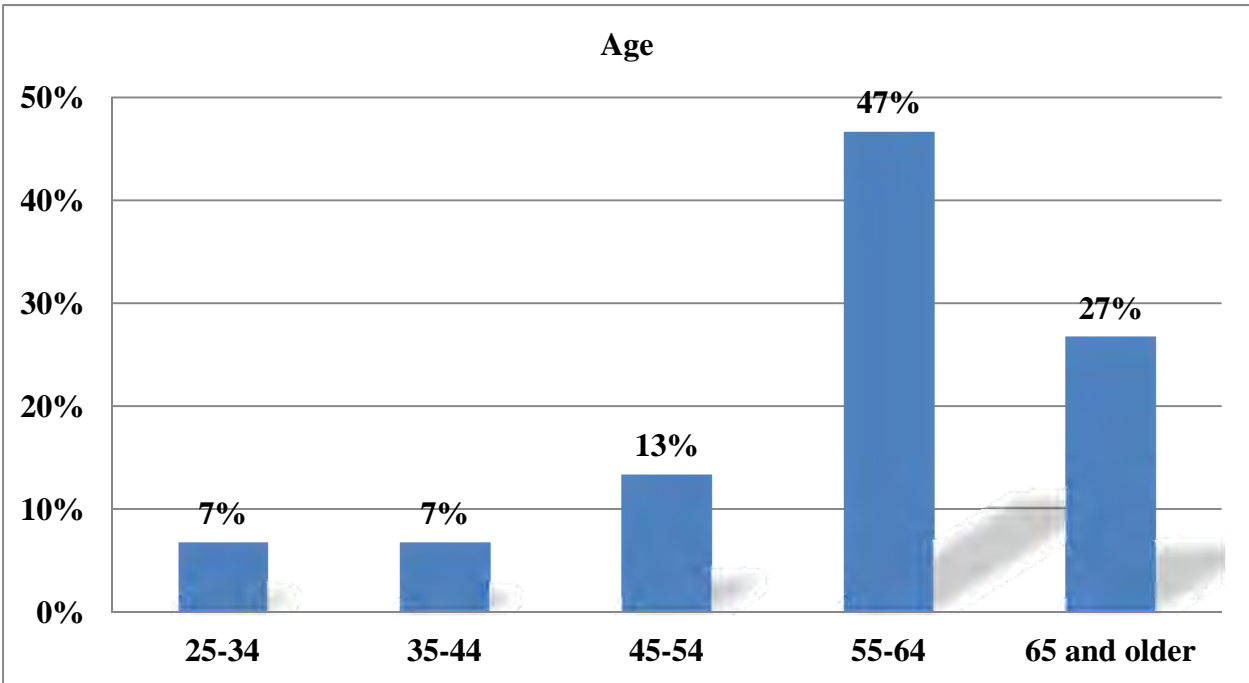


**Do you live in or visit the area in...
(% among Part Time Residents and Visitors)**

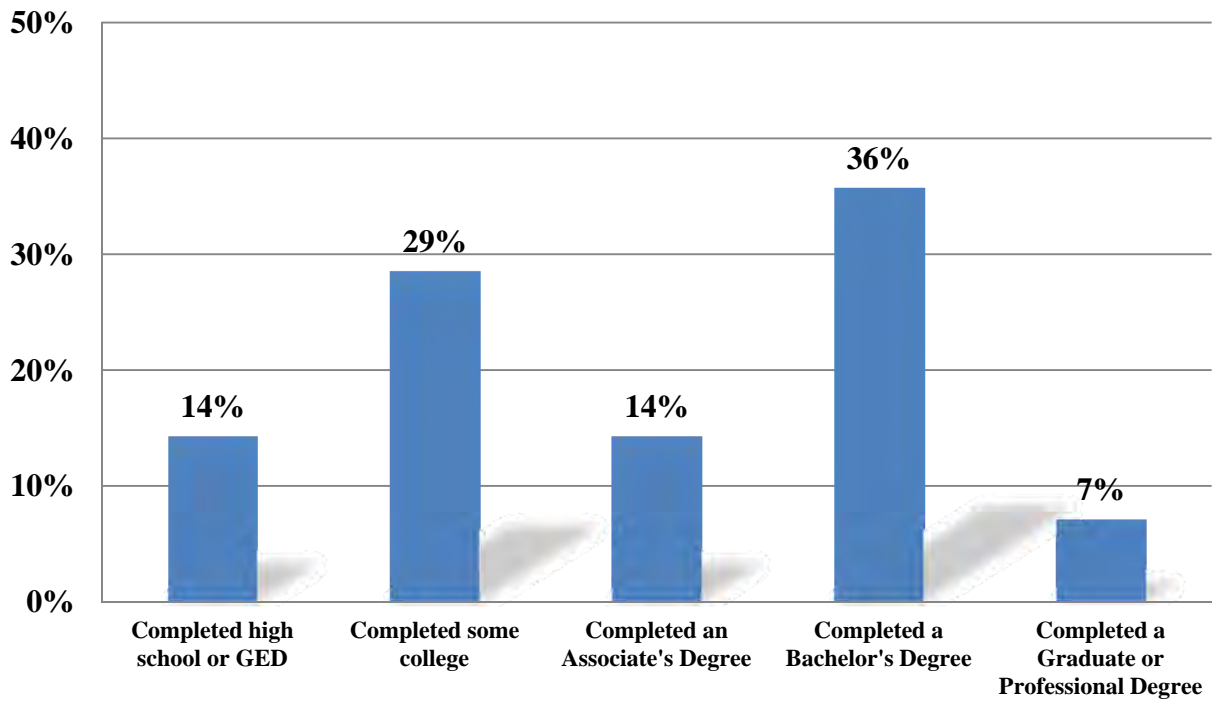
Winter	54%
Spring	69%
Summer	100%
Fall	77%

Do you own a home or camp in this area?

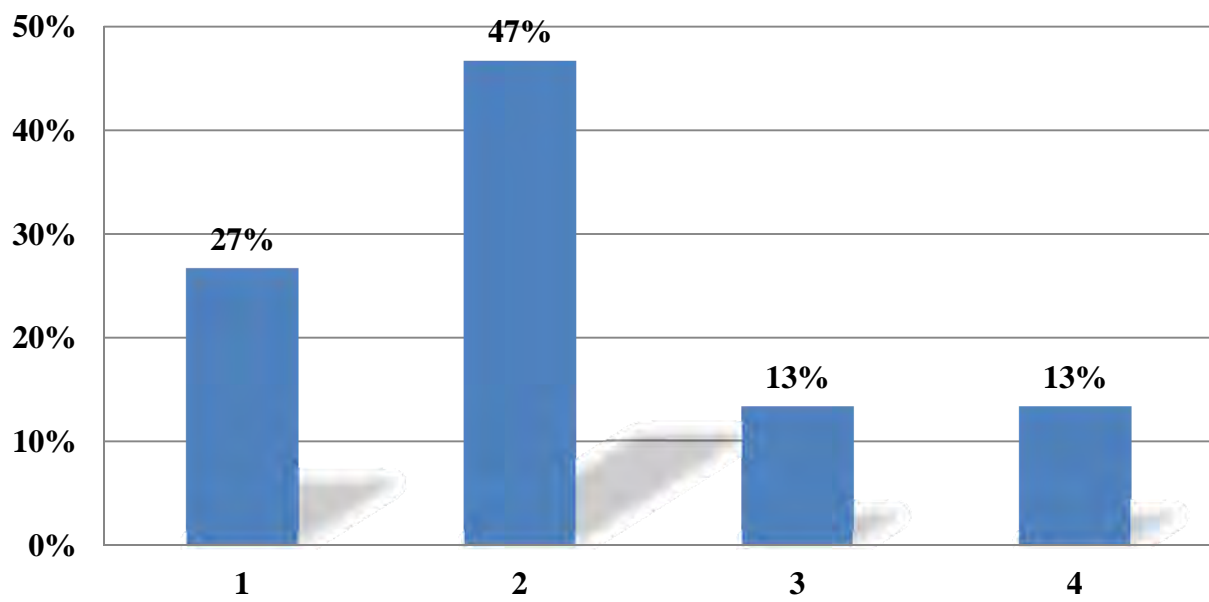




Education



Number in Party



Zip Code

	%
01982	7%
02019	7%
04011	7%
04276	7%
04401	13%
04468	7%
04474	7%
04609	7%
04640	7%
04646	13%
04862	7%
04901	7%
21921	7%

Appendix. Survey Instrument

LOCATION

LOWER POND

Survey Questions (Lower Pond Version)

GREET: Hello, I am conducting a short survey among visitors about their impressions of this area. Do you have a few minutes?

Today we are conducting a brief survey among those visiting the area. We are asking visitors to complete this brief survey about the purpose of their visit and their experiences. Please be assured that your answers are confidential. If you have any questions about this survey or need to verify it as legitimate, please feel free to contact the study director, Dr. Brian Robertson at 1-800-293-1538, ext. 102. Please provide your answer by checking next to the appropriate response or writing in the space provided.

1. Have you visited Lower Lead Mountain Pond before today? (CIRCLE RESPONSE)

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

2. IF YES TO 1: What times of the year do you visit Lower Lead Mountain Pond? (CHECK ALL MENTIONED)

<input type="checkbox"/>	Winter	<input type="checkbox"/>	Summer
<input type="checkbox"/>	Spring	<input type="checkbox"/>	Fall

**3. Thinking about your visit to Lower Lead Mountain Pond, what are your plans for today?
(READ AND CHECK ALL MENTIONED)**

<input type="checkbox"/>	Hiking or Walking
<input type="checkbox"/>	Boating (sail or motor)
<input type="checkbox"/>	Canoeing or kayaking
<input type="checkbox"/>	Fishing from a boat
<input type="checkbox"/>	Fishing from the shore or standing in water
<input type="checkbox"/>	Swimming
<input type="checkbox"/>	Viewing the scenery
<input type="checkbox"/>	Nature observation or bird watching
<input type="checkbox"/>	Picnicking
<input type="checkbox"/>	Camping
<input type="checkbox"/>	Stargazing or looking at the night sky
<input type="checkbox"/>	Other (SPECIFY): _____

4. What prompted you to come out to Lower Lead Mountain Pond today?

Get out Map of Ponds and Show to the Respondent and Hand them the first Sharpie Marker

Please look at this Map of the Lower, Middle, and Upper Lead Mountain Pond.

5. I would like to get a sense of where you are going today. With this marker, can you show me where you intend to go today on Lower Lead Mountain Pond?

Get out the second Sharpie Marker and Hand to Respondent

6. If you have been here before, can you show me what other parts of Lower Lead Mountain Pond you have visited?

7. Next, if you have visited Middle or Upper Lead Mountain Pond, can you show me what parts you have visited.

Expectations for Today

Please think about what is it that you look forward to when coming to Lower Lead Mountain Pond. 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.

	Do not meet at all			Completely Meet				DK
	1	2	3	4	5	6	7	
8. The scenery. Enjoying the beautiful surroundings	1	2	3	4	5	6	7	DK
9. To get outdoors, enjoy the fresh air	1	2	3	4	5	6	7	DK
10. Getting exercise	1	2	3	4	5	6	7	DK
11. A sense of rejuvenation. Relief from the tensions of modern civilization	1	2	3	4	5	6	7	DK
12. The companionship. Camaraderie, being with my family or friends	1	2	3	4	5	6	7	DK
13. The enjoyment of being on a boat	1	2	3	4	5	6	7	DK
14. The general experience of being out on the water	1	2	3	4	5	6	7	DK
15. The quality of the fishing	1	2	3	4	5	6	7	DK

16. What other expectations did you have for today?

17. And on this same scale, how well did this area meet your other expectations?

	Do not meet at all			Completely Meet				
Other Expectations	1	2	3	4	5	6	7	DK

I would like you to think about two specific aspects of your expectations.

18. First please think about your expectations for the number of people that may also be using the pond. 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.

Uncrowded, few or no people			Crowded, a larger number of people				
1	2	3	4	5	6	7	DK

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

Undeveloped			Highly Developed				
1	2	3	4	5	6	7	DK

Ask Respondent if They Have Visited Before

20. About how many boats and people do you normally see on the water at any one time?

21. And how would you say that number varies with the season?

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.

	Very Negative			Very Positive				
22. Views of large clear cuts on hillsides.	1	2	3	4	5	6	7	DK
23. Views of downhill ski trails and facilities.	1	2	3	4	5	6	7	DK
24. Views of power lines on hillsides.	1	2	3	4	5	6	7	DK
25. Views of wind power projects.	1	2	3	4	5	6	7	DK
26. Views of private docks along the shore.	1	2	3	4	5	6	7	DK
27. Views of motorized craft on the lake or pond	1	2	3	4	5	6	7	DK
28. Views of industrial facilities such as a biomass generator, paper mill or landfill	1	2	3	4	5	6	7	DK
29. Views of residential development along the shore.	1	2	3	4	5	6	7	DK

LOWER LEAD MOUNTAIN POND QUESTIONS

I'd like to have you look at a picture of view to the southwest and get your impressions. I'll ask you to rate the scenic quality of the view.

INTS: PULL OUT THE NEXT SET OF PHOTO SIMULATIONS: BEFORE/AFTER VIEW OF WIND FARM

HAND FIRST PICTURE TO RESPONDENT (EXISTING VIEW LOOKING SOUTHWEST)

30. First take a look at the CURRENT 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? (CIRCLE NUMBER)

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

31. Why do you say that?

HAND SECOND PICTURE TO RESPONDENT (PHOTOSIMULATION - AFTER)

32. 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? (CIRCLE NUMBER)

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

33. Why do you say that?

34. 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 On a scale of 1-7, where 7 is a very positive affect and 1 is a very negative affect on your enjoyment how would your enjoyment be affected? A 4 means that it would not change your enjoyment at all. (CIRCLE NUMBER)

Please note that the views to the south would not change.

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

35. Why do you say that?

36. Please think about how a change from the current view to the view with wind turbines would affect your likelihood of returning to Lower Lead Mountain Pond. 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 Lower Lead Pond Mountain, given the change in the view? A 4 means the change in the view would have no effect on your return.

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

37. Why do you say that?

ASK THIS SERIES ONLY IF THEY HAVE VISITED UPPER LEAD MOUNTAIN POND

UPPER LEAD MOUNTAIN POND QUESTIONS

Next, I'd like to have you look at a view from Upper Lead Mountain Pond and get your impressions. Again, I'll ask you to rate the scenic quality of the view.

INTS: PULL OUT THE NEXT SET OF PHOTO SIMULATIONS: BEFORE/AFTER VIEW OF WIND FARM

HAND FIRST PICTURE TO RESPONDENT (EXISTING VIEW LOOKING SOUTHWEST)

38. First take a look at the CURRENT view. On the 1-to-7 scale of scenic quality, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic quality of this view? (CIRCLE NUMBER)

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

39. Why do you say that?

HAND SECOND PICTURE TO RESPONDENT (PHOTOSIMULATION - AFTER)

40. 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, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic quality of this view? (CIRCLE NUMBER)

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

41. Why do you say that?

42. Now I'd like you to think about how your enjoyment of going there 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. (CIRCLE NUMBER)

Please note that the views to the south would not change.

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

43. Why do you say that?

44. Please think about how a change from the current view to the view with wind turbines would affect your likelihood of returning to Upper Lead Mountain Pond. 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 Upper Lead Pond Mountain, given the change in the view? A 4 means the change in the view would have no effect on your return.

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

45. Why do you say that?

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

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

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

47. Are you a year round resident, part time resident, or visitor to this area?

Year round resident Part time resident Visitor

**48. IF PART TIME RESIDENT/VISITOR: Do you live in or visit the area in:
(READ AND CHECK ALL)**

<input type="checkbox"/>	Winter	<input type="checkbox"/>	Summer
<input type="checkbox"/>	Spring	<input type="checkbox"/>	Fall

49. Do you own a home or camp in this area?

Yes No

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

<input type="checkbox"/>	1	18-24	<input type="checkbox"/>	5	55-64
<input type="checkbox"/>	2	25-34	<input type="checkbox"/>	6	65 and older
<input type="checkbox"/>	3	35-44	<input type="checkbox"/>	8	DK
<input type="checkbox"/>	4	45-54			

51. Please stop me when I say the highest level of education you completed. (CIRCLE RESPONSE)

1	Have not completed high school	5	Completed a Bachelor's Degree
2	Completed high school or GED	6	Completed a Graduate or Professional Degree
3	Completed some college	8	DK
4	Completed an Associate's Degree		

52. What is your zip code? _____ (ENTER ZIP CODE)

53. GENDER (BY OBSERVATION)

1 Male

2 Female

54. Number in party (BY OBSERVATION) _____ (ENTER NUMBER)

Thank you for your help today.

Date: _____ **Time:** _____



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Research Report

Weaver Wind Project Lower and Upper Lead Mountain Ponds Intercept Surveys

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July 13, 2015

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I. Summary

SunEdison is in the process of conducting a visual impact assessment for the proposed Weaver Wind Project in Hancock County, Maine. The goal of the survey assessment is to better understand the views of users regarding the potential impacts of the proposed project on their use and enjoyment of scenic resources of state or national significance (SRSNS) from where the proposed project likely would be visible.

The user survey was designed to address specific portions of the Evaluation Criteria found in §3452.3 of the Wind Energy Act:

- C. The expectations of the typical viewer
- E. The extent, nature and duration of potentially affected public uses of the SRSNS and the potential effect of the generating facilities' presence on the public's continued use and enjoyment of the SRSNS

SunEdison requested that the survey be conducted at two locations:

- Lower Lead Mountain Pond
- Upper Lead Mountain Pond

Surveys were conducted June 26 and June 27, 2015 and between July 3 and July 5, 2015.

SunEdison engaged Market Decisions Research (MDR) to finalize and conduct the survey and evaluate the results. MDR staff interviewed 21 respondents who visited either Lower Lead Mountain Pond or Upper Lead Mountain Pond. Interviewers were stationed at Lower Lead Mountain Pond either on a boat on the lake or at the public boat launch and at Upper Lead Mountain Pond at the public boat launch.

This survey was conducted to validate and supplement the conclusions from the 2014 iteration, where interviews were conducted between September 5 and September 18 and between October 3 and October 6 during 2014. In general, the overall responses to the visual impact and enjoyment assessments remained unchanged between the 2014 and 2015 fieldings.

II. Methodology

The survey used in this research was developed by MDR. The survey was designed to be administered in person at the public boat launches on Lower Lead Mountain and Upper Lead Mountain Ponds or on the water at Lower Lead Mountain Pond. Administration of the survey on Upper Lead Mountain Pond was unnecessary as the photographs used in the photosimulation for Upper was taken from the boat launch, not from a spot on the lake as at Lower. The survey included a total of 60 questions including demographic information. The survey assessed:

- Prior visits to the area and use of scenic and recreational resources
- Patterns of use/visitation in the area
- Activities in which respondents are engaged or planning
- Reason for their current visit to the area
- Importance of key attributes to their visit
- Expectations for the area
- General assessment of scenic value and quality
- Assessment of the scenic value (with and without the wind turbines)
- Impact of the project on use and enjoyment of the scenic resources
- Impact of other human activity on enjoyment
- General views of wind power development

For the most important set of questions, respondents were first asked to rate the scenic value of the views from two areas (one area on Lower Lead Mountain Pond and one area on Upper Lead Mountain Pond) by evaluating the following:

- A current view from Lower Lead Mountain Pond
- A photosimulation from same location but showing the additional proposed wind turbines
- A current view from Upper Lead Mountain Pond
- A photosimulation from same location but showing the additional proposed wind turbines

In addition to their interview location, respondents were asked to evaluate the other location if they had visited it at any time prior to the interview.

Respondents were then asked a series of questions about how the presence of the wind turbines would impact their use and enjoyment of these water resources. A copy of the survey is provided in Appendix II.

Similar to the Fall 2014 fielding, which took place over two consecutive weekends in September and one weekend in October, this survey was administered over two weekends.

- June 26 and June 27, 2015
- July 3 through July 5, 2015

The weather conditions varied over the study period and consisted of days that were mostly sunny, partly sunny, as well as cloudy days along with periods of rain.

On each day, two MDR interviewers went to the public boat launches; one conducted interviews at the public boat launch on Upper Lead Mountain Pond while the other conducted interviews either in a boat or at the boat launch on Lower Lead Mountain Pond. In addition, the interviewers also counted the number of people and watercraft visible on the water or recreating along its edge.

Interviewers conducted interviews from 9:00 AM to 6:00 PM on Saturdays, 9:00 AM to 2:00 PM on Sunday, July 5th, and 12:30 to 6:00 PM on Friday July 3, 2015.

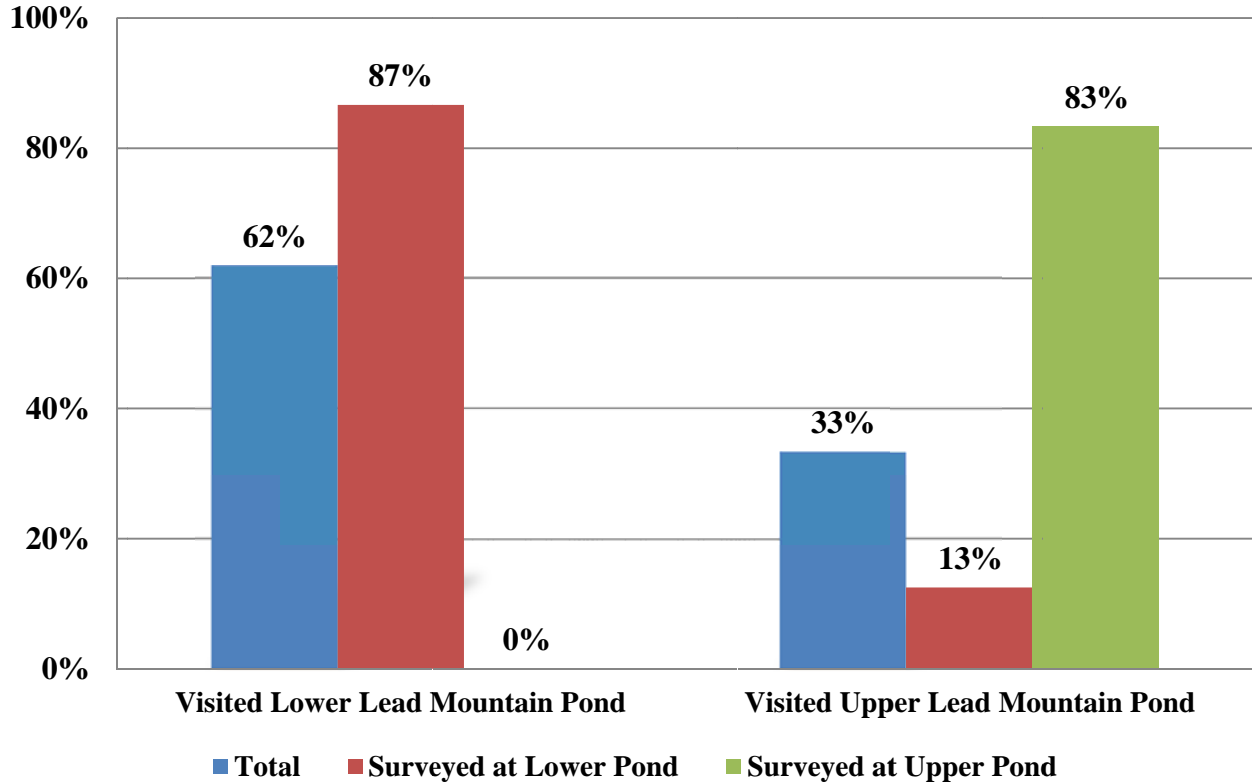
Multiple adults from each party interviewers met were invited to participate as they were willing. Children were not interviewed.

A total of 89 adults and 36 children were observed on the boat launches during the survey period on the two ponds. In addition, interviewers observed 21 boats, two personal water craft, five canoes and nine kayaks on Lower Lead Mountain Pond and eight boats, two personal water craft, three canoes, and four kayaks on Upper Lead Mountain Pond across all four interviewing dates. When counting watercraft from the shore or on the water, effort was made to avoid recounts; however these figures should be taken as rough estimates not hard counts. In all, 21 interviews were completed among adults with 15 completed at Lower Lead Mountain Pond and six at Upper Lead Mountain Pond.

III. Survey Results

Prior Visits to Lower and Upper Lead Mountain Pond

Have you visited Lower/Upper Lead Mountain Pond before today?

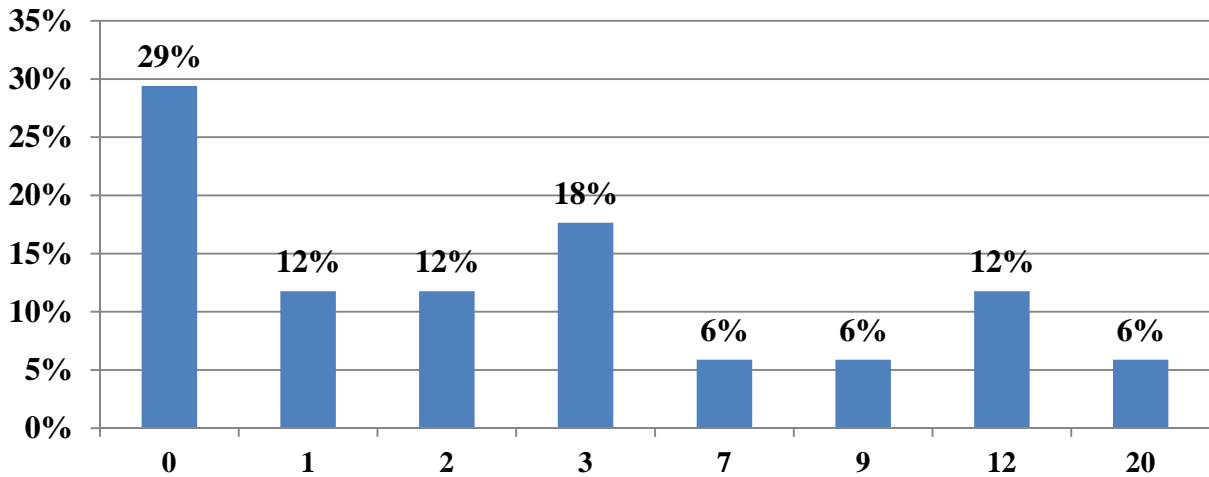


Sixty-two percent of respondents visited Lower Lead Mountain Pond prior to the interview date with a median of 12 visits during the past year. Thirty-three percent of respondents visited Upper Lead Mountain Pond prior to the interview with a median of 12 visits during the past year. Only 13% of those surveyed on or near Lower Lead Mountain Pond had visited Upper Lead Mountain Pond and no respondents surveyed at Upper Lead Mountain Pond had been to Lower Lead Mountain Pond.

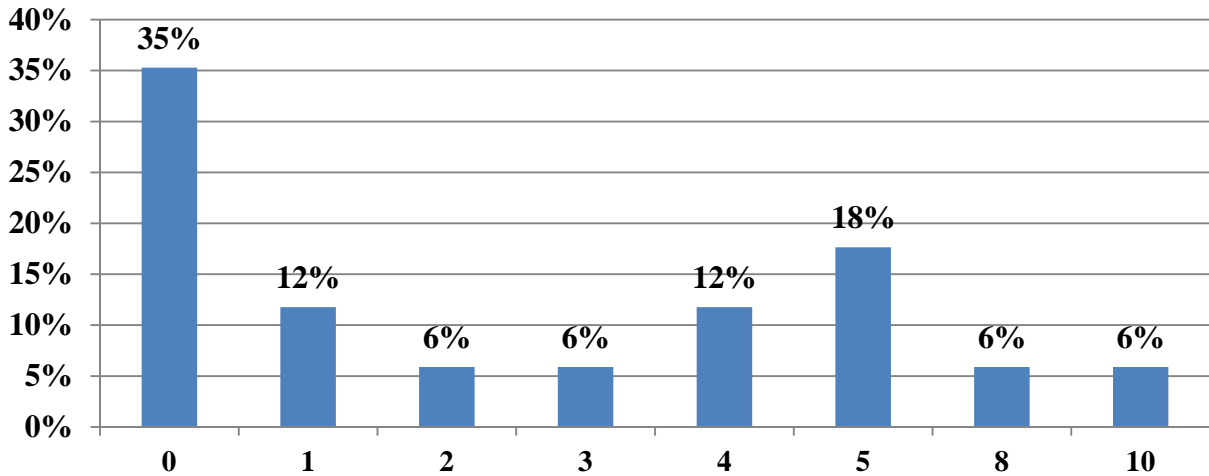
Respondents visited the ponds year-round with Summer (100%) and Fall (87%) being the most popular seasons to visit, followed by Winter (71%) and Spring (65%).

The median number of visits in the Summer was 10, three in the Fall, two in the Winter and two in the Spring.

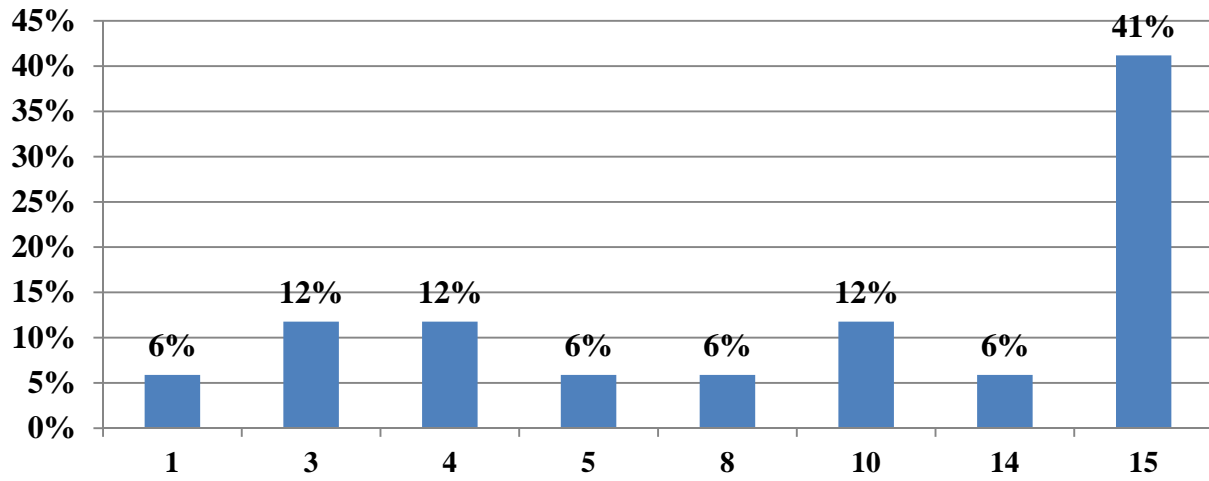
How many times in Winter?



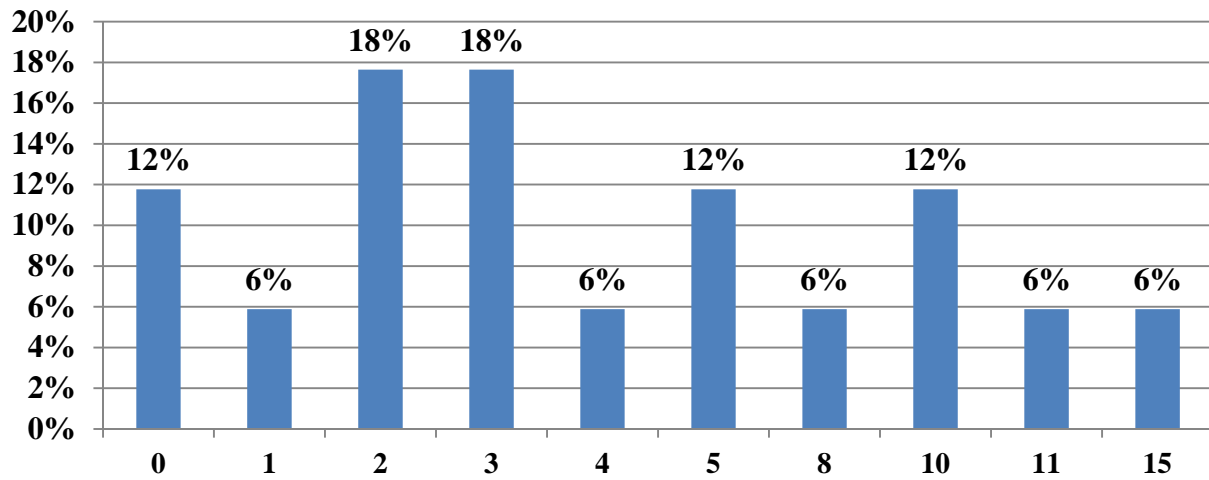
How many times in Spring?



How many times in Summer?



How many times in Fall?



Reasons for Visit to Lower and Upper Lead Mountain Pond

When asked their plans for their visit to Lower and Upper Lead Mountain Ponds, 86% indicated they visited for viewing the scenery, 81% for boating either sail or motor, 81% for fishing from a boat, and 67% for swimming. Over half (57%) visited for nature observation or bird watching and 52% for fishing from the shore. Forty-eight percent indicated they were visiting for stargazing and 43% visited for canoeing or kayaking. Thirty-eight percent indicated they were there for picnicking, 33% for camping and 19% for hiking or walking.

When asked about the primary reasons for their visit to Upper and Lower Lead Mountain Ponds, 29% indicated they visited primarily for boating (either sail or motor), 24% for fishing from a boat, and 14% for swimming. Ten percent responded that they were primarily visiting for viewing the scenery and five percent each responded that they were visiting for nature observation or bird watching, canoeing or kayaking, picnicking, camping or some other reason.

When asked what prompted their visit to Lower or Upper Lead Mountain Pond respondents indicated that they had property in the area and were up to enjoy the weekend or holiday.

Thinking about your visit to Lower/Upper Lead Mountain Pond, what are your plans for today?

	Total	Lower Pond	Upper Pond
Viewing the scenery	86%	87%	83%
Boating - sail or motor	81%	73%	100%
Fishing from a boat	81%	73%	100%
Swimming	67%	67%	67%
Nature observation or bird watching	57%	60%	50%
Fishing from the shore or standing in water	52%	53%	50%
Stargazing or looking at the night sky	48%	53%	33%
Canoeing or kayaking	43%	40%	50%
Picnicking	38%	40%	33%
Camping	33%	33%	33%
Hiking or Walking	19%	27%	-
Other	19%	27%	-

**Thinking about your visit to Lower/Upper Lead Mountain Pond, what are your plans for today? -
Primary Reason**

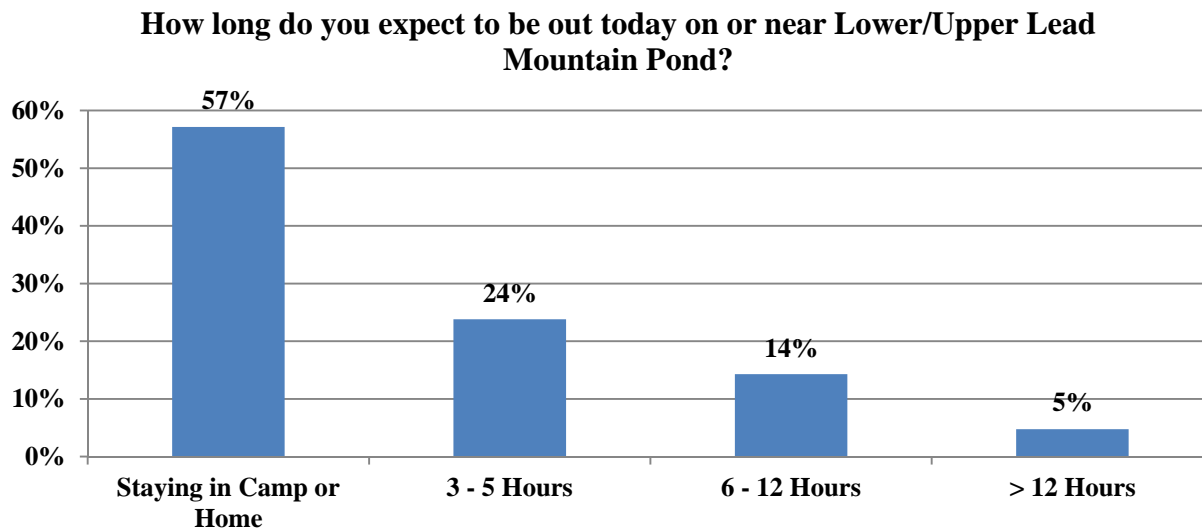
	Total	Lower Pond	Upper Pond
Boating - sail or motor	29%	7%	83%
Fishing from a boat	24%	27%	17%
Swimming	14%	20%	
Viewing the scenery	10%	13%	
Nature observation or bird watching	5%	7%	
Canoeing or kayaking	5%	7%	
Picnicking	5%	7%	
Camping	5%	7%	
Other	5%	7%	
Total	100%	100%	100%

What prompted you to come out to Lower/Upper Lead Mountain Pond today?

ID	Location	COMMENT
2	Upper	Summer's here, opening up our camps
3	Upper	Putting our boat in the water
4	Upper	I live here
5	Upper	We live in the area, we're looking for new water.
6	Upper	Going up to camp.
7	Upper	Enjoying the 4th.
8	Lower	4th of July, we have a camp.
9	Lower	We own a camp, relatives are visiting
10	Lower	The 4th of July
11	Lower	First time staying overnight
12	Lower	To relax
13	Lower	Getting things ready for family vacation next week
14	Lower	I live here
15	Lower	Walking my dogs
16	Lower	My camp
18	Lower	Own a camp
19	Lower	Husband's family camp
20	Lower	Fishing
21	Lower	Fishing
22	Lower	Fishing

Length of Stay On or Near the Ponds

Over half (57%) of all respondents were either staying in their home or camps near the lake. Twenty-four percent of those surveyed were planning on being out on or near the ponds between 3 and 5 hours, and 14% were planning on being out for between 6 to 12 hours. Only 5 % said that they were planning on being out greater than 12 hours but not staying in camp.



How long do you expect to be out today on or near Lower/Upper Lead Mountain Pond?

	Total	Lower Pond	Upper Pond
Staying in Camp or Home	57%	73%	17%
3 - 5 Hours	24%	13%	50%
6 - 12 Hours	14%	13%	17%
> 12 Hours	5%		17%
Total	100%	100%	100%

Expectations for Experience

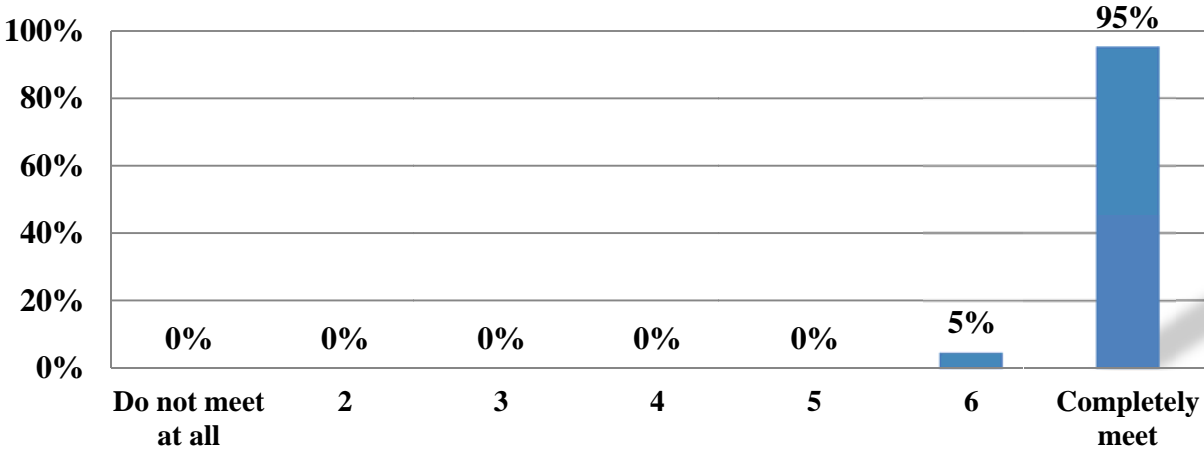
Respondents were asked to rate their expectations for their recreational experience while visiting Lower and Upper Lead Mountain Ponds. Respondents rated eight areas of expectation on a seven-point scale with one indicating their expectations were not met at all and a seven indicating their expectations were completely met. Most respondents had been present on or near the ponds for some time previous to the survey administration. Overall, respondents indicated that in the eight areas measured, their expectations were almost completely met. Based on the average, the eight areas ranked in order are:

- **The scenery. Enjoying the beautiful surroundings.** (average of 6.9 with 95% rating as completely met expectations)
- **To get outdoors, enjoy the fresh air.** (average of 6.9 with 95% rating as completely met expectations)
- **The enjoyment of being on a boat.** (average of 6.9 with 95% rating as completely met expectations)
- **The general experience of being out on the water.** (average of 6.9 with 95% rating as completely met expectations)
- **A sense of rejuvenation. Relief from the tensions of modern civilization.** (average of 6.9 with 95% rating as completely met expectations)
- **The companionship. Camaraderie, being with my family or friends.** (average of 6.5 with 76% rating as completely met expectations)
- **Getting exercise.** (average of 6.0 with 75% rating as completely met expectations)
- **The quality of the fishing.** (average of 4.9 with 22% rating as completely met expectations)

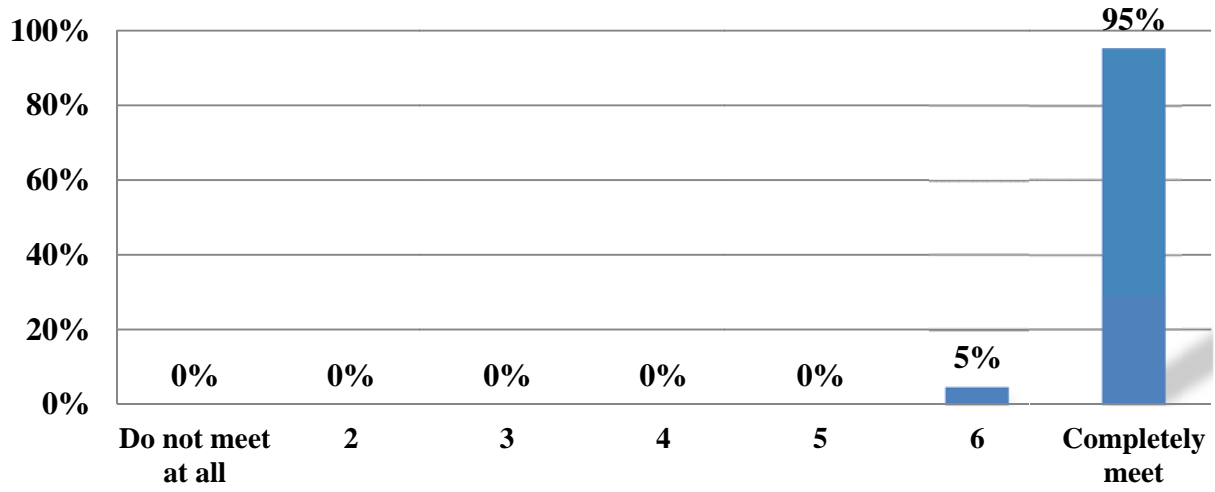
Please think about what is it that you look forward to when coming to Lower/Upper Lead Mountain Pond. I will ask you to rate about how well the area meets your expectations on a set of attributes. Please rate each on a seven point scale where 1 is the area did not meet my expectations AT ALL and 7 is the area COMPLETELY met my expectations.

	Average on 7-point scale		
	Total	Lower Pond	Upper Pond
The scenery. Enjoying the beautiful surroundings.	6.95	7.00	6.83
To get outdoors, enjoy the fresh air.	6.95	7.00	6.83
The enjoyment of being on a boat.	6.95	7.00	6.83
The general experience of being out on the water.	6.95	7.00	6.83
A sense of rejuvenation. Relief from the tensions of modern civilization.	6.95	7.00	6.83
The companionship. Camaraderie, being with my family or friends.	6.48	6.40	6.67
Getting exercise.	6.00	5.93	6.17
The quality of the fishing.	4.94	5.17	4.50

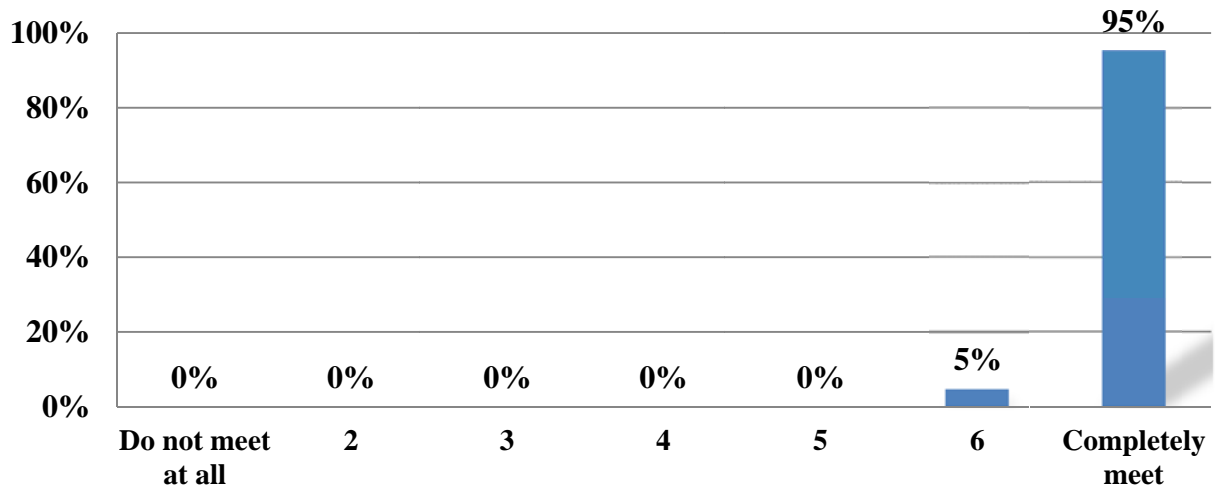
How well did Lower/Upper Lead Mountain Pond meet your expectations - The scenery. Enjoying the beautiful surroundings.



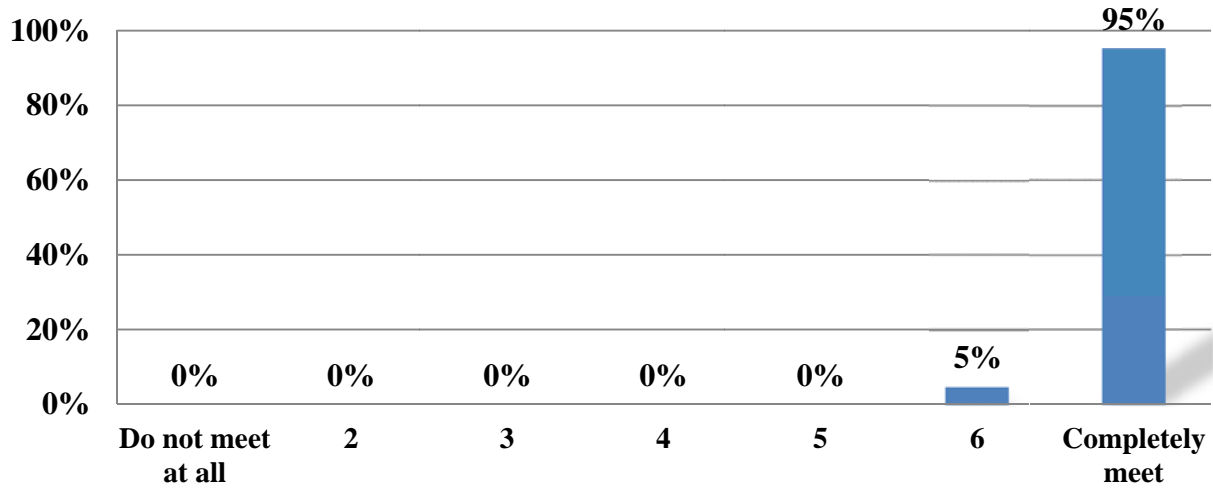
To get outdoors, enjoy the fresh air.



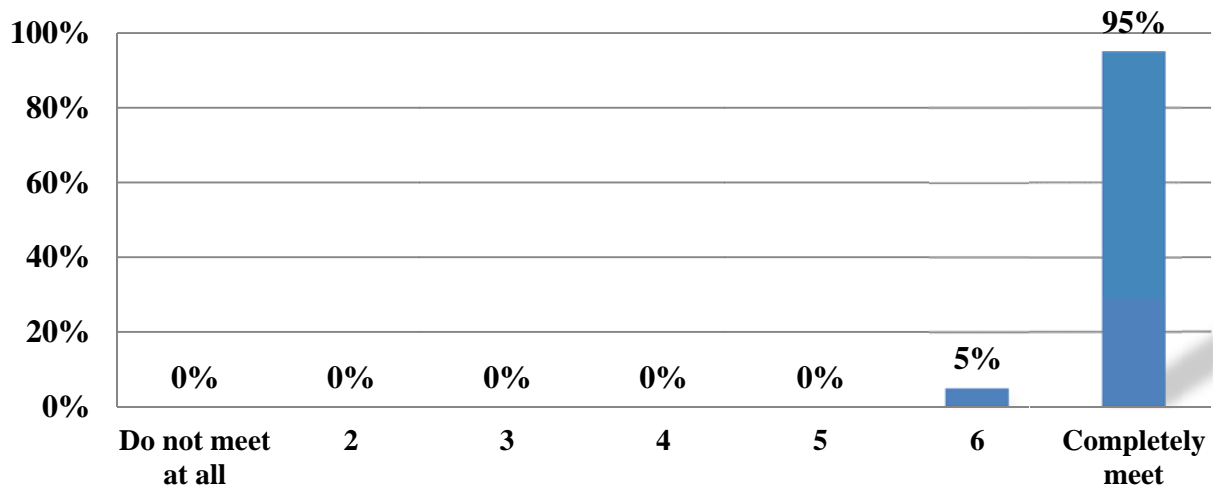
The enjoyment of being on a boat.



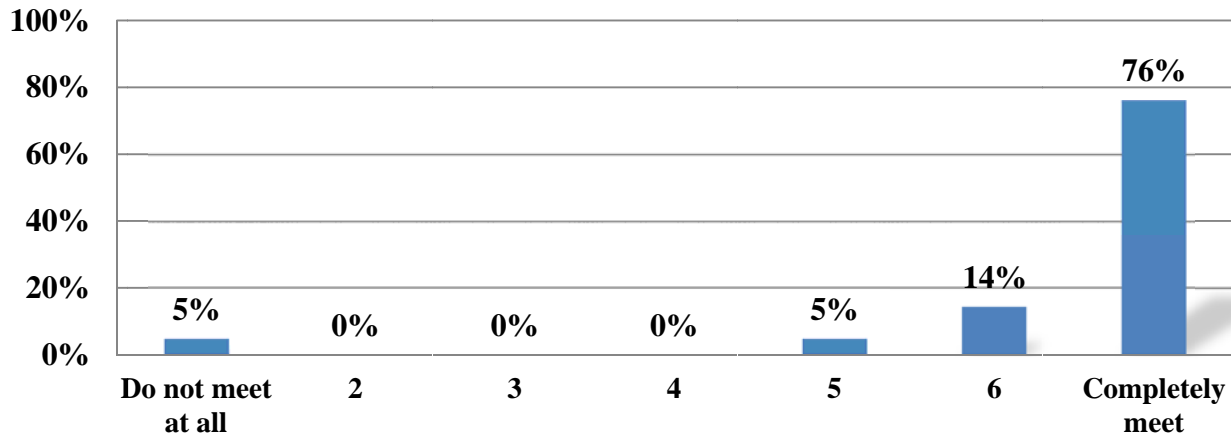
The general experience of being out on the water.



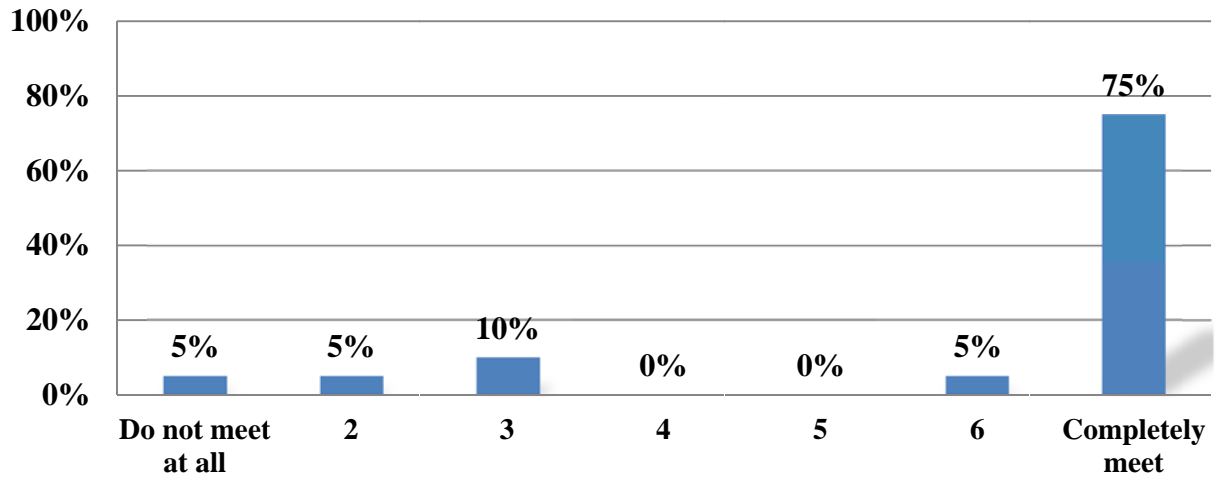
A sense of rejuvenation. Relief from the tensions of modern civilization.



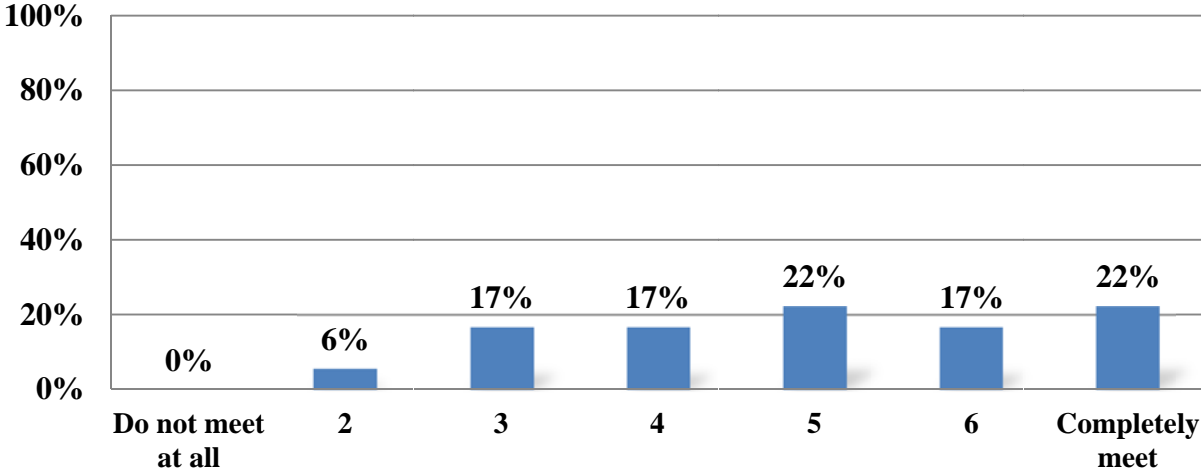
The companionship. Camaraderie, being with my family or friends.



Getting exercise.



The quality of the fishing.



Respondents were asked to evaluate two additional aspects of their expectations of their visit to Lower or Upper Lead Mountain Pond; the number of boats and people they might see and the level of development along the shore. Both of these aspects were evaluated on a seven-point scale.

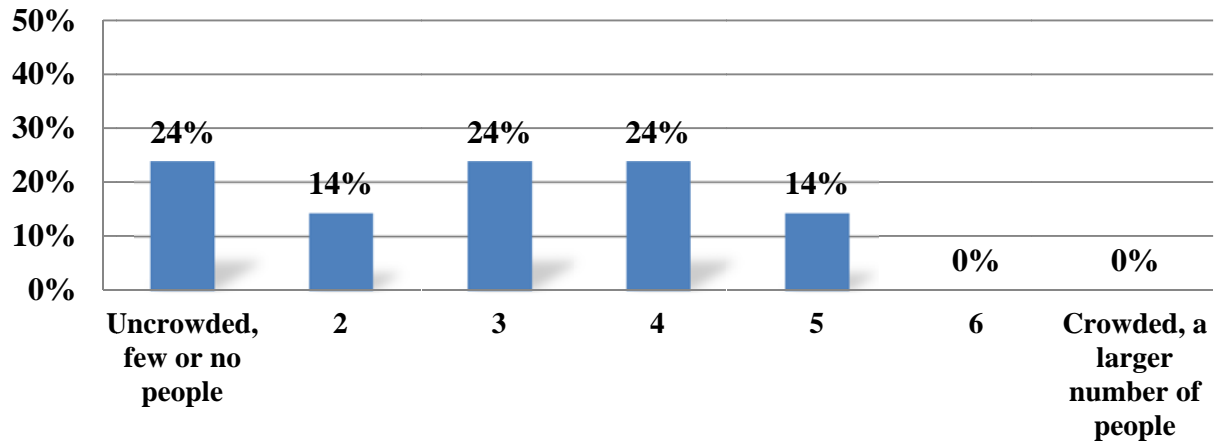
When asked about how the number of boats varies with the seasons, respondents indicated that there were greater numbers of people during the summer and during holidays, with fewer numbers during the spring and fall.

Respondents expected that a relatively low number of people would also be using the ponds. The average rating on the seven-point scale (with 1 being uncrowded and 7 being crowded) was 2.9 with 24% assigning a score of 1 (or uncrowded).

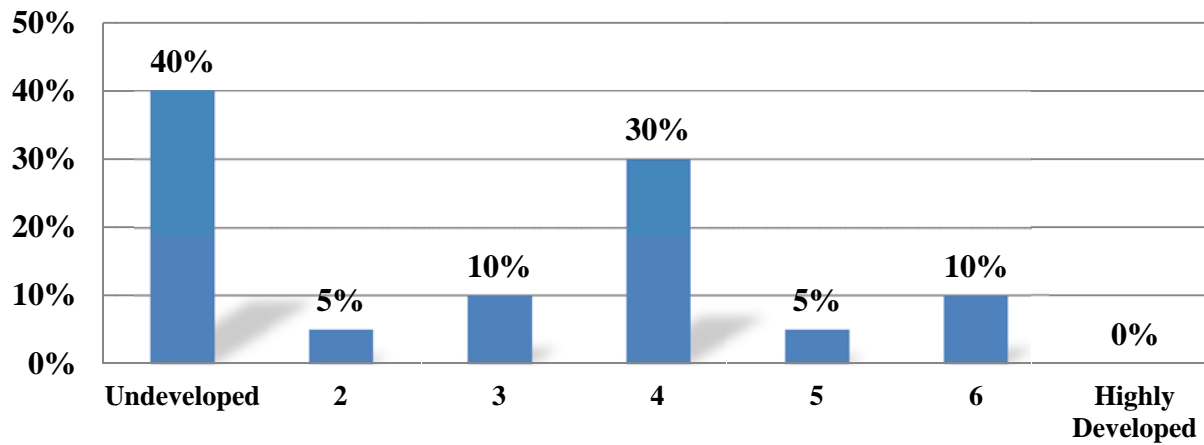
Respondents also expected to see little development along the shores of the pond. The average rating on the seven-point scale (with 1 being undeveloped and 7 being developed) was 2.8 with 40% assigning a score of 1 (or undeveloped).

	Total	Lower Lead Mountain Pond	Upper Lead Mountain Pond
<p>Think about your expectations for the number of people that may also be using the pond.</p> <p><i>Rate on a scale from 1 to 7 where 1 means you expect it to be uncrowded with few or no other people and 7 means you expect it to be crowded with a large number of people.</i></p>	2.90	2.87	3.00
<p>Think about your expectations for level of development that you will see along the pond.</p> <p><i>Rate on a scale from 1 to 7 where one means you expect the pond to be largely undeveloped and 7 means you expect it to largely or mostly developed.</i></p>	2.85	2.43	3.83

Think about your expectations for the number of people that may also be using the pond.



Think about your expectations for level of development that you will see along the pond.



Impact of Human Activity on Experience

Respondents were asked to evaluate the impact of human activity on the quality of their experience being on Maine lakes and ponds. Respondents were read a list of eight types of human activity that can impact the landscape, and asked to indicate whether this type of activity would have a negative impact, no impact, or a positive impact on the quality of their experiences. Each was rated on a seven-point scale.

The average impact of these human activities ranged from a positive impact for views of private docks along the shore or motorized craft on the lake or pond, to a significant negative impact that would be caused by the view of industrial facilities such as a biomass generator, paper mill, or landfill.

The table on the following page provides the average scores for the seven types of human activity in decreasing order of negative impact. On this scale, an average score of four would indicate that on average, the human factor would not impact the quality of their experience on Maine's lakes or ponds.

Several factors were rated as having a slight positive impact (on average) on their experience. The views of private docks along the shore had an average rating of 5.0, while the views of motorized craft on the lake or pond was rated 4.7 on average among respondents. Views of ski trails and wind power projects also had a positive impact on respondents' experience, with average ratings of 4.3 and 4.2 respectively.

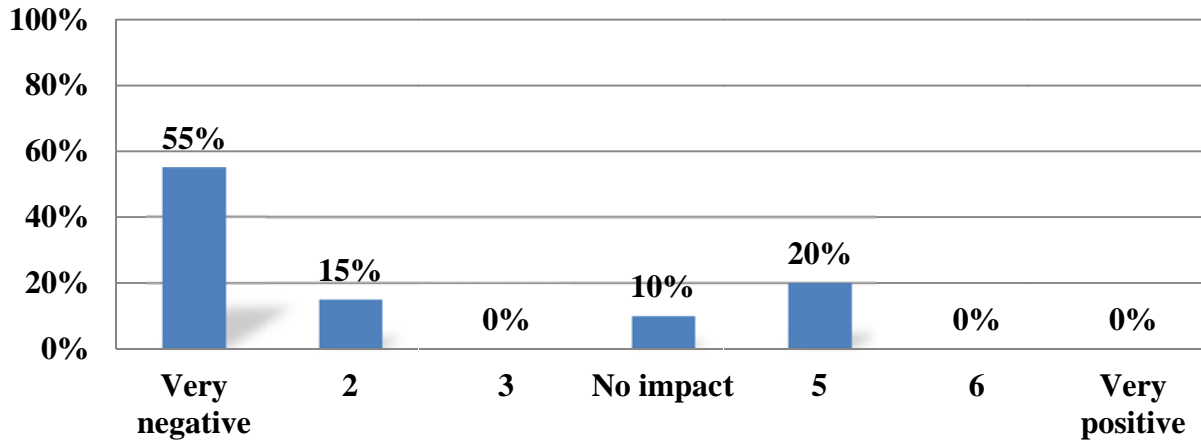
The human factor with the smallest negative impact was views of residential development along the shore (an average of 3.4 on the seven point impact scale), followed by views of large clear cuts (3.1). In these cases respondents indicated that on average, there would be a slight to moderate negative impact caused by the human factor on the quality of their experience of being on the water in Maine.

The human factor with the largest negative impact would be views of industrial facilities such as a biomass generator, paper mill, or landfill with respondents rating the impact on the quality of their experience as 2.25, on average.

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.

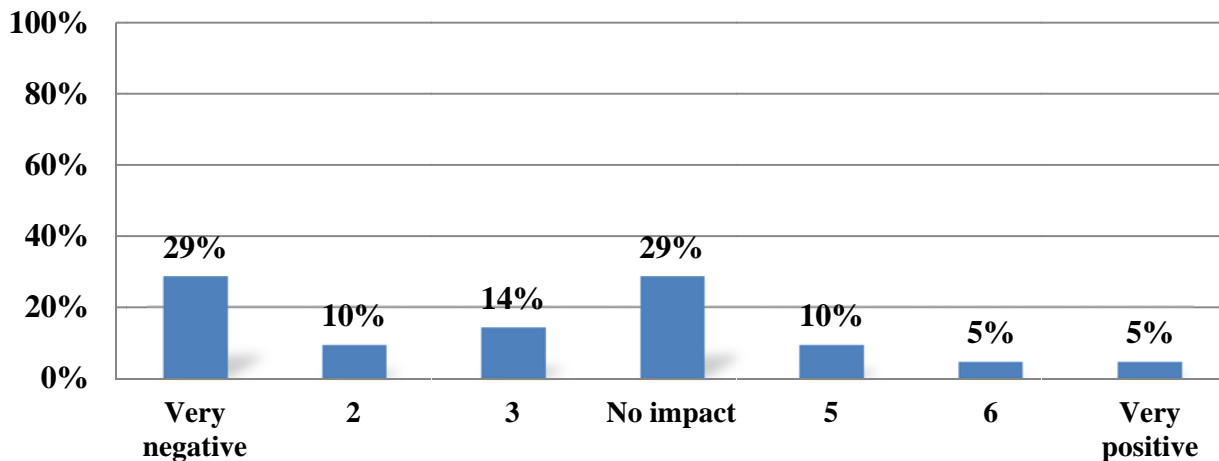
	Average (4 = no impact)		
	Total	Lower Pond	Upper Pond
Views of industrial facilities such as a biomass generator, paper mill or landfill.	2.25	2.43	1.83
Views of large clear cuts on hillsides.	3.14	3.40	2.50
Views of residential development along the shore.	3.45	3.43	3.50
Views of power lines on hillsides.	4.05	4.53	2.83
Views of wind power projects.	4.19	4.73	2.83
Views of downhill ski trails and facilities.	4.30	4.57	3.67
Views of motorized craft on the lake or pond.	4.57	4.60	4.50
Views of private docks along the shore.	5.00	5.07	4.83

Views of industrial facilities such as a biomass generator, paper mill or landfill.



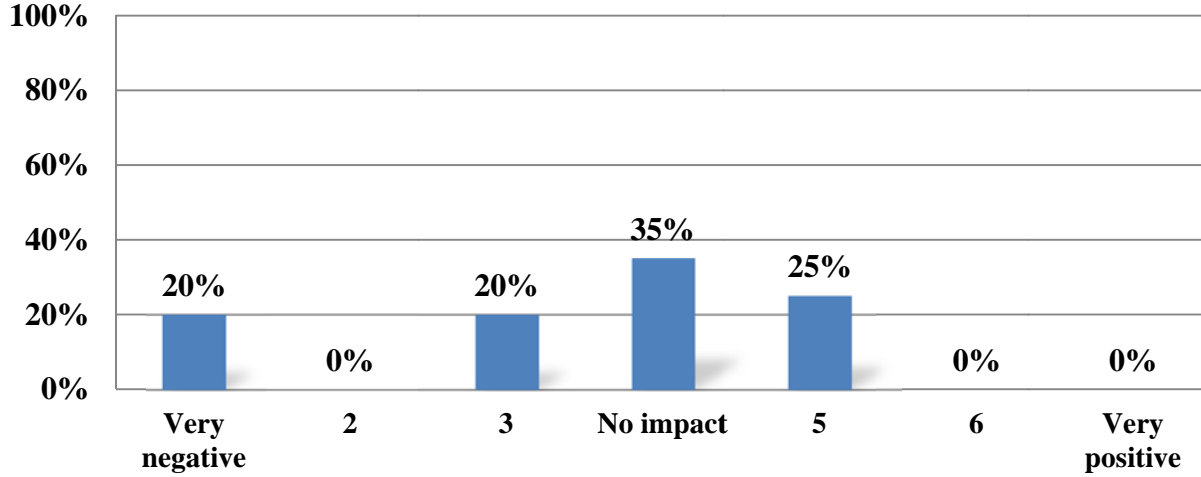
Seventy percent of respondents indicated that views of industrial facilities would have a negative impact on the quality of their experience, while 10% indicated that they would have no impact and only 20% indicated that they would have a slightly positive impact. Of those that felt the presence of industrial facilities would have a positive experience, several indicated they were indicators of economic growth or positive impacts on the economy, not necessarily a positive aesthetic or scenic impact.

Views of large clear cuts on hillsides.



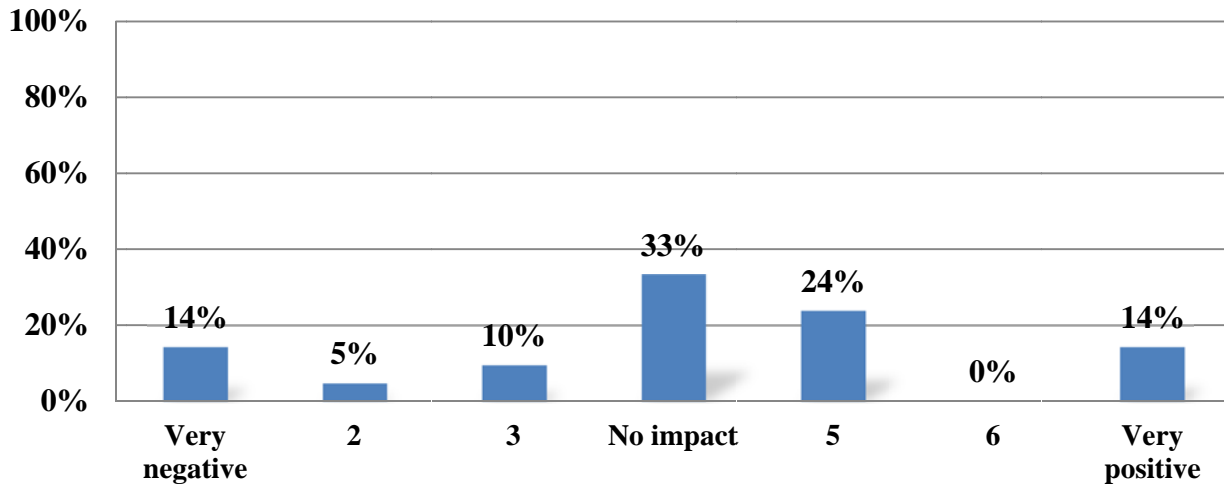
Fifty-three percent of respondents indicated that views of large clear cuts on hillsides would have a negative impact on the quality of their experience, while 29% indicate such views would have no impact on the quality of their experience. Twenty percent indicated that such views would have a positive impact on their experience.

Views of residential development along the shore.



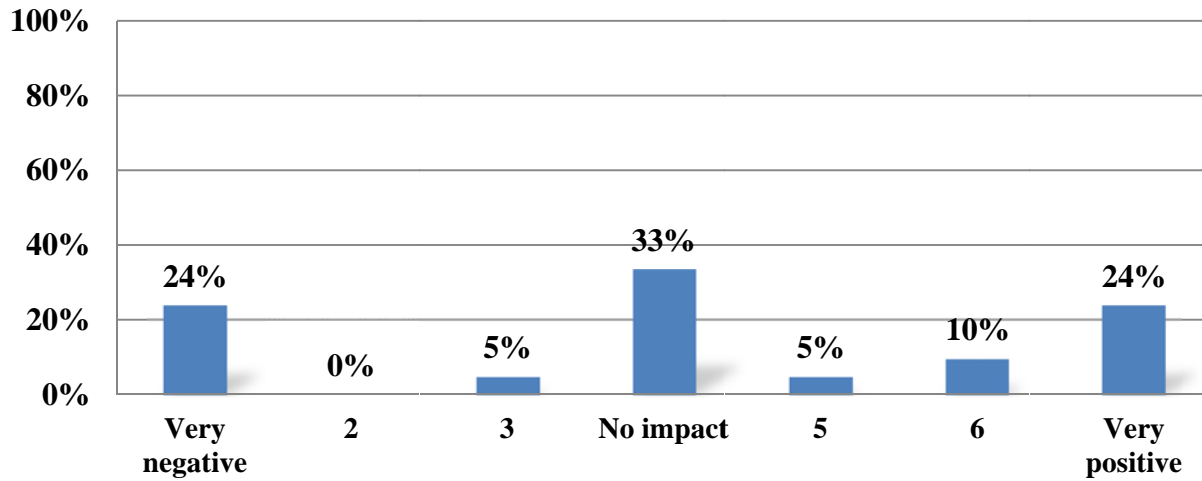
Forty percent of respondents indicated that views of residential development along the shore would have a negative impact on the quality of their experience, while 35% indicated such views would have no impact and 25% indicated that it would have a slightly positive impact on their experience.

Views of power lines on hillsides.



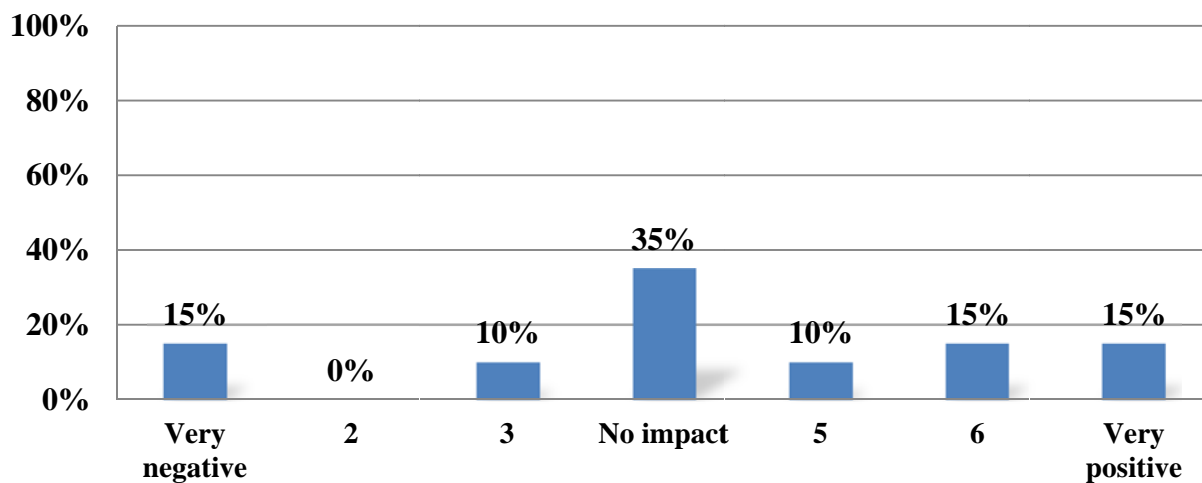
Twenty-nine percent of respondents indicated that views of power lines on hillsides would have a negative impact on the quality of their experience, while 33% indicate such views would have no impact and 38% a positive impact on the quality of their experience.

Views of wind power projects.



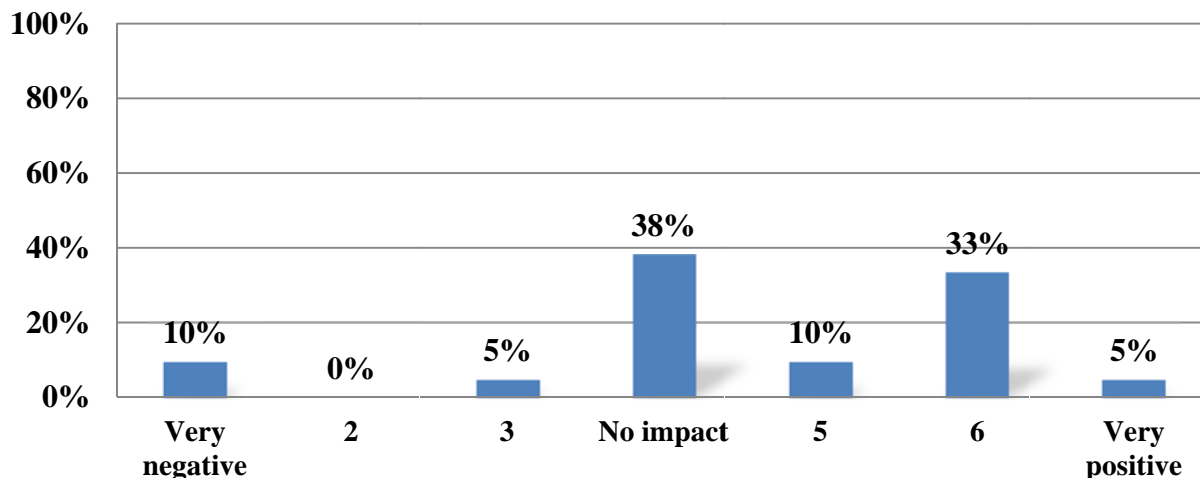
Twenty-nine percent of respondents indicated that views of wind power projects would have a negative impact on the quality of their experience, while 33% indicate such views would have no impact and 39% indicated that it would have a positive impact on the quality of their experience.

Views of downhill ski trails and facilities.



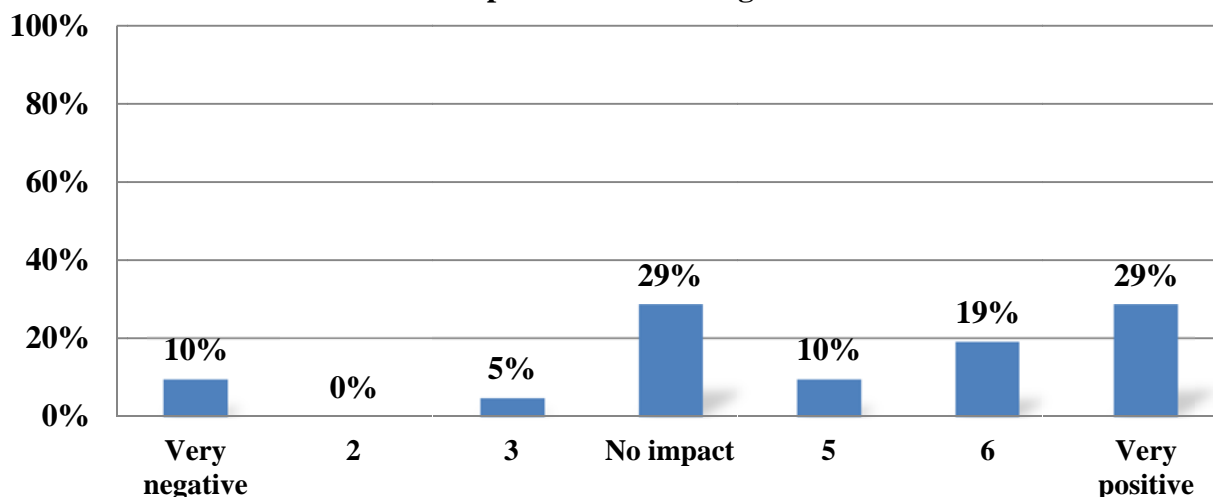
Twenty-five percent of respondents indicated that views of downhill ski trails and facilities would have a negative impact on the quality of their experience, while 75% indicate such views would have no impact or a positive impact on the quality of their experience.

Views of motorized craft on the lake or pond.



Fifteen percent of respondents indicated that views of motorized craft on the lake or pond would have a negative impact on the quality of their experience, while 85% indicate such views would have no impact or a positive impact on the quality of their experience.

Views of private docks along the shore.



Fifteen percent of respondents indicated that views of private docks along the shore would have a negative impact on the quality of their experience, while 85% indicate such views would have no impact or a positive impact on the quality of their experience.

Most and Least Scenic Place in Maine

In order to contextualize their views on scenic beauty, respondents were asked about their opinions on the most scenic place in main, or a 7 on the 1 to 7 scale of scenic beauty and the least scenic place in main, or a 1 on the 1 to 7 scale of scenic beauty. The most common response for the most scenic area in Maine was the ponds themselves, with respondents mentioning the beauty, the quiet undeveloped nature, and the wildlife. The next most common response was the area around Mt. Katahdin, again because of the general beauty, the views, and the variety of places. Also mentioned were Mount Desert Island, Washington County in general, and the north Maine woods.

The most commonly mentioned least scenic place in Maine was the city in general, with several urban areas in particular named. Other respondents also indicated that the dump or the junkyard was the least scenic place in Maine. Reasons for these included the crowded busy nature of cities, the proliferation of trash, buildings and pollution.

Most Scenic and Why

ID	The Most Scenic Place in Maine	Why?
2	Katahdin Area	Nice, so many different varieties of places
3	Katahdin Iron Works	A nice stream, waterfalls, can see everything
4	The north Maine woods	It's just beautiful
5	Washington county	Natural appearance, it's unaltered, the natural beauty of the scenery.
6	Upper lead mtn. pond	It's beautiful
7	The lakes.	I like the outdoors
8	Mt. Maddie	You can see both the coast and the mountains.
9	The Rangeley Area	The mix of wildlife, the mountains and the water.
10	Mount Desert Island	Acadia National Park
11	Mount Desert Island	The water, mountains, lakes
12	The coast, like Bar Harbor	The ocean, the views, and the people
13	Right here (Lower Lead Mtn. Pond)	The combination of quiet, undeveloped, friends and wildlife
14	Moosehead Lake	Been there number of times, comfortably undeveloped, a very large lake, very peaceful for a "tourist place", plenty of room.
15	Lower lead mountain pond	It's beautiful
16	Bar Harbor	The view, the winter harbor
17	The coast, lead mountain, main in general, Katahdin	The view
18	Lower lead	It's beautiful
19	Lower lead mountain pond	Natural looking
20	Lower lead pond	It's beautiful
22	Mount Katahdin area	Scenic

Least Scenic and Why

ID	The Least Scenic Place in Maine	Why?
2	Portland Area	Too crowded, too much stuff.
3	Bar Harbor	Tourists, it's crowded, a lot of trash.
4	Any city, really.	I could stay back in Boston and see that.
5	Urban areas in general	There's development, the population.
6	The town dump/land fill	It's a dump
7	The junkyard.	Because it's a junkyard.
8	Downtown Lewiston	It's really run down, not kept up well
9	Lewiston	It's an old town, not kept up.
11	The mill in Bucksport	Ugly, but necessary
12	Lewiston	It always seemed dirty to me
13	Reed St. Park	The bottle flies
14	Ellsworth	Lots of traffic, a tourist trap, so crowded
15	The city	Light Pollution
17	Portland, the city	The view, industry, airplanes
18	Gorham	The paper mills
19	The city	All the buildings
20	the landfill	It's gross
22	The dump/city	The trash, pollution, no trees, nothing scenic

Scenic Value of Lower Lead Mountain Pond and Impact of Wind Turbines

Respondents were then handed two images to evaluate and were asked to rate the scenic value of both views. The two images represented the view from a point out on the water of Lower Lead Mountain Pond.

- The current view from the location
- The view from the location showing additional wind turbines that are being proposed

Respondents first rated the current view. Respondents were then handed a photo simulation of the same view including the proposed wind turbines and asked to rate the scenic value of this view. Both views were rated on a seven-point scale where 1 represents the lowest scenic value and 7 represents the highest scenic value. Respondents were also asked the reason for their rating for both views.

Next I would like you to take a look at the view Lower Lead Mountain Pond.

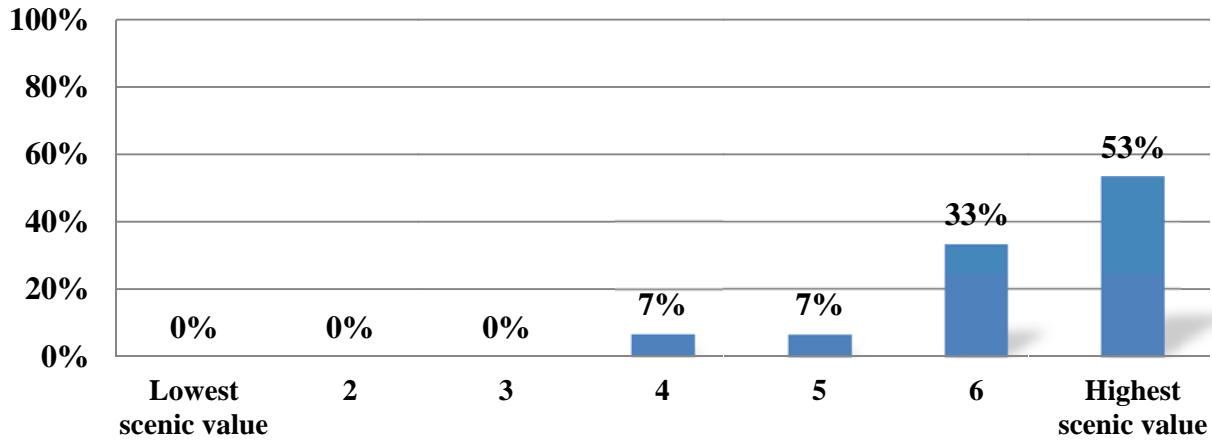
	Average Score in 2014	Average Score in 2015
How would you rate the scenic quality of this view - CURRENT view from Lower Lead Mountain Pond.	6.5	6.3
How would you rate the scenic quality of this view - Lower Lead Mountain Pond View that includes wind turbines that may be built in the future.	5.1	5.7
Difference in Scores Between Views (<i>Negative Value = Decrease in Scenic Value, Positive Value = Increase in Scenic Value, 0 = No Change in Scenic Value</i>)	-1.4	-.60

The average rating of the initial view among all respondents was 6.3 with 53% of respondents rating the view as a seven, or highest scenic quality, 33% rating as a six, and 7% rating as a five on the seven-point scale. This compares to an overall average of 6.5 during the fall 2014 administration. Respondents were then asked why they assigned the view the value that they did. Respondent comments are provided on the following page (sorted by whether they assigned it a high scenic value, neutral value, or low scenic value). Comments were similar in that they said it offered views, it was unspoiled without development.

The average rating of the second view (the view containing the proposed wind turbines) was 5.7. Forty percent of respondents rated the view with wind turbines as a 7, or highest scenic quality, while 33% assigned a score of 6, and 7% assigned a score of 5 on the seven point scale. Seven percent of respondents assigned the view with wind turbines a score of 1, or lowest scenic quality while 13% assigned the view a score of 4 on the seven-point scale. This compares to an overall average of 5.1 in 2014. Respondents indicated they didn't mind the turbines or they favored wind power.

Overall, there was a .6 point drop in the average score between the two views from 6.3 to 5.7. This compares to a drop of 1.4 in 2014. Eighty-seven percent indicated there were no differences in the scenic value of the two views. Seven percent assigned a difference of three points between the two views (they indicated the second view was somewhat less scenic), 7% a difference of six between the two views (these respondents indicated that the second view was significantly less scenic).

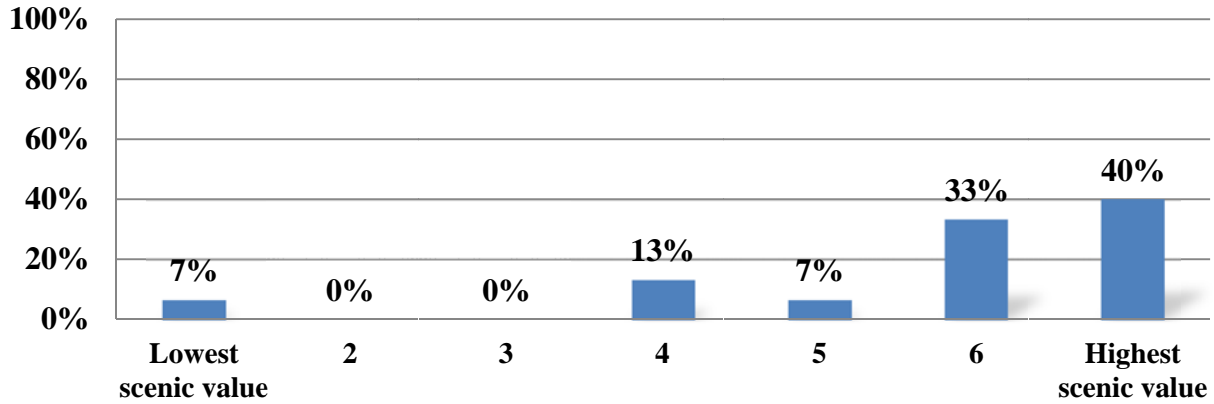
How would you rate the scenic quality of this view - CURRENT view from Lower Lead Mountain Pond.



**Why do you say that?
(Why did you assign it this rating to CURRENT View)**

ID	Rating	Comment
8	High	The water, the tranquility, the environment
9	Neutral	There's no mountains
10	High	I love it here, as much as I do here.
11	High	Pretty, the water, the trees, it's nice
12	High	It's beautiful, it's really pretty and clean, there are no camps visible on the shore
13	High	The combination of the quiet, it's undeveloped, the wildlife
14	High	Next best place to Moosehead, I live here, it's peaceful, quiet, there's a lot of wildlife here.
15	High	It's beautiful
16	High	It's beautiful
17	Neutral	I've seen better
18	High	It's untouched
19	High	It's relaxing, nice
21	High	It is beautiful
22	High	It's beautiful

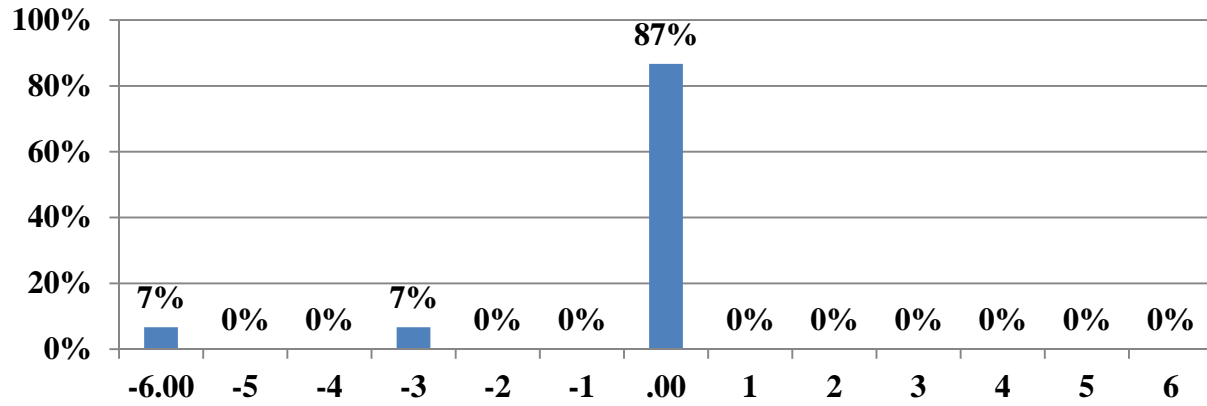
How would you rate the scenic quality of this view - Lower Lead Mountain Pond view that includes wind turbines that may be built in the future.



**Why do you say that?
(Why did you assign it this rating to View with the Wind Turbines)**

ID	Rating	Comment
8	High	I actually find windmills pretty
9	Neutral	The windmills don't bother me.
10	High	It doesn't affect me at all
11	High	I'm not going to be seeing them all the time, wind power's important
12	High	It doesn't bother me, they're just there
13	High	The change doesn't take away anything
14	High	I've got no problem with that.
15	High	It doesn't bother me
16	High	It doesn't bother me
17	Neutral	I wouldn't see this from my camp
18	High	They're far enough away
19	Neutral	It doesn't affect or bother me
21	High	It is progress
22	High	It doesn't bother me

Difference in Scores Between Views (Negative Value = Decrease in Scenic Value, Positive Value = Increase in Scenic Value, 0 = No Change in Scenic Value).



Impact on Enjoyment and Use

Respondents were asked two questions about the impact of the proposed addition of wind turbines in regards to their enjoyment and use of Lower Lead Mountain Pond.

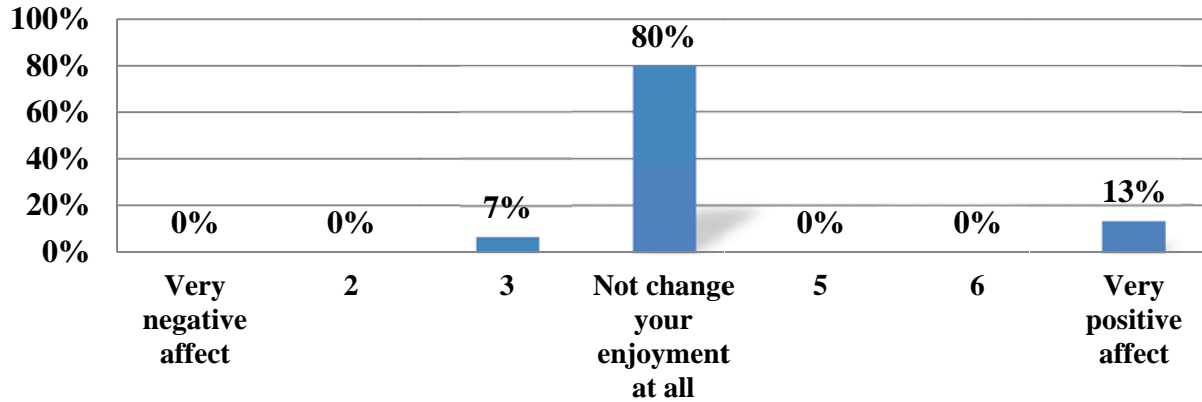
Respondents evaluated the impact of wind project on their enjoyment during future visits. Respondents rated the impact on a seven-point scale where 1 indicates a very negative effect and 7 represents a very positive effect on the enjoyment of their visit. On the scale, a 4 represents no change in enjoyment.

On average, respondents indicated that the proposed addition of wind turbines would have a slightly positive effect on the enjoyment of their visit; a rating of 4.3, slightly above 'no change in enjoyment' (which would be a rating of 4). This compares to a rating of 3.5 during the fall 2014 administration. Eighty percent of respondents indicated that the proposed addition of wind turbines would have no impact on their enjoyment. Seven percent indicated it would have a minor negative impact on their enjoyment, while 13% indicated it would have a very positive impact on their enjoyment. Respondents were then asked why they assigned the score to the impact on their enjoyment. Most respondents indicated there was an impact because they could see the turbines, while others indicated the presence of wind turbines would not bother them.

Respondents were then asked to evaluate how the proposed wind project might affect their likelihood of returning to Lower Lead Mountain Pond. Respondents rated the impact on a seven-point scale where 1 indicates they are less likely to return and 7 indicates they are more likely to return. On the scale, a 4 represents no change in their likelihood of returning to Lower Lead Mountain Pond.

On average, respondents indicated that the proposed wind project would actually have a slight positive impact on their likelihood of returning to Lower Lead Mountain Pond (rating as 4.7 on the 7 point scale). This compares the rating of 5.4 during the fall 2014 administration. Twenty-seven percent of respondents indicated it would have a very positive impact on their likelihood of returning while 73% of respondents indicated the proposed addition of wind turbines would have no impact on their likelihood of returning. No respondents indicated the proposed wind turbines would have a negative impact on their likelihood to return to Lower Lead Mountain Pond. Respondents indicated that the wind turbines would not change their likelihood of returning.

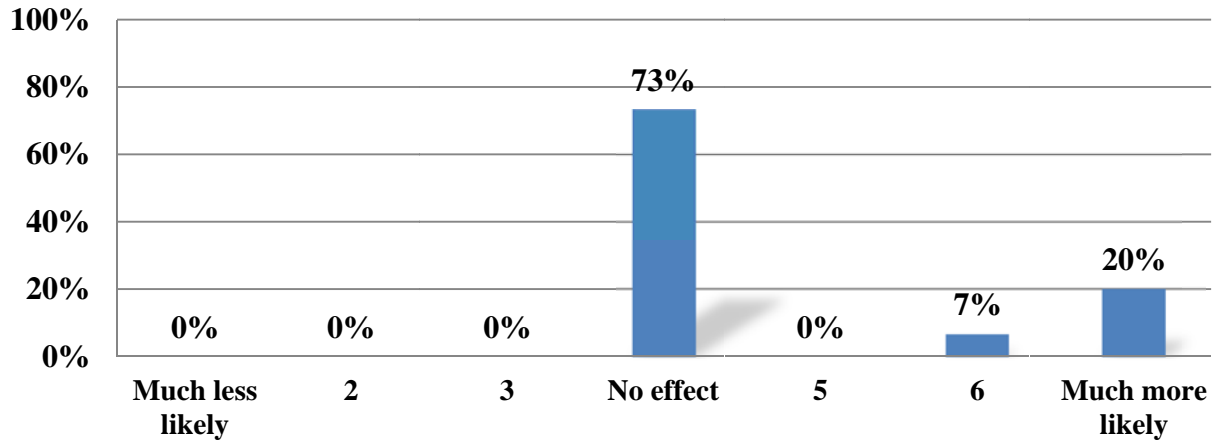
How would your enjoyment be affected by a change in the current Lower Lead Mountain Pond view compared to the view with the wind turbines?



**Why do you say that?
(Why does it have that impact on your enjoyment?)**

ID	Rating	Comment
8	No Change	We don't mind windmills
9	No Change	I'm indifferent to the change
10	No Change	It doesn't affect me at all
11	No Change	I don't care
12	No Change	It wouldn't bother me a bit
13	No Change	It doesn't take away anything
14	No Change	It doesn't bother me at all.
15	No Change	It doesn't bother me.
16	No Change	They do good more the merrier
17	No Change	It won't affect me and my family
18	No Change	They're far enough away
19	No Change	It doesn't look bad
20	Negative	They are ugly
22	Positive	It wouldn't bother me

How likely are you to return to Lower Lead Mountain Pond, given the change in the view?



**Why do you say that?
(Why does it have that impact on likelihood of returning?)**

ID	Rating	Comment
8	No Effect	We don't mind windmills
9	No Effect	I don't care about the windmills
10	No Effect	It doesn't affect me at all
11	No Effect	I'd keep coming here.
12	No Effect	It wouldn't bother me a bit
13	No Effect	It doesn't take away anything
14	No Effect	I live here
15	No Effect	It doesn't bother me.
16	No Effect	I'll be here till I die
19	Positive Effect	It doesn't change my feeling about the pond
20	Positive Effect	It wouldn't affect my return
21	Positive Effect	DK

Scenic Value of Upper Lead Mountain Pond and Impact of Wind Turbines

Respondents were then handed two images to evaluate, and were then asked to rate the scenic value of both views. The two images represented the view from the public boat launch on Upper Lead Mountain Pond.

- The current view from the location
- The view from the location showing additional wind turbines that are being proposed

Respondents first rated the current view. Respondents were then handed a photo simulation of the same view including the proposed wind turbines and asked to rate the scenic value of this view. Both views were rated on a seven-point scale where 1 represents the lowest scenic value and 7 represents the highest scenic value. Respondents were also asked the reason for their rating for both views.

Next I would like you to take a look at the view Upper Lead Mountain Pond.

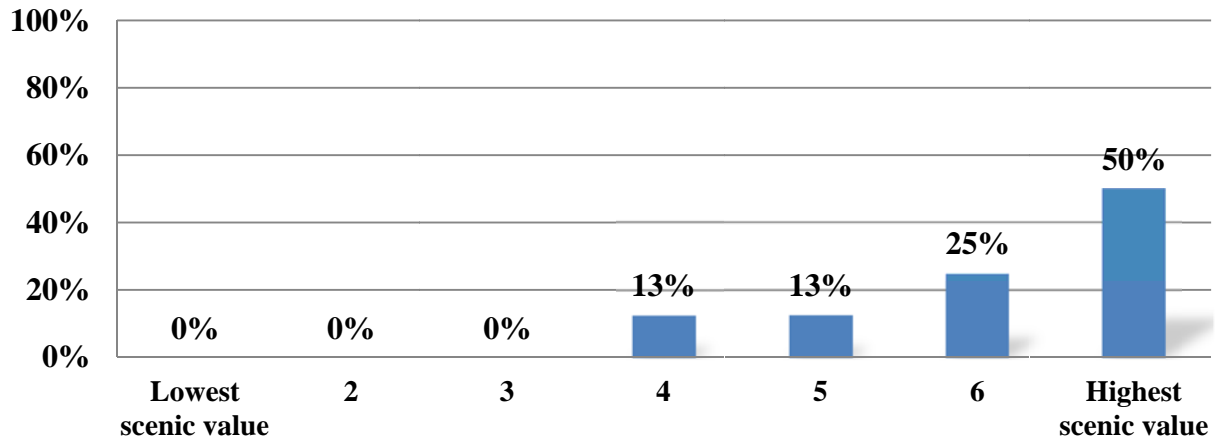
	Average Score in 2014	Average Score in 2015
How would you rate the scenic quality of this view - CURRENT view from Upper Lead Mountain Pond.	6.4	6.1
How would you rate the scenic quality of this view - Upper Lead Mountain Pond View that includes wind turbines that may be built in the future.	5.9	6.0
Difference in Scores Between Views (<i>Negative Value = Decrease in Scenic Value, Positive Value = Increase in Scenic Value, 0 = No Change in Scenic Value</i>)	-0.6	-.12

The average rating of the initial view among all respondents was 6.1 with 50% of respondents rating the view as a seven, or highest scenic quality, 25% rating as a six and 13% rating as a five on the seven-point scale. Thirteen percent rated the view as a four on the seven point scale. This compares to an overall average of 6.4 during the fall 2014 administration. Respondents liked the area because of its beauty and that it was untouched by development.

The average rating of the second view (the view containing the proposed additional wind turbines) was 6.0. This compares with the average rating of 5.9 in 2014. Fifty percent of respondents rated the view with wind turbines as a 7, or highest scenic quality, while 13% assigned a score of 6 and 25% assigned a score of 4 on the seven point scale. Thirteen percent rated the view as a four on the seven point scale. Comments mostly indicated the turbines made no difference or did not bother them with one respondent who indicating they could notice the wind turbines in the view.

Overall, there was a 0.12 point drop in the average score between the two views from 6.1 to 6.0, a negligible change in the scenic value. This compares with the .6 drop in scenic value from 2014. Eighty-eight percent of respondents indicated there were no differences in the scenic value of the two views. Thirteen percent assigned a difference of one point between the two views, indicating the second view was less scenic.

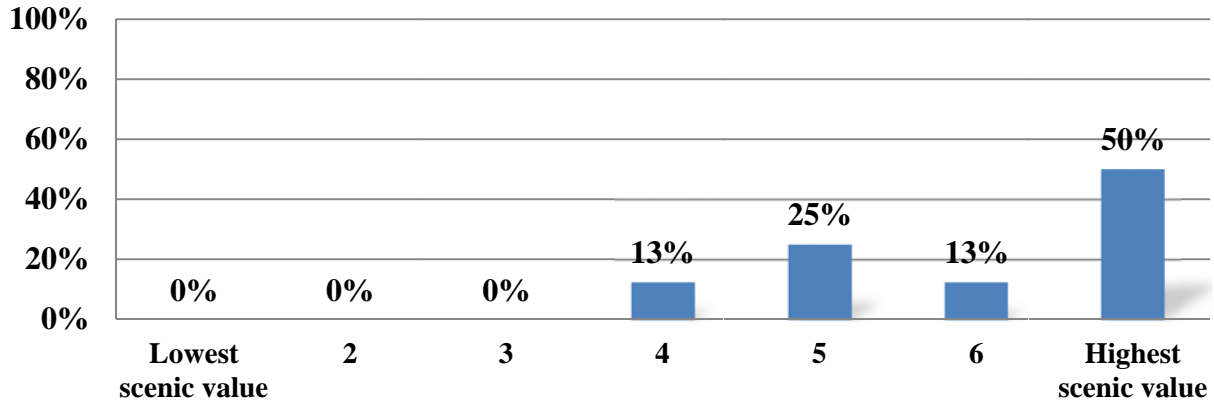
How would you rate the scenic quality of this view - CURRENT view from Upper Lead Mountain Pond.



**Why do you say that?
(Why did you assign it this rating to CURRENT View)**

ID	Rating	Comment
2	High	Grass growing, water's too shallow
3	Neutral	The weeds, the water's too shallow
5	High	There's no development, the clean water, the heavy tree growth
6	High	It's scenic
7	High	It's pretty
9	Neutral	see everything, the water

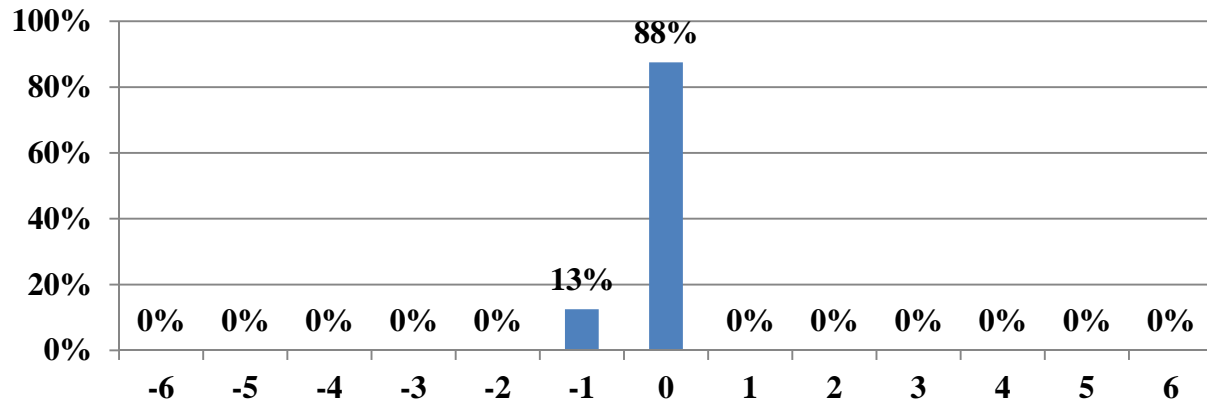
How would you rate the scenic quality of this view - Upper Lead Mountain Pond view that includes wind turbines that may be built in the future.



**Why do you say that?
(Why did you assign it this rating to View with the Wind Turbines)**

ID	Rating	Comment
2	Neutral	Grass, too shallow, you can see the windmills
3	Neutral	I can't see any real difference
5	High	The turbines are hard to see, not close to the lake
6	High	You can barely see them
7	High	It's still pretty. Looks the same
9	High	I don't care about the windmills
21	High	Not enough of a difference

Difference in Scores Between Views (Negative Value = Decrease in Scenic Value, Positive Value = Increase in Scenic Value, 0 = No Change in Scenic Value).



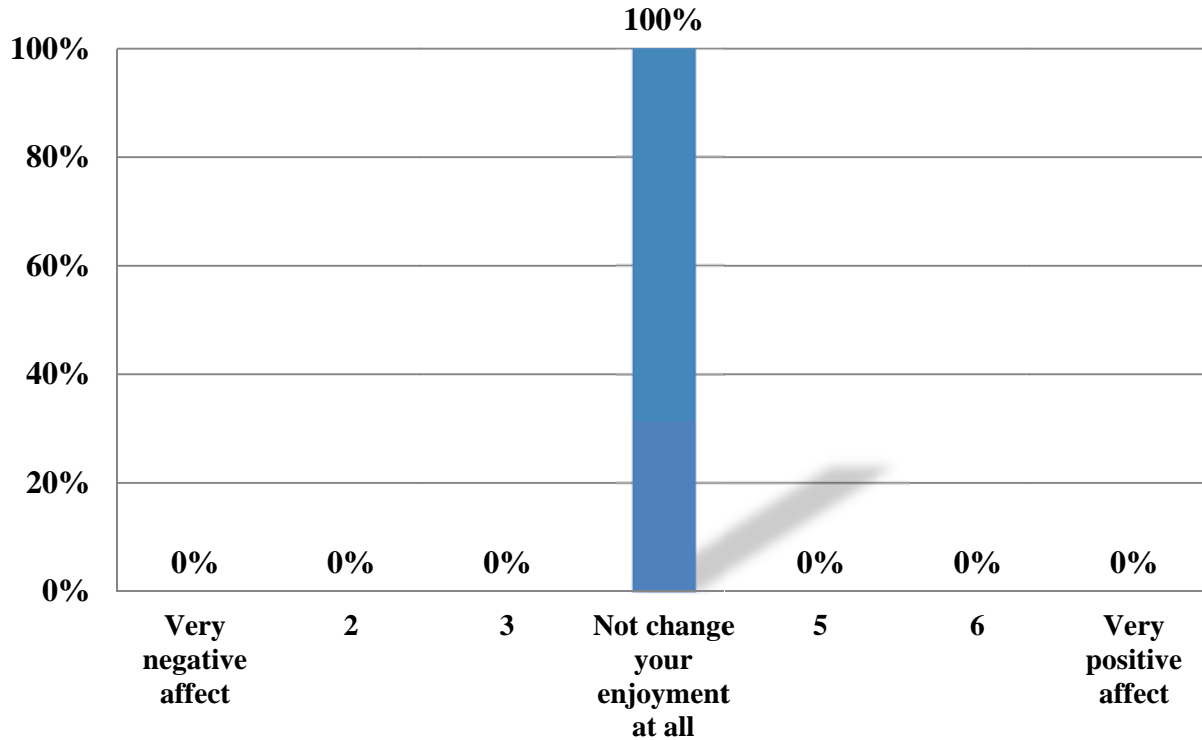
Impact on Enjoyment and Use

On average, respondents indicated that the proposed addition of wind turbines would have no effect on the enjoyment of their visit; with 100% of respondents giving it a rating of 4, no change. This compares to an average of 3.5 during the fall 2014 administration. Most respondents indicated that they really couldn't be seen or that they didn't make any difference to the view.

Respondents were then asked to evaluate how the proposed wind project might affect their likelihood of returning to Upper Lead Mountain Pond. Respondents rated the impact on a seven point scale where 1 indicates they are less likely to return and 7 indicates they are more likely to return. On the scale, a 4 represents no change in their likelihood of returning to Upper Lead Mountain Pond.

On average, respondents indicate that the proposed wind project would have no impact on their likelihood of returning to Lower Lead Mountain Pond (rating as 3.9 on the 7 point scale). This compares to an average of 4.2 during the fall 2014 administration. Thirteen percent of respondents indicated it would have a negative impact on their likelihood of returning while 88% of respondents indicated the proposed addition of wind turbines would have no impact on their likelihood of returning. Respondents indicated that the wind turbines would not change their likelihood of returning and that they own property in the area.

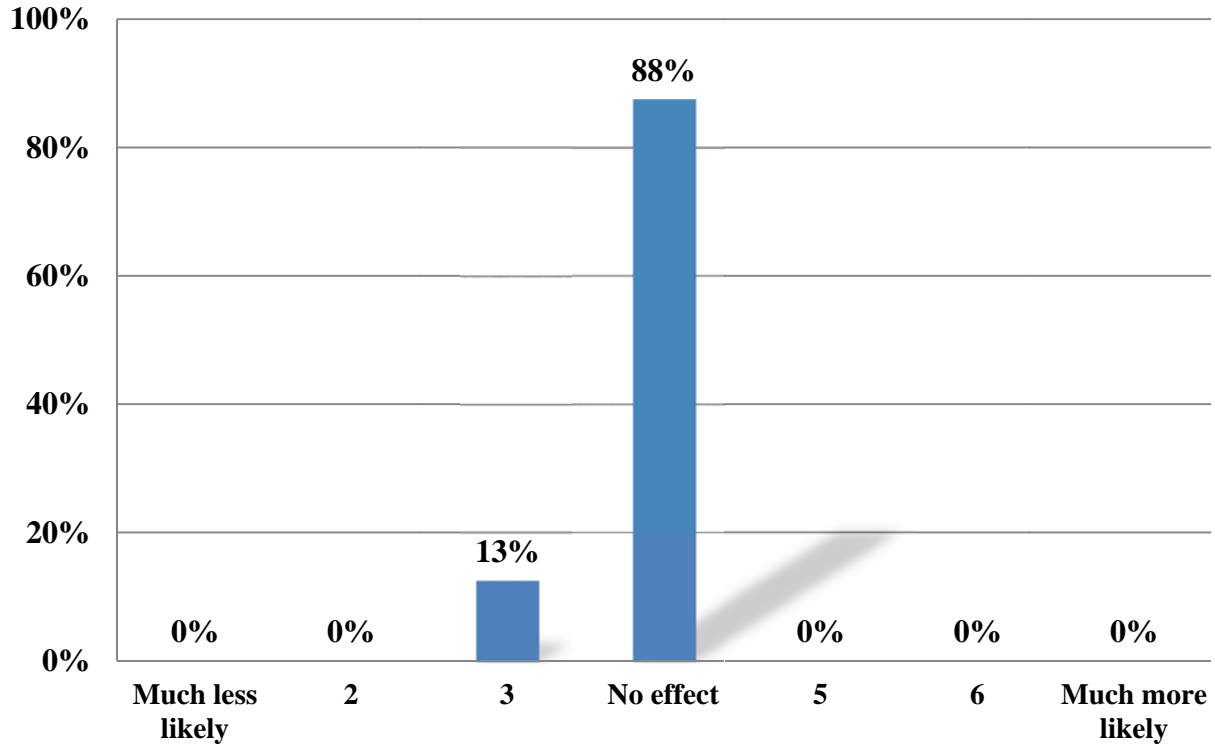
How would your enjoyment be affected by a change in the current Upper Lead Mountain Pond view compared to the view with the wind turbines?



**Why do you say that?
(Why does it have that impact on your enjoyment?)**

ID	Rating	Comment
2	No Change	Not going to really see them unless we're on the mountain.
3	No Change	I can't see any real difference
4	No Change	If they give me some of the electricity, I don't care.
5	No Change	I came here to catch fish.
6	No Change	There's no real difference
7	No Change	It looks the same
9	No Change	Windmills don't bother me
21	No Change	It would not change

How likely are you to return to Upper Lead Mountain Pond, given the change in the view?



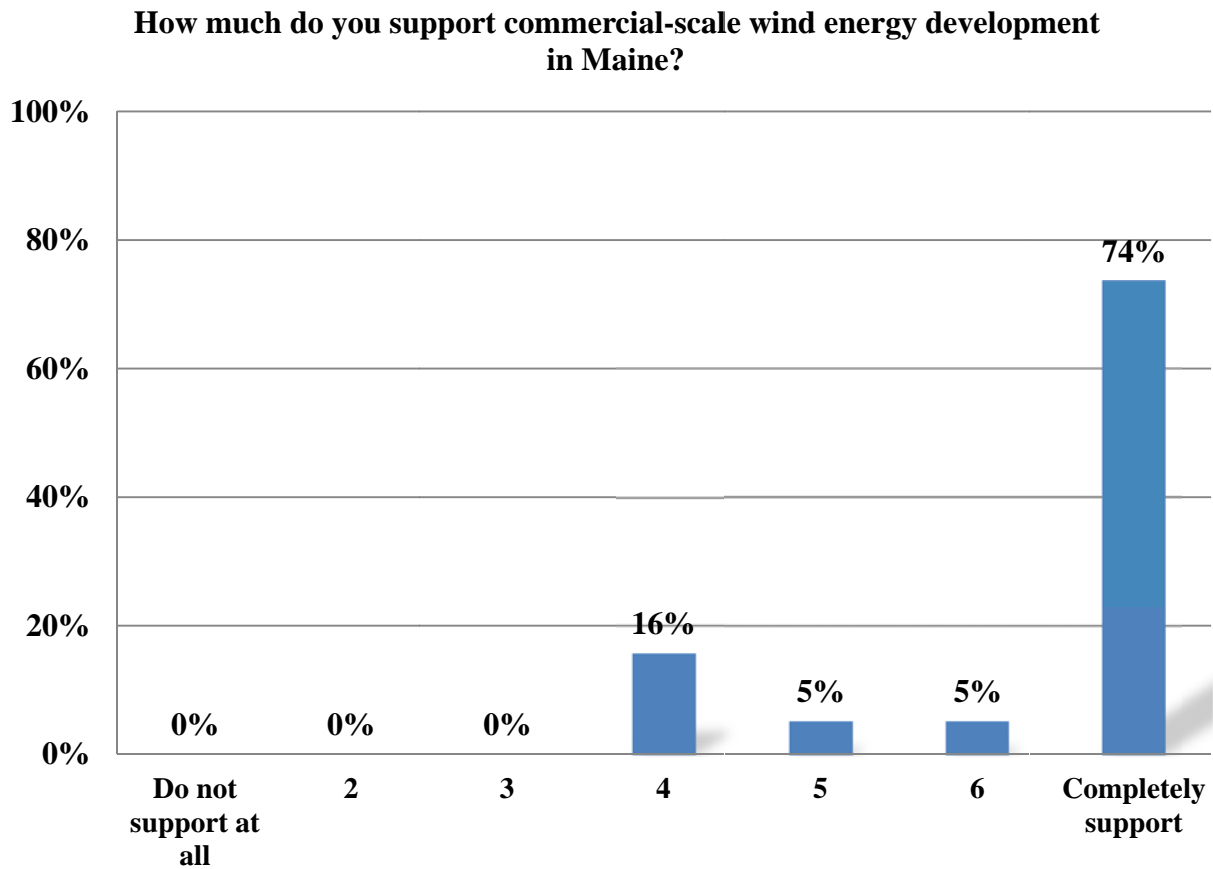
**Why do you say that?
(Why does it have that impact on likelihood of returning?)**

ID	Rating	Comment
2	Negative Effect	If the power leaves the state, then we don't need any here.
3	No Effect	I can't see them, really.
4	No Effect	I own the property on the lake.
5	No Effect	I'd come here even if they were visible
6	No Effect	There's no difference
7	No Effect	It wouldn't affect it at all.
9	No Effect	I don't care about the windmills

General Views of Wind Power Development

Respondents were asked to indicate how appropriate wind development was for the state of Maine. Respondents rated their views on a seven-point scale where 1 indicates they believe it is very inappropriate and 7 indicates they believe wind power is very appropriate for Maine.

On average, respondents assigned a score of 5.3. Overall, 84% of respondents indicate they support commercial-scale wind energy development in Maine (rating as a 5, 6, or 7) while sixteen percent of respondents were neutral.



Demographics

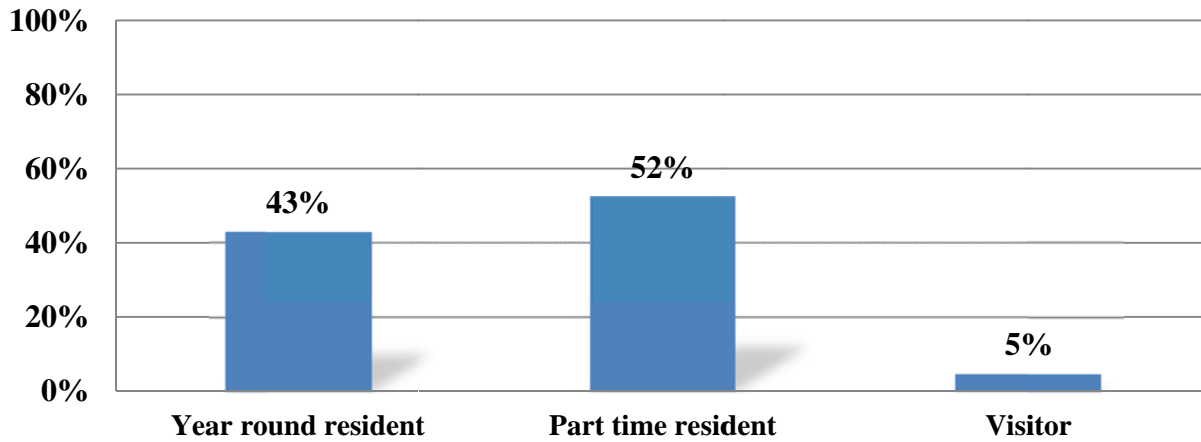
Forty-three percent of respondents were full-time residents in the area, 52% part time residents, and 5% were visitors to the area. All part-time residents and visitors reported visiting the area in the Summer, 90% in the Fall, 81% in the Spring, and 86% in the Winter. Nearly all (95%) owned a home or camp in the area, with 29% having a camp on Upper Lead Mountain Pond, 62% on Lower or Middle Lead Mountain Pond and 5% somewhere else nearby.

The largest percentage of respondents (38%) was aged 55-64 while 33% were aged 65 and older and 29% under age 55. Most (81%) were male. Forty-seven percent of respondents had a college degree with 29% holding a bachelor's or post-graduate degree.

Forty-eight percent of respondents were with one other person, while 14% were alone. Thirty-four percent were in groups of three or four and the largest group size was 10 people.

Most respondents were from Maine communities: Beddington, Bangor, Bar Harbor, Windham, Portland, Durham, Hampden, Bremen, Steuben, and Union, though four respondents were from out of state.

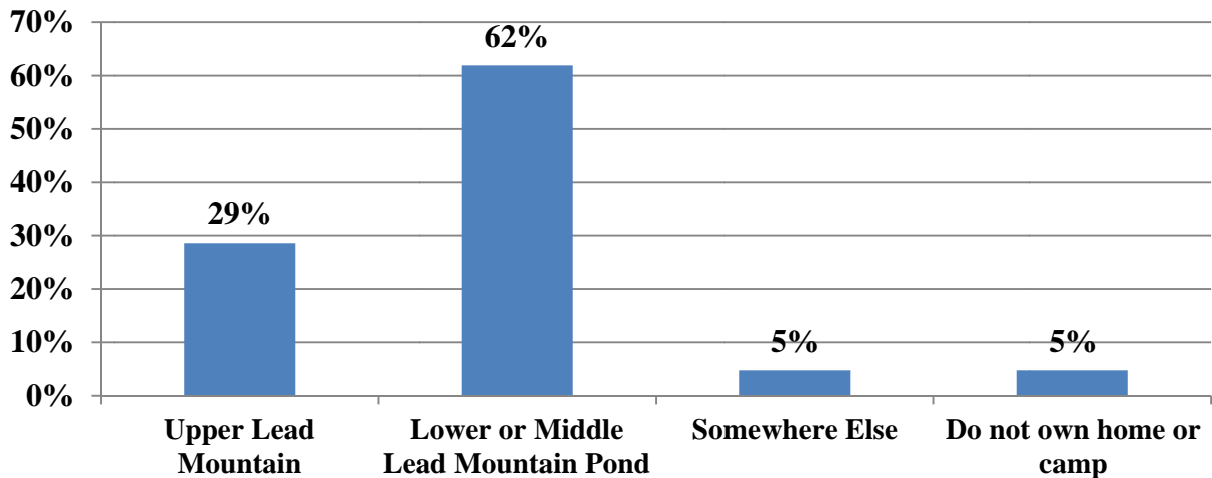
Are you a year round resident, part time resident, or visitor to this area?



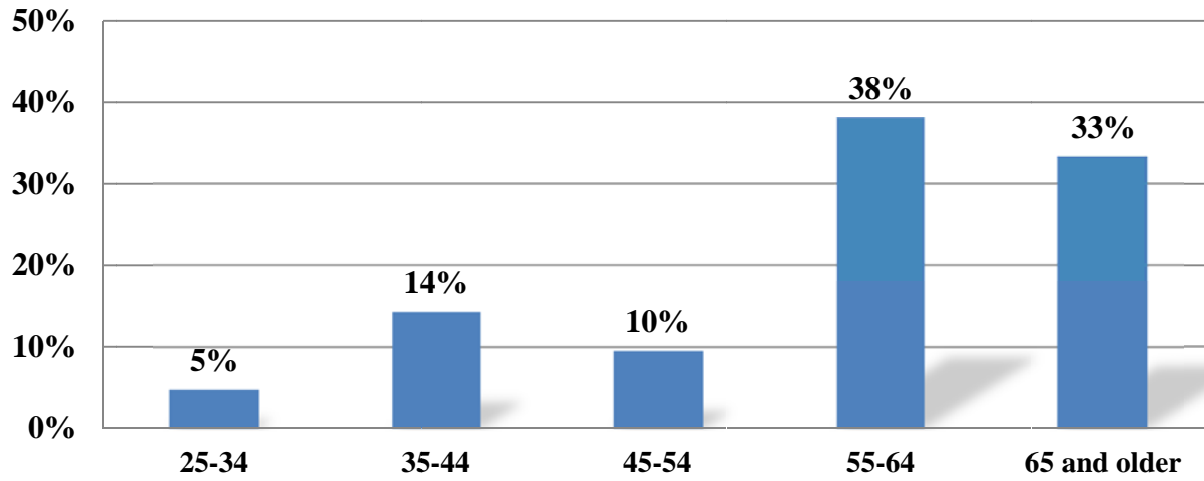
**Do you live in or visit the area in...
(% among Part Time Residents and Visitors)**

Winter	86%
Spring	81%
Summer	100%
Fall	90%

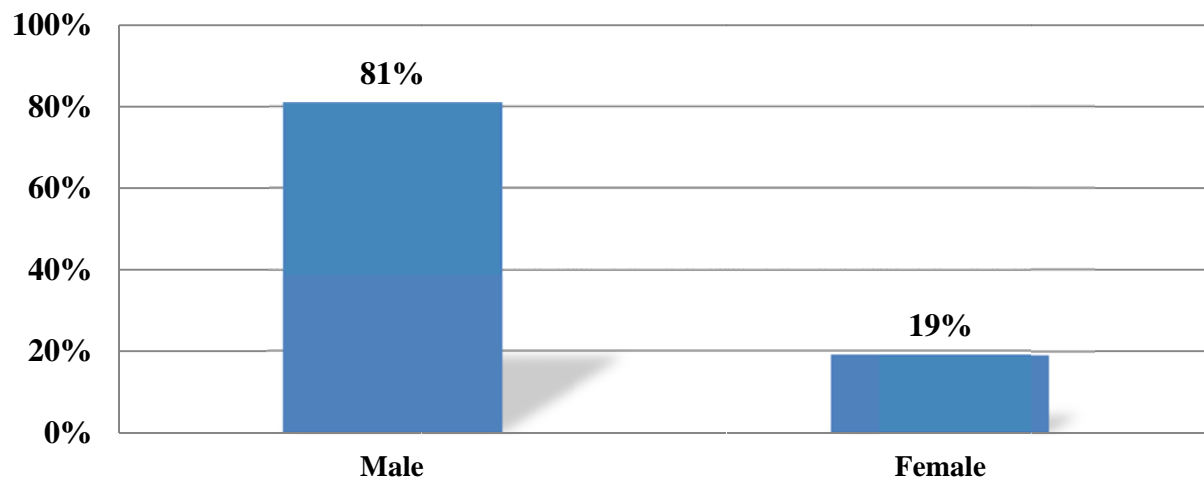
Do you own a home or camp in this area?



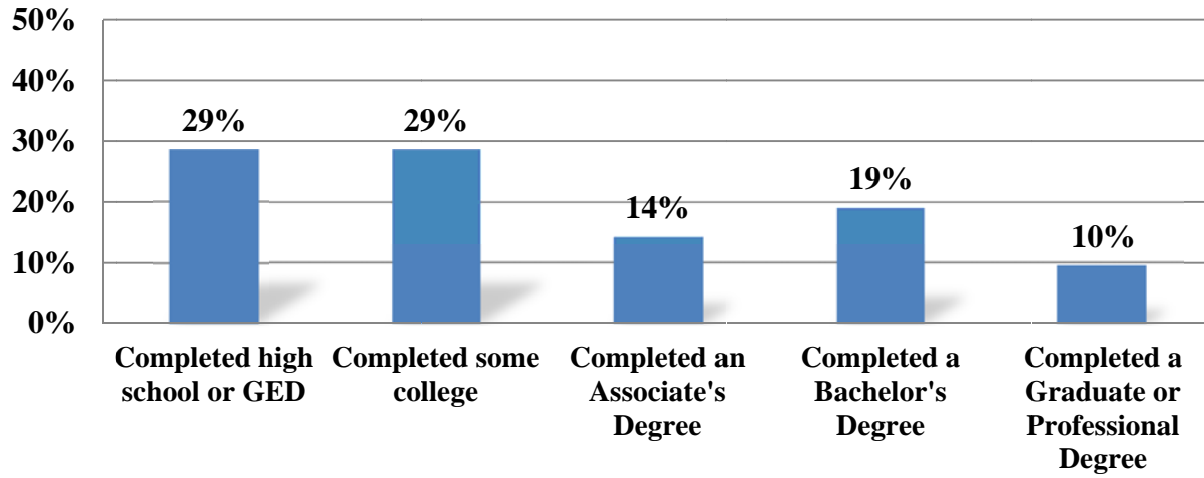
Age



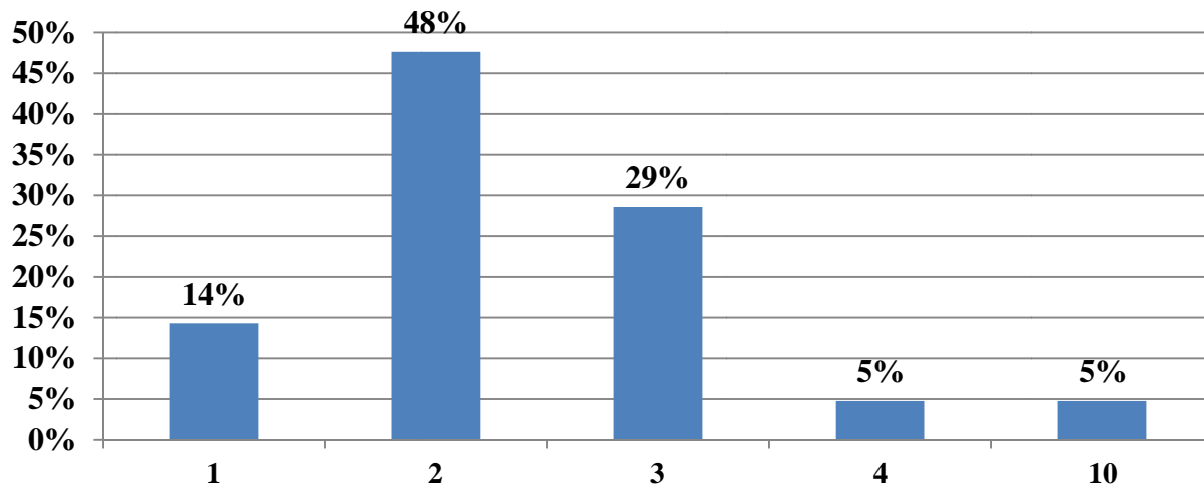
Gender



Education



Number in Party



Zip Code

	%
01747	5%
02019	5%
02038	5%
03874	5%
04062	5%
04101	5%
04222	5%
04401	10%
04408	10%
04444	5%
04547	5%
04609	10%
04622	15%
04680	5%
04862	5%

Appendices

I. Numbers of Boats and People on or Near the Ponds

Dock Counts:

Date	Lower			Upper		
	Refusals	Adults	Children	Refusals	Adults	Children
6/27/2015	1	12	2	0	9	3
7/3/2015	3	15	9	1	3	0
7/4/2015	4	10	5	5	33	12
7/5/2015	0	7	5	0	0	0

Binocular Counts:

Date: 6/27/2015		Binocular Counts			Location: Upper
Time	On The Pond				Shore People
	Boats	PWC	Canoes	Kayaks	
8:45 AM					
9:15 AM					
9:45 AM					
10:15 AM	1				3
10:45 AM					
11:15 AM					5
11:45 AM					2
12:15 PM					2
12:45 PM					2
1:15 PM					4
1:45 PM					8
2:15 PM					12
2:45 PM					12
3:15 PM					8
3:45 PM					8
4:15 PM					6
4:45 PM		1			
5:15 PM					
5:45 PM					
6:15 PM					
6:45 PM					
7:15 PM					

Date: 6/27/2015		Binocular Counts			Location: Lower
Time	On The Pond				Shore People
	Boats	PWC	Canoes	Kayaks	
8:30 AM	1				1
9:00 AM					1
9:30 AM					
10:00 AM					
10:30 AM					1
11:00 AM					1
11:30 AM				2	1
12:00 PM					1
12:30 PM	3				1
1:00 PM					
1:30 PM					
2:00 PM					
2:30 PM					2
3:00 PM					
3:30 PM					
4:00 PM					
4:30 PM					
5:00 PM		1			
5:30 PM	1				
6:00 PM			1		
6:30 PM					
7:00 PM					
7:30 PM					2

Date: 7/3/2015		Binocular Counts			Location: Upper
Time	On The Pond				Shore People
	Boats	PWC	Canoes	Kayaks	
1:00 PM	1				
1:30 PM	1				
2:00 PM	2				
2:30 PM					3
3:00 PM					4
3:30 PM					5
4:00 PM	1				4
4:30 PM	1				7
5:00 PM					
5:30 PM					

Date: 7/3/2015		Binocular Counts			Location: Lower
Time	On The Pond				Shore People
	Boats	PWC	Canoes	Kayaks	
12:30 PM	1			2	
1:00 PM					
1:30 PM	1		1		2
2:00 PM					2
2:30 PM					1
3:00 PM					1
3:30 PM	1				2
4:00 PM					
4:30 PM	1				
5:00 PM	1				
5:30 PM					1
6:00 PM					3

Date: 7/4/2015		Binocular Counts			Location: Upper
Time	On The Pond				Shore People
	Boats	PWC	Canoes	Kayaks	
9:00 AM					
9:30 AM					
10:00 AM	1				3
10:30 AM	1				3
11:00 AM	1		1		3
11:30 AM	1			1	9
12:00 PM	1			2	11
12:30 PM				2	18
1:00 PM	1		1	2	15
1:30 PM	1		2	1	16
2:00 PM	1				23
2:30 PM				2	13
3:00 PM					9
3:30 PM					
4:00 PM	2				
4:30 PM	1				6
5:00 PM	1				4
5:30 PM					
6:00 PM		1			8

Date: 7/4/2015		Binocular Counts			Location: Lower
Time	On The Pond				Shore People
	Boats	PWC	Canoes	Kayaks	
9:30 AM	1				2
10:00 AM	2				
10:30 AM	3		1	2	
11:00 AM	1		1		3
11:30 AM	1				3
12:00 PM	2				3
12:30 PM	2		1		
1:00 PM					
1:30 PM	1				
2:00 PM			1		2
2:30 PM	1	1	1		4
3:00 PM	1			1	4
3:30 PM				1	2
4:00 PM	1				
4:30 PM					
5:00 PM	1				
5:30 PM	1				

Date: 7/5/2015		Binocular Counts			Location: Lower
Time	On The Pond				Shore People
	Boats	PWC	Canoes	Kayaks	
9:00 AM	1				
9:30 AM	1				2
10:00 AM	1				2
10:30 AM	1				2
11:00 AM					4
11:30 AM	1				
12:00 PM	1				2
12:30 PM					2
1:00 PM	1				
1:30 PM	1				

Date: 7/5/2015		Binocular Counts			Location: Upper
Time	On The Pond				Shore People
	Boats	PWC	Canoes	Kayaks	
9:30 AM					
10:00 AM					
10:30 AM					
11:00 AM					
11:30 AM					
12:00 PM					
12:30 PM					
1:00 PM					

II. Survey Instrument

LOCATION

**LOWER LEAD MOUNTAIN
POND**

Survey Questions (Lower Lead Mountain Pond Version)

GREET: Hello, I am conducting a short survey among visitors about their impressions of this area. Do you have a few minutes?

Today we are conducting a brief survey among those visiting the area and using the pond. We are asking people to complete this brief survey about the purpose of their visit and their experiences. Please be assured that your answers are confidential. If you have any questions about this survey or need to verify it as legitimate, please feel free to contact the study director, Dr. Brian Robertson at 1-800-293-1538, ext. 102.

1. Have you visited Lower Lead Mountain Pond before today? (CIRCLE RESPONSE)

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

2. IF YES TO 1: And how many time do you visit Lower Lead Mountain Pond during the...? (READ AND ENTER NUMBER OF TIMES)

	Winter
	Spring
	Summer
	Fall

**3. Thinking about your visit to Lower Lead Mountain Pond, what are your plans for today?
(READ AND CHECK ALL MENTIONED)**

	Hiking or Walking
	Boating (sail or motor)
	Canoeing or kayaking
	Fishing from a boat
	Fishing from the shore or standing in water
	Swimming
	Viewing the scenery
	Nature observation or bird watching
	Picnicking
	Camping
	Stargazing or looking at the night sky
	Other (SPECIFY):

**4. And what is your primary activity for today?
(INTS: IN QUESTION 3 CIRCLE THEIR PRIMARY ACTIVITY)**

5. How long do you expect to be out today on or near Lower Lead Mountain Pond?

1	< 1 hour	5	> 12 Hours
2	1 – 2 Hours	6	Staying in Camp/Home
3	3 – 5 Hours (half day)	8	DK
4	6 – 12 Hours (Full Day)		

6. What prompted you to come out to Lower Lead Mountain Pond today?

Get out Map of Ponds and Show to the Respondent and Hand them the first Sharpie Marker

Please look at this Map of Lower, Middle, and Upper Lead Mountain Pond.

- 7. I would like to get a sense of where you are going today. With this marker, can you show me where you intend to go today on Lower and Middle Lead Mountain Pond?**

Get out the second Sharpie Marker and Hand to Respondent

- 8. If you have been here before, can you show me what other parts of Lower and Middle Lead Mountain Pond you have visited?**
- 9. Next, if you have visited Upper Lead Mountain Pond, can you show me what parts you have visited.**

_____ **HAS VISITED UPPER LEAD MOUNTAIN POND**

Expectations for Today

Please think about what is it that you look forward to when coming to Lower Lead Mountain Pond. 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.

	Do not meet at all							Completely Meet	DK
	1	2	3	4	5	6	7		
10. The scenery. Enjoying the beautiful surroundings	1	2	3	4	5	6	7	DK	
11. To get outdoors, enjoy the fresh air	1	2	3	4	5	6	7	DK	
12. Getting exercise	1	2	3	4	5	6	7	DK	
13. A sense of rejuvenation. Relief from the tensions of modern civilization	1	2	3	4	5	6	7	DK	
14. The companionship. Camaraderie, being with my family or friends	1	2	3	4	5	6	7	DK	
15. The enjoyment of being on a boat	1	2	3	4	5	6	7	DK	
16. The general experience of being out on the water	1	2	3	4	5	6	7	DK	
17. The quality of the fishing	1	2	3	4	5	6	7	DK	

18. What other expectations did you have for today?

19. And on this same scale, how well did this area meet your other expectations?

Other Expectations	Do not meet at all							Completely Meet	DK
	1	2	3	4	5	6	7		

I would like you to think about two specific aspects of your expectations.

- 20. First please think about your expectations for the number of people that may also be using the pond. 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.**

Uncrowded, few or no people			Crowded, a larger number of people				
1	2	3	4	5	6	7	DK

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

Undeveloped				Highly Developed			
1	2	3	4	5	6	7	DK

Ask Respondent if They Have Visited Before

- 22. About how many boats and people do you normally see on the water at any one time?**

- 23. And how would you say that number varies with the season?**

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.

	Very Negative			Very Positive				
24. Views of large clear cuts on hillsides.	1	2	3	4	5	6	7	DK
25. Views of downhill ski trails and facilities.	1	2	3	4	5	6	7	DK
26. Views of power lines on hillsides.	1	2	3	4	5	6	7	DK
27. Views of wind power projects.	1	2	3	4	5	6	7	DK
28. Views of private docks along the shore.	1	2	3	4	5	6	7	DK
29. Views of motorized craft on the lake or pond	1	2	3	4	5	6	7	DK
30. Views of industrial facilities such as a biomass generator, paper mill or landfill	1	2	3	4	5	6	7	DK
31. Views of residential development along the shore.	1	2	3	4	5	6	7	DK

Scenic Value/Quality Questions

32. Now I'd like to ask you about scenic quality. Can you think of a place in Maine that has a very high scenic quality, or outstanding views? That is one that on a scale of 1 to 7 for scenic quality, one you would rate as a 7 for the HIGHEST scenic quality.

33. What is it about this place that makes it highly scenic?

34. Next, can you think of an outdoor place in Maine that has a VERY LOW scenic quality? That is one that on a scale of 1 to 7 for scenic views, one you would rate as a 1 for LOWEST SCENIC QUALITY?

35. What is it about this place that gives it low scenic value?

LOWER LEAD MOUNTAIN POND QUESTIONS

I'd like to have you look at a picture of a view to the southwest from the north end of Lower Lead Mountain Pond and get your impressions. I'll ask you to rate the scenic quality of the view.

INTS: PULL OUT THE NEXT SET OF PHOTO SIMULATIONS: BEFORE/AFTER VIEW OF WIND FARM

HAND FIRST PICTURE TO RESPONDENT (EXISTING VIEW LOOKING SOUTHWEST)

36. 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? (CIRCLE NUMBER)

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

37. Why do you say that?

HAND SECOND PICTURE TO RESPONDENT (PHOTOSIMULATION - AFTER)

38. 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? (CIRCLE NUMBER)

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

39. Why do you say that?

40. 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. On a scale of 1-7, where 7 is a very positive affect and 1 is a very negative affect on your enjoyment how would your enjoyment be affected? A 4 means that it would not change your enjoyment at all. (CIRCLE NUMBER)

Please note that the views to the south would not change.

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

41. Why do you say that?

42. Please think about how a change from the current view to the view with wind turbines would affect your likelihood of returning to Lower Lead Mountain Pond. 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 Lower Lead Pond Mountain, given the change in the view? A 4 means the change in the view would have no effect on your return.

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

43. Why do you say that?

ASK THIS SERIES ONLY IF THEY INDICATE THEY HAVE VISITED UPPER LEAD MOUNTAIN POND IN Q9

UPPER LEAD MOUNTAIN POND QUESTIONS

Next, I'd like to have you look at a view from the boat launch at Upper Lead Mountain Pond and get your impressions. Again, I'll ask you to rate the scenic quality of the view.

INTS: PULL OUT THE NEXT SET OF PHOTO SIMULATIONS: BEFORE/AFTER VIEW OF WIND FARM

HAND FIRST PICTURE TO RESPONDENT (EXISTING VIEW LOOKING SOUTHWEST)

44. First take a look at the CURRENT view. On the 1-to-7 scale of scenic quality, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic quality of this view? (CIRCLE NUMBER)

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

45. Why do you say that?

HAND SECOND PICTURE TO RESPONDENT (PHOTOSIMULATION - AFTER)

46. 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, where 7 is the highest scenic value and 1 is the lowest, how would you rate the scenic quality of this view? (CIRCLE NUMBER)

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

47. Why do you say that?

48. Now I'd like you to think about how your enjoyment of going there 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. (CIRCLE NUMBER)

Please note that the views to the south would not change.

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

49. Why do you say that?

50. Please think about how a change from the current view to the view with wind turbines would affect your likelihood of returning to Upper Lead Mountain Pond. 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 Upper Lead Pond Mountain, given the change in the view? A 4 means the change in the view would have no effect on your return.

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

51. Why do you say that?

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

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

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

53. Are you a year round resident, part time resident, or visitor to this area?

1	Year round resident	2	Part time resident	3	Visitor
---	---------------------	---	--------------------	---	---------

54. IF PART TIME RESIDENT/VISITOR: Do you live in or visit the area in: (READ AND CHECK ALL)

1	Winter	3	Summer
2	Spring	4	Fall

55. Do you own a home or camp in this area?

IF YES ASK: Is this on Upper Lead Mountain Pond, Lower Lead Mountain Pond, or somewhere else?

1	Upper Lead Mountain Pond	2	Lower or Middle Lead Mountain Pond	3	Somewhere else	4	Do Not Own Home or Camp in Area
---	--------------------------	---	------------------------------------	---	----------------	---	---------------------------------

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

1	18-24	5	55-64
2	25-34	6	65 and older
3	35-44	8	DK
4	45-54		

57. Please stop me when I say the highest level of education you completed. (CIRCLE RESPONSE)

1	Have not completed high school	5	Completed a Bachelor's Degree
2	Completed high school or GED	6	Completed a Graduate or Professional Degree
3	Completed some college	8	DK
4	Completed an Associate's Degree		

58. What is your zip code? _____ (ENTER ZIP CODE)

59. GENDER (BY OBSERVATION)

1

Male

2

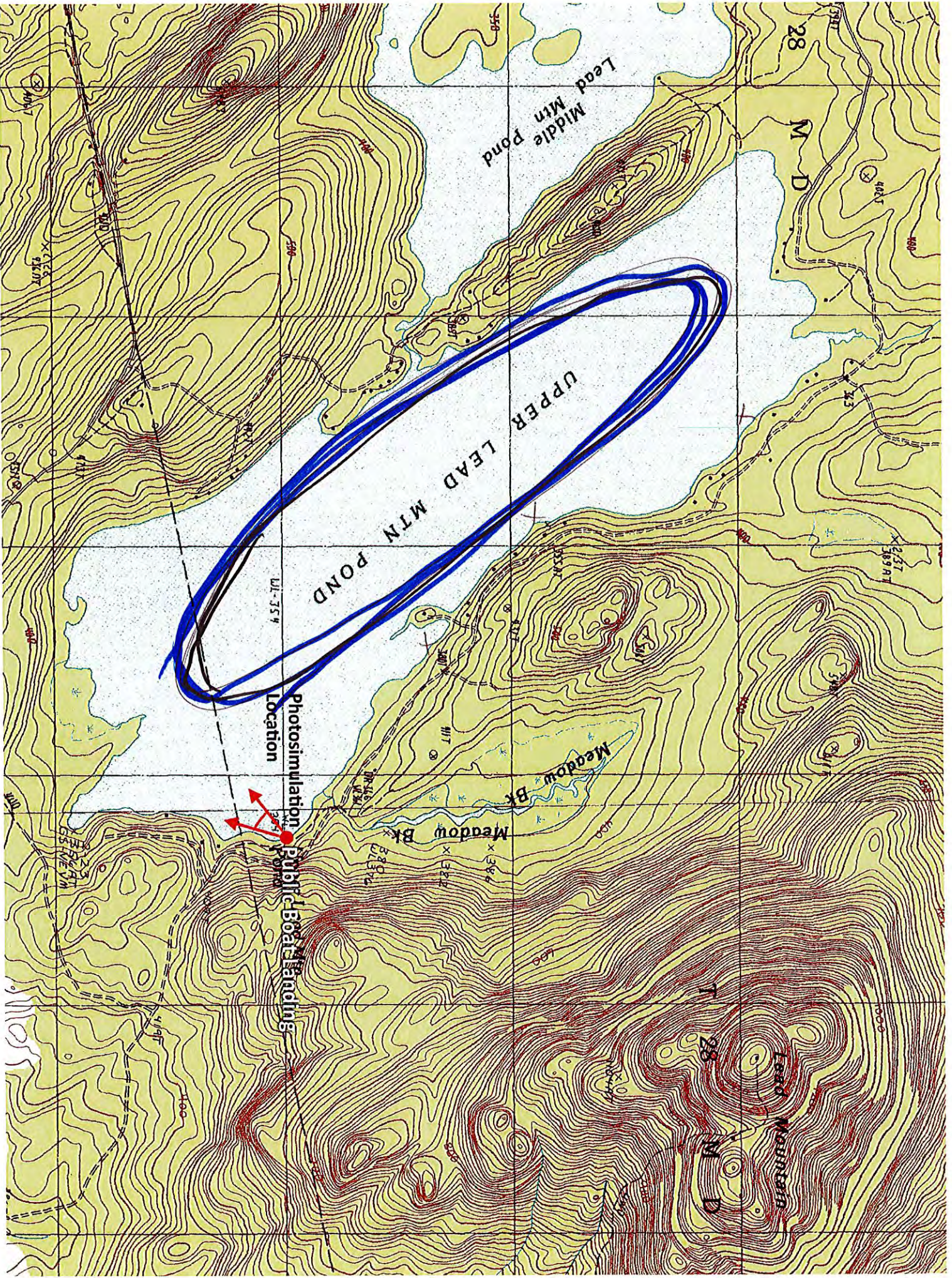
Female

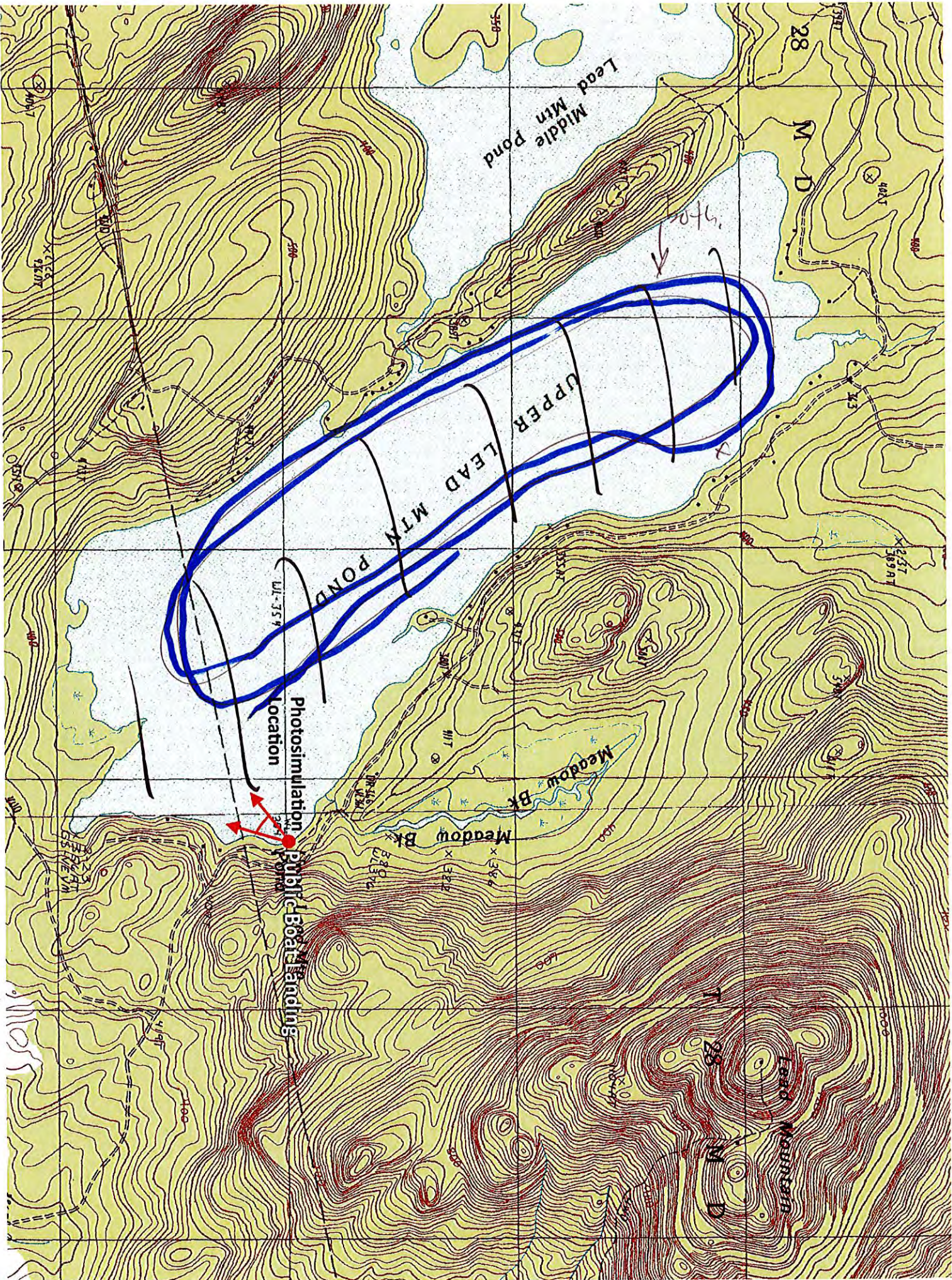
60. Number in party (BY OBSERVATION) _____ (ENTER NUMBER)

Thank you for your help today.

Date: _____ **Time:** _____

III. Maps of Locations Visited on the Ponds

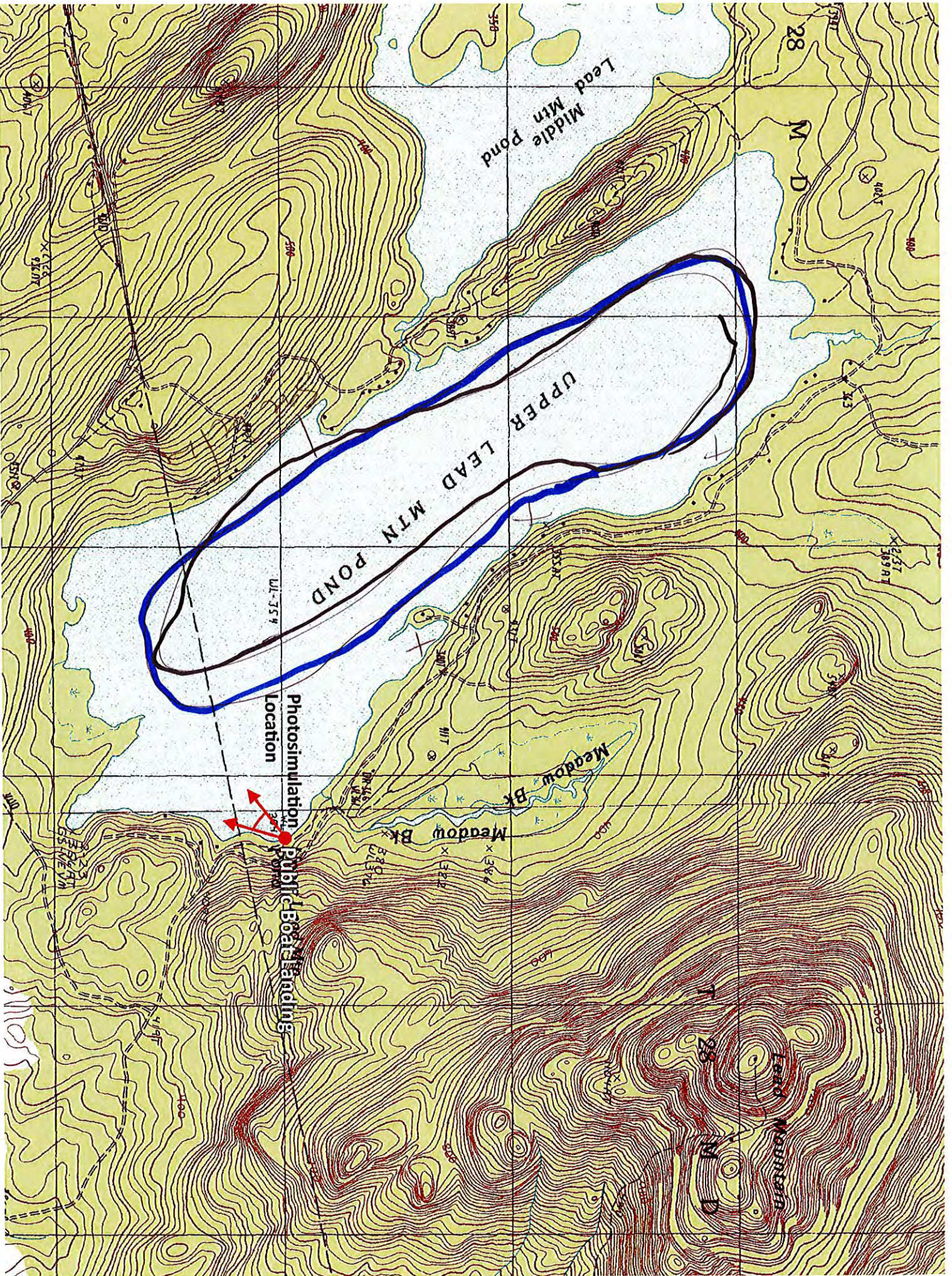




Please indicate on this map where you typically go when recreating on the pond.

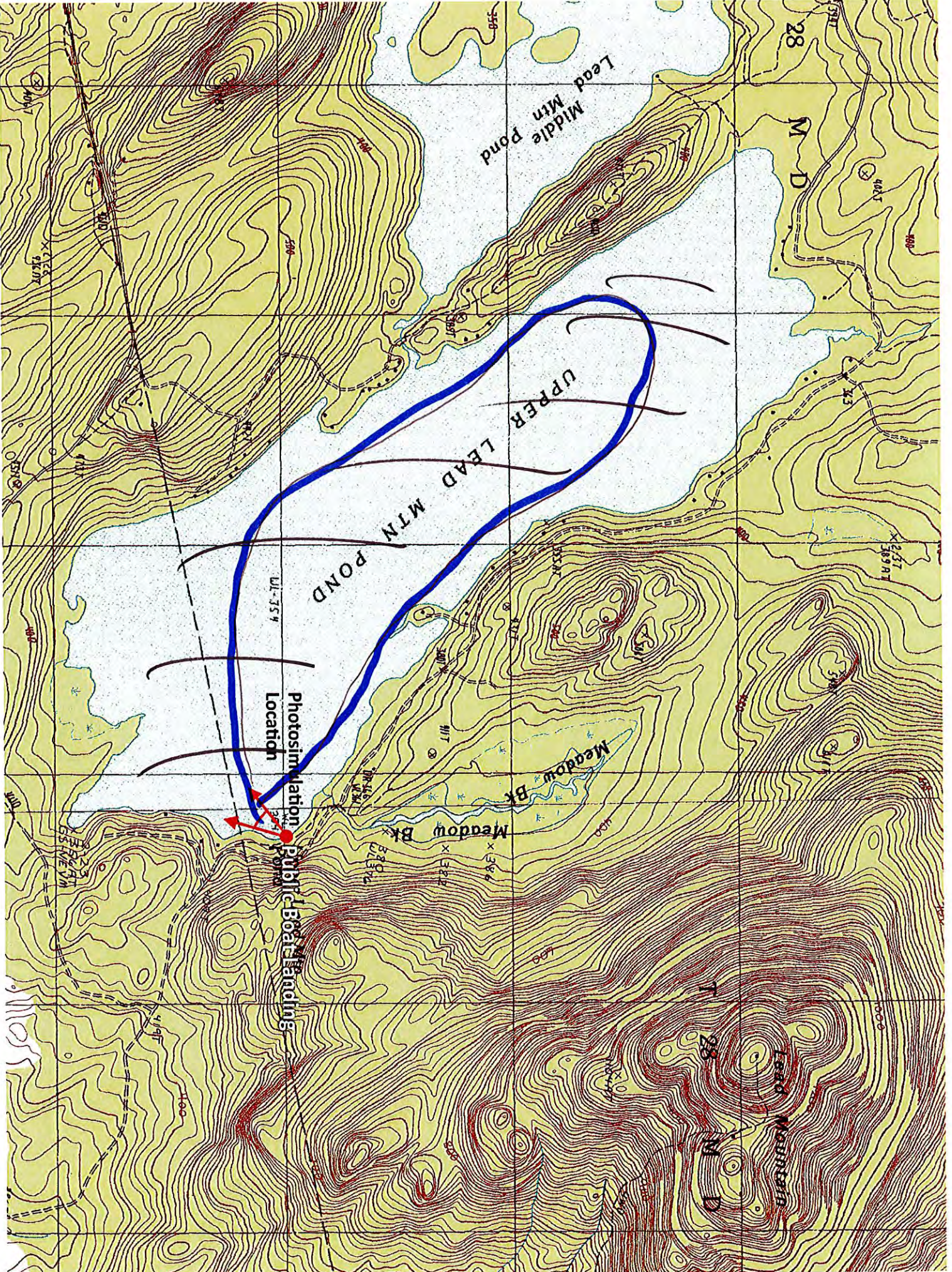
A02

FLOWER



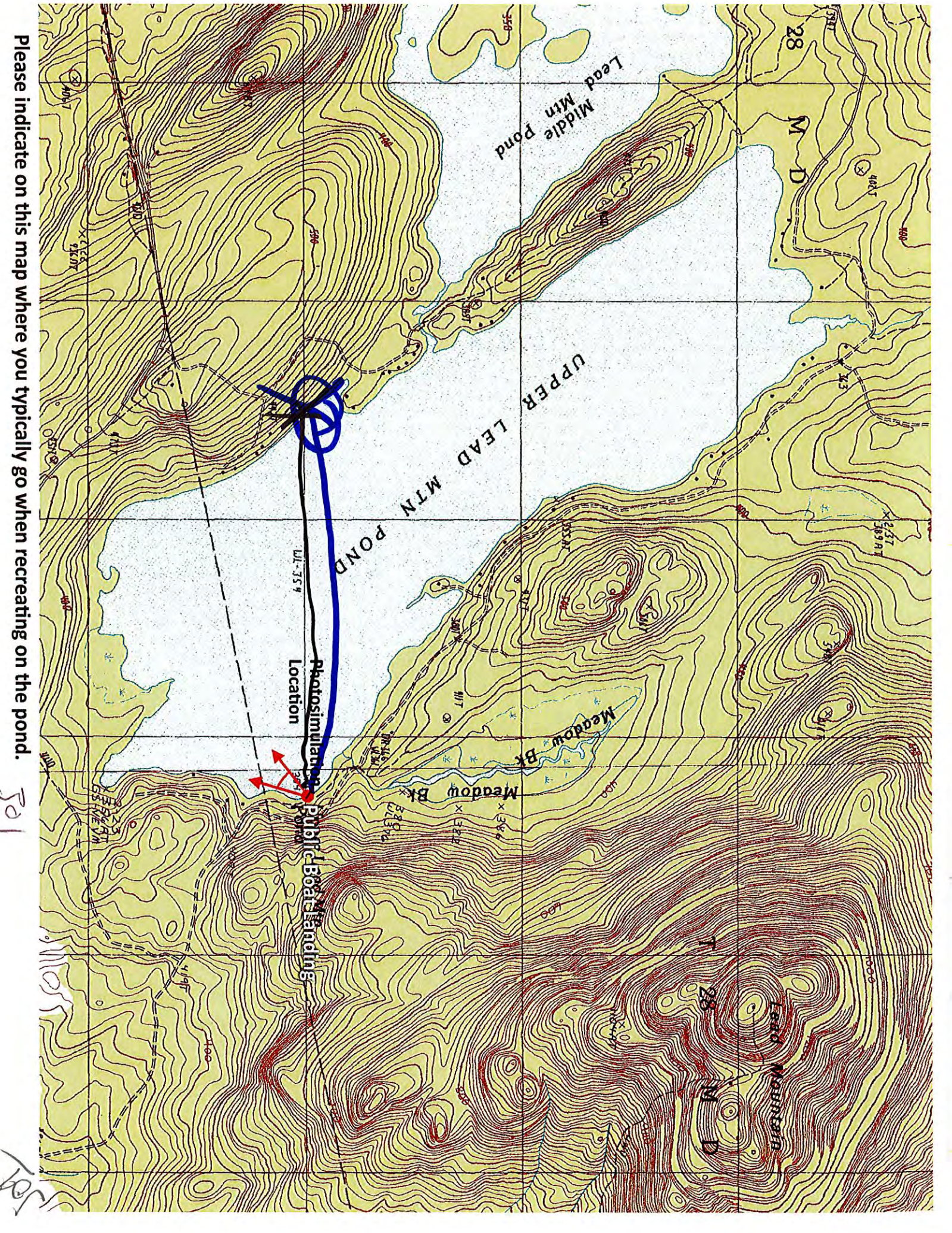
Please indicate on this map where you typically go when recreating on the pond.

A03



Please indicate on this map where you typically go when recreating on the pond.

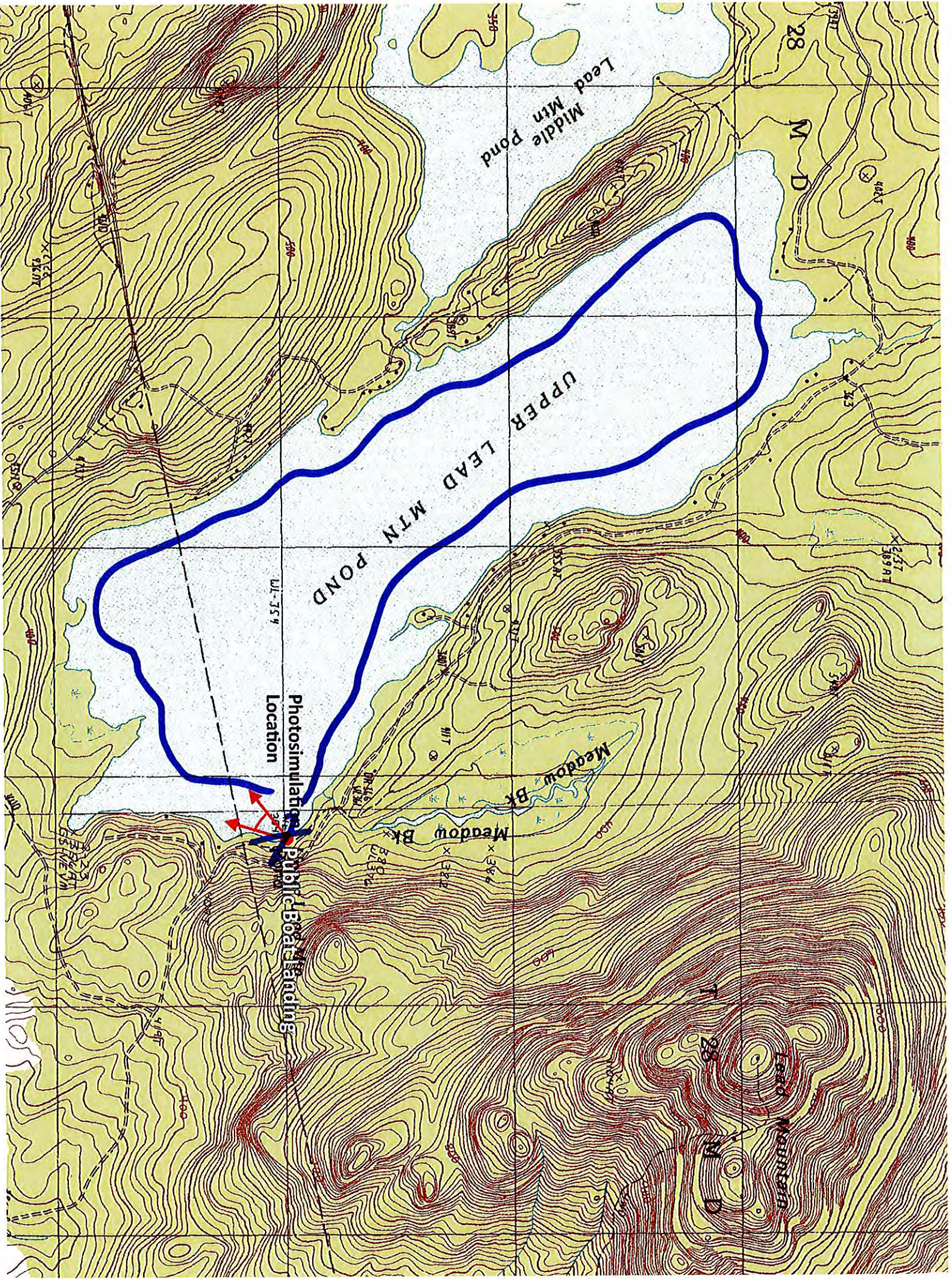
A04 All over



Please indicate on this map where you typically go when recreating on the pond.

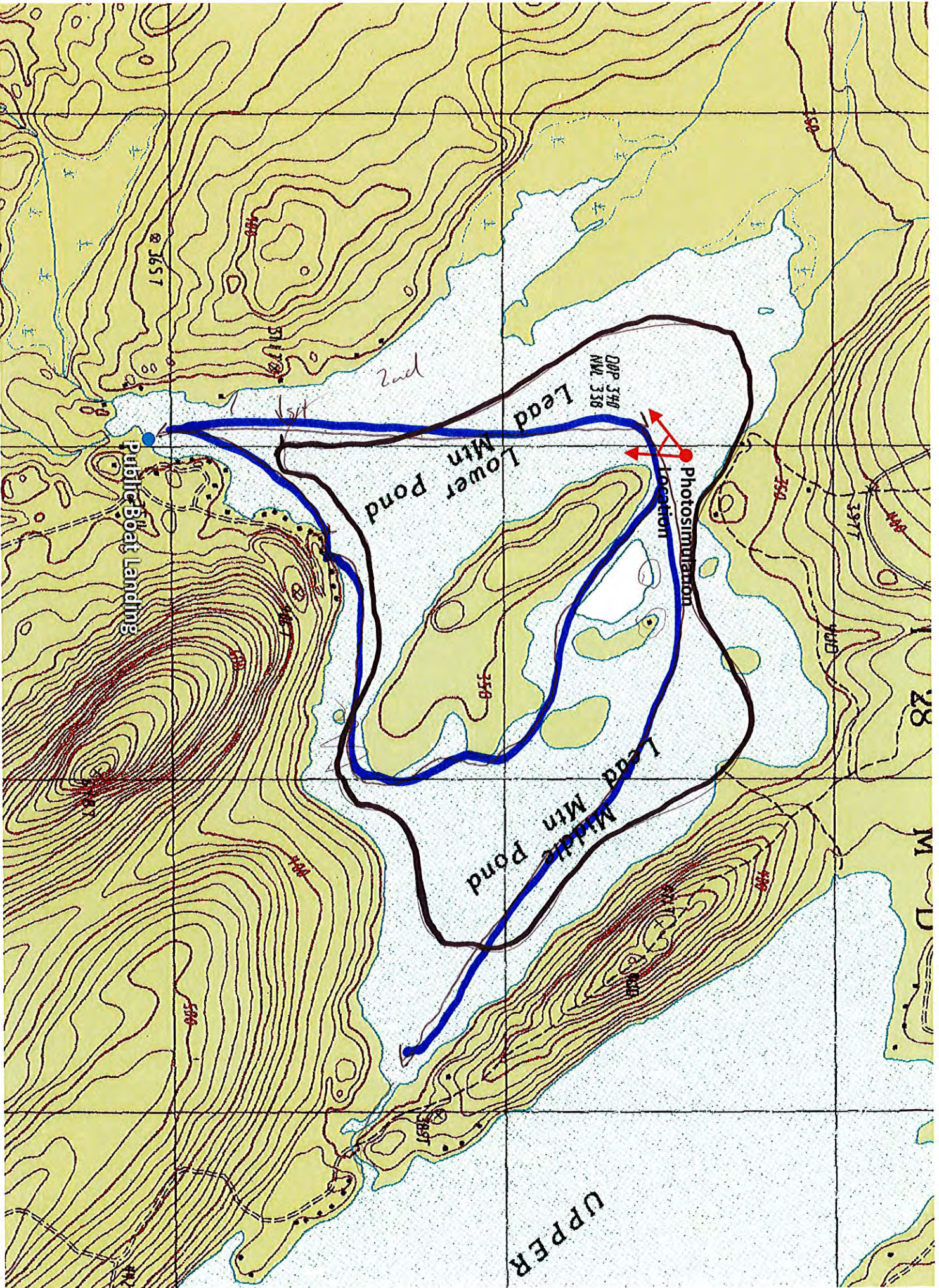
501

501



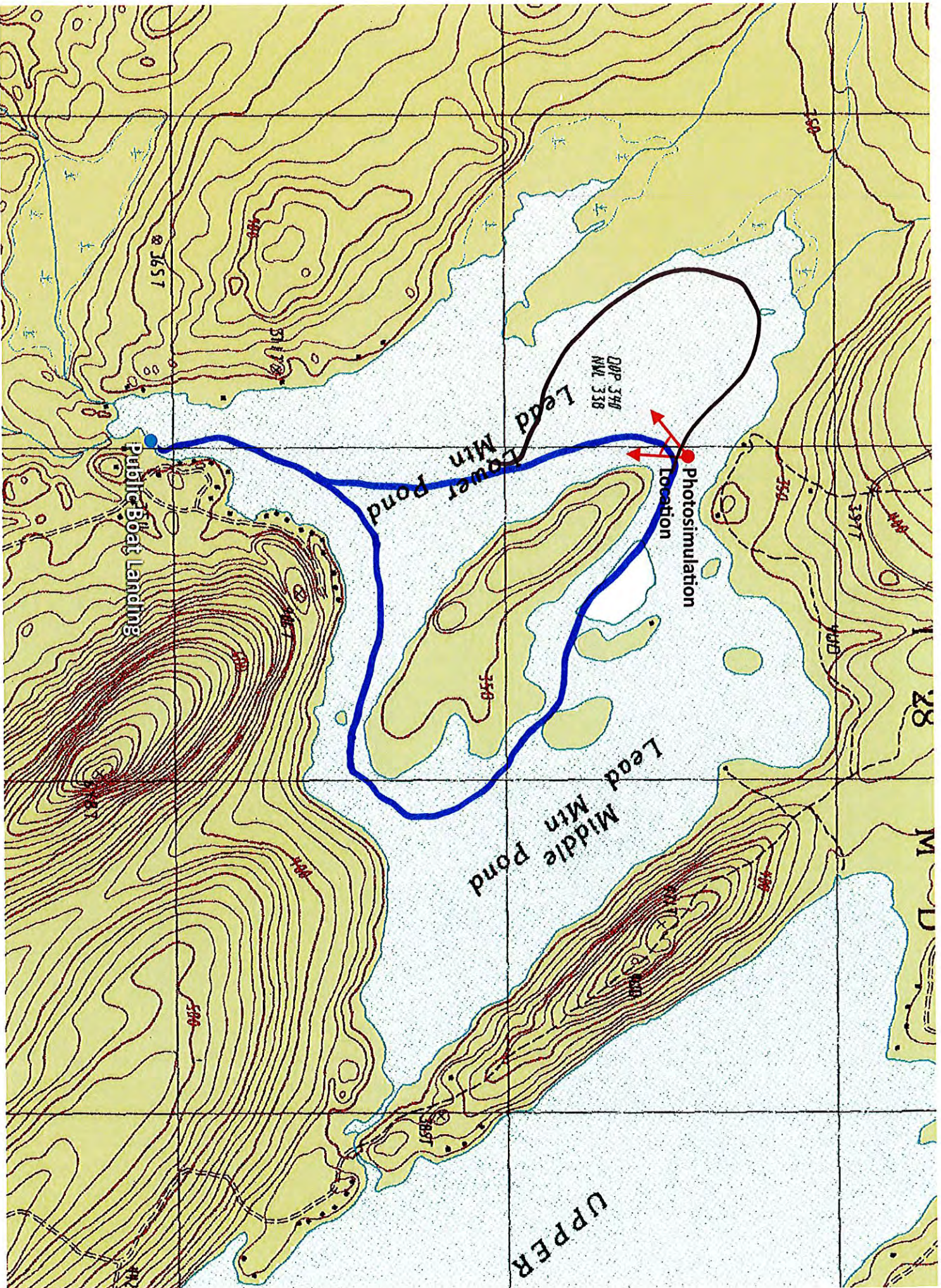
Please indicate on this map where you typically go when recreating on the pond.

502



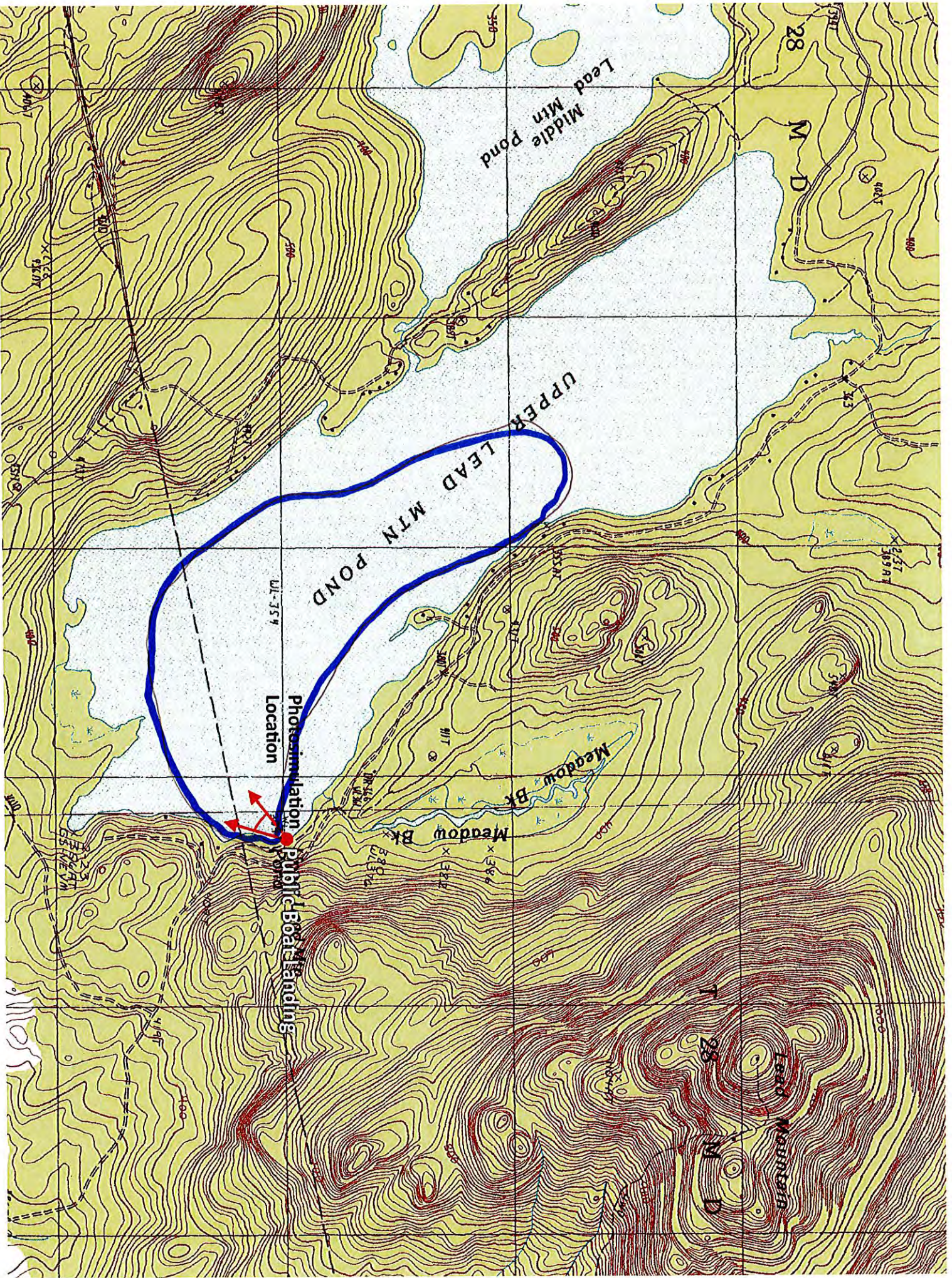
Please indicate on this map where you typically go when recreating on the pond.

AOS



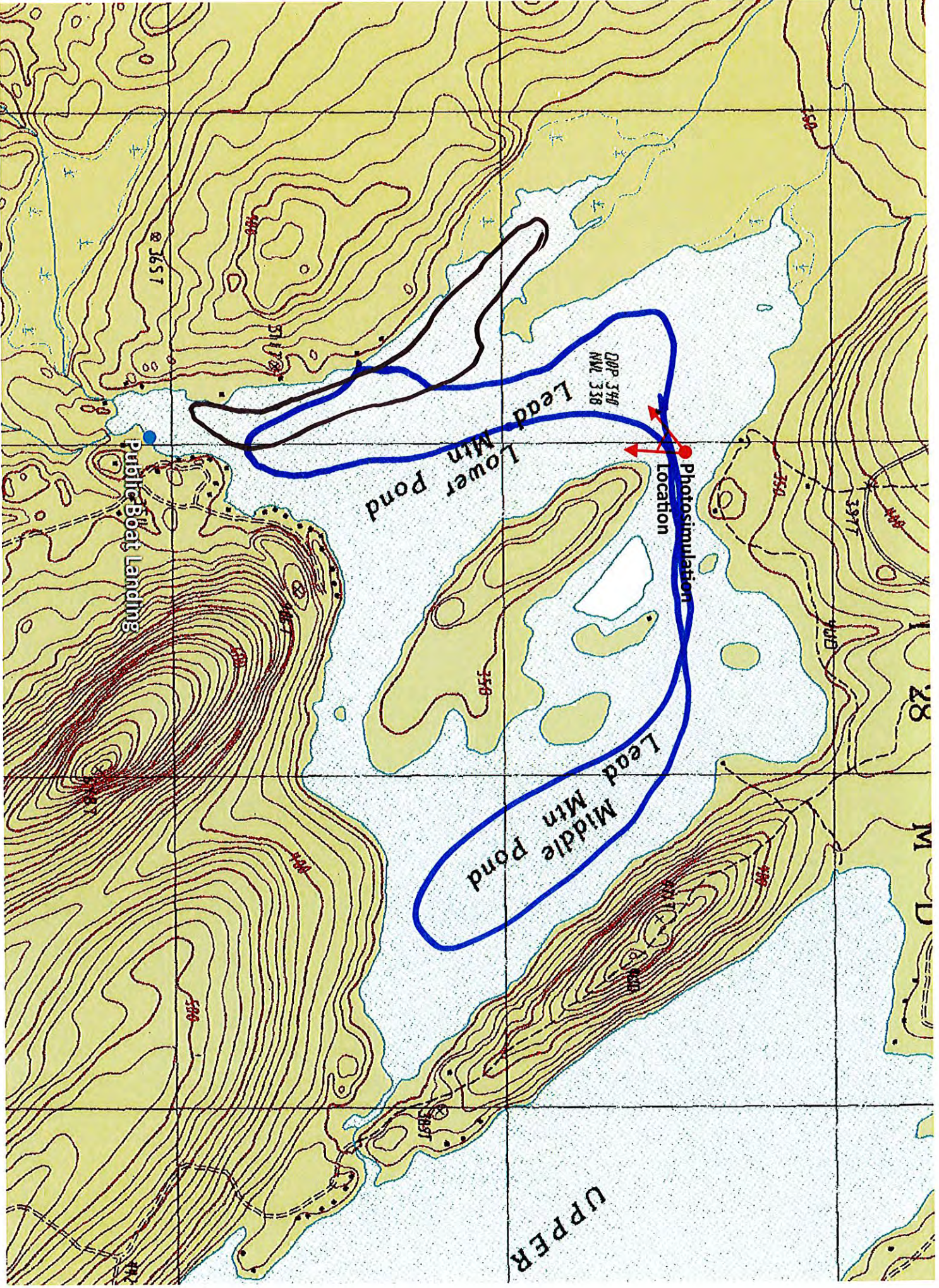
Please indicate on this map where you typically go when recreating on the pond.

A26



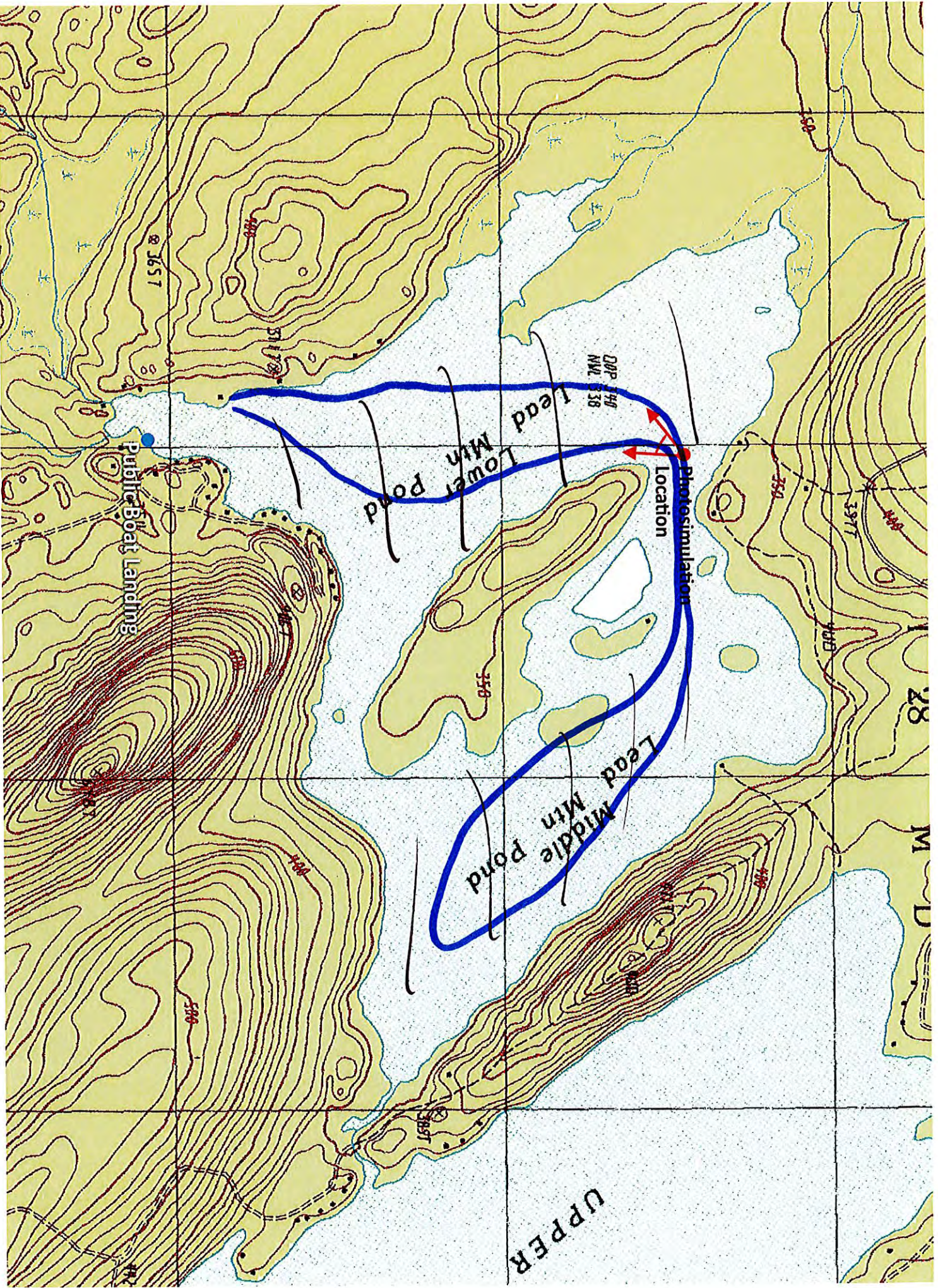
Please indicate on this map where you typically go when recreating on the pond.

406



Please indicate on this map where you typically go when recreating on the pond.

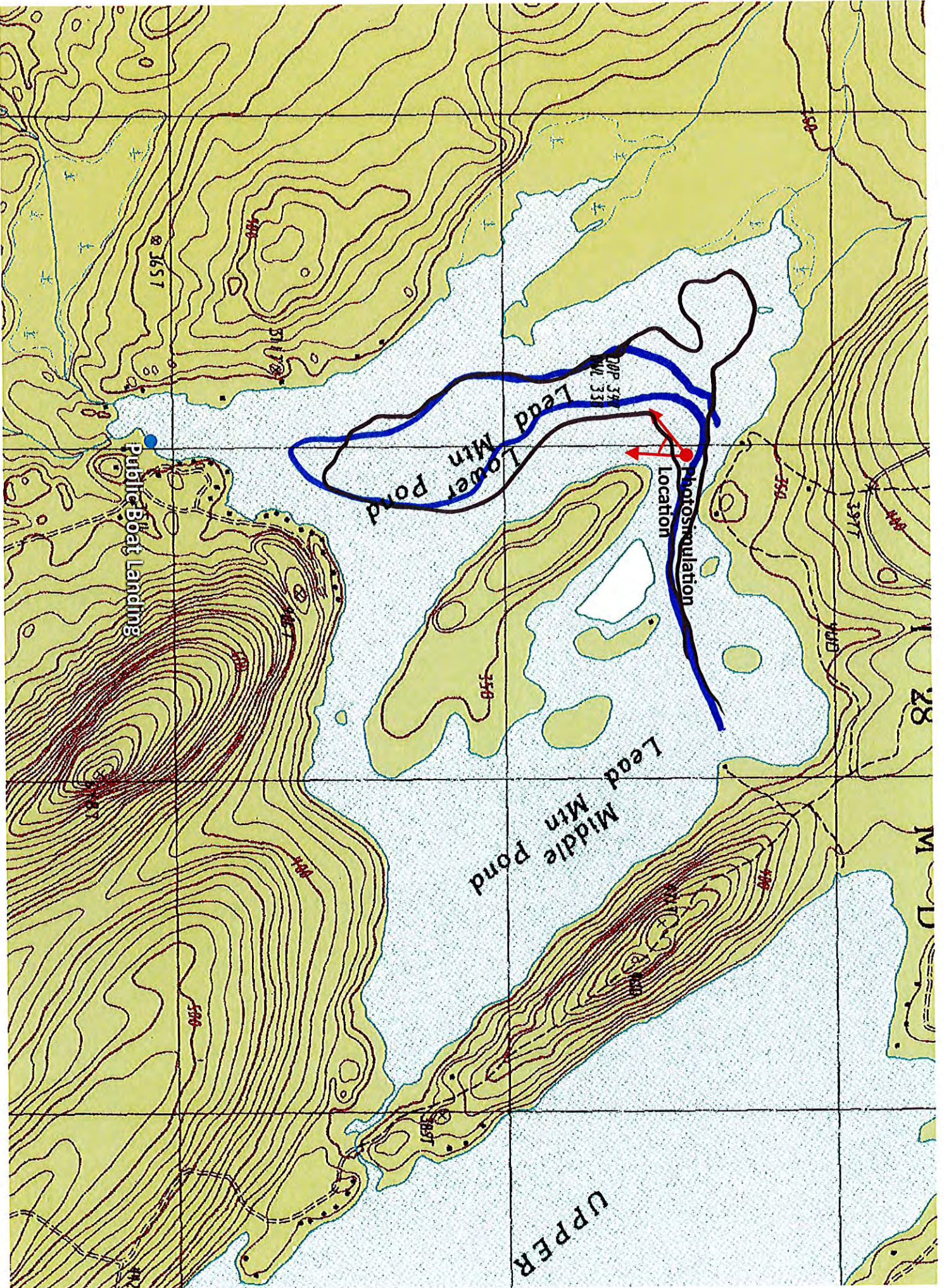
AD 7



Please indicate on this map where you typically go when recreating on the pond.

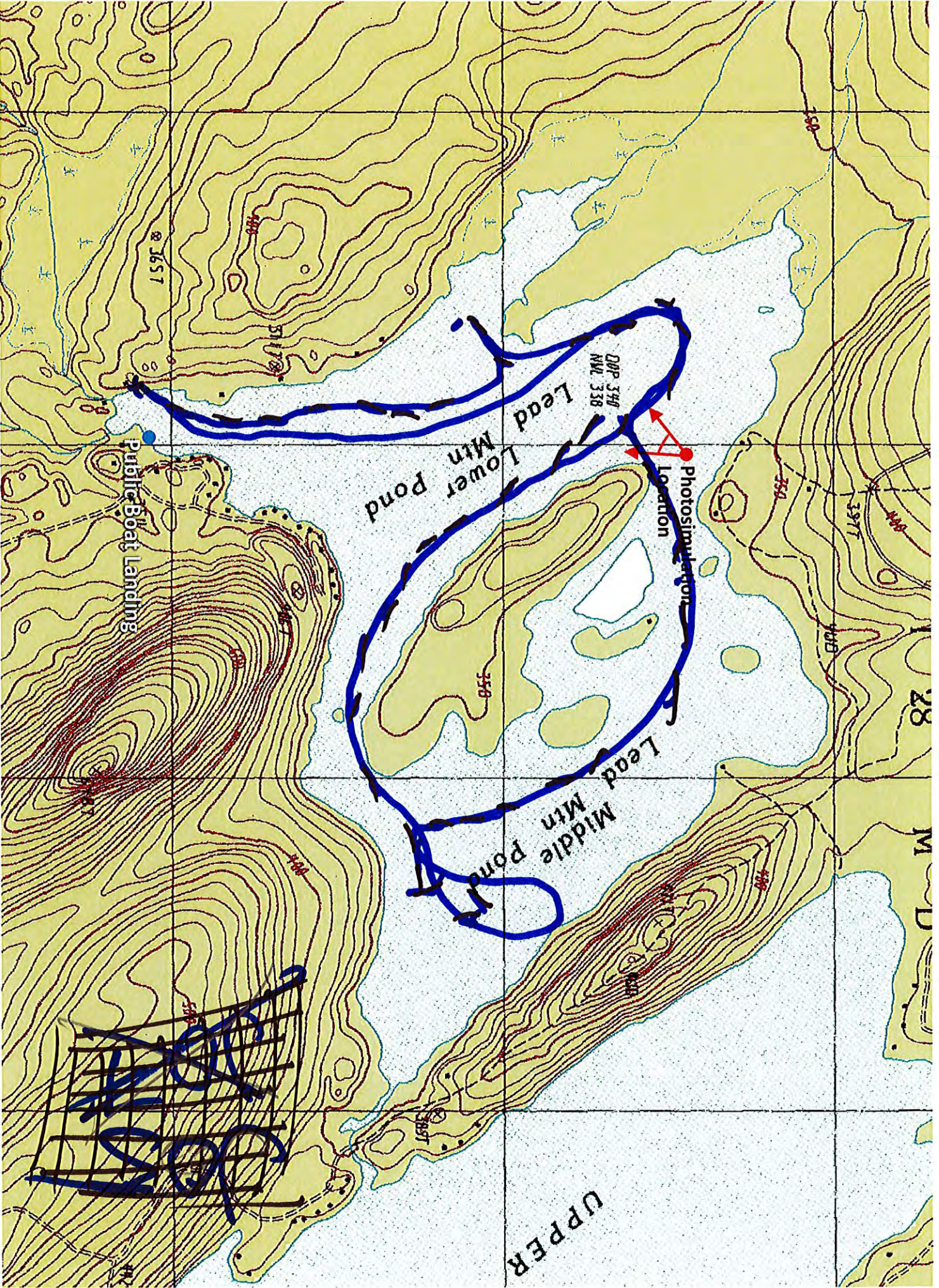
A08

All over



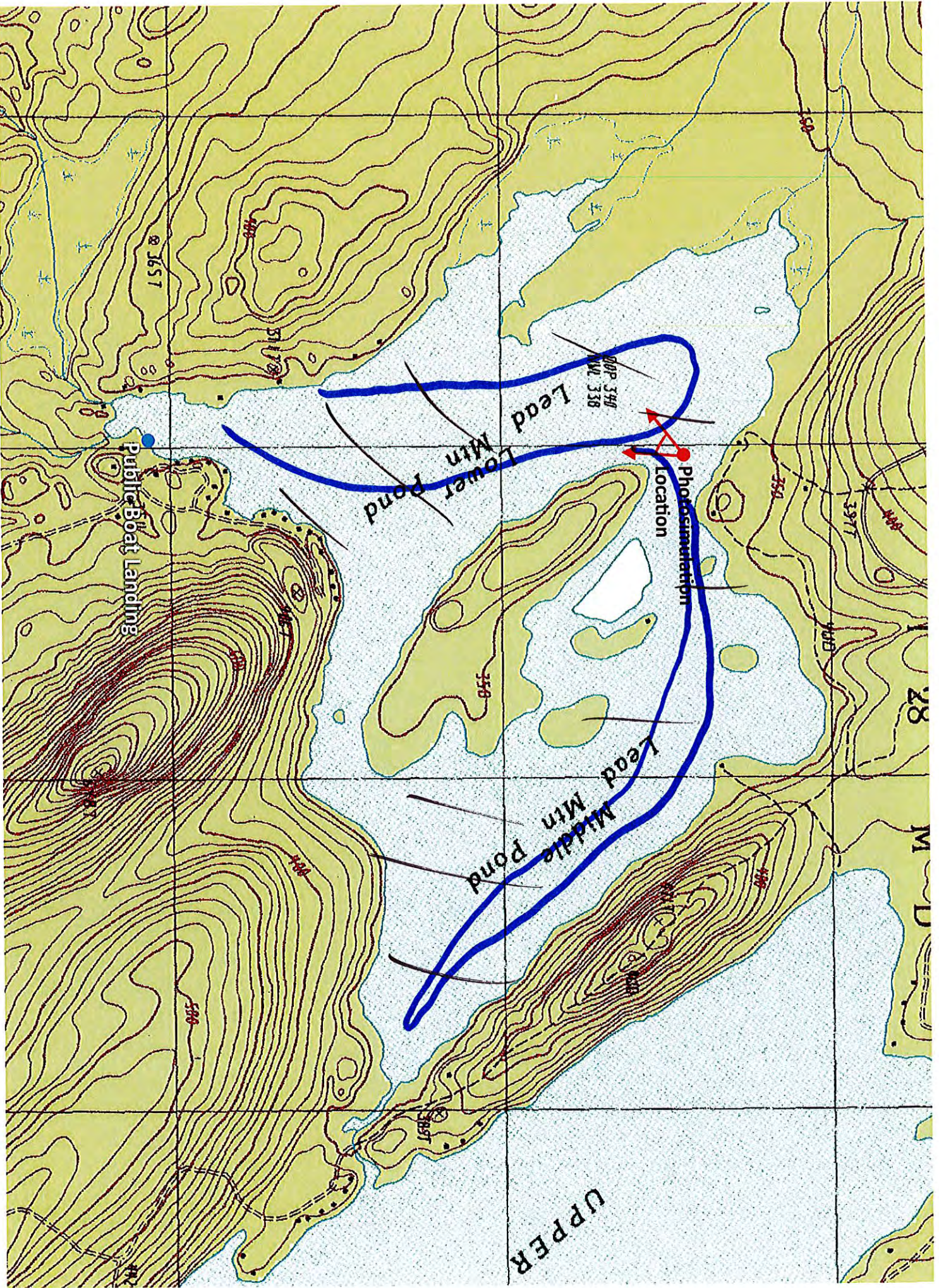
Please indicate on this map where you typically go when recreating on the pond.

AW



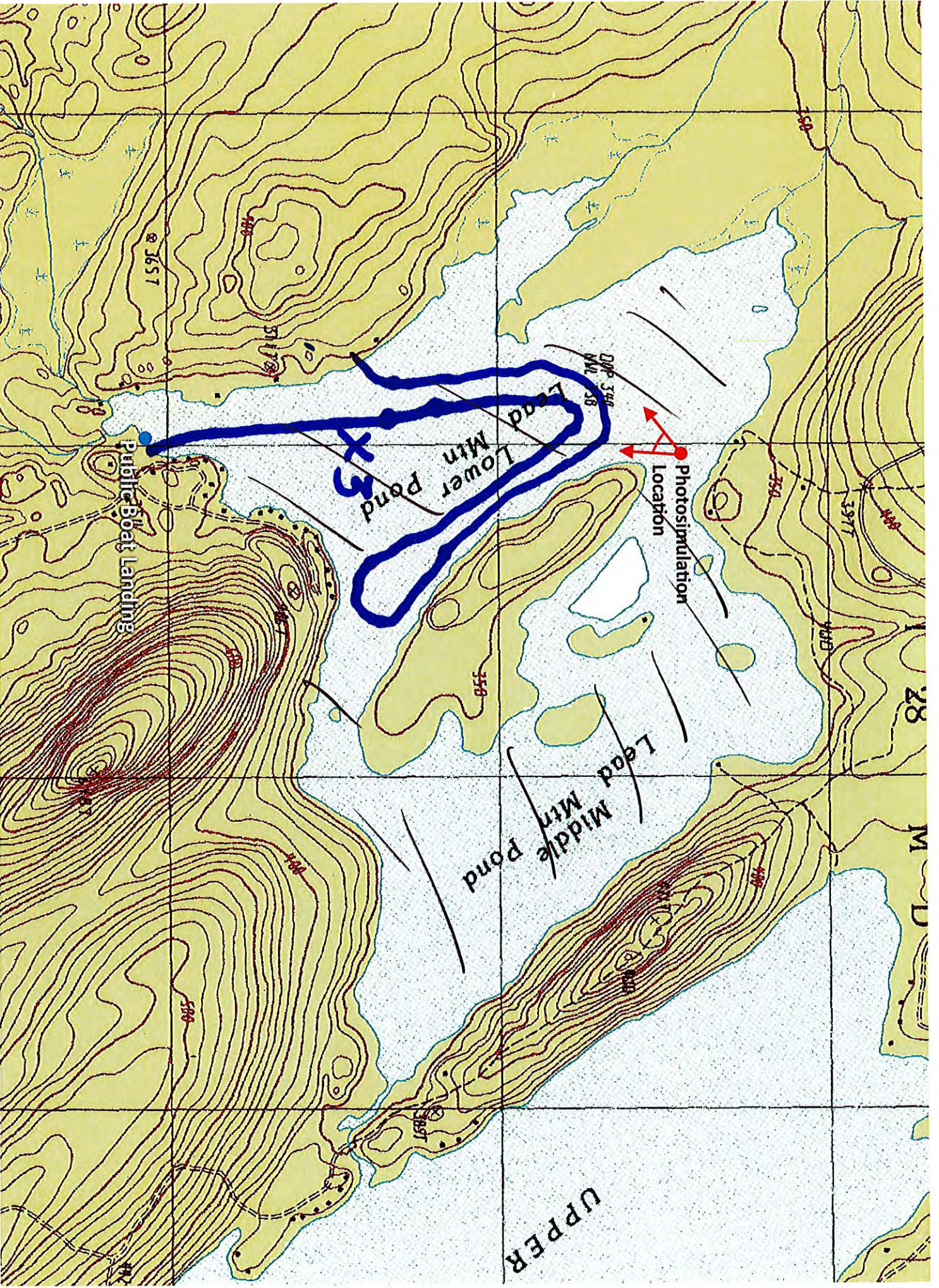
Please indicate on this map where you typically go when recreating on the pond.

J03



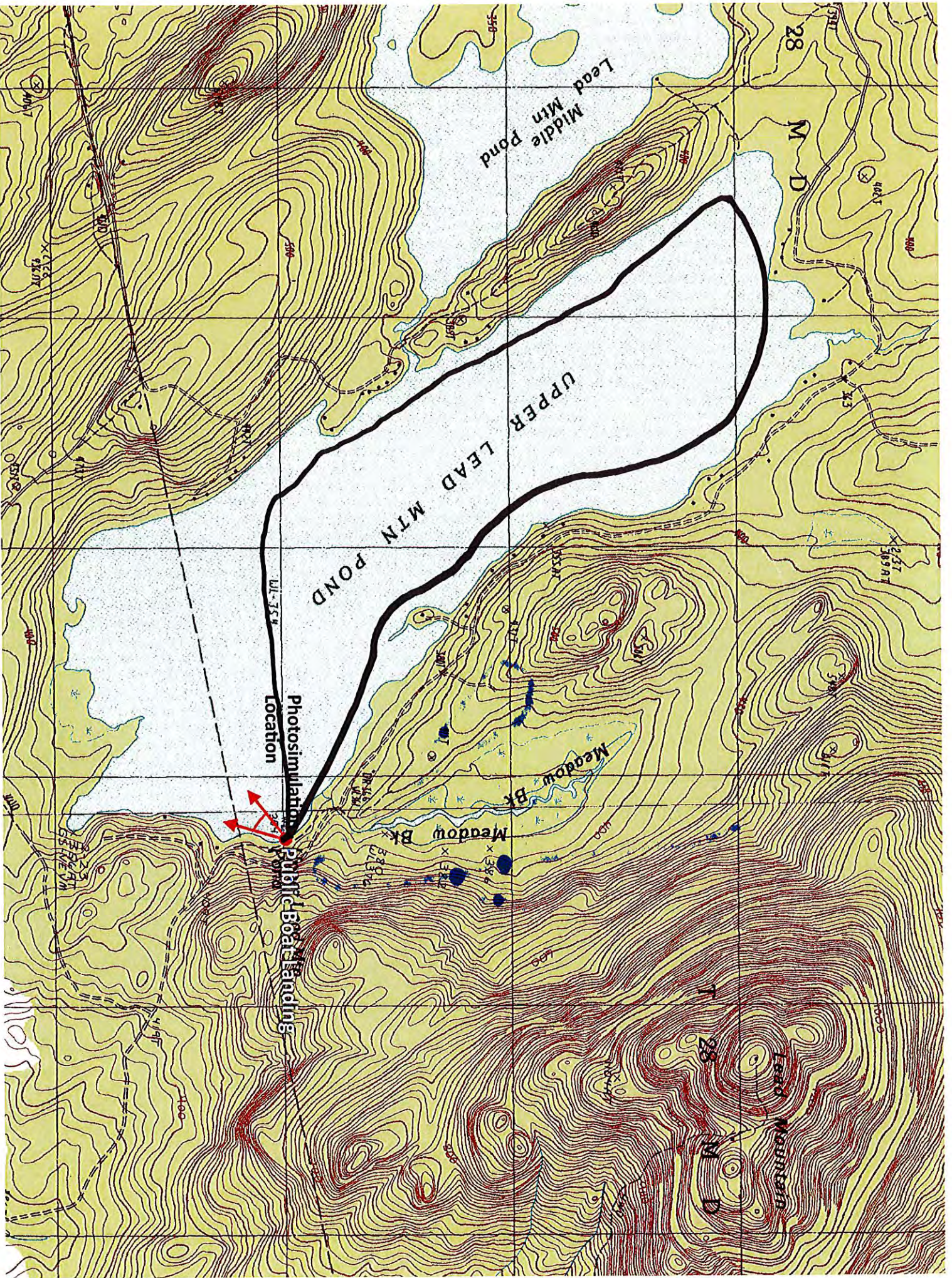
Please indicate on this map where you typically go when recreating on the pond.

504 All over



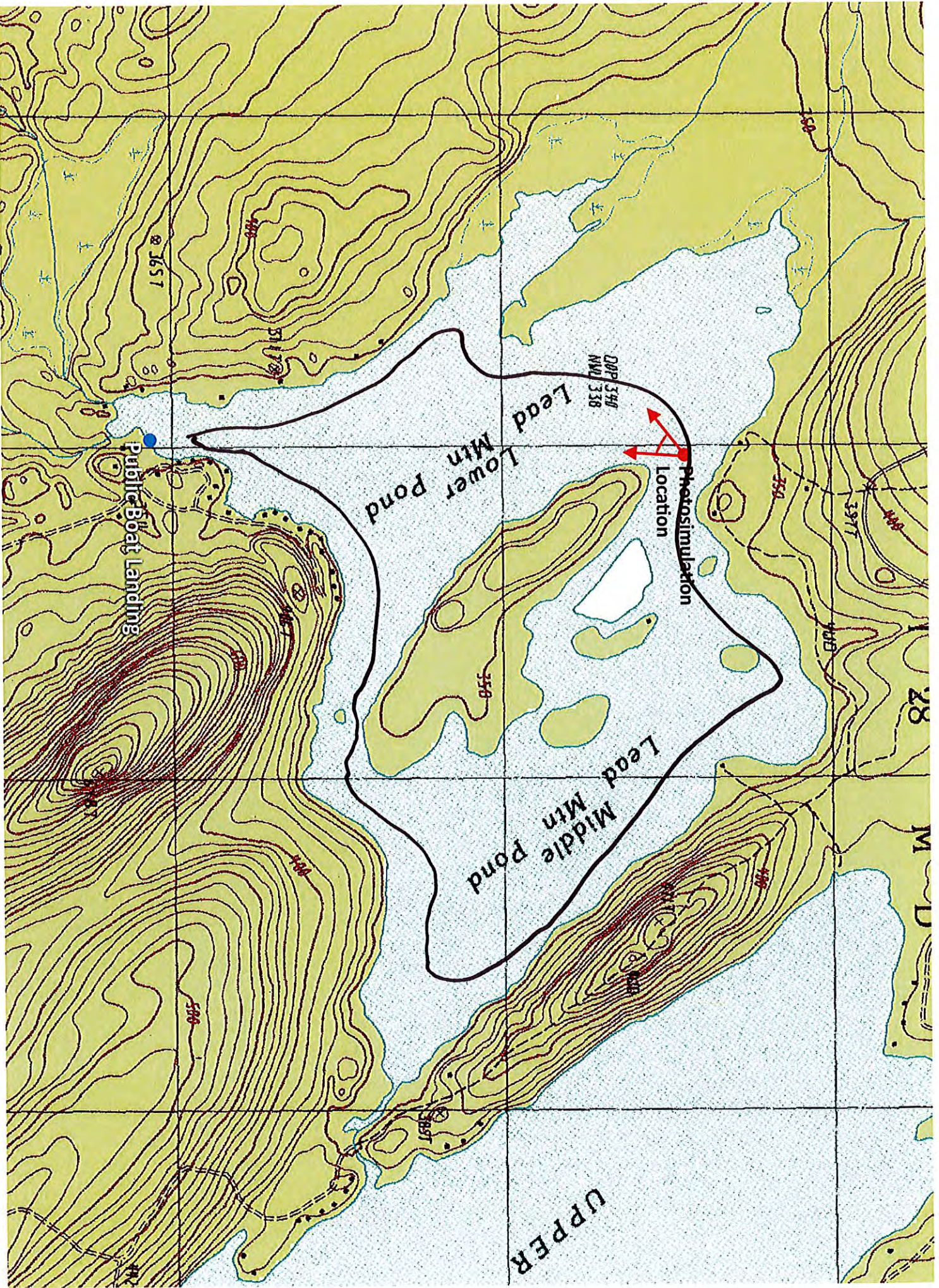
Please indicate on this map where you typically go when recreating on the pond.

505
All over



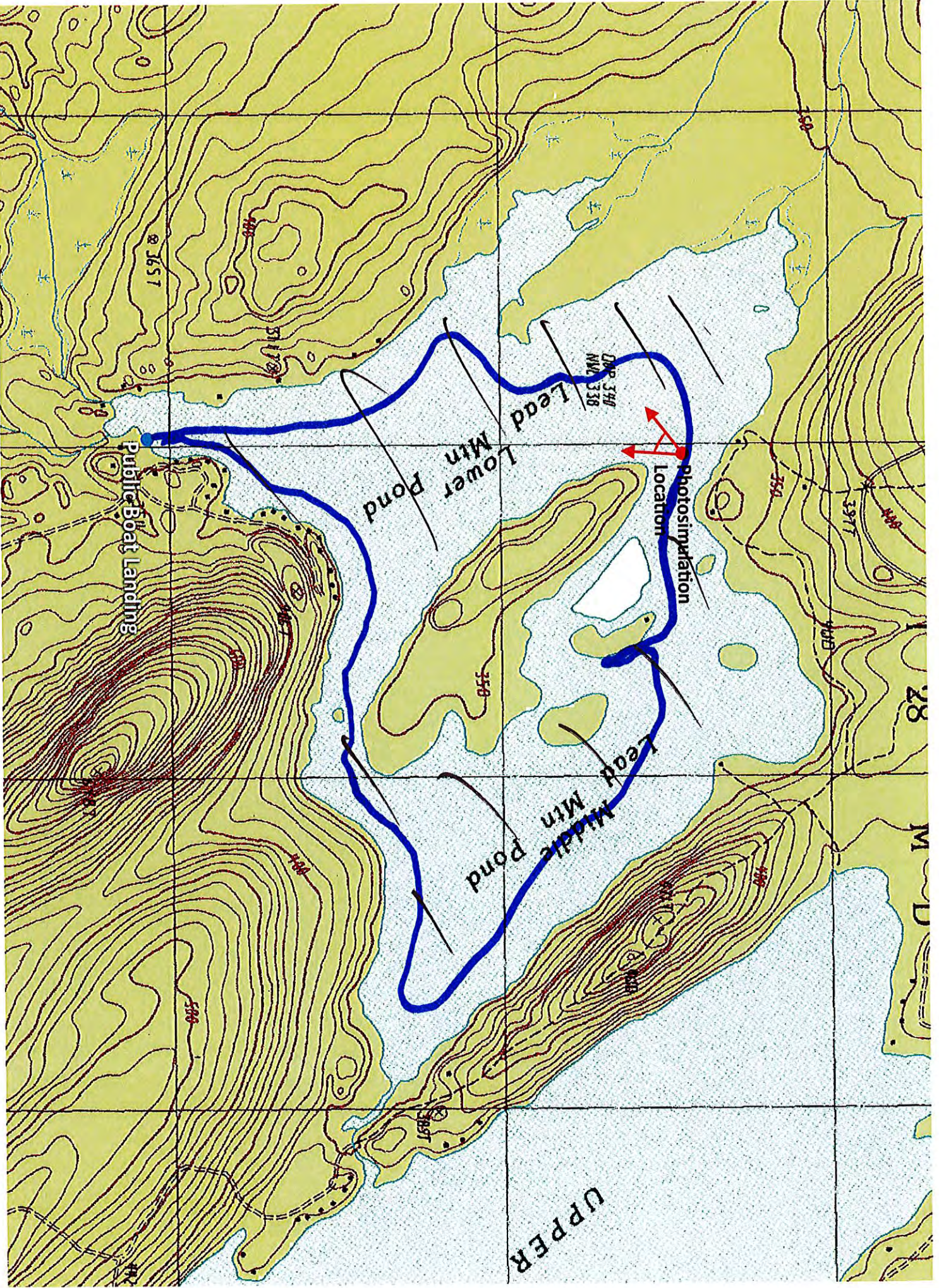
Please indicate on this map where you typically go when recreating on the pond.

105



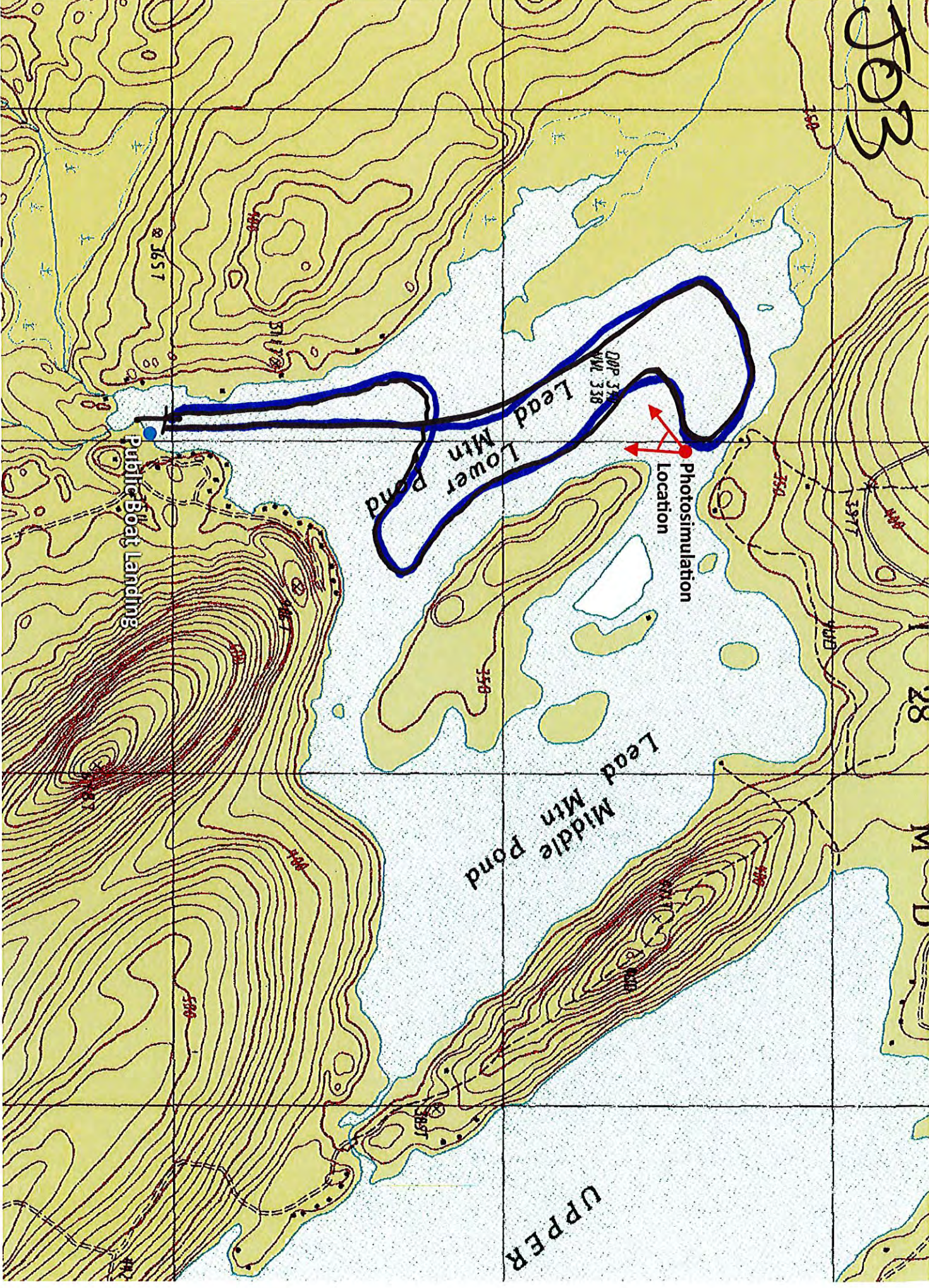
Please indicate on this map where you typically go when recreating on the pond.

306 NAME TODAY



Please indicate on this map where you typically go when recreating on the pond.

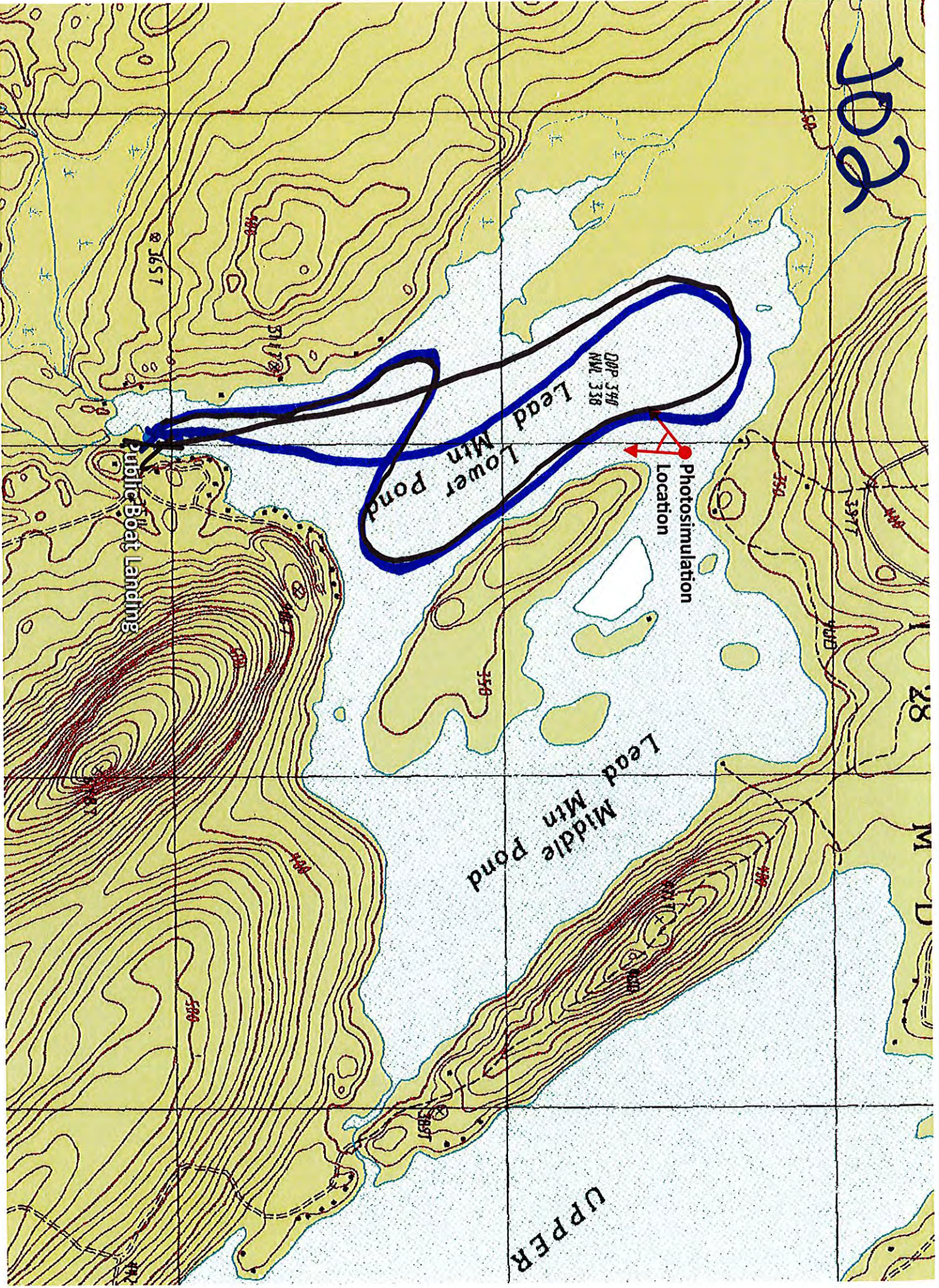
507 All over



Please indicate on this map where you typically go when recreating on the pond.

508

502



DPP 340
NW 338
Lower Mtn Pond

Photosimulation
Location

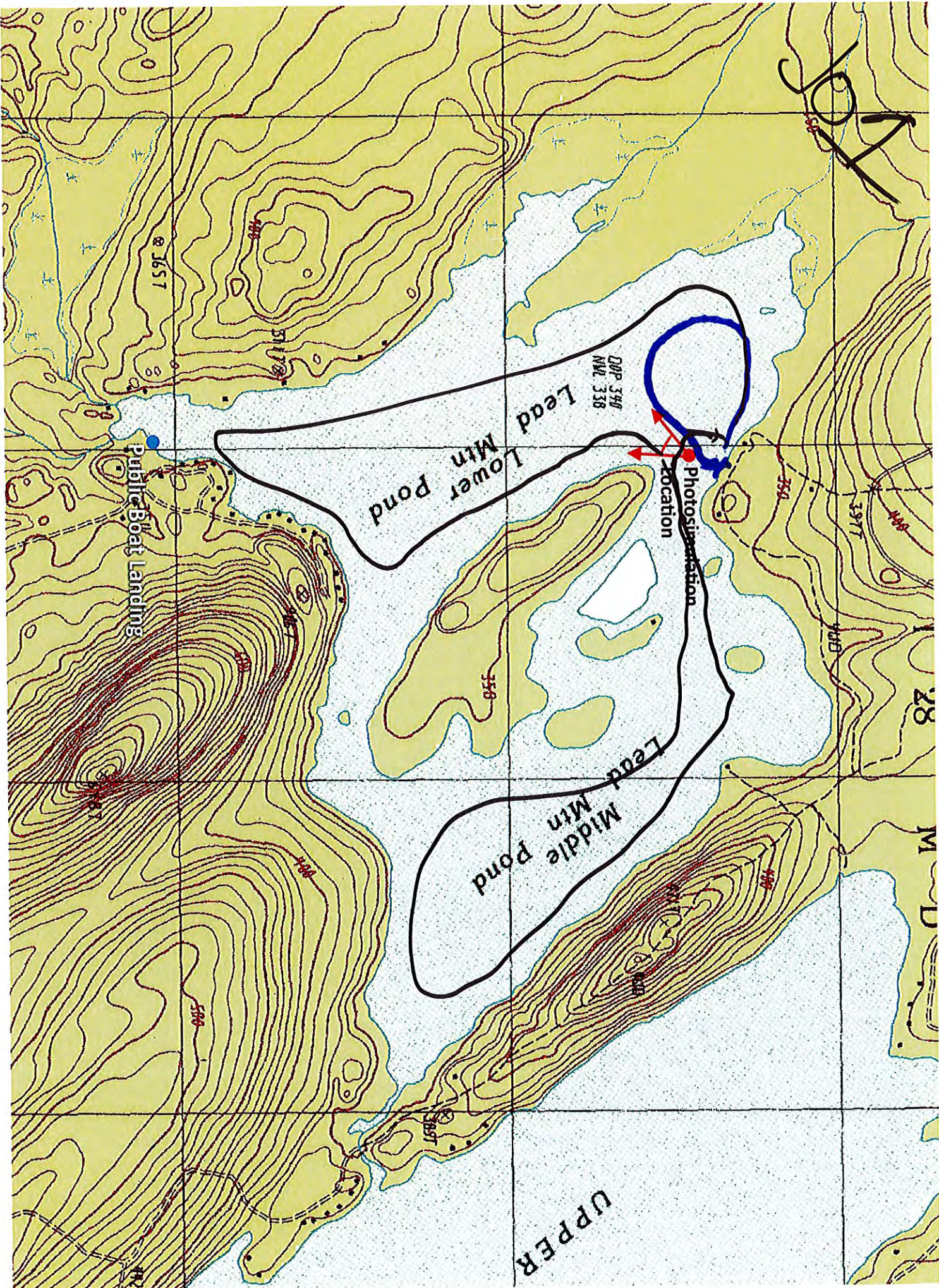
Public Boat Landing

Middle Mtn Pond

UPPER

Please indicate on this map where you typically go when recreating on the pond.

509



Please indicate on this map where you typically go when recreating on the pond.

510



LLMP PROPOSED



LLMP PROPOSED



LLMP EXISTING

LLMP EXISTING



