Section 30. VISUAL QUALITY AND SCENIC CHARACTER

30.1. VISUAL IMPACT ASSESSMENT

Terrence J. DeWan & Associates (TJD&A) Landscape Architects & Planners 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 (3) to examine each SRSNS in terms of context, significance, existing public use, viewer expectations, project impact, and the potential effect on public use.

The Project includes 33 turbine locations (3 of which are spares) and the VIA assumes that 33 turbines are operating. The project will be visible from one SRSNS: Mopang Lake, a great pond, classified as a SRSNS under WEA §3451.9(D) as well as one property on the National Register of Historic Places: Gallison Memorial Library, a historic resource classified as a SRSNS under WEA §3451.9(B). Overall scenic impacts on Mopang Lake and the Gallison Memorial Library range from low to none. The upper portion of the blades from one turbine may be visible at a distance of 7.7 miles from Mopang Lake, a medium-value SRSNS. The Gallison Memorial Library in Harrington is 3.9 miles from the nearest turbine and there is potential for filtered visibility of blade tips from one turbine.

The associated facilities for the Project (i.e., the access roads, the underground electrical collection system, O&M facility, and met towers) will have no impact on views from SRSNS. The associated facilities will not be of a location, character, or size to cause an unreasonable adverse visual effect on the scenic values and existing uses of SRSNS within the study area.

A cumulative impact analysis was also conducted for the Downeast Wind Project. There are three existing wind power projects with overlapping 8-mile study areas with the Downeast Wind Project: Weaver Wind, Bull Hill Wind, and Hancock Wind. This cumulative impact analysis found that there were no SRSNS located in the area of cumulative visual impacts.

Overall Scenic Impacts on SRSNS range from low to none. The 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.

The Great Heath is not a statutorily defined SRSNS. Additionally, as set forth in Appendix J of Exhibit 30-1, the Project analyzed whether the Great Heath might be considered a SRSNS pursuant to 35-A MRS Section 3451.9.A on the basis that it is an area with comparable outstanding natural and culture features to national natural landmarks or wilderness areas. For the reasons set forth in Appendix J, the Project does not believe the Great Heath qualifies as a SRSNS on that basis. The DEP has not made a final determination on this issue and requested that it be analyzed in the VIA. The Great Heath, however, is inaccessible during the winter, so the Project will conduct additional fieldwork when the season allows and supplement the VIA report with the findings and results of that additional work.

30.2. RADAR-ASSISTED MITIGATION TECHNOLOGY

The FAA requires nighttime lighting on a certain number of turbines and met towers exceeding 200 feet to notify aircraft of the presence of the structures. If approved by the FAA, the project will use a radar-assisted lighting system to minimize the effects of nighttime safety lighting. This type of lighting will allow the turbine lights to remain off at all times unless there is an aircraft in the vicinity of the site.

In compliance with FAA safety requirements, turbines will be equipped with standard nighttime lighting in the event the FAA does not approve radar-assisted lighting for this project, and as a contingency in the case of malfunction or inoperability due to maintenance and repair.

EXHIBIT 30-1: VISUAL IMPACT ASSESSMENT

Visual Impact Assessment

DOWNEAST WIND PROJECT

Washington County, Maine

Prepared by
TJD&A Landscape Architects & Planners
Yarmouth, Maine

MARCH 2021

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APPENDICES

1. EXECUTIVE SUMMARY

1.1 Project Overview

Downeast Wind, LLC (Applicant) is proposing to construct and operate the Downeast Wind Project (Project), an approximately 126-megawatt (MW) grid-scale wind energy facility located in the town of Columbia and in the unorganized territories of T18 MD BPP and T24 MD BPP in Washington County.

This Project will support the goal of the Maine Wind Energy Act (WEA) for renewable energy in Maine, and deliver the clean energy generated from the facility to the New England Independent System Operator (ISO-NE) electric market. The Project is located in an area identified as appropriate for grid-scale wind energy development (i.e., an expedited permitting area) as defined under 35-A M.R.S., §3451[1] and is sited to maximize energy production while minimizing impacts to ecological and environmental resources.

The facility consists of 30 Vestas V150 4.2 MW wind turbines capable of generating 126 MW of electricity. Seven (7) turbines are located in the town of Columbia along the northern edges of the blueberry barrens and to the north of Baseline Road. Six (6) turbines are sited in the Thousand Hills area of T18 MD BPP. Seven (7) positions, including one spare, are arrayed in the northern portion of T18 MD BPP around Crebo Flat and Hawk Hill Rd. Thirteen (13) positions, including two spare locations, are sited in T24 MD BPP. Turbines are planned to be mounted on 125-meter (410 feet) towers with a rotor diameter of 150 meters (492 feet) meters for a total height with the blades fully extended of 200 meters (656 feet).

Project facilities will also include the following structures and equipment: one permanent meteorological (met) tower, two temporary power performance towers, a substation, an Operations and Maintenance building (O&M) located on US Hwy 1 in Columbia, 24 miles of underground electrical collections, access roads, and a temporary laydown area. The Project will initiate improvements to existing access roads and associated culverts and bridges.

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

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

1.2 Summary of Conclusions

The visual impact assessment included extensive fieldwork, computer-based viewshed analysis, scenic resource identification, 3D model analysis, and a photosimulation. An examination of potential visual impacts was completed for 20 SRSNS within an eight-mile radius of the Project.

[1] Available Online: http://legislature.maine.gov/statutes/35-A/title35-Ach34-Asec0.html

This analysis found that the Project will be partially visible from two SRSNS:

- Mopang Lake, a great pond, classified as an SRSNS under WEA §3451.9(D)
- Gallison Memorial Library, an historic resource classified as an SRSNS under WEA §3451.9(B)

Overall Scenic Impacts on these two SRSNS range from low to none. There will be no Project visibility from other SRSNS within the 8-mile study area. The 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 would 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.

An analysis of cumulative visual impacts was also conducted for the Downeast Wind Project. There are three existing wind power projects with overlapping 8-mile study areas with the Downeast Wind Project: Weaver Wind, Bull Hill Wind, and Hancock Wind. The cumulative impact analysis found that there were no SRSNS located in the area of cumulative visual impacts.

2. INTRODUCTION

2.1 Background

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

At the time of this VIA, there are 33 potential turbine sites under consideration for the 30 proposed turbines. For the purposes of this analysis, all 33 sites have been included in the assessment. The study area includes an eight-mile radius around all 33 sites.

The 8-mile study area includes 23 towns, townships, and unorganized territories. The communities are located primarily in Washington County and the western edge of Hancock County. The Project is located in Columbia, T18 MD BPP, and T24 MD BPP. The study area includes all of Beddington, Deblois, and Columbia Falls. In Washington County the study area includes portions of Cherryfield, Steuben, Milbridge, Harrington, Addison, Jonesboro, Centerville TWP, Northfield, Wesley, T25 MD BPP, Day Block TWP, T30 MD BPP, and Devereux TWP. In Hancock County the study area includes portions of T28 MD BPP, T22 MD BPP, T16 MD BPP, and T10 MD BPP.

The entire study area is within the area designated as “expedited for permitting” under the WEA. The eight-mile study is based upon the WEA, which instructs the primary siting authority (Maine Department of Environmental Protection (DEP)) to “consider insignificant the effects of portions of the development's generating facilities located more than 8 miles, measured horizontally, from a scenic resource of state or national significance.” (§ 3452.3.)

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

The following maps are included in Appendix A:

- Map 1: Study Area Context
- Map 2: Project Study Area
- Map 3: Topographic Viewshed for Blades
- Map 4: Surface Data (landcover) Viewshed for Blades
- Map 5: Surface Data (landcover) Viewshed for Nacelles
- Maps 6A & 6B: Cumulative Impact Viewshed
- Map 7: Surface Data (landcover) Viewshed for Meteorological Towers

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

2.2 Field Investigations

Field studies began with an evaluation of the viewshed analysis and field investigations to determine where the maximum number of turbines may be visible from SRSNS. TJD&A personnel collected field data by a variety of means during site visits on May 2 and 9, 2019; September 30, 2019; October 1,

2019; and March 12, 2020. Fieldwork concentrated on evaluating and photographing SRSNS and other components of the visible landscape within eight miles of the turbine area. TJD&A personnel visited the study area by automobile, boat, and on foot. Fieldwork was limited to lands, roads, and waterbodies that are open to the public.

Photographs of the Project area were taken with Nikon D5600 and Nikon D750 cameras. Photographs were set to record at the highest resolution (fine) and set to 35mm (equivalent to a 50mm 'normal' lens in a film camera) for the Nikon D5600 and 50mm for the Nikon D750 (a full-frame 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 C: Study Area Photographs. Photographs were also used in the preparation of the photosimulation of Mopang Lake in Appendix D: Photosimulation from Mopang Lake.

2.3 Viewshed Analysis and Photosimulations

Computer-generated images (i.e., viewshed analysis maps and photosimulations) have been prepared to illustrate the relationship between the scenic resources within the study area and the Downeast Wind Project. Viewshed maps were used to guide fieldwork to areas of potential visibility of the Project from SRSNS. Photosimulations were prepared to illustrate the anticipated changes in view resulting from the Project.

2.3.1 Viewshed Analysis

TJD&A prepared a computer-based viewshed analysis to examine potential visibility of the Project components within the study area. The analysis is a predictive screening tool used to identify areas where Project components may be potentially visible.

The viewshed analysis was conducted using ESRI ArcGIS Pro software. The analysis relied on a Digital Terrain Model (DTM) to represent topography (i.e., bare earth conditions) as well as a Digital Surface Model (DSM) to represent vegetation and structures in the landscape. For most of the 8-mile study area, the DTM and DSM used to represent the landscape were derived from LiDAR point cloud data, which was taken from The National Map produced by the U.S. Geological Survey (USGS)[2]. The point cloud data was processed to create 10-foot square resolution surface raster models. LiDAR data was not available for a portion of the study area east of the Air Force station around Libby Brook. For this area, the DTM was derived from National Elevation Data (NED) available on the USGS National Mapper website and the DSM was derived from Maine landcover data from the Maine Office of GIS Data Catalog.[3]

The geospatial turbine data used in the viewshed analysis were provided by the Applicant. For purposes of the viewshed analysis, a viewer height of 5 feet above the terrain was assigned to represent the eye level of a typical viewer in the landscape. Project components are counted as 'visible' if the computer determines that a single point on the turbine would be seen from eye level (5 feet above ground level) and not blocked by topography, vegetation, or buildings. In addition to telling us whether the project is

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

[3] The land cover data for used for a portion of the study area assume that the maximum 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 that would block views of turbines.

visible, the analysis can also identify how many turbines would be visible from any point (or raster) within the study area.

There are some technological shortcomings to the viewshed analysis. It does not determine the degree of visibility based on distance, weather, or other atmospheric conditions. As an initial screening tool, it is used to determine the geographic extent of Project visibility, identify visually sensitive resources with potential visibility, and select places to conduct field investigations to further our understanding of Project visibility.

Topographic Model Viewshed Analysis. TJD&A prepared a topographic viewshed analysis of the eight-mile study area to determine maximum potential turbine visibility (Map 3: Topographic Viewshed for Blades in Appendix A). This analysis modeled the potential visibility of the blade tips based only on the digital terrain model (DTM). This analysis presents a "worst-case scenario", illustrating potential areas of visibility based on bare-earth conditions, i.e., as if there were no intervening vegetation or structures in the landscape. However, it does provide a baseline understanding of where there is no possible Project visibility due to the screening effects of topography alone.

Surface Model Viewshed Analysis. To gain a more realistic understanding of Project visibility, two additional viewshed analyses were prepared using both the DTM (topography) and DSM (vegetation and structures). This provides a more accurate depiction of potential Project visibility, as it takes into account features in the landscape, such as buildings and forest cover, that would block views of the turbines. Map 4: Surface Data Viewshed for Blades in Appendix A shows where a viewer would see at least the blade tip of turbines within 8 miles. This analysis of blade tip visibility may overstate potential Project visibility, since blades are often difficult to see at distances beyond 3-4 miles. Map 5: Surface Data Viewshed for Nacelles in Appendix A is the most realistic of the viewshed maps in that it shows where a viewer might see the nacelles and blades within 8 miles. As noted below, Map 5 indicates that there will be no nacelles visible from SRSNS within the 8-mile study area.

2.3.2 Photosimulation

Photosimulations (computer-altered photographs) are prepared to illustrate the anticipated changes in views from SRSNS due to a proposed project. Mopang Lake is the only publicly accessible SRSNS with potential Project visibility and therefore was the only location selected for a photosimulation (see Appendix D).[4] The photosimulation of the Project was prepared by 1) creating a three dimensional DTM model base of the study area landscape using National Elevation Data from USGS; 2) creating three dimensional models of the turbines (based on information provided by the Applicant and Vestas) generated in 3D Studio Max and inserting them into the model; 3) inserting data on associated facilities as an AutoCAD file from the Applicant into the model; 4) aligning the computer model of the Project with GPS-located photographs (elevation, latitude, and longitude data) in 3D Studio Max, 5) rendering a simulated perspective of the Project using 3D Studio Max. Appendix E provides a detailed description of the alignment process used to accurately register the photograph with the 3D model.

Post-production editing involved eliminating parts of turbines on the computer model that will be blocked by terrain or trees. If necessary, the image is enhanced in Photoshop to account for time of day, weather conditions, haze, and other environmental factors.

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

[4] Viewshed mapping indicate that blade tips may also be visible from the Gallison Memorial Library at a distance of nearly four miles. However, as noted in Appendix F, intervening vegetation will block views from the library.

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

2.3.3 Study Area Photographs

Representative photographs of the study area are included in Appendix C. The locations of the photographs are indicated on the Project Study Area Map in Appendix A. The photographs were selected to document the field study, give the reviewers additional information on the existing character of the surrounding area (§3452.3.B), and provide context images for the photosimulation location.

3. REGULATORY REQUIREMENTS

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

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

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

3.1 Visual Impact Standard

Expedited Permitting Areas include all of the organized areas of the State and limited locations within Maine Land Use Planning Commission's (LUPC's) jurisdiction. The Project will be located in an organized area of Columbia, and the unorganized territories of T18 MD BPP and T24 MD BPP. These towns and unorganized territories are located within the Expedited Windpower Permitting Area. Additionally, as noted above, all the areas within the 8-mile study area, which includes several other towns and townships, are within the Expedited Windpower Permitting Area.

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

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

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

B. A property listed on the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966, as amended, including, but not limited to, the Rockland Breakwater Light and Fort Knox;
C. A national or state park;
D. A great pond that is:
   (1) One of the 66 great ponds located in the State's organized 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 Agriculture, Conservation and Forestry designates by rule adopted in accordance with section 3457;
G. A scenic turnout on a scenic highway constructed by the Department of Transportation; or
H. Scenic viewpoints located in the coastal area that are ranked as having state or national significance in terms of scenic quality in: (1) One of the scenic inventories prepared for and published by the Executive Department, State Planning Office: "Method for Coastal Scenic Landscape Assessment with Field Results for Kittery to Scarborough and Cape Elizabeth to South Thomaston," Dominie, et al., October 1987; "Scenic Inventory Mainland Sites of Penobscot Bay," DeWan and Associates, et al., August 1990; or "Scenic Inventory: Islesboro, Vinalhaven, North Haven and Associated Offshore Islands," DeWan and Associates, June 1992; or (2) A scenic inventory developed by or prepared for the Executive Department, former State Planning Office, or the Department of Agriculture, Conservation and Forestry.

The two SRSNS with potential Project views are **Mopang Lake**, a great pond classified as an SRSNS under WEA §3451.9(D) and the **Gallison Memorial Library**, a historic resource classified as an SRSNS under WEA §3451.9(B). The visual impact on both resources is described in Section 8.2.

3.3 Regulatory Standard: Associated Facilities

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

4. PROJECT DESCRIPTION

The following section describes the visible components of the generating facilities of the Downeast Wind Project and its associated facilities.[5]

Project facilities include 30 wind turbines with a total capacity of 126 MW, a permanent met tower, a substation and switchyard, an Operations and Maintenance building (O&M), underground electrical collection lines, access roads, two temporary power performance towers, and a temporary construction laydown area. In addition, the Project will initiate improvements to existing access roads and associated culverts and bridges.

4.1 Wind Turbines

The Project will use 30 Vestas V150 4.2 MW turbines mounted on 125-meter (410 feet) towers with a rotor diameter of 150 meters (492 feet), for a total height with the blades fully extended of 200 meters (656 feet). As noted above, there are 33 potential turbine sites under consideration for the 30 proposed turbines. For the purposes of this analysis, all 33 potential sites have been included in this assessment.

The base elevation of the turbines ranges from approximately 79 to 164 feet in elevation, which is relatively similar to the topography of the surrounding landscape. A map of the proposed turbine locations is provided in Appendix A.

The siting of individual turbines has taken into account the wind resource, site-specific topography, access road locations, proximity to wetlands, wildlife habitat, public input and preference, existing agricultural operations and infrastructure, and other site conditions.

The turbine components (base, nacelle, and blades) will be painted 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.

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

4.2 Project Lighting

Project lighting for the turbines and met tower will follow the Federal Aviation Administration (FAA) requirements for aviation safety (Advisory Circular 70/7460-1L, effective September 6, 2018). To meet these standards, the turbines will be equipped with flashing red lights at the nacelles. The Project will seek FAA approval to operate a radar-assisted lighting system. The radar-assisted lighting system will minimize impact upon the night sky by allowing lights to remain off at all times unless an aircraft is operating in the vicinity of the Project site or during periods of maintenance or repair.

[5] 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”.

4.3 Meteorological Towers

The Project will include one permanent meteorological (met) tower and two temporary power performance towers, each with a height of 197 feet (60 meters). The towers will replace the six temporary meteorological towers installed on the Project site. The towers will be guyed lattice construction with a triangular cross section approximately 18 inches across.

4.4 Access Roads

The main access roads into the Project site originate from Rte. 193 on the west and from Rt. 1 on the south. They were created by the blueberry producers and forest products companies that own the property and will be upgraded and maintained as required by the Project. Road improvements and maintenance may include permanent stormwater controls and ditching, as necessary. Approximately two (2) miles of new access roads will be constructed and maintained.

4.5 Collection System

Electricity generated by the Project will be collected and transmitted through underground collection lines. There will be approximately 24 miles of underground collections maintained in corridors ranging between 50 and 95 feet in width. The Project requires no new transmission lines because the interconnection facilities will be located on the Epping to Deblois Line 52 of the Emera Downeast Loop.

4.6 Substation and Switchyard

The Project substation will be located in Columbia on the north side of the existing transmission corridor, approximately 340 feet from the nearest access road. The substation will be approximately 152 feet x 275 feet and enclosed by a chain link fence. The substation will contain one H-frame structure, 45 feet in height topped by an 18-foot lighting mast. The majority of the electrical infrastructure in the substation will be 17 - 25 feet in height. The switchyard will be north of the substation in a fenced area of 175 feet x 360 feet.

4.7 Operations and Maintenance Building

The O&M building will be located at 191 US Route 1 in Columbia, at the site of a former restaurant (*The Navigator)*. Images of this site are provided in P68 in Appendix C. The building will be a single story with a shed roof sloping toward the highway. The building will have vertical metal siding, metal roof panels, soffit panels and canopies. A gravel driveway and landscaped parking area will provide access to the building.

Land use in the immediate vicinity is primarily low density commercial with occasional residential. Nearby uses include a self-storage facility, a carpentry shop, an ambulance service, a U-Haul dealer, a used-car dealer, and a single-family home. The commercial developments will have views of the building. The home will be screened by approximately 300 feet of woodland vegetation.

4.8 Temporary Construction Laydown Area

The temporary laydown area to be used during Project construction is a portion of the 112-acre site located in T18 MD BPP that is the former site of the Over-The-Horizon backscatter radar system at the Columbia Falls Air Force Station. This area is already largely cleared, graveled and surrounded by an existing access road that ties into Bombing Range Road. The surrounding landscape is primarily blueberry barrens and forest land.

5. PROJECT STUDY AREA

5.1 Site Context

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

5.1.1 Landforms

The Project study area includes portions of both the East Coastal biophysical region of Maine and the Eastern Interior biophysical region.[6] The East Coastal region is characterized by low ridges, surrounded by poorly drained, relatively flat terrain. Elevations are generally less than 100' above mean sea level with the exceptions of the mountains of Mount Desert Island and the Tunk Lake area, which rise to elevations of 1000' or more. The topography in the Eastern Interior region is gently rolling with elevations averaging between 200' and 400'. The elevated peaks are located on the north side of the study area and include Tug Mountain (el. 717), Peaked Mountain (el. 938), Pleasant Mountain (el. 1,374), and Spruce Mountain (el. 1,055).

5.1.2 Water Resources

Lakes and Ponds. There are several dozen lakes and ponds of varying sizes within the study area. Two are considered SRSNS: Mopang Lake (1700 acres) and Upper Cranberry Lake (134 acres), which are rated for scenic quality in the Maine Wildlands Lake Assessment. Some of the other larger waterbodies include Pleasant River Lake (895 acres), Schoodic Lake (406 acres), Beddington Lake (404 acres), Spruce Mountain Lake (448 acres), Southwest Pond (138 acres), Montegail Pond (170 acres), and Peaked Mountain Pond (227 acres). Mopang Lake is the largest waterbody in the study area and the only rated waterbody with a potential view of the Project.

In addition to the lakes and ponds, the study area is characterized by a number of bogs, heaths (or raised bogs), and flowages, many of which have open water. At 7,000 acres, the Great Heath in Columbia and T18 MD BPP is the largest heath in Maine. Most of the heath (5,681 acres) is part of the Great Heath Public Reserve Land.

Rivers and Streams. The study area is drained by an extensive series of rivers, streams, and flowages, generally running north to south. The Machias River and Schoodic Brook are the only rivers and streams identified by the Maine Rivers Study as having unique/significant scenic resource values within the study area.

Approximately 15 miles of the Machias River runs across the northeastern portion of the study area. The Machias River is rated as an 'A' river in the Maine Rivers Study, which means that the river and its related corridor possess a composite natural and recreational resource value with greater than average state significance. The Machias river is surrounded by a 1,000-foot conserved corridor along 121 miles of the river, several key tributaries, and two of its headwater lakes. The conserved corridor helps to preserve the river's recreational values, salmon habitat and 11 rare plants, animals and natural communities while ensuring that the surrounding working forest remains productive. The conservation easements are owned and managed by the Maine Atlantic Salmon Commission and the Department of

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

Conservation.[7] The Maine Rivers Study also notes that five of its resource values – including scenic – are considered to be some of the state's most significant, and the resources may be of greater than statewide or national significance. The Project will not be visible from either the Machias River or the conserved corridor.

The Narraguagus River, on the west side of the study area, is rated as an 'A' river in the Maine Rivers Study for its natural and recreational resource values of greater than state significance. Scenic quality is not one of the resources that the Narraguagus is noted for, and therefore it is not considered an SRSNS.

Schoodic Brook is a tributary of the Narraguagus River, running five miles west from Schoodic Lake to the Narraguagus, crossing Route 193 in Cherryfield. Schoodic Brook is rated for scenic resources in the Maine Rivers Study; however, it is not included in Appendix G of the Maine Rivers Study, and therefore it is not considered an SRSNS.

Pleasant River flows 46 miles from Pleasant River Lake, at the northern end of the study area, south to Pleasant Bay in Addison. It is rated as an 'A' river in the Maine Rivers Study for six resource values; however, it is not rated as 'scenic', therefore it is not an SRSNS.

Likewise, Mopang Stream, a tributary of the Machias River, flowing 14 miles from Mopang Lake to the Machias River, is rated as an 'A' river for three resource values. However, it is not rated as 'scenic', and therefore is not considered an SRSNS.

Atlantic Ocean. The Atlantic Ocean reaches the southern end of the study area in the form of four tidal embayments located in Harrington and Addison: Back Bay, Flat Bay, Lily Cove, and Dyer Cove.

5.1.3 Vegetative Patterns

Vegetation in the study area is characterized by forest land and extensive blueberry barrens. The forest growth in the area includes second growth forest land, with evidence of active logging in the northeastern portion of the study area. The blueberry barrens are commercial agricultural lands with a monoculture of low-bush blueberry. Large boulders populate the landscape and evergreen windrows create linear patterns through the blueberry fields (see P29 and P41 in Appendix C). Centrally located in the study area is the Great Heath, a significant ecological feature noteworthy for its variety of peatland types. It encompasses an unpatterned stream drainage fen, an unpatterned open basin fen, and a level bog. It is the largest peatland in the Downeast region and one of the largest multiple-unit peatlands in all of Maine. Access to the heath is limited, with no trails or public access infrastructure within the Great Heath (see P35 in Appendix C).

5.1.4 Cultural Characteristics

Population Centers. Population in the study area is concentrated along the coastline in the towns of Cherryfield (pop. 1,232), Columbia (pop. 486), Columbia Falls (pop. 560), Milbridge (pop. 1,353), Harrington (pop. 1,004), and Addison (pop. 1,266)[8]. The central and northern portions of the study area are defined by scattered rural development and blueberry barrens. Seasonal residential communities are located along the shorelines of many of the larger waterbodies. Housing for seasonal farmworkers is

[7] Information on the Machias River Project accessed from https://www.nrcm.org/explore-maine-map/machias-river-project

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

located within the blueberry barrens.

Historic Resources. There are 17 historic structures on the National Register of Historic Places located on Route 1 / the Blackwoods Scenic Byway. Most of these structures are located in Cherryfield and Columbia Falls. None of the historic structures will have Project visibility.

Recreation. Snowmobiling and ATV riding are important recreational activities in the area. The Maine Snowmobile Association's Interconnected Trail System 81 (ITS 81) runs north-south through the study area from north of Route 9 to Route 1. A portion of ITS 81 will have views of the Project in the area north of Schoodic Brook (see P29 in Appendix C).

The Downeast Sunrise Trail, designed for both motorized and non-motorized recreation, runs east-west on the north side of Route 1. There will be no Project visibility from the Sunrise Trail, which is not an SRSNS since it is not used exclusively for pedestrian use.

The 2003 Columbia Comprehensive Plan contains this description of the town's recreation and open space resources: "The vast natural resources of Columbia and the surrounding region provide numerous recreational opportunities for residents and visitors alike. The town, however, has few municipal recreational facilities. Our open space includes fields, farms, barrens, heaths, forestlands, wetlands, lakeshores, and river corridors, as described in the natural resources section of this plan. Although much open space is not officially accessible to the public, Columbia (as with the rest of Maine) has a tradition of informal public access to vast amounts of private land."[9]

The 2019 draft of the Cherryfield Comprehensive Plan Update contains this description of its recreation resources: "Via the Narraguagus River, Cherryfield is linked to a vast inter- connected system of pristine streams and lakes, and, ultimately, to the Atlantic Ocean. Cherryfield is a gateway community to exceptional recreation opportunities, including hunting, fishing, paddling and boating, hiking, swimming, wildlife watching, snowmobiling and ATV riding, cross-country skiing, bicycling, and snowshoeing."[10]

Scenic Byways. Two MDOT-designated Scenic Byways pass through the study area: the Blackwoods Scenic Byway and the Bold Coast Scenic Byway. Visitors to the region utilize these byways to access and explore the Downeast coastal areas. There are no designated scenic turnouts on either byway.

Ownership Patterns. There are a number of large landowners, government organizations, and non-government organizations that own and manage land within the study area. The Bureau of Parks & Lands owns and manages the Great Heath, Pleasant River Lake, and Donnel Pond. Inland Fisheries and Wildlife owns and manages the Narraguagus WMA, Bog Brook WMA, and the Mill River Point WMA. The Nature Conservancy manages the Spring River Matrix. The study area also includes Passamaquoddy Indian Territory.

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 on the USDA Forest Service visual analysis criteria for forested landscapes and addresses the amount of

[9] Town of Columbia, Maine. Comprehensive Plan September 2003. http://www.wccog.net/assets/files/columbia-comp-plan/G-Recreation-Columbia.pdf Accessed March 5, 2021.
[10] Town of Cherryfield, Maine. Comprehensive Plan Update. 2019. http://wccog.net/cherryfield.htm Accessed March 5, 2021.

detail that an observer can differentiate at varying distances.[11] The evaluation of foreground, midground, and background, as defined below, provides a useful framework for evaluating the significance of wind turbines and their related facilities in the larger landscape. While the size of contemporary wind turbines may require a different understanding of how wind power components relate to the surrounding landscape, the distance zone concept remains a helpful reference tool in such evaluations. The distance zones used for the Downeast Wind 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), the met towers, and other infrastructure components of the Project will be readily apparent. There are no SRSNS within one-half mile of any turbine. Within this distance zone, turbines will be visible from local roads, the Pleasant River, and the Great Heath, none of which are SRSNS.

- **Midground**: 1/2 mile to 3-5 miles from the observer. The midground is a critical part of the natural landscape. The WEA presumes that a visual impact assessment will be required to evaluate potential scenic impacts to scenic resources within three miles. Within this zone the details found in the landscape become subordinate to the whole: individual trees lose their identities and become forests; buildings are seen as simple geometric forms; roads and rivers become lines. Edges define patterns on the ground and hillsides. Development patterns are readily apparent, especially where there is noticeable contrast in scale, form, texture, or line. Colors of structures become somewhat muted and the details become subordinate to the whole. This effect is intensified in hazy weather conditions, which tend to mute colors and de-sharpen outlines even further. In panoramic views, the midground landscape is the most important element in determining visual impact. There are two SRSNS located within the midground distance zone: Columbia Union Church in Columbia (2.5 miles from the nearest turbine) and the Gallison Memorial Library in Harrington (3.9 miles from the nearest turbine).

- **Background**: greater than 3–5 miles.[12] 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. While most structures in typical development proposals cease to be uniquely recognizable at distances greater than 3–5 miles, the color and form of wind turbines are readily distinguishable in the midground and well beyond into the background (up to eight miles from the observer). The majority of SRSNS identified in the study area are located in the background. Mopang Lake is the only SRSNS with visibility of the Project in the background, at 7.7 miles from the nearest turbine.

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

[12] 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.)

6.0 VISUAL IMPACTS ON SCENIC RESOURCES OF STATE OR NATIONAL SIGNIFICANCE

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

As noted above, there are 20 SRSNS within eight miles of the turbines and associated facilities (see complete list of resources in Appendix B. The following section evaluates the potential visual impact on the three resources with potential Project visibility, using the criteria in the WEA and Chapter 382:

- ***Context***. *The existing character of the surrounding area and the context of the proposed activity*. (§ 3452.3.B, 3452.3.D, Chapter 382.3.C, 382.3.E, Chapter 382.3.I).
- ***Significance***. *The significance of the potentially affected scenic resource of state or national significance* (§ 3452.3.A, Chapter 382.3.B, and Chapter 382.3.I).
- ***Public Uses***. *The extent, nature and duration of potentially affected public uses of the scenic resource of state or national significance.* (§ 3452.3.E and Chapter 382.3.B.(3)).
- ***Viewer Expectations***. *The expectations of the typical viewer who would be using or enjoying the scenic resource of state or national significance*. (§ 3452.3.C, Chapter 382.3.D, and Chapter 382.3.I).
- ***Purpose and context.*** *The expedited wind energy development's purpose and context of the proposed activity*. (§ 3452.3.D and Chapter 382.3.E).
- ***Project Impact***. *The scope and scale of the potential effect of views of the Project on the scenic resource of state or national significance, including but not limited to issues related to the number and extent of turbines visible from the scenic resource of state or national significance, the distance from the scenic resource of state or national significance, and the effect of prominent features of the development on the landscape.* (§ 3452.3.F and Chapter 382.3.G).
- ***Potential Effect on Public Use***. *The potential effect of the generating facilities' presence on the 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).
- ***Conclusion****. A determination of whether the development significantly compromises views from a scenic resource of state or national significance such that the development has an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the scenic resource of state or national significance.* (§ 3452.1 and Chapter 382.3.I).

6.2 Scenic Resources of State or National Significance

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

There are no national natural landmarks or federally designated wilderness areas within the study area. The closest national natural landmark to the study area is *Carrying Place Cove Bog*, located approximately 42 miles from the nearest turbine.

The Great Heath is not a statutorily defined SRSNS. Additionally, as set forth in Appendix J, the Project analyzed whether the Great Heath might be considered an SRSNS pursuant to 35-A MRS Section 3451.9.A on the basis that it is an area with comparable outstanding natural and culture features to

national natural landmarks or wilderness areas. For the reasons set forth in Appendix J, we do not believe the Great Heath qualifies as an SRSNS on that basis. The DEP has not made a final determination on this issue and requested that it be analyzed in the VIA. The Great Heath, however, is inaccessible during the winter, so the Project will conduct additional fieldwork when the season allows and supplement this report with the findings and results of that additional work.

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 16 structures and one historic district on the National Register of Historic Places within 8 miles of the wind turbine generators. Of the 16 identified historic structures, 15 are located in close proximity to Route 1 in the communities of Cherryfield, Harrington, Columbia, Columbia Falls, and Addison. The single historic structure located away from the Route 1 corridor is the *Columbia Union Church* in Columbia.

The majority of the historic structures are private, often maintained as private residences. Five of the historic structures have public access:

- *Union Church*, used as a community building in Columbia Falls.
- *Union Evangelical Church*, also known as Church on the Hill, owned by a community organization that is currently seeking to restore the church for non-religious community use.
- *Gallison Memorial Library*, the public library in the Town of Harrington.
- *Cherryfield Academy*, used as a community and event center.
- *Patten Building*, a private building that welcomes the public to access the retail store.

There are two historic structures with potential visibility of the Project: the *Columbia Union Church* in Columbia and the *Gallison Memorial Library* in Harrington. A description of each resource is provided below and the NRHP Nomination Forms are provided in Appendix I.

- **Columbia Union Church** is located approximately 2.8 miles north of Route 1 on the west side of the Pleasant River. This church is currently vacant. This church is located approximately 2.5 miles east of the nearest turbine. The viewshed analysis for both blade tip and nacelle visibility suggests potential visibility from the fields and open areas around the church, but no potential visibility from the church itself (viewshed analysis provided in Appendix A). Based on field investigations and a preliminary photo overlay analysis, the evergreen trees in the immediate vicinity of the church are likely to screen any potential views of the turbines (overlay analysis provided in Appendix G). A photograph of the church and surrounding vegetation is provided in P40 in Appendix C.

- **Gallison Memorial Library** is located on Route 1 in Harrington adjacent to the Post Office. The building serves as the public library and is actively used by members of the public. This historic structure is located 3.9 miles from the nearest turbine. The viewshed analysis of turbine blade tips shows potential visibility from the library (there is no potential visibility of the turbine nacelles). The blade tip viewshed analysis map shows minimal raster data in the area around the resource, which suggests visibility is fragmented and unlikely. A 3D model analysis to evaluate potential Project visibility suggests that blade tip visibility will be very minimal and seen over treetops north of the library. An enlargement of the area around the library and analysis are provided in Appendix F. A photograph of the library is provided in P51 in Appendix C.

The *Cherryfield Historic District* is located in downtown Cherryfield at the intersection of Route 1 and the Narraguagus River, approximately 5.7 miles southwest of the nearest turbine. The district includes substantially intact residential and commercial buildings that depict the nineteenth century development of a riverside community. The district is approximately 75 acres and has 52 contributing and 10 non-contributing structures. Seven of the identified historic structures are also located in the historic district. There is no Project visibility from anywhere within the district due to intervening vegetation and structures.

C. National or State Parks

There are no national or state parks within the study area. The closest State Park to the study area is *Roque Bluffs State Park*, approximately 20 from the nearest turbine. *Acadia National Park* is approximately 27 miles from the nearest turbine.

D. A great pond that is:

(1) One of the 66 great ponds located in the State's organized area identified as having outstanding or significant scenic quality in the "Maine's Finest Lakes" study; or

(2) One of the 280 great ponds in the State's unorganized or deorganized areas designated as outstanding or significant from a scenic perspective in the "Maine Wildlands Lake Assessment."

Two ponds in the study area are rated as significant or outstanding for scenic quality in the Maine Wildlands Lake Assessment; *Upper Cranberry Lake* in T30 BP MDD (Outstanding) and *Mopang Lake* in Devereaux Twp (Significant). There will be partial views of the Project from Mopang Lake at a distance of approximately 7.7 miles from the nearest turbine. There are no Project views from Upper Cranberry Lake. A 3D model visibility analysis for Mopang Lake is provided in Appendix E and photosimulation is provided in Appendix D.

Mopang Lake in Devereaux Twp is 1,487 acres in size with a maximum depth of 76 feet. It is rated as 'Significant' for scenic resources in the Maine Wildlands Lake Assessment. The pond is not rated for any other resources. The pond is surrounded by private property, with the exception of a small conservation area and boat launch located at the southern end of the lake. The conservation area and boat launch are owned by Black Bear Cub Inc. and Penobscot Forest, LLC. Development around the lake is minimal, with a small number of houses located on the northern and southern shorelines. The Maine Inland Fisheries and Wildlife inventory of Mopang Lake (last updated in 1999) notes that "*Mopang Lake is a moderate-sized, clear, scenic water… suitable for coldwater sportfish… the winter fishery is especially popular with anglers.*"[13] The 8-mile study area runs through the center of the lake, eliminating the northern portion of the lake from the study area. Topography and vegetation will screen the Project from the end of the lake, and vegetation will screen the Project from nearly the entire waterbody. According to the viewshed analysis enlargement provided in Appendix E, the only portion of the lake with potential visibility is a small section of the southwestern shoreline, where blade tips of a single turbine may be seen. See the photosimulation in Appendix D. Visibility will be minimal.

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.

[13] Maine Department of Inland Fisheries and Wildlife. Mopang Lake. Surveyed August, 1955, Revised 1975, 1999. https://www.maine.gov/ifw/docs/lake-survey-maps/washington/mopang_lake.pdf Accessed 03.03.2021.

The *Machias River* is the only river listed in Appendix G of the Maine Rivers Study as having unique/significant scenic resource values. As noted above, *Schoodic Brook* is also Rated for Scenic Resources in the Maine Rivers Study, but not included in Appendix G of the Study and is therefore not considered an SRSNS.

The *Machias River* is located east of the Project area, approximately 5.7 miles from the nearest turbine. The Machias River is rated as an "A" River in the Maine Rivers Study for Geologic/Hydrologic, Critical/Ecological, Undeveloped, Scenic, Anadromous Fishery, Inland Fishery Whitewater Boating, & Backcountry Excursion. The Machias River flows 76 miles from Fifth Machias Lake to tidewater in downtown Machias. The river corridor is protected from development to preserve its ecological, recreational, and traditional economic value. *The Machias River Corridor Public Lands and Map & Guide* brochure published by the Maine Bureau of Parks and Lands calls it "*one of Maine's wildest and most cherished* waterways." A total of 60,000 acres has been preserved along the river corridor through state-owned land and conservation easements. This conservation area prevents development and restricts timber cutting in a 1,000-foot corridor on both sides of the river and its major tributaries. The conservation corridor along the riverbanks has helped in the conservation of the wildlife and salmon habitat, maintained scenic quality of the river, and has made the river a popular backcountry canoe route. Included in the conservation effort is guaranteed recreational access in perpetuity.[14] The boating access in closest proximity to the Downeast Wind Project is located at the river's intersection with Route 9.

Views along the Machias River are provided in P21, P22, and P23 in Appendix C. The landcover viewshed analysis represented on Map 4 and Map 5 in Appendix A indicate that there will be no visibility of the Project from the Machias River, due to the riparian vegetation along the river corridor.

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 designated viewpoints on trails used exclusively for pedestrian use within the study area.

The Interconnected Trail System (ITS) 81 and the Downeast Sunrise Trail are multi-use motorized recreational trails located in the Study area, but do not qualify as SRSNS under the WEA. Information about both of these trails is provided in Appendix B.

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

The two scenic byways in the Study Area are the Blackwoods Scenic Byway (Route 182) and the Bold Coast Scenic Byway (Route 1). There are no scenic turnouts on either byway within the study area. Information about each of these byways is provided in the Appendix B.

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

[14] The Machias River Corridor Public Lands and Map & Guide brochure by the Maine Bureau of Parks and Lands https://www.maine.gov/dacf/parksearch/PropertyGuides/PDF_GUIDE/machiasriverguide.pdf

Associates, et al., August 1990; or "Scenic Inventory: Islesboro, Vinalhaven, North Haven and Associated Offshore Islands," DeWan and Associates, June 1992; or (2) A scenic inventory developed by or prepared for the Executive Department, State Planning Office.

There are no coastal scenic viewpoints ranked as having statewide significance or national importance in terms of scenic quality in the coastal area.

Ten coastal scenic viewpoints in the southern portion of the study area have been identified. These are all rated as either local or regional significance, and therefore do not qualify as SRSNS. The Coastal Scenic Viewpoint Forms are provided in Appendix H. Additional information on anticipated impacts to each coastal scenic viewpoint are provided in Appendix B.

7. ASSOCIATED FACILITIES

The associated facilities for the Downeast Wind Project reviewed under the WEA include access roads, substation and switchyard, a permanent meteorological tower, a temporary power performance tower, an operations & maintenance building (O&M), an underground electrical collection system, and a temporary laydown site.

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 will 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 Epping to Deblois Line 52 of the Versant Downeast Loop. This is an existing transmission line and therefore does not require construction of a new generator lead line.

Details on specific associated facilities are provided below.

7.2 Visual Impacts from Associated Facilities

The associated facilities in support of the 30 wind turbines include: a permanent met tower, two temporary power performance towers, a substation, an O&M building, underground electrical collection lines, access roads, and a temporary laydown area. These associated facilities will not be visible from any SRSNS.

7.2.1 Access Roads

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

7.2.2 Electrical Collection System

The electrical collector system will be located underground, thereby minimizing potential visual impact. The new infrastructure used for the electrical collection will not be visible from any SRSNS.

7.2.3 Substation & Switchyard

The Substation and Switchyard are located in woodland, approximately 340 feet from the nearest access road. Neither facility will be visible from any SRSNS. A forested buffer will remain on three sides (north, west, and east) of the substation and switchyard. The fourth side to the south borders the transmission corridor. The forested buffer will reduce overall visibility of the substation from the fields and surrounding area. The substation and switchyard will be visible from the existing transmission corridor and partially visible from existing roads (e.g., Baseline Road) through the adjacent blueberry barrens. The tallest structure in the substation (45 feet in height) will be approximately the same height as the surrounding forest land and would not be visible beyond the immediate foreground.

7.2.4 Operations & Maintenance Building (O&M)

The scale and character of the single-story O&M building is similar to the restaurant that it is replacing and will be compatible with the surrounding commercial land uses. While the O&M is located on the Bold Coast Scenic Byway, it will not be visible from any SRSNS.

7.2.5 Meteorological and Power Performance Towers

These towers will be located within close proximity to the proposed wind turbines; thus, the viewshed mapping for the turbine nacelles is a good indication of maximum potential tower visibility. Based on the location of the towers and viewshed analysis completed for the turbine area, there will be no visibility of the towers from any SRSNS.

7.2.6 Temporary Construction Laydown Area

The temporary laydown area to be used during Project construction is a portion of the 112-acre site located in T18 MD BPP that is the former site of the Over-The-Horizon backscatter radar system at the Columbia Falls Air Force Station. There will be no constructed or permanent infrastructure associated with this site. This area will not be visible from any SRSNS based on its location and the screening provided by the surrounding forested vegetation.

7.3 Conclusion

The associated facilities reviewed under the WEA for the Downeast Wind Project will not be of a location, character, or size to cause an unreasonable adverse visual effect on the scenic character of the study area. The associated facilities will not be visible from any SRSNS.

8. EVALUATION

8.1 Overview

The WEA establishes several criteria to determine whether expedited wind energy 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 resource.

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. The Scenic Resources Chart in Appendix B presents a listing of the SRSNS 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 SRSNS. A summary of these ratings is presented in Table 10.1.

A. Resource Significance: CH. 382:B provides: *When evaluating whether a proposed development would significantly compromise views from an 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.*

Gallison Memorial Library is the only NRHP structure in the study area with possible views of the Project. The NRHP Nomination Form indicates the building is significant because of its contributions to education and architecture. Even though the structure is on the National Register, its resource significance rating is **low**, since no mention is made in the nomination for listing regarding the scenic character of the surrounding landscape or the uses related to the scenic character of the property.

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.*

Mopang Lake is assigned a resource significance rating of **medium** because of its 'Significant' rating. (An 'Outstanding' rating would be rated as High.)

B. Existing Character of Surrounding Area: This criterion evaluates the setting of the resource and its surrounding area. CH. 382: C stipulates: *The existing character of the surrounding area will be taken into*

consideration by the Department when determining whether the proposed development would have an unreasonable adverse effect on scenic character or existing uses related to scenic character of the SRSNS. When evaluating the existing character of the surrounding area, the Department will take into consideration all relevant evidence, including but not limited to the following.

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

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

The setting of **Mopang Lake** is characterized primarily by an undeveloped shoreline and the mixed hardwood and softwood vegetation surrounding the 1,487-acre lake. The lake is bisected by a peninsula at the southern end of the lake, forming two separate coves, visually separating the eastern and western shorelines. There appear to be 7 camps located on the western shoreline of the lake. The camps are set back from the shoreline and set apart from one another, reinforcing the undeveloped character of the lake. The eastern shoreline of the lake is commercial forestland. There is a public boat launch and conservation area at the southern end of the lake. The boat launch is a gravel parking area and beach entry to the waterbody, with no formal boat ramp. The shoreline is characterized by rolling topography along the immediate shoreline. Pleasant Mountain (1,347 ft elevation) is visible from the lake to the southwest. Shoreline vegetation and topography prevents any distant views from the lake. The lake is rated as 'Significant' for scenic resources in the Maine's Finest Lake Study (verses 'Outstanding'); the character of the surrounding area of Mopang Lake is rated as **Medium**.

The **Gallison Memorial Library** is located on Route 1 (Main Street) in the village of Harrington. The library is positioned between the Harrington Post Office and a former church building. Residential homes are the predominant land use in the area around the library. Center Street, a residential street that provides access to several homes, connects to Route 1 just west of the library. This residential neighborhood is located northwest of the library. Immediately north of the library is a forested landscape made up of both soft and hardwood vegetation. There are no other historic structures located in the area around the library, and no other historic structure identified in the town of Harrington. As noted above, the nomination form does not mention its landscape setting as significant in its architectural value. The character of the area surrounding Gallison Memorial Library is rated as **Medium**.

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

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

There are a limited number of viewer groups who will see the Project from the SRSNS and possibly be affected by the change in visual character.

Boaters and anglers on **Mopang Lake** are expected to have a **medium** expectation of scenic quality for an undeveloped lake rated as 'Significant' for scenic resources. The number of boaters and anglers is anticipated to be relatively low due to the lack of camps and modest access amenities.

Visitors and employees at the **Gallison Memorial Library** in Harrington are anticipated to have **low** expectations of scenic qualify, since scenic considerations did not contribute to its listing on the National Register. Views from the area around the library (and likely from within the library) are of residential development and wooded vegetation to the north and the Route 1 corridor to the south. There are no distant views or scenic features that would elevate viewer expectation of the library.

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

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

These criteria were rated as **medium**, based upon the following:

- The Project will make a significant contribution toward achieving the State's energy goals. At 126 MW of installed capacity, it is one of the larger renewable energy projects in the State.
- The Project will be seen in the context of three other wind energy projects: Weaver Wind, a 22-turbine 73 MW project currently under construction, 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. Due to proximity to existing infrastructure, the Project does not require construction of a new generator lead line.
- 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 blueberry barrens and timberland, with an extensive road network for woodland and crop 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.

There are no publicly available records that quantify the number of people who typically use **Mopang Lake**. There is a well-maintained boat launch that is indicative of public use. The pond is surrounded by private property, with the exception of a small conservation area and boat launch located at the southern end of the lake. As noted above in Section 6.2, the Maine Inland Fisheries and Wildlife inventory of Mopang Lake notes that it is suitable for coldwater sportfishing and the winter fishery is especially popular for anglers. Based upon the low evidence of use observed during field observation, information obtained through online research, and the limited number of camps on the lake, the extent, nature, and duration of use at Mopang Lake was rated as **Low**.

The **Gallison Memorial Library** is rated as Low; the building is used by the public but midground views are not expected to be one of the reasons for public use.

E.2. Effect on continued use and enjoyment:

The effect on continued use and enjoyment for anglers and boaters on **Mopang Lake** is expected to be **low/none**. The turbine blade will be seen as a relatively small object on the horizon, just above the tree line in the background distance zone, and only from a very small portion of the lake. None of the turbines will block views of the surrounding low hills.

As part of this process, the applicant consulted with Maine DEP about the need for a user intercept survey at Mopang Lake (the SRSNS with the most potential visibility). Based upon the preliminary visibility analysis, Maine DEP determined that an intercept survey at Mopang Lake would not be required due to the very limited Project visibility.[15]

Since there are no direct views of the Project from the **Gallison Memorial Library,** there should be **no effect** on the continued use and enjoyment of this resource.

F. Scope and scale of Project views/ Visual Impact: As directed by CH. 382.G, Scope and Scale of the Potential Effect, the VIA has provided *evidence of the number of turbines and portions of turbines that would be visible from various viewpoints for users of the SRNSN* (see photosimulations and viewshed maps). A rating of None was assigned to those resources where the Project will not be visible.

A rating of **low/none** was assigned to **Mopang Lake** because of the minimal project views and the distance from the observer (nearly 8 miles). See Appendix E: Mopang Lake Visibility Analysis. The blades of one turbine may be visible from less than 1% of the lake and over a horizontal field of view of less than 1º. The blade would not be a dominant presence in the landscape, if it were noticeable at all.

A rating of **low/none** was assigned to the **Gallison Memorial Library** because of the minimal Project views and the intervening vegetation that would screen the view from the resource. See Appendix F:

[15] Supported by correspondence between Paul Williamson (APEX Energy) and Jessica Damon (Maine DEP), August 2019.

Gallison Memorial Library Visibility Analysis. If turbine blades were visible through the intervening vegetation, they would not present significant contrasts in color, form, line, or texture.

Overall Scenic Impact. The Overall Scenic Impact evaluates the Project at two levels: scenic impacts on individual SRSNS, and the scenic impact of the Project as a whole, considering only the area within 8 miles of the turbines. Based on Chapter 382, the evaluation of impacts to SRSNS is a composite finding, based on 1) the Value of the Resources (based on significance of the resource, existing character, and viewer expectations); and 2) the Significance of the Impacts, (based on project purpose and context; extent, nature, and duration of public uses and the potential effect on that public use and enjoyment of those uses; scope and scale of potential impact; and cumulative impacts).

Based on these factors described above, the overall scenic value of **Mopang Lake** is rated as **medium**. The significance of the impacts to Mopang Lake is considered **low**, primarily based on the limited Project visibility and the distance to the observer. Pursuant to Chapter 382.I., a low impact to a medium value resource does not constitute an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS.

Based on these factors described above, the overall scenic value of Gallison Memorial Library is rated as **low**. The significance of the impacts to the Library is considered **low**, primarily based on the limited visibility through intervening vegetation and the distance to the Project. Pursuant to Chapter 382.I., a low scenic impact to a low value resource does not constitute an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS.

Potential Project scenic impact from **Mopang Lake** will be **Low to None**. Potential Project scenic impact from the **Gallison Memorial Library** will be **Low to None**. The overall scenic impact of the proposed Downeast Wind Project to SRSNS will be **Low to None**.

Table 8.1 Summary Table to Visual Effects

Scenic Resource of State or National Significance	Scenic Impact Evaluation Criteria							Overall Scenic Impact
	A: Resource Significance	B. Character of Surrounding Area	C: Viewer Expectation	D: Purpose and Context	E.1: Extent, Nature, Duration of Use	E.2: Effect on Continued Use and Enjoyment	F: Scope and Scale of Project Views	
B. Structures on NRHP								
Gallison Memorial Library	Low	Medium	Low	Medium	Low	None	Low/None	Low/None
D.1. Great Ponds								
Mopang Lake	Medium	Medium	Medium	Medium	Low	Low / none	Low/None	Low/None

9. CUMULATIVE VISUAL IMPACTS

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

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

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

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

As seen in Appendix A's Maps 6A and 6B Cumulative Impact Viewshed there are three existing wind power projects with overlapping 8-mile study areas with the Downeast Wind Project study area: Weaver Wind Project in Osborn and Eastbrook (recently operational); Bull Hill Wind Project (operational in 2012) in T16; and Hancock Wind Project (operational in 2016) inT22. The Applicant is not considering any other projects within the Downeast Wind study area.

None of the SRSNS that have been identified for the Downeast Wind Project are within eight miles of any of the three nearby wind projects. Therefore, there will be no cumulative visual impacts on the proposed Project's SRSNS.

9. CONCLUSION

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

The Department will also evaluate the evidence regarding the purpose and context of the proposed wind 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 low to no scenic impact on Mopang Lake and the Gallison Memorial Library. 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 upper portion of turbine blades may be partially visible over treetops at a distance of 3.9 miles from **Gallison Memorial Library,** which is a low value SRSNS. Due to intervening vegetation, the blades would be almost non-detectable to the casual observer. The overall scenic impact to Gallison Mrmorial Library will be low to none. The Project will not be visible from other structures on the National Register of Historic Places within eight miles of the Project.

- The upper portion of the blades from one turbine may be visible at a distance of 7.7 miles from **Mopang 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 Mopang Lake will be low to none.

- There will be no cumulative visual impact of the Project in relation to Weaver Wind, Bull Hill Wind, and Hancock Wind. No Project SRSNS are located within eight miles of any of the three wind energy projects with proximity to the Downeast project.

- The associated facilities for the Project (i.e., the access roads, the underground electrical collection system, O&M facility, and met and performance towers) will not 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 values and existing uses of SRSNS within the study area.

- Overall Scenic Impacts on SRSNS will be low to none. The 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.

Appendix A: Study Area and Viewshed Maps

DOWNEAST WIND PROJECT

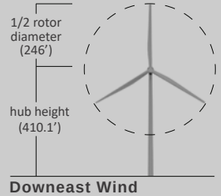
MAP 1 • STUDY AREA CONTEXT

LEGEND

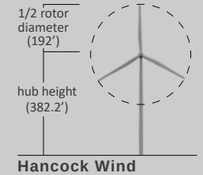
- Downeast Wind Turbine (proposed)
- Downeast Wind Meteorological Tower (proposed)
- Adjacent Wind Projects (see map labels)
- Township
- County Boundary
- Conservation Land-Public
  - WMA (Wildlife Management Area)
  - Maine BPL (Bureau of Parks and Lands)
  - IF&W (Inland Fisheries and Wildlife)
- Conservation Land-Private
  - DRLT (Downeast Rivers Land Trust)
  - TNC (The Nature Conservancy)
  - MASC (Maine Atlantic Salmon Commission)
- Major Road
- Scenic Byway
- ITS (Interconnected Trail System)
- Structure on National Register of Historic Places
- Boat Launch
- Campsite
- Great Pond (rated as Outstanding (O) or Significant (S)) Scenic Rivers and Streams

PROJECT LOCATION

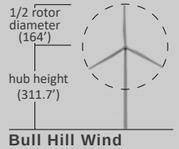
TURBINES



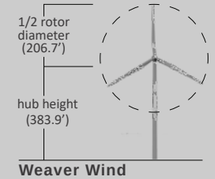
Downeast Wind
Vestas V150



Hancock Wind
Vestas V117



Bull Hill Wind
Vestas V100



Weaver Wind
Vestas V126

MAP SOURCES

- Downeast Wind Project turbine layout dated December 18, 2020
- World Street Map, January 2018
- Interconnected Trail System (ITS) from Northern Geomantics dated 2018
- Conservation Land, townships, county boundaries, boat launches, and roads from ME OGIS
- Structures on National Register of Historic Places from National Park Service

NORTH
0 2 4 6
MILES

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Appendix A
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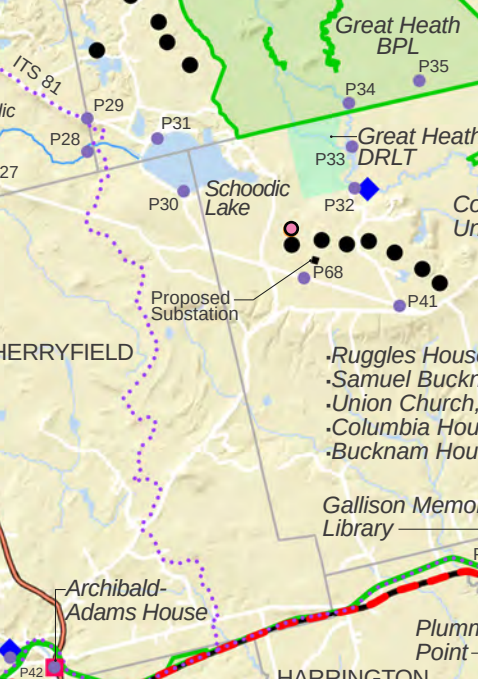
DOWNEAST WIND PROJECT

MAP 2 • PROJECT STUDY AREA

LEGEND

- Downeast Wind Turbine (proposed)
- Downeast Wind Meteorological Tower (proposed)
- Township
- County Boundary
- Conservation Land-Public
  - WMA (Wildlife Management Area)
  - Maine BPL (Bureau of Parks and Lands)
  - IF&W (Inland Fisheries and Wildlife)
- Conservation Land-Private
  - DRLT (Downeast Rivers Land Trust)
  - TNC (The Nature Conservancy)
  - MASC (Maine Atlantic Salmon Commission)
- Scenic Byway
- Structure on National Register of Historic Places
- Boat Launch
- Campsite
- Great Pond (rated as Outstanding (O) or Significant (S))
- Scenic Rivers and Streams
- ITS (Interconnected Trail System)
- P# Study Area Photographs
- Major Road



TURBINE

NORTH

0 1 2 3 MILES

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Appendix A
March 17, 2021

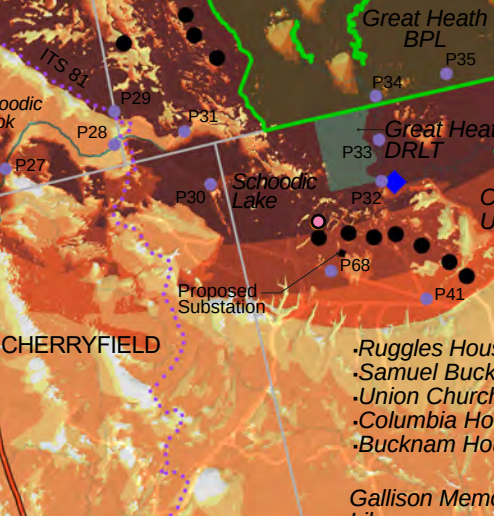
DOWNEAST WIND PROJECT

MAP 3 • TOPOGRAPHY VIEWSHED

LEGEND

- Downeast Wind Turbine (proposed)
- Downeast Wind Meteorological Tower (proposed)
- Township
- County Boundary
- Conservation Land-Public
  - WMA (Wildlife Management Area)
  - Maine BPL (Bureau of Parks and Lands)
  - IF&W (Inland Fisheries and Wildlife)
- Conservation Land-Private
  - DRLT (Downeast Rivers Land Trust)
  - TNC (The Nature Conservancy)
  - MASC (Maine Atlantic Salmon Commission)
- Scenic Byway
- Structure on National Register of Historic Places
- Boat Launch
- Campsite
- Great Pond (rated as Outstanding (O) or Significant (S))
- Scenic Rivers and Streams
- ITS (Interconnected Trail System)
- P# Study Area Photographs
- Major Road

TURBINE



Vestas V150

TURBINE VISIBILITY

- 1-5 Turbines Visible
- 6-10 Turbines Visible
- 11-15 Turbines Visible
- 16-20 Turbines Visible
- 21-25 Turbines Visible
- 26-33 Turbines Visible

NORTH

0 1 2 3 MILES

VIEWSHED NOTES

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

The analysis is based on a Digital Terrain Model (DTM) processed at 10-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.

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

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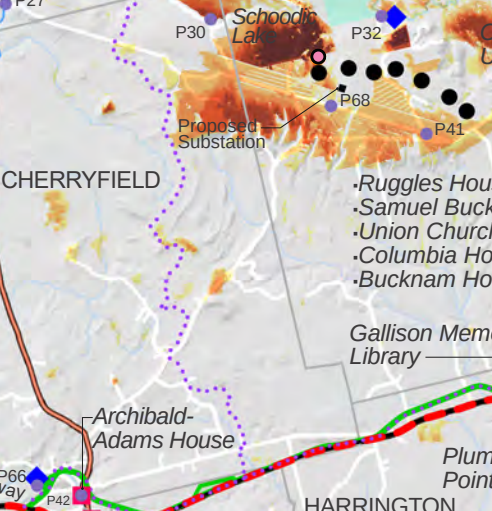
DOWNEAST WIND PROJECT

MAP 4 • LANDCOVER VIEWSHED FOR BLADES

LEGEND

- Downeast Wind Turbine (proposed)
- Downeast Wind Meteorological Tower (proposed)
- Township
- County Boundary
- Conservation Land-Public
  - WMA (Wildlife Management Area)
  - Maine BPL (Bureau of Parks and Lands)
  - IF&W (Inland Fisheries and Wildlife)
- Conservation Land-Private
  - DRLT (Downeast Rivers Land Trust)
  - TNC (The Nature Conservancy)
  - MASC (Maine Atlantic Salmon Commission)
- Scenic Byway
- Structure on National Register of Historic Places
- Boat Launch
- Campsite
- Great Pond (rated as Outstanding (O) or Significant (S))
- Scenic Rivers and Streams
- ITS (Interconnected Trail System)
- P# Study Area Photographs
- Major Road

TURBINE



Vestas V150

TURBINE VISIBILITY

- 1-5 Turbines Visible
- 6-10 Turbines Visible
- 11-15 Turbines Visible
- 16-20 Turbines Visible
- 21-25 Turbines Visible
- 26-33 Turbines Visible

NORTH

0 1 2 3 MILES

Appendix A
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VIEWSHED NOTES

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

The analysis is based on a Digital Surface Model (DSM) processed at 10-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.

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

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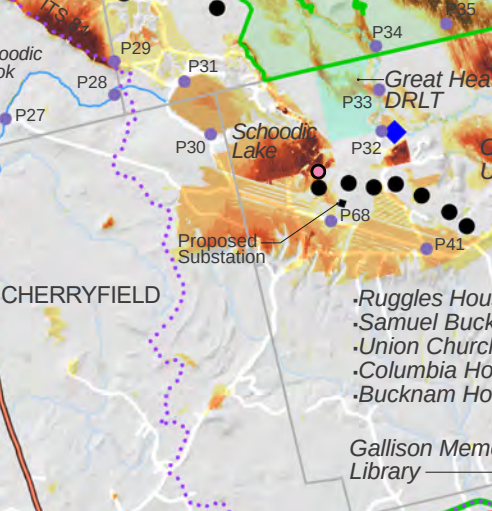
DOWNEAST WIND PROJECT

MAP 5 • LANDCOVER VIEWSHED FOR NACELLES

LEGEND

- Downeast Wind Turbine (proposed)
- Downeast Wind Meteorological Tower (proposed)
- Township
- County Boundary
- Conservation Land-Public
  - WMA (Wildlife Management Area)
  - Maine BPL (Bureau of Parks and Lands)
  - IF&W (Inland Fisheries and Wildlife)
- Conservation Land-Private
  - DRLT (Downeast Rivers Land Trust)
  - TNC (The Nature Conservancy)
  - MASC (Maine Atlantic Salmon Commission)
- Scenic Byway
- Structure on National Register of Historic Places
- Boat Launch
- Campsite
- Great Pond (rated as Outstanding (O) or Significant (S))
- Scenic Rivers and Streams
- ITS (Interconnected Trail System)
- P# Study Area Photographs
- Major Road

TURBINE



Vestas V150

TURBINE VISIBILITY

- 1-5 Turbines Visible
- 6-10 Turbines Visible
- 11-15 Turbines Visible
- 16-20 Turbines Visible
- 21-25 Turbines Visible
- 26-33 Turbines Visible

NORTH

0 1 2 3 MILES

Appendix A
March 17, 2021

VIEWSHED NOTES

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

The analysis is based on a Digital Surface Model (DSM) processed at 10-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.

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

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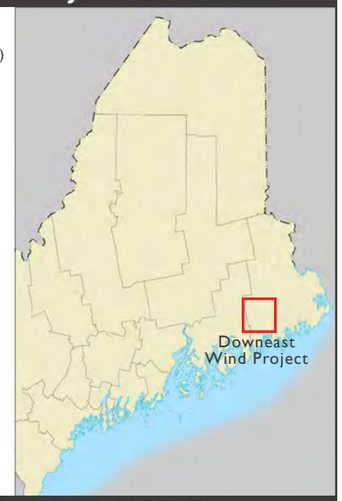
DOWNEAST WIND PROJECT

MAP 6A • CUMULATIVE IMPACT VIEWSHED

LEGEND

- Downeast Wind Turbine (proposed)
- Downeast Wind Meteorological Tower (proposed)
- Adjacent Wind Projects (see map labels)
- Township
- County Boundary
- Conservation Land-Public
  - WMA (Wildlife Management Area)
  - Maine BPL (Bureau of Parks and Lands)
  - IF&W (Inland Fisheries and Wildlife)
- Conservation Land-Private
  - DRLT (Downeast Rivers Land Trust)
  - TNC (The Nature Conservancy)
  - MASC (Maine Atlantic Salmon Commission)
- Scenic Byway
- Great Pond (rated as Outstanding (O) or Significant (S)) Scenic Rivers and Streams
- ITS (Interconnected Trail System)
- Major Road

PROJECT LOCATION



TURBINE VISIBILITY

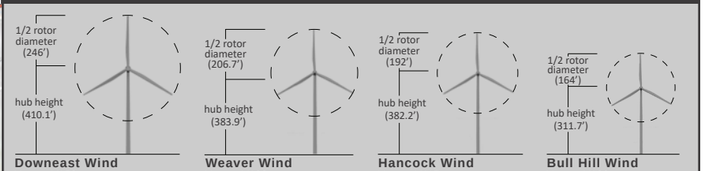
- Downeast Wind
- Weaver Wind
- Hancock Wind
- Bull Hill Wind
- Hancock and Bull Hill
- Bull Hill and Weaver
- Hancock and Weaver
- Hancock, Bull Hill, and Weaver
- Downeast and Hancock
- Downeast, Hancock, and Bull Hill
- All Four Projects

VIEWSHED NOTES

- Accounts for the screening effects of topography as well as existing vegetation. Viewshed calculations for Weaver Wind, Hancock Wind and Bull Hill Wind used landcover data from Maine OGIS. The maximum heights for forest cover is 40'. Viewshed calculation for Downeast Wind used Lidar Data. See Narrative for details of landcover types.
- Shows where the viewer may see at least blade tips if vegetation was present for Downeast Wind, Weaver Wind, Hancock Wind and Bull Hill Wind Projects.

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

TURBINES



MAP SOURCES

- Downeast Wind Project turbine layout dated December 18, 2020
- World Street Map last updated January 2018
- Interconnected Trail System (ITS) from Northern Geomantics dated 2013
- Conservation Land, townships, county boundaries, boat launches, and roads from ME OGIS
- Structures on National Register of Historic Places from the National Park Service
- ATV trails from Department of Agriculture, Conservation and Forestry

NORTH

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MILES

APEX CLEAN ENERGY

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Appendix A
March 17, 2021

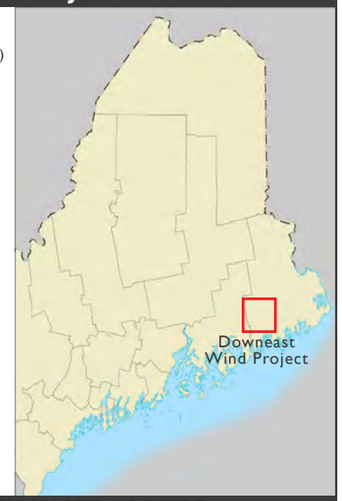
DOWNEAST WIND PROJECT

MAP 6B • CUMULATIVE IMPACT VIEWSHED

LEGEND

- Downeast Wind Turbine (proposed)
- Downeast Wind Meteorological Tower (proposed)
- Adjacent Wind Projects (see map labels)
- Township
- County Boundary
- Conservation Land-Public
  - WMA (Wildlife Management Area)
  - Maine BPL (Bureau of Parks and Lands)
  - IF&W (Inland Fisheries and Wildlife)
- Conservation Land-Private
  - DRLT (Downeast Rivers Land Trust)
  - TNC (The Nature Conservancy)
  - MASC (Maine Atlantic Salmon Commission)
- Scenic Byway
- Great Pond (rated as Outstanding (O) or Significant (S)) Scenic Rivers and Streams
- ITS (Interconnected Trail System)
- Major Road

PROJECT LOCATION



TURBINE VISIBILITY

- 1 PROJECT
- 2 PROJECTS
- 3 PROJECTS
- 4 PROJECTS

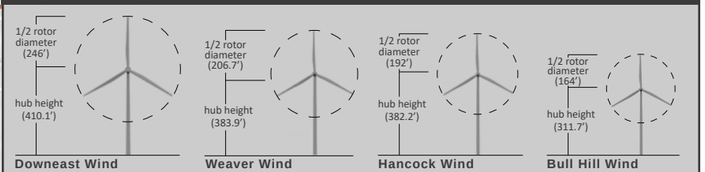
The image to the left is an enlargement from the viewshed map illustrating the color variation of project visibility.

VIEWSHED NOTES

- Accounts for the screening effects of topography as well as existing vegetation. Viewshed calculations for Weaver Wind, Hancock Wind and Bull Hill Wind used landcover data from Maine OGIS. The maximum heights for forest cover is 40'. Viewshed calculation for Downeast Wind used Lidar Data. See Narrative for details of landcover types.
- Shows where the viewer may see at least blade tips if vegetation was present for Downeast Wind, Weaver Wind, Hancock Wind and Bull Hill Wind Projects.

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

TURBINES



Downeast Wind — Vestas V150

Weaver Wind — Vestas V126

Hancock Wind — Vestas V117

Bull Hill Wind — Vestas V100

MAP SOURCES

- Downeast Wind Project turbine layout dated December 18, 2020
- World Street Map last updated January 2018
- Interconnected Trail System (ITS) from Northern Geomantics dated 2013
- Conservation Land, townships, county boundaries, boat launches, and roads from ME OGIS
- Structures on National Register of Historic Places from the National Park Service
- ATV trails from Department of Agriculture, Conservation and Forestry

NORTH

0 2 4 6

MILES

APEX CLEAN ENERGY

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Appendix A
March 17, 2021

DOWNEAST WIND PROJECT

MAP 7 • LANDCOVER VIEWSHED FOR METEOROLOGICAL TOWERS

LEGEND

- Downeast Wind Turbine (proposed)
- Downeast Wind Meteorological (Met) Tower (proposed)
- Township
- County Boundary
- Conservation Land-Public
  - WMA (Wildlife Management Area)
  - Maine BPL (Bureau of Parks and Lands)
  - IF&W (Inland Fisheries and Wildlife)
- Conservation Land-Private
  - DRLT (Downeast Rivers Land Trust)
  - TNC (The Nature Conservancy)
  - MASC (Maine Atlantic Salmon Commission)
- Scenic Byway
- Major Road
- ITS (Interconnected Trail System)
- Structure on National Register of Historic Places
- Boat Launch
- Campsite
- Great Pond (rated as Outstanding (O) or Significant (S)) Scenic Rivers and Streams
- P# Study Area Photographs

METEOROLOGICAL TOWER VISIBILITY

- Visible

VIEWSHED NOTES

Map shows areas where a viewer may be able to see any part of one of the three proposed meteorological towers, based upon the screening effect of topography, vegetation, and structures to block views.

The analysis is based on a Digital Surface Model (DSM) processed at 10-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.

Potential meteorological tower visibility needs to be confirmed with field investigations and other visualization techniques.

NORTH

0 1 2 3

MILES

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Appendix B: Scenic Resource Chart

DOWNEAST WIND

Appendix B: Scenic Resource Chart

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Resource	Location	Ownership	Size	Access	DEV	Scenic Rating or Significance	Res Class/ Mgmt Class	Distance	POTENTIAL VISIBILTY			Notes
									DSM Hub	DSM Blade	DTM Blade	
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.												
NONE WITHIN STUDY AREA *Note: The Great Heath is primarily managed as an ecological peatland preserve and not as a scenic resource and is therefore not considered a Scenic Resource of State or National Significance. Additional information provided in Appendix J.*												
B. A property listed on the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966.*												
**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.*												
Columbia Union Church	Columbia	Private	n/a	Vacant/Not in use	yes	National Register of Historic Places - 1997	n/a	2.49 mi	No	No	Yes	Between residential housing, surrounded by evergreen trees, near agricultural development. Property is located in close proximity to viewshed data, but no views from the church. Analysis included in Appendix G.
Bucknam House	Columbia Falls	Private	n/a	Private	yes	National Register of Historic Places - 2000	n/a	5.28 mi	No	No	No	
Columbia House	Columbia Falls	Private	n/a	Private	yes	National Register of Historic Places - 2000	n/a	5.17 mi	No	No	Yes	
Union Church (former)	Columbia Falls	Private	n/a	Private	yes	National Register of Historic Places - 2000	n/a	5.14 mi	No	No	No	Union Hall, built in 1840 as a Union Church, was deeded to the Town in 1902 to be used as a community building to be known as the Union Hall. Over the years it has been known as both Union Hall and Town Hall.
Samuel Bucknam House	Columbia Falls	Private	n/a	Private	yes	National Register of Historic Places - 1978	n/a	5.16 mi	No	No	Yes	
Ruggles House	Columbia Falls	Private	n/a	Private	yes	National Register of Historic Places -1970	n/a	5.11 mi	No	No	Yes	
Union Evangelical Church	Addison	Private	n/a	Private	yes	National Register of Historic Places - 1996	n/a	5.43 mi	No	No	Yes	On May 22, 2007, citizens of Addison gathered to form a group dedicated to the repair, restoration and preservation of the Church on the Hill. The group seeks to restore the church for non religious community use. http://www.addisonmaine.org/organizations/friends/friends.html
Gallison Memorial Library	Harrington	Public	n/a	Public	yes	National Register of Historic Places - 2001	n/a	3.93 mi	No	Yes	Yes	In use as the Public Library One raster of blade tip viewshed data shows up in close proximity to the Library. Cross section analysis included in Appendix.
Archibald--Adams House	Cherryfield	Private	n/a	Private	yes	National Register of Historic Places - 1987	n/a	6.03 mi	No	No	No	
Cherryfield Academy	Cherryfield	Private	n/a	Public Access/Rentals/Community Events	yes	National Register of Historic Places - 1982	n/a	6.23 mi	No	No	No	Now a publicly accessible community center owned and managed by the Cherryfield Academy Trustees, a private non-profit,
David W. Campbell House	Cherryfield	Private	n/a	Private	yes	National Register of Historic Places - 1984	n/a	6.24 mi	No	No	Yes	Maintained as private home
Col. Samuel Campbell House	Cherryfield	Private	n/a	Private	yes	National Register of Historic Places - 1982	n/a	6.37 mi	No	No	Yes	Maintained as private home
General Alexander Campbell House	Cherryfield	Private	n/a	Private	yes	National Register of Historic Places - 1977	n/a	6.39 mi	No	No	Yes	Maintained as private home
Frank Campbell House	Cherryfield	Private	n/a	Private	yes	National Register of Historic Places - 1982	n/a	6.44 mi	No	No	No	Maintained as private home
Cherryfield Historic District	Cherryfield	Public Street with Privately owned structures	75 ac	Public Access to street	yes	National Register of Historic Places -	n/a	6.23 mi	No	No	Yes	Includes areas on both sides of the Naraguages River. On the west side of the river, the district extends from School Street to area south of Route 1 on the west side of River Road, the district extends from south of Church Street to south of Park Street. This includes Main Street, Route 1, Park Street, and New Street. There are 52 contributing and 10 non contributing buildings in the district.
William W. Nash House	Cherryfield	Private	n/a	Private	yes	National Register of Historic Places - 1983	n/a	6.38 mi	No	No	No	
Patten Building	Cherryfield	Private	n/a	Private with public access through storefront.	yes	National Register of Historic Places - 1978	n/a	6.44 mi	No	No	No	Within Cherryfield Historic District, old General Store

DOWNEAST WIND

Appendix B: Scenic Resource Chart

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Resource	Location	Ownership	Size	Access	DEV	Scenic Rating or Significance	Res Class/ Mgmt Class	Distance	POTENTIAL VISIBILTY			Notes
									DSM Hub	DSM Blade	DTM Blade	
C. National or State Parks												
NONE WITHIN STUDY AREA												
D. A great pond that is:												
Upper Cranberry Lake	T30 MD BPP	Public	150 +/- ac	No public access point	Yes	Rated 'Outstanding' for scenic resources - *Maine Wildlands Lake Assessment*	1B/7	7.99 mi	No	No	Yes	Viewshed analysis and 3D modeling indicate that there will be no visibility from the lake or any area around the lake.
Mopang Lake	Devereaux Twp	Public	1700 +/- ac	Public Boat Launch (Maine Dept. of Agriculture, Conservation & Forestry)	Yes	Rated 'Significant'-for scenic resources - *Maine Wildlands Lake Assessment*	1B/7	7.83 mi	No	Yes	Yes	Viewshed indicates a small area on the western shoreline with potential visibility of 1 blade tip. There are 10-12 camps on the lake, with most concentrated on the southern and western shore. FAA lights would not be not visible. See Photosimulation in Appendix D.
E. A segment of a scenic river or stream identified as having unique or outstanding scenic attributes listed in Appendix G of the "Maine Rivers Study."												
Machias River	Northfield, T25 MD BPP, Day Block TWP	Public	22 +/- mi within 8 miles	Public Boat Launch (Day Block TWP) -Maine Dept. of Agriculture, Conservation & Forestry	no	"A" Rated River in *Maine Rivers Study* for: Geologic/Hydrologic, Critical/Ecological, Undeveloped, **Scenic,** Anadromous Fishery, Inland Fishery Whitewater Boating, & Backcountry Excursion	"A" - Maine Rivers Study	5.23 mi	No	No	Yes	Boat launch located at the river's intersection with Route 9. Machias River Phase I, part of the Machias River Project, creates a 1,000 foot preserved corridor on each side of the river for wildlife/salmon habitat and recreation preservation. Viewshed analysis and 3D modeling indicate that there will be no visibility from the river. River foreground vegetation will likely screen any project views.
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.												
NONE WITHIN STUDY AREA												
G. A scenic turnout on a scenic highway constructed by the Department of Transportation.												
NONE WITHIN 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, former State Planning Office or the Department of Agriculture, Conservation and Forestry in accordance with section 3457. *												
NONE WITHIN STUDY AREA												

**Downeast Coastal Scenic Inventory-Hancock and Washington Counties, Prepared for the Maine State Planning Office Coastal Program by the Hancock County Planning Commission & Washington County Council of Governments, February 2010.*

KEYS

HEADINGS/RATINGS	RATINGS
Distance - Distance from edge of resource to nearest turbine. ***DEV*** - Development on or near the resource, based on Google Earth aerial analysis. ***Res Class/Mgmt Class*** - Resource Class/Management Class (LUPC Comprehensive Plan 2010 App. C)	***Resource Class "1B"*** - Lakes of statewide significance with a single outstanding natural value. - Maine Wildlands Lake Assessment Management Class "7" - Consists off all lakes not otherwise classified in the Maine Wildlands Lake Assessment. ***"A" Rivers*** - 1. River or river segments possessing six resource values with regional, statewide or greater than statewide significance in a specific resource category. 2. Rivers or river segments possessing two or more resource values which are recognized to be some of the State's most significant in a given resource category. Included within this category are rivers providing important habitat (defined as self-sustaining viable runs or significant restoration efforts producing fishable populations) for the nationally significant Atlantic sea run salmon - Maine Rivers Study

Appendix C: Study Area Photographs

P1 - Approaching the public boat launch on the southwestern shore of Mopang Lake in Devereaux Twp.

P2 - Public boat launch and parking area on the southwestern shore of Mopang Lake.

P3 - Panoramic view looking northwest from the public boat launch on the southwestern shore of Mopang Lake. Mopang Lake is rated 'Significant' for scenic resources in the Maine Wildlands Lake Assessment. The proposed Project is located in the opposite direction of this view 7.7 miles away and will not be visible from the boat launch due to intervening terrain and vegetation.

P4 - Panoramic view looking southeast from a western point on Mopang Lake, toward the proposed Project. Mopang Lake is rated 'Significant' for scenic resources in the Maine Wildlands Lake Assessment. The closest proposed turbine is approximately 7.7 miles away and will not be visible from this location due to intervening terrain and vegetation.

P5 - Panoramic view looking south from the eastern shore of Mopang Lake toward the proposed Project. The closest proposed turbine is 7.4 miles away and will not be visible from this location due to intervening terrain and vegetation.

P6 - Entrance sign at Cranberry Lake Campground (Privately Owned) on the eastern side of Upper Cranberry Lake in T30 MD BPP.

P7 - Cranberry Lake Campground. The proposed Project is 7.8 miles from this viewpoint and will not be visible from the campground.

P8 - Panoramic view looking south from Upper Cranberry Lake towards the proposed Project. Upper Cranberry Lake is rated 'Outstanding' for scenic resources in the Maine Wildlands Lake Assessment. The closest proposed turbine is located 7.8 miles from this viewpoint. The project will not be visible from the lake due to intervening vegetation.

P9 - View looking southeast from the Tenan conservation land in T22 MD BPP towards the proposed Project. The closest proposed turbine is located 7.5 miles away and will not be visible from this viewpoint due to intervening terrain and vegetation.

P10 - View looking north from the public boat launch on Beddington Lake in Beddington. The closest proposed turbine is located 5.8 miles away and will not be visible from the boat launch due to intervening terrain and vegetation.

P11 - Panoramic view looking southeast from Spruce Mountain Lake in Beddington towards the proposed Project. Spruce Mountain Lake is not rated for scenic resources. Blade tips from up to six proposed turbines will be visible from this location 7.7 to 9.6 miles away.

P12 - Panoramic view looking southeast from the northern shore of Pleasant River Lake in Devereaux Twp toward the proposed Project. Pleasant River Lake is not rated for scenic resources. Approximately twenty turbines will be visible 4.3 to 9.1 miles away from this location.

P13 - Entrance to the public boat launch on Pleasant River Lake in Devereaux Twp.

P14 - View looking southeast from the public boat launch on Pleasant River Lake toward the proposed Project. Approximately eleven turbines will be visible 4.0 to 14.1 miles away from this location.

P15 - Panoramic view looking east from the northwest shore of Southwest Pond in Beddington toward the proposed Project. Southwest Pond is not rated for scenic resources. Blades of up to five proposed turbines will be visible 2.1 to 3.9 miles away from this location.

P16 - View looking north from the 'Rock Dam' conservation land in Beddington. The Project will not be visible from the parcel due to intervening terrain and vegetation.

P17 - View looking north from the Narraguagus River in Beddington, accessed via the 'Rock Dam" parcel. The Narraguagus River is not rated for scenic resources. There will be no Project visibility anywhere along the river due to intervening terrain and vegetation.

P18 - Panoramic view looking southwest from Mopang Stream in T24 MD BPP toward the Project. Mopang Stream is not rated for scenic resources. Approximately eleven proposed turbines will be visible 2.6 to 3.7 miles away from this location.

P19 - View looking west on Shadagee Road over Mopang Stream in T24 MD BPP. This location is used as an unofficial water access point for Mopang Stream.

P20 - View looking east from Shadagee Road in T24 MD BPP.

P21 - View looking north from the Machias River in T25 MD BPP. The Machias River is rated for scenic resources in The Maine Rivers Study. This photo illustrates the typical landscape character along the banks of the river throughout the Project Area.

P22 - View looking south from a public campsite near the Upper Wigwam Rapids, on the Machias River in T25 MD BPP.

P23 - Panoramic view looking southeast from the Machias River near the Lower Wigwam Rapids in T25 MD BPP, toward the proposed Project. There are 20.9 miles of the Machias River within 8 miles of the project. There will be no visibility of the Project from the Machias River due to intervening terrain and vegetation.

P24 - Panoramic view looking northeast from Popple Hill in Deblois towards the proposed Project. All of the proposed turbines will be visible 3.5 to 8.6 miles from this location.

P25 - View looking northwest from Popple Hill. The existing Bull Hill Project is visible on the horizon 7.4 miles from this location.

P26 - A memorial plaque on Popple Hill.

P27 - View looking northeast from intersection of Baseline Road and Schoodic Brook in Deblois. Schoodic Brook is not listed in Appendix G of the The Maine Rivers Study.

P28 - View looking north from Schoodic Brook in Deblois towards the proposed Project. The tip of one proposed turbine may be visible 1.3 miles away from this location. Foreground vegetation will screen the majority of the Project.

P29 - View looking northwest from Schoodic Lake Road. ITS 81 is co-located with this section of the road that runs through the commercial blueberry barrens. Approximately eleven proposed turbines will be visible 0.9 to 7.7 miles from this location.

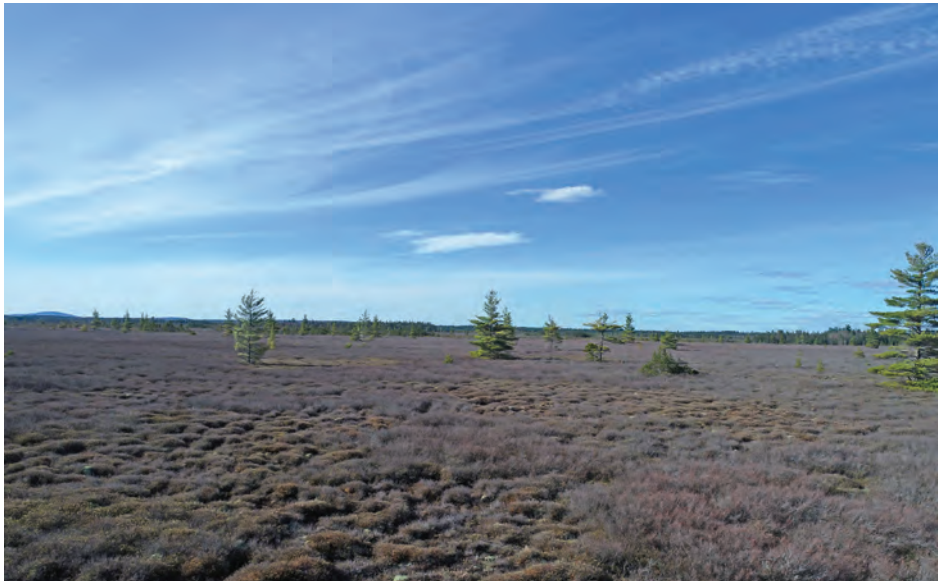
P30 - Panoramic view looking northwest from the southern shore of Schoodic Lake in Cherryfield toward the proposed Project. Schoodic Lake is not rated for scenic resources. Seven turbines and blade tips of fourteen turbines will be visible 1.6 to 7.7 miles away from this location.

P31 - Panoramic view looking southeast from the northwest shore of Schoodic Lake in T18 MD BPP, toward the proposed Project. Seven turbines will be visible 2.13 to 3.9 miles away from this location.

P32 - View looking northeast from the informal Pleasant River water access point at the end of Ell Meadow Road in Columbia. The will not be visible from the boat launch due to intervening vegetation. Pleasant River is not a designated scenic river.

P33 - View looking northwest from the Pleasant River in Columbia towards the proposed Project. Leave off filtered views of six turbines may be possible 2.3 to 3.4 miles away from this location.

P34 - Private camp along the Pleasant River within the Great Heath MBPL parcel in Columbia. The Project will not be visible from the camp due to intervening vegetation.



P35 - View looking north showing the typical open landscape character within the Great Heath MBPL parcel. There are no established trails located within the Great Heath (this image was captured using drone photography).

P36 - View looking northwest from Montegail Pond in T19 MD BPP toward the proposed Project. Approximately thirteen proposed turbines will be visible 4.7 to 7.6 miles from this location. Montegail Pond is not rated for scenic resources.

P37 - Trailhead in the Pleasant River Community Forest in Columbia Falls.

P38 - Otter Falls in the Pleasant River Community Forest. There will be no Project visibility within this forest recreation area due to intervening vegetation.

P39 - View looking southeast toward the Pleasant River Public Boat Launch on Tibbetstown Road in Columbia. There will be no visibility of the proposed Project from the boat launch due to intervening terrain and vegetation.

P40 - View looking north at the Columbia Union Church in Columbia. The church is listed on the National Register of Historic Places (NRHP). Mature vegetation on the northwest side of the church will block views of the Project.

P41 - Panoramic view looking northwest from Baseline Road in Columbia toward the proposed Project. All thirty three proposed turbines will be visible 1.5 to 11.1 miles away from this location.

P42- The Archibald Adams House in Cherryfield is listed on the NRHP. There will be no visibility of the proposed Project from this structure.

P43 - Cherryfield Academy in Cherryfield is listed on the NRHP. There will be no visibility of the proposed Project from this structure.

P44 - The William M. Nash House in Cherryfield is listed on the NRHP. There will be no visibility of the proposed Project from this structure.

P45 - The David W. Campbell House in Cherryfield is listed on the NRHP. There will be no visibility of the proposed Project from this structure.

P46 - The Patten Building in Cherryfield is listed on the NRHP and is within the Cherryfield Historic District. Downtown Cherryfield is also designated as a scenic area in the Downeast Coastal Scenic Inventory. There will be no visibility of the proposed Project from this structure or district.

P47 - The Frank Campbell House in Cherryfield is listed on the NRHP. There will be no visibility of the proposed Project from this structure.

P48 - The Col. Samuel Campbell House in Cherryfield is listed on the NRHP. There will be no visibility of the proposed Project from this structure.

P49 - The Gen. Alexander Campbell House in Cherryfield is listed on the NRHP. There will be no visibility of the proposed Project from this structure.

P50 - View looking west from a portion the Downeast Sunrise Trail (a multi-use trail) in Harrington. Approximately 19 miles of the trail are within 8 miles of the proposed Project. There will be no visibility of Project due to intervening terrain and vegetation.

P51 - The Gallison Memorial Library in Harrington is listed on the NRHP. Intervening buildings and vegetation will block most of the Project from view. The top of a single blade tip may be visible over the tree line.

P52 - The Ruggles House in Columbia Falls is listed on the NRHP. This structure is located in the downtown scenic area as designated by the Downeast Coastal Scenic Inventory. There will be no visibility of the proposed Project from this structure.

P53 - The Samuel Bucknam House in Columbia Falls is listed on the NRHP. This structure is located in the downtown scenic area as designated by the Downeast Coastal Scenic Inventory. There will be no visibility of the proposed Project from this structure.

P54 - The Union Hall in Columbia Falls is listed on the NRHP. This structure is located in the downtown scenic area as designated by the Downeast Coastal Scenic Inventory. There will be no visibility of the proposed Project from this structure.

P55 - The Columbia House in Columbia Falls is listed on the NRHP. This structure is located in the downtown scenic area as designated by the Downeast Coastal Scenic Inventory. There will be no visibility of the proposed Project from this structure.

P56 - The Capt. Buckham House in Columbia Falls is listed on the NRHP. This structure is located in the downtown scenic area as designated by the Downeast Coastal Scenic Inventory. There will be no visibility of the proposed Project from this structure.

P57 - The Union Evangelical Church in Addison is listed on the NRHP. This structure is located in the Addison Point Scenic Area as designated by the Downeast Coastal Scenic Inventory. There will be no visibility of the proposed Project from this structure.

P58 - Panoramic view looking northwest from an elevated point on East Side Road in Addison toward the proposed Project. This portion of East Side Road is within the Pleasant Bay Scenic Area as designated by the Downeast Coastal Scenic Inventory. Approximately six proposed turbines will be visible 6.5 to 7.9 miles from this location.

P59 - Panoramic view looking north near the shoreline of Flat Bay in Milbridge toward the proposed Project. Approximately seven proposed turbines may be visible 7.9 to 8.6 miles from this location. This viewpoint on Flat Bay is not a designated Coastal Scenic Viewpoint.

P60 - Panoramic view looking northwest from the Water Street bridge over the Pleasant River in Addison toward the proposed Project. This portion of Water Street is within the Addison Point Scenic Area, as designated by the Downeast Coastal Scenic Inventory. Approximately seven proposed turbines will be visible 6.2 to 8.0 miles from this location.

P61 - Panoramic view looking northwest from Wescogus Cemetery in Addison toward the proposed Project. The Cemetery is located at the top of hill within the Addison Point Scenic Area as designated by the Downeast Coastal Scenic Inventory. Approximately nineteen proposed turbines will be visible 6.9 to 14.2 miles from this location.

P62 - Panoramic view looking northwest from Kennedy Highway (Route 1A) toward Harrington Marsh and the proposed Project. This portion of the highway and the Marsh are within the Harrington Marsh Scenic Area as designated by the Downeast Coastal Scenic Inventory. Seven proposed turbines will be visible 4.2 to 5.5 miles from this location.

P63 - Panoramic view looking north from Kennedy Highway (Route 1A) toward Curtis Creek and the proposed Project. The highway and creek are located within the Curtis Creek Scenic Area as designated by the Downeast Coastal Scenic Inventory. There will be no visibility of the proposed Project from this location due to intervening vegetation.

P64 - Panoramic view looking north from Kennedy Highway (Route 1A) in Harrington toward Cole Creek and the proposed Project. The highway and creek are located within the Cole Creek/Mill River Scenic Area as designated by the Downeast Coastal Scenic Inventory. There will be no visibility of the proposed Project from this location due to intervening vegetation.

P65 - Panoramic view looking north from Kennedy Highway (Route 1A) in Harrington toward the Mill River and the proposed Project. The highway and river are located within the Cole Creek/Mill River Scenic Area as designated by the Downeast Coastal Scenic Inventory. There will be no visibility of the proposed Project from this location due to intervening vegetation.

P66 - Panoramic view looking west from Cable Pool Park in Cherryfield toward the Narraguagus River. The park is within the Cable Pool Scenic Area as designated by the Downeast Coastal Scenic Inventory. This view is looking in the opposite direction of the project. There will be no visibility of the proposed Project from this location due to intervening vegetation.

P67 - Panoramic view looking east to southeast near the Beech Hill Dam Parcel in T24 MD BPP toward the proposed Project. Blade tips of approximately three turbines may be visible 0.9 to 1.4 miles away from this location.

P68 - View looking southeast towards the site of the proposed O&M building off Route 1 in Columbia. The existing building will be replaced with new construction. The building will be visually compatible with the surrounding commercial buildings.

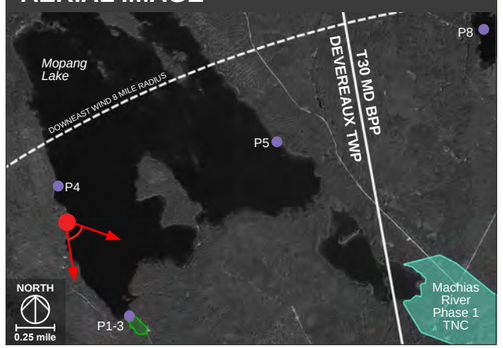
P69 - View looking north from Baseline Road towards the existing transmission line and the location of the proposed substation in Columbia.

Appendix D: Photosimulation from Mopang Lake

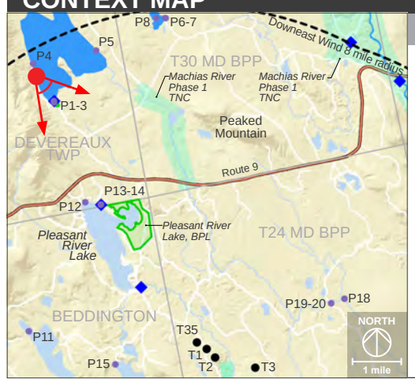
PHOTOSIMULATION: MOPANG LAKE, DEVEREAUX TWP

Panoramic view looking southeast from the southwest shore of Mopang Lake toward the proposed Downeast Wind Project. The blade tips of one turbine will be visible from a distance of 7.5 miles.

PHOTOSIMULATION LOCATION AERIAL IMAGE



CONTEXT MAP

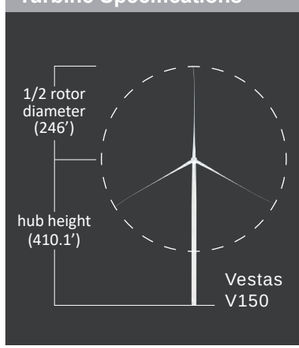


Legend

- Downeast Wind Turbine (proposed layout 39)
- Township
- County Boundary
- Conservation Land-Public
  - WMA (Wildlife Management Area)
  - Maine BPL (Bureau of Parks and Lands)
  - IF&W (Inland Fisheries and Wildlife)
- Conservation Land-Private
  - DRLT (Downeast Rivers Land Trust)
  - TNC (The Nature Conservancy)
  - MASC (Maine Atlantic Salmon Commission)
- Boat Launch
- Great Pond (rated as Outstanding (O) or Significant (S)) Scenic Rivers and Streams
- P# Study Area Photographs
- Major Road
- Photosimulation Location

TECHNICAL INFORMATION

Turbine Specifications



Photograph Information

Location	44.908973°, -68.014087°
Viewing Direction	Southeast
Horizontal Angle of View	1°
Date and Time	09/30/19 at 10:59am
Camera Focal Length	35 mm
Camera Make/Model	Nikon D5600
Photo Source	TJD&A
Proposed Turbines Visible	1
Closest Visible Turbine	7.5 miles

DOWNEAST WIND PROJECT

APEX CLEAN ENERGY

tjd&a

Appendix D
March 5, 2021

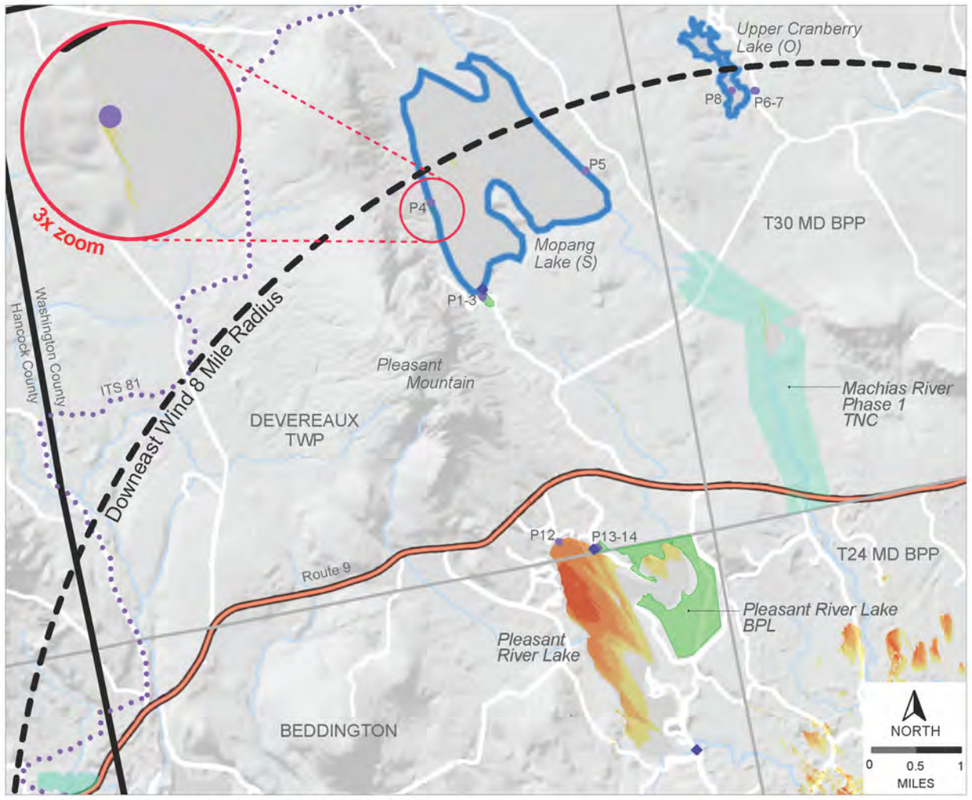
EXISTING CONDITIONS: MOPANG LAKE, DEVEREAUX TWP

Normal view looking southeast from the southwest shore of Mopang Lake.

PROPOSED CONDITIONS: MOPANG LAKE, DEVEREAUX TWP

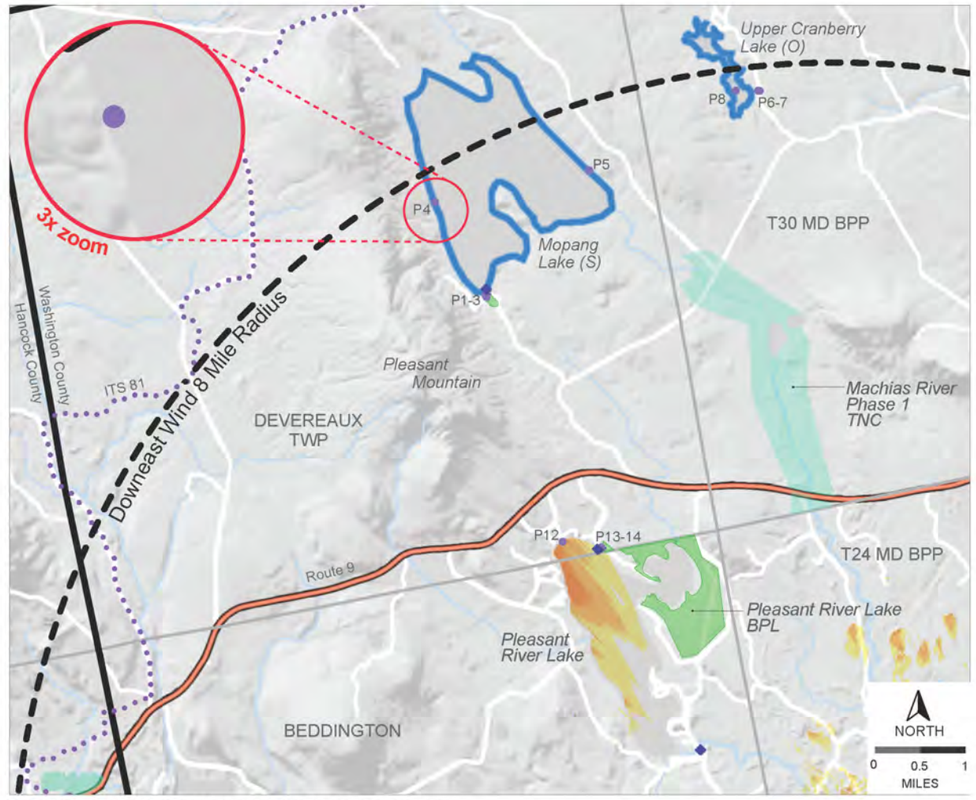
Normal view looking southeast from the southwest shore of Mopang Lake toward the proposed Downeast Wind Project. The blade tips of one turbine will be visible from a distance of 7.5 miles.

Appendix E: Mopang Lake Visibility Analysis



MAP 6A • LANDCOVER VIEWSHED FOR BLADES

TURBINE VISIBILITY	VIEWSHED NOTES
1-5 Turbines Visible 6-10 Turbines Visible 11-15 Turbines Visible 16-20 Turbines Visible 21-25 Turbines Visible 26-33 Turbines Visible	Map shows areas where a viewer may see at least one blade tip within 8 miles of any proposed turbine, based upon the screening effect of topography, vegetation, and structures to block views. The analysis is based on a Digital Surface Model (DSM) processed at 10-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.



MAP 6B • LANDCOVER VIEWSHED FOR NACELLES

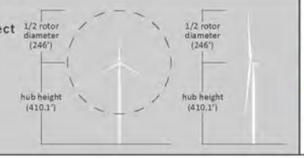
TURBINE VISIBILITY	VIEWSHED NOTES
1-5 Turbines Visible 6-10 Turbines Visible 11-15 Turbines Visible 16-20 Turbines Visible 21-25 Turbines Visible 26-33 Turbines Visible	Map shows areas where a viewer may see at least one nacelle within 8 miles of any proposed turbine, based upon the screening effects of topography, vegetation, and structures to block views. The analysis is based on a Digital Surface Model (DSM) processed at 10-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.

DOWNEAST WIND PROJECT

ENLARGEMENTS
LANDCOVER VIEWSHEDS FOR BLADES AND NACELLES

TURBINE

Downeast Wind Project
Vestas V150

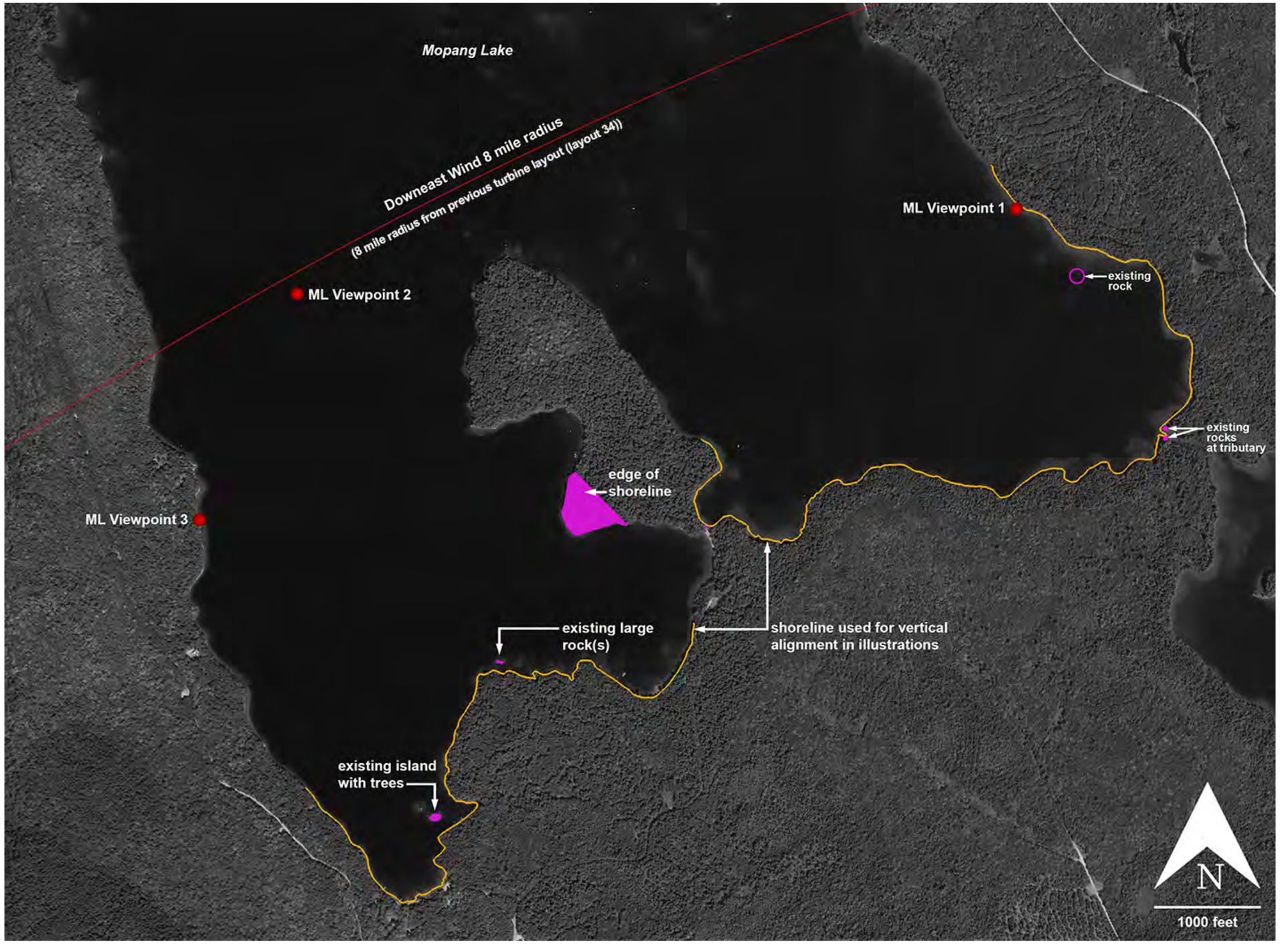


LEGEND

- Township
- County Boundary
- Major Roads
- ITS (Interconnected Trail System)
- Conservation Land-Public
  - WMA (Wildlife Management Area)
  - Maine BPL (Bureau of Parks and Lands)
  - IF&W (Inland Fisheries and Wildlife)
- Conservation Land-Private
  - DRLT (Downeast Rivers Land Trust)
  - TNC (The Nature Conservancy)
  - MASC (Maine Atlantic Salmon Commission)
- Boat Launch
- Great Pond (rated as Outstanding (O) or Significant (S))
- Scenic Rivers and Streams
- Study Area Photographs

APEX CLEAN ENERGY
tjd&a

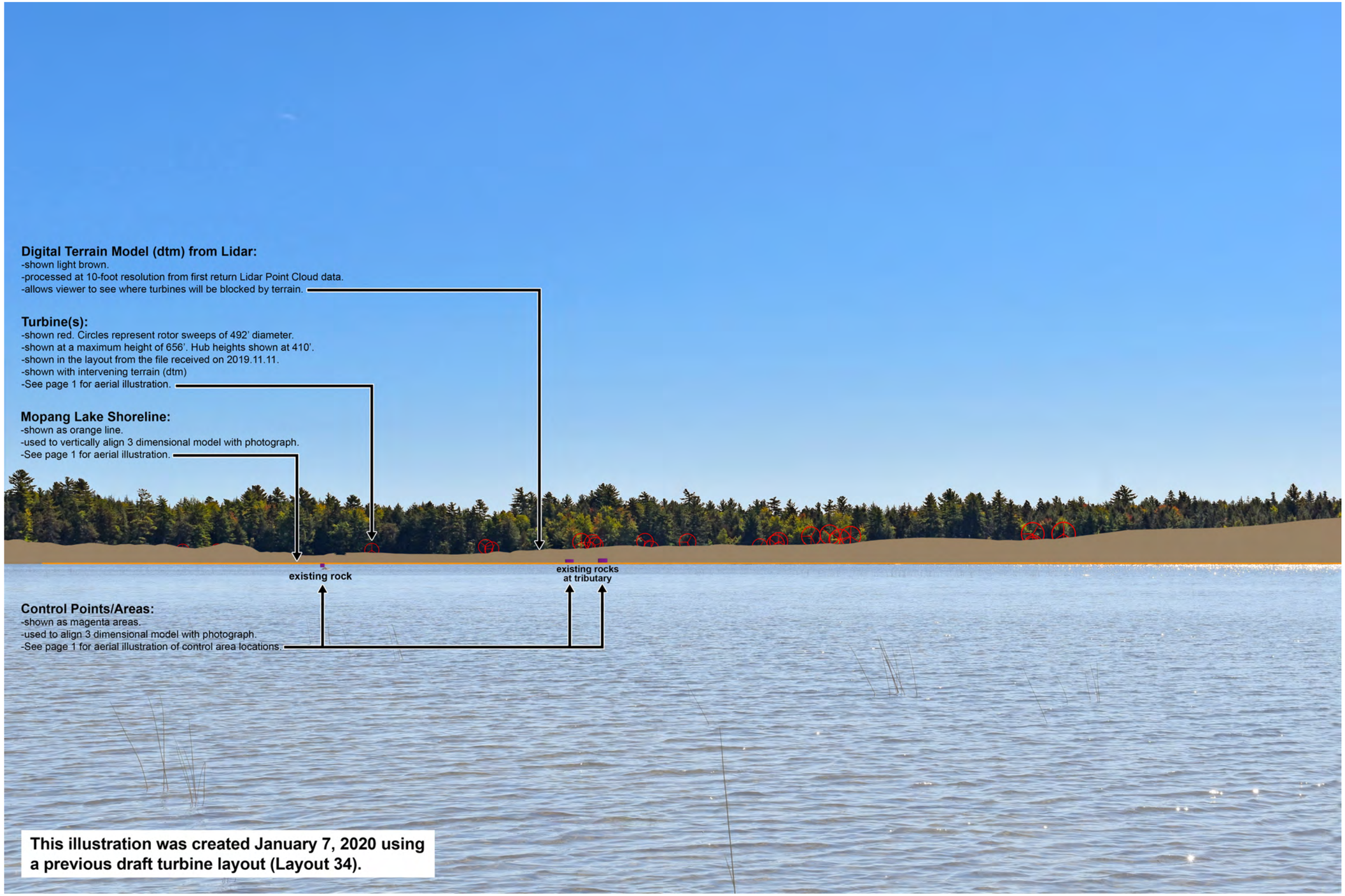
Mopang Lake Area Viewshed Maps



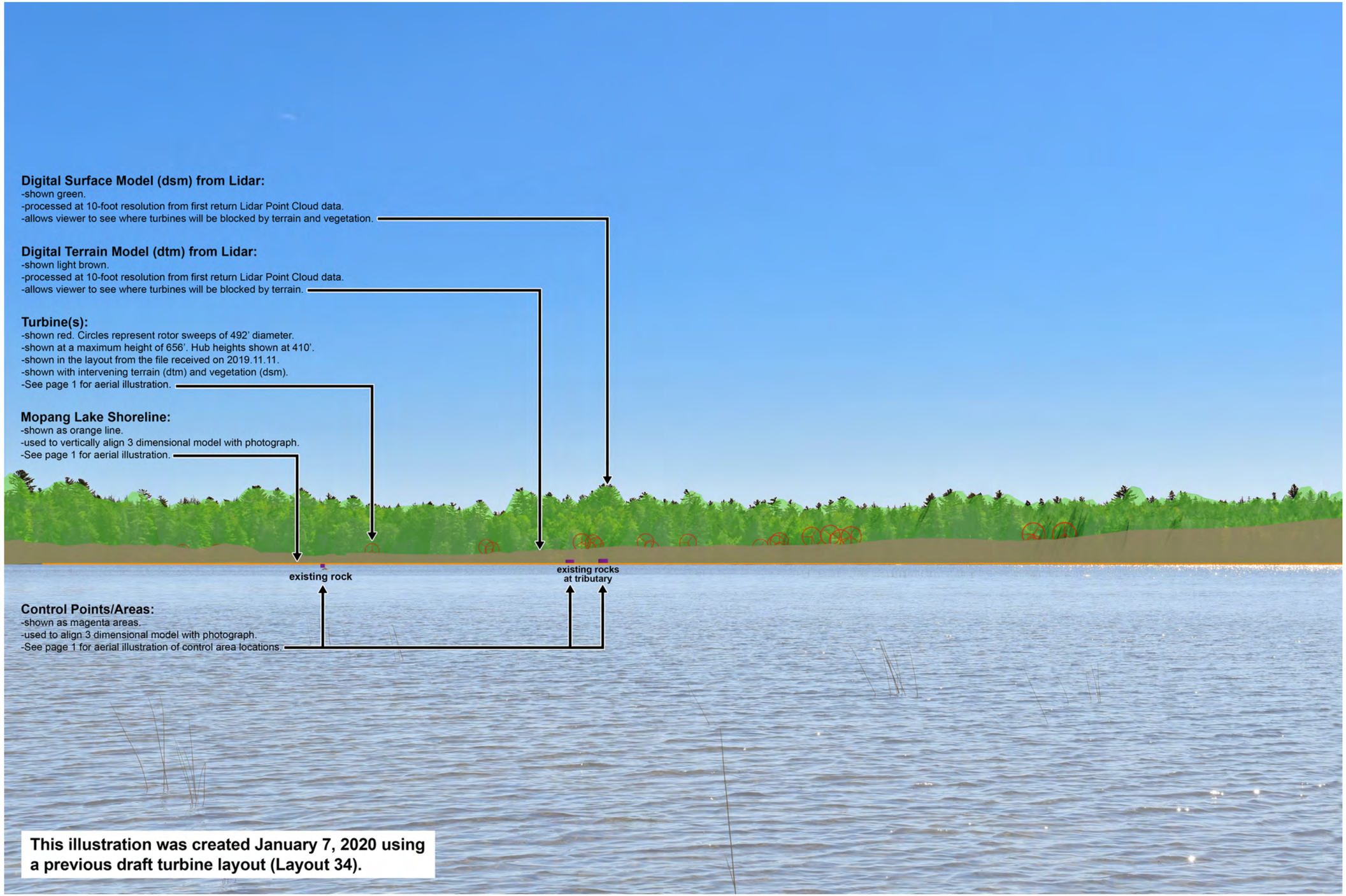
Google Earth Aerial with Mopang Lake Viewpoints

Mopang Lake Viewpoint 1 Normal View Existing Conditions

Mopang Lake Viewpoint 1 Normal View Illustration 1



Mopang Lake Viewpoint 1 Normal View Illustration 2

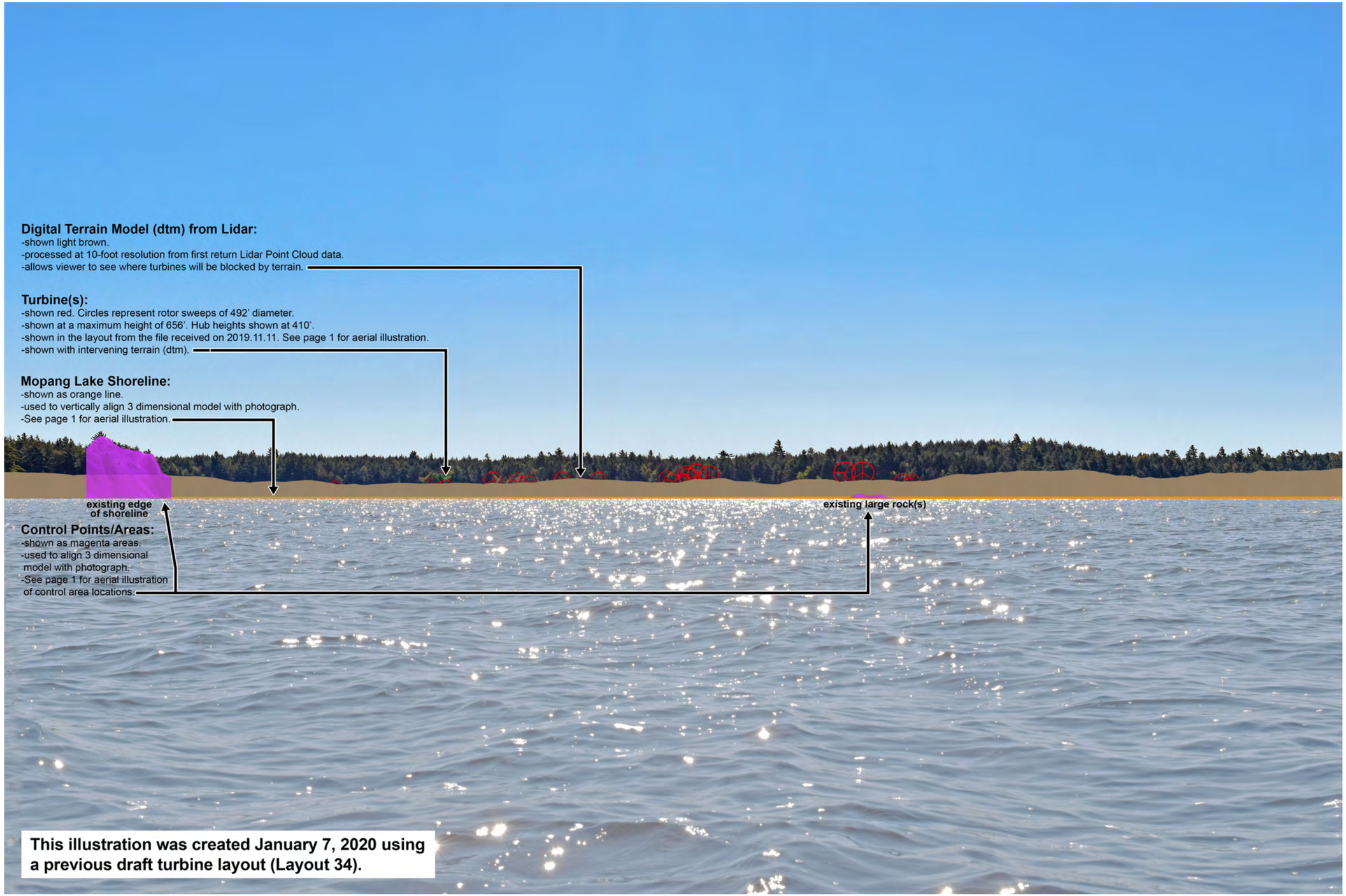


Mopang Lake Viewpoint 1 Normal View Illustration 3

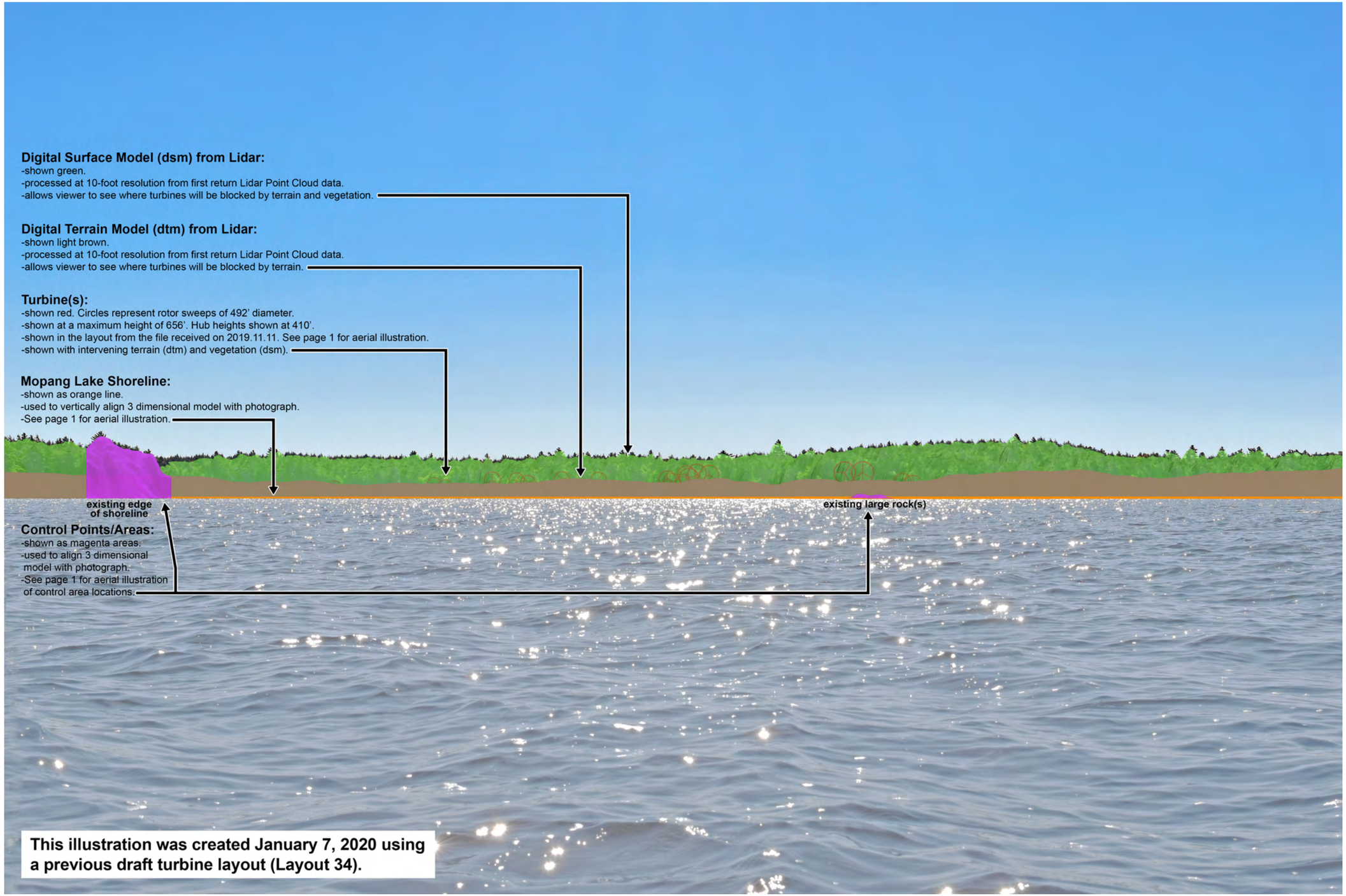
Mopang Lake Viewpoint 1 Normal View Illustration 4

Mopang Lake Viewpoint 2 Normal View Existing Conditions

Mopang Lake Viewpoint 2 Normal View Illustration 1



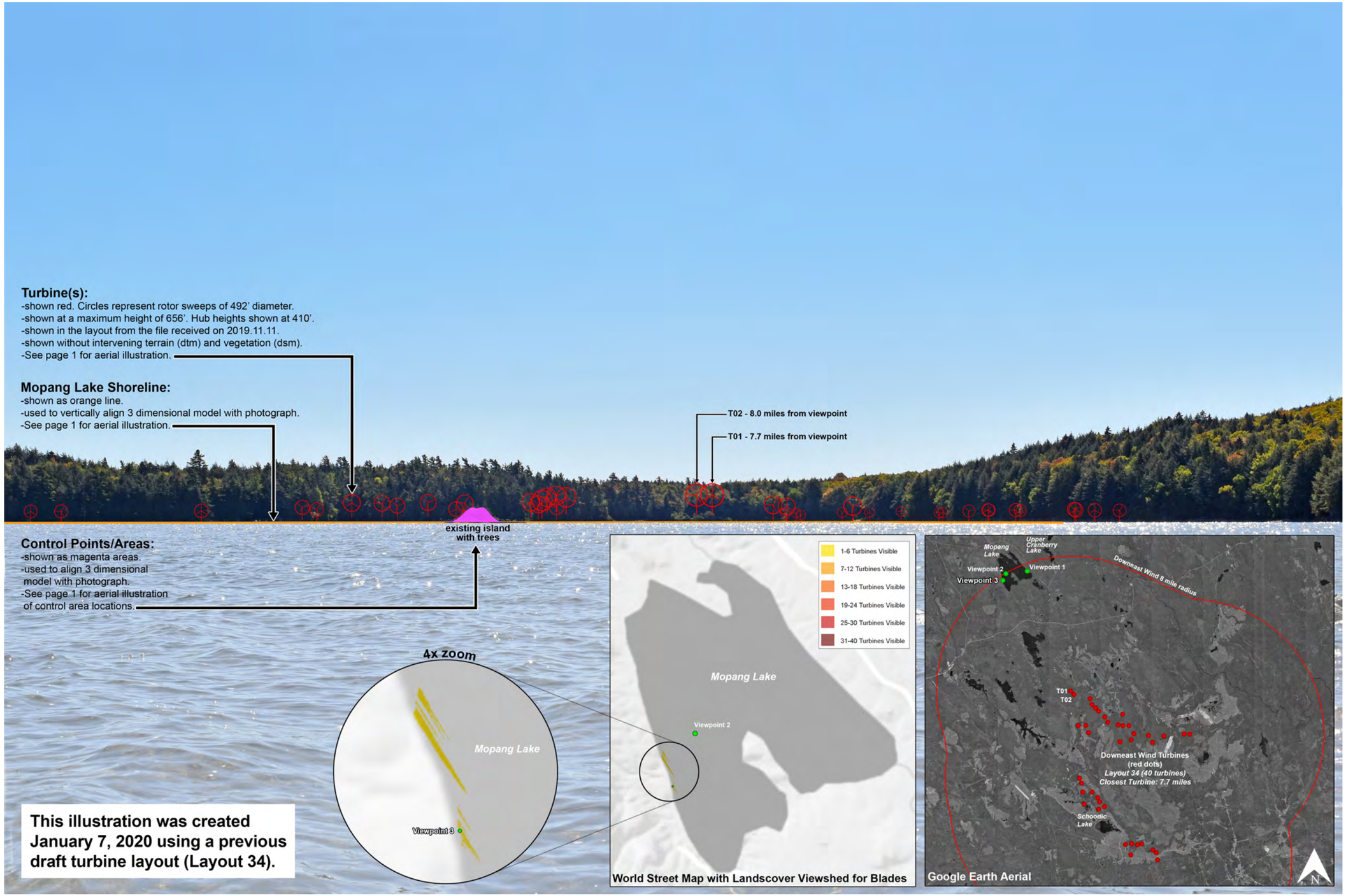
Mopang Lake Viewpoint 2 Normal View Illustration 2



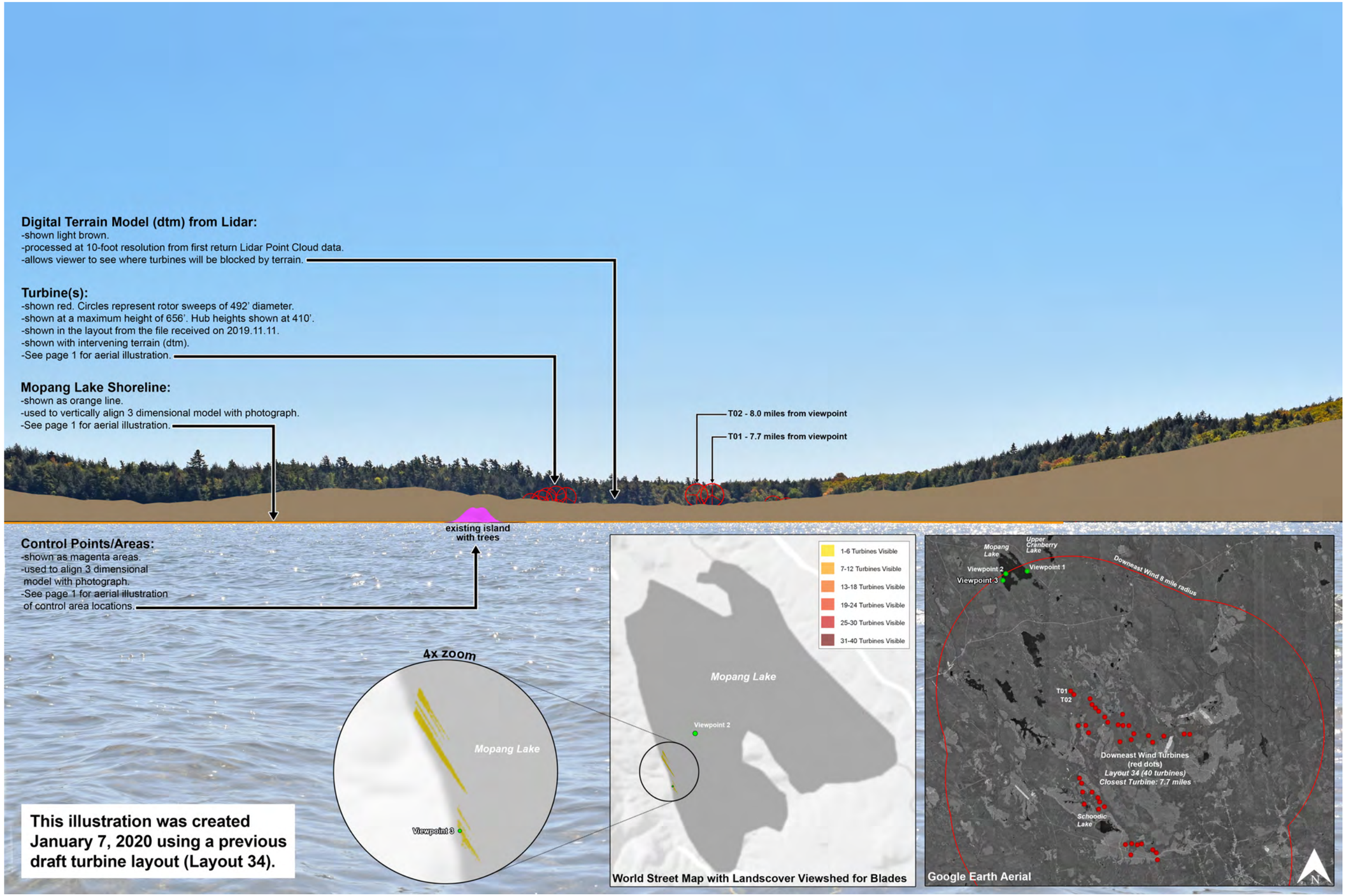
Mopang Lake Viewpoint 2 Normal View Illustration 3

Mopang Lake Viewpoint 2 Normal View Illustration 4

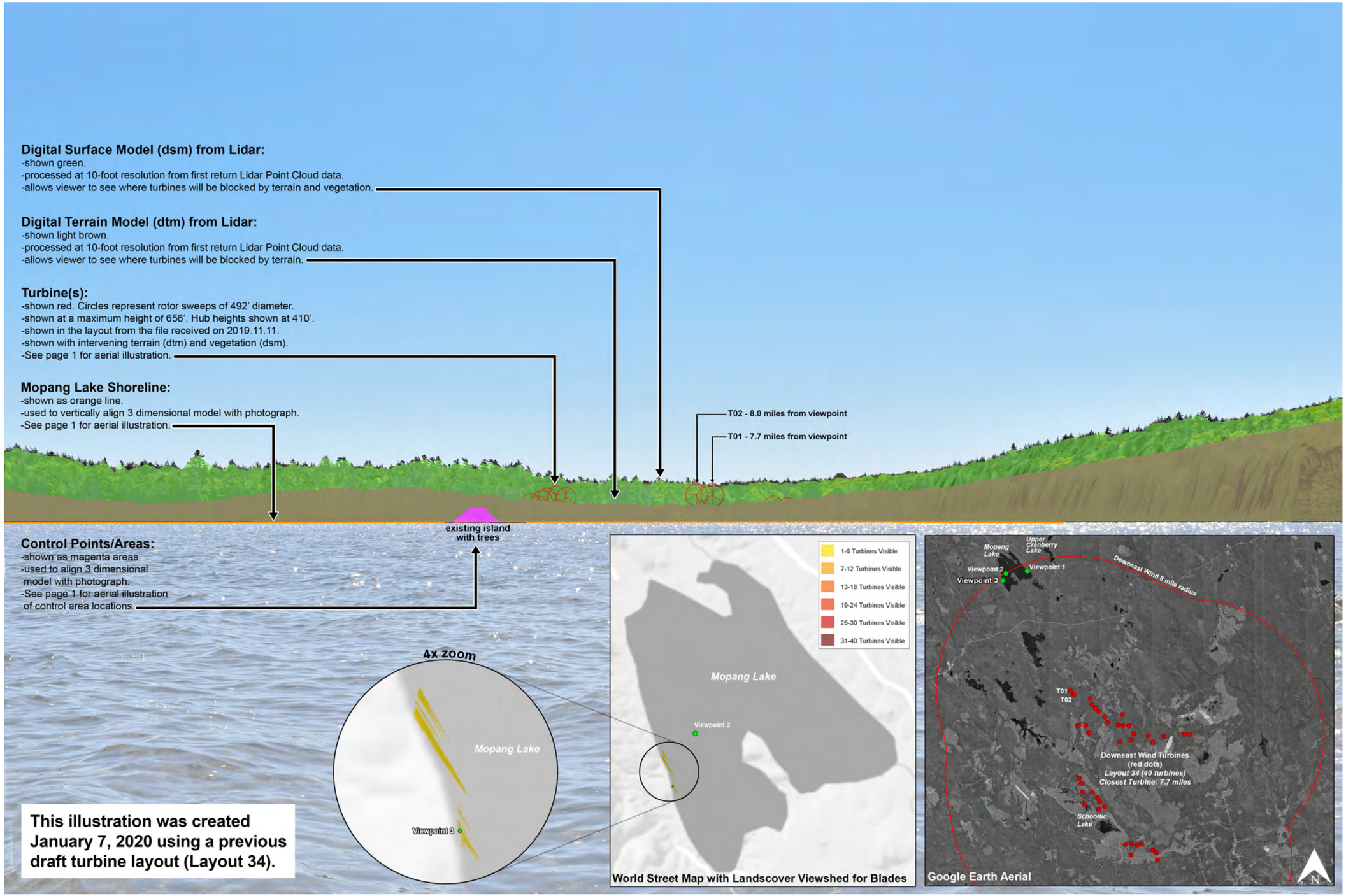
Mopang Lake Viewpoint 3 Normal View Existing Conditions



Mopang Lake Viewpoint 3 Normal View Illustration 1



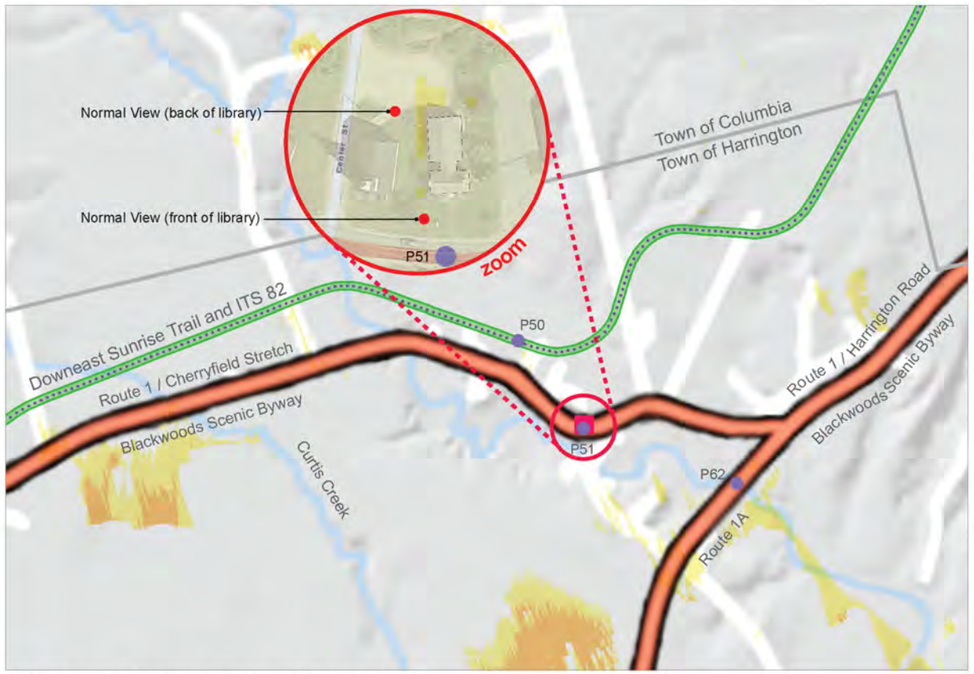
Mopang Lake Viewpoint 3 Normal View Illustration 2



Mopang Lake Viewpoint 3 Normal View Illustration 3

Mopang Lake Viewpoint 3 Normal View Illustration 4

Appendix F: Gallison Memorial Library Visibility Analysis



MAP 7A • LANDCOVER VIEWSHED FOR BLADES

NORTH
0 0.25
MILES

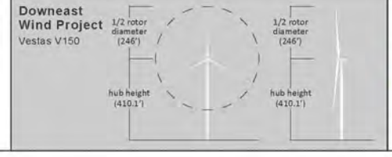
TURBINE VISIBILITY	VIEWSHED NOTES
1-5 Turbines Visible 6-10 Turbines Visible 11-15 Turbines Visible 16-20 Turbines Visible 21-25 Turbines Visible 26-33 Turbines Visible	Map shows areas where a viewer may see at least one blade tip within 8 miles of any proposed turbine, based upon the screening effect of topography, vegetation, and structures to block views. The analysis is based on a Digital Surface Model (DSM) processed at 10-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.

DOWNEAST WIND PROJECT

ENLARGEMENTS
LANDCOVER VIEWSHEDS FOR BLADES AND NACELLES

TURBINE

Downeast Wind Project
Vestas V150



LEGEND

- Township
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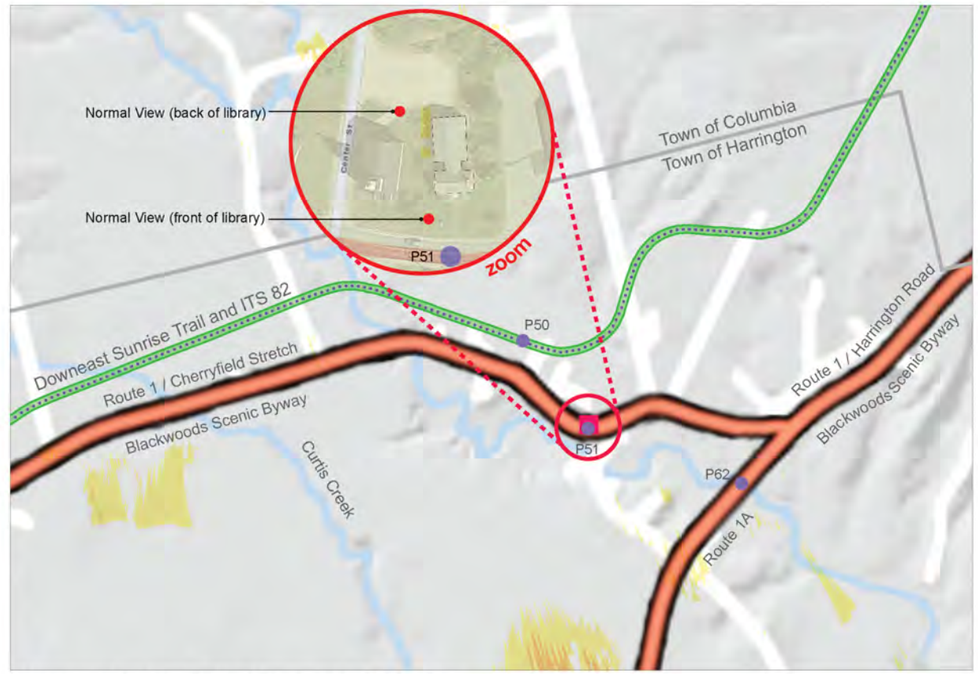
  - IF&W (Inland Fisheries and Wildlife)
- Conservation Land-Private
  - DRLT (Downeast Rivers Land Trust)
  - TNC (The Nature Conservancy)
  - MASC (Maine Atlantic Salmon Commission)
- Boat Launch
- Great Pond (rated as Outstanding (O) or Significant (S))
- Scenic Rivers and Streams
- Study Area Photographs



MAP 7B • LANDCOVER VIEWSHED FOR NACELLES

NORTH
0 0.25
MILES

TURBINE VISIBILITY	VIEWSHED NOTES
1-5 Turbines Visible 6-10 Turbines Visible 11-15 Turbines Visible 16-20 Turbines Visible 21-25 Turbines Visible 26-33 Turbines Visible	Map shows areas where a viewer may see at least one nacelle within 8 miles of any proposed turbine, based upon the screening effects of topography, vegetation, and structures to block views. The analysis is based on a Digital Surface Model (DSM) processed at 10-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.

APEX CLEAN ENERGY
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Gallison Memorial Library Area Map

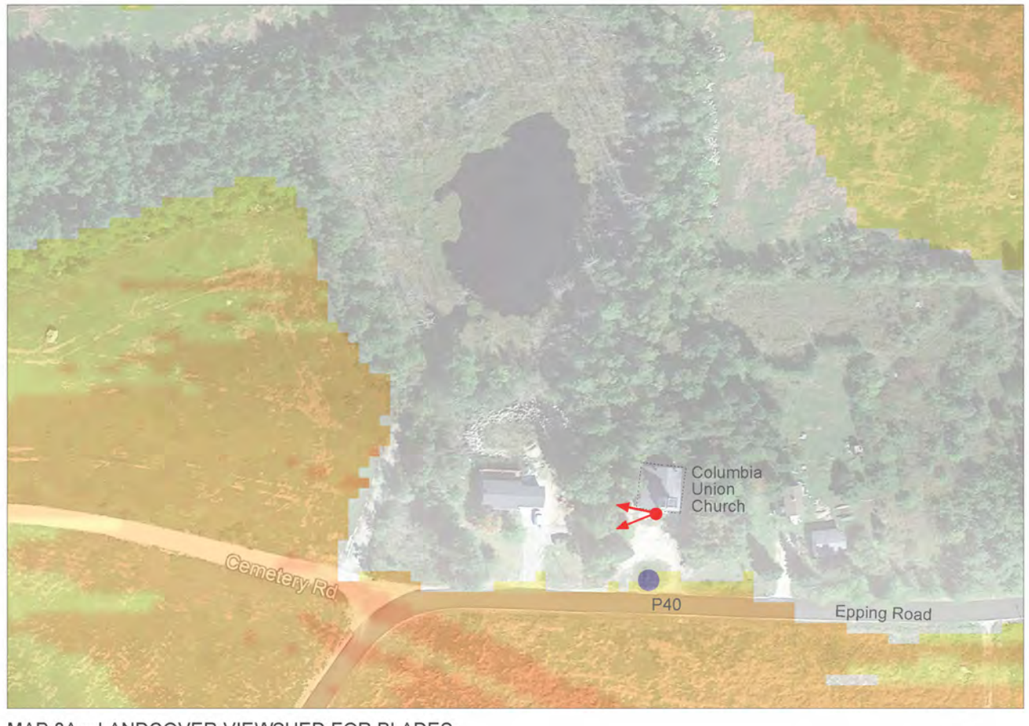
Gallison Memorial Library behind library Normal View Existing Conditions

Gallison Memorial Library behind library Normal View Illustration

Gallison Memorial Library front of library Normal View Existing Conditions

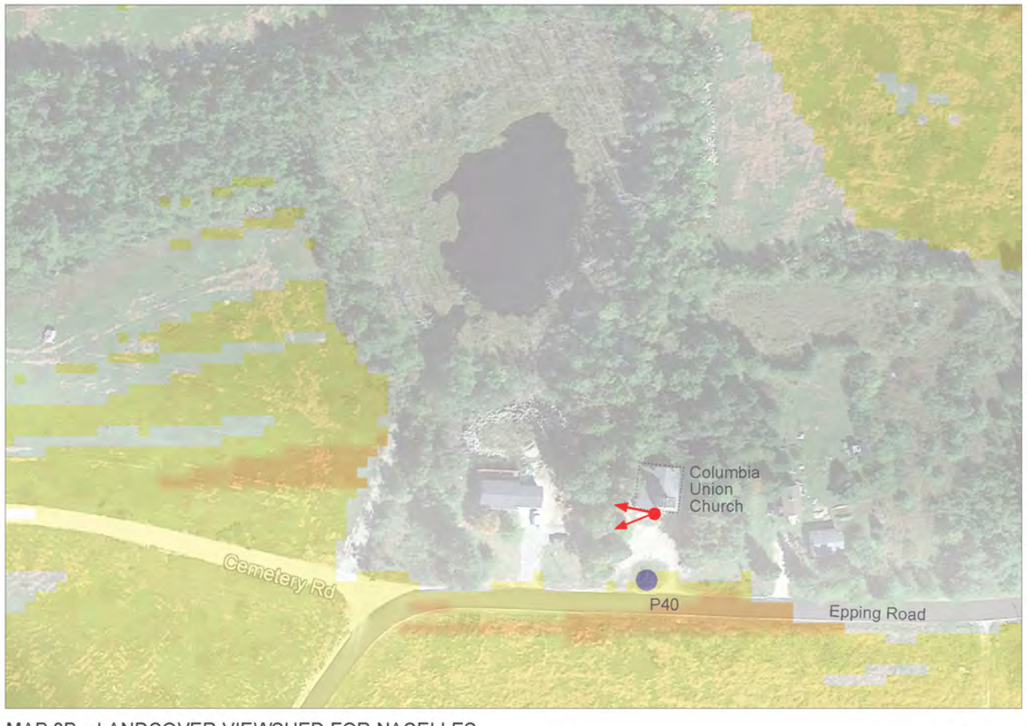
Gallison Memorial Library front of library Normal View Illustration

Appendix G: Columbia Union Church Visibility Analysis



MAP 8A • LANDCOVER VIEWSHED FOR BLADES

NORTH
0 100
FEET



MAP 8B • LANDCOVER VIEWSHED FOR NACELLES

NORTH
0 100
FEET

TURBINE VISIBILITY	VIEWSHED NOTES
1-5 Turbines Visible 6-10 Turbines Visible 11-15 Turbines Visible 16-20 Turbines Visible 21-25 Turbines Visible 26-33 Turbines Visible	Map shows areas where a viewer may see at least one blade tip within 8 miles of any proposed turbine, based upon the screening effect of topography, vegetation, and structures to block views. The analysis is based on a Digital Surface Model (DSM) processed at 10-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.

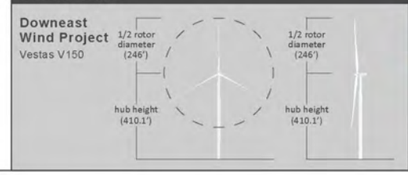
TURBINE VISIBILITY	VIEWSHED NOTES
1-5 Turbines Visible 6-10 Turbines Visible 11-15 Turbines Visible 16-20 Turbines Visible 21-25 Turbines Visible 26-33 Turbines Visible	Map shows areas where a viewer may see at least one nacelle within 8 miles of any proposed turbine, based upon the screening effects of topography, vegetation, and structures to block views. The analysis is based on a Digital Surface Model (DSM) processed at 10-foot resolution from first return Lidar point cloud data acquired from the USGS National Map. The viewer height is set at 5 feet above ground level elevation.

DOWNEAST WIND PROJECT

ENLARGEMENTS
LANDCOVER VIEWSHEDS FOR BLADES AND NACELLES

TURBINE

Downeast Wind Project
Vestas V150

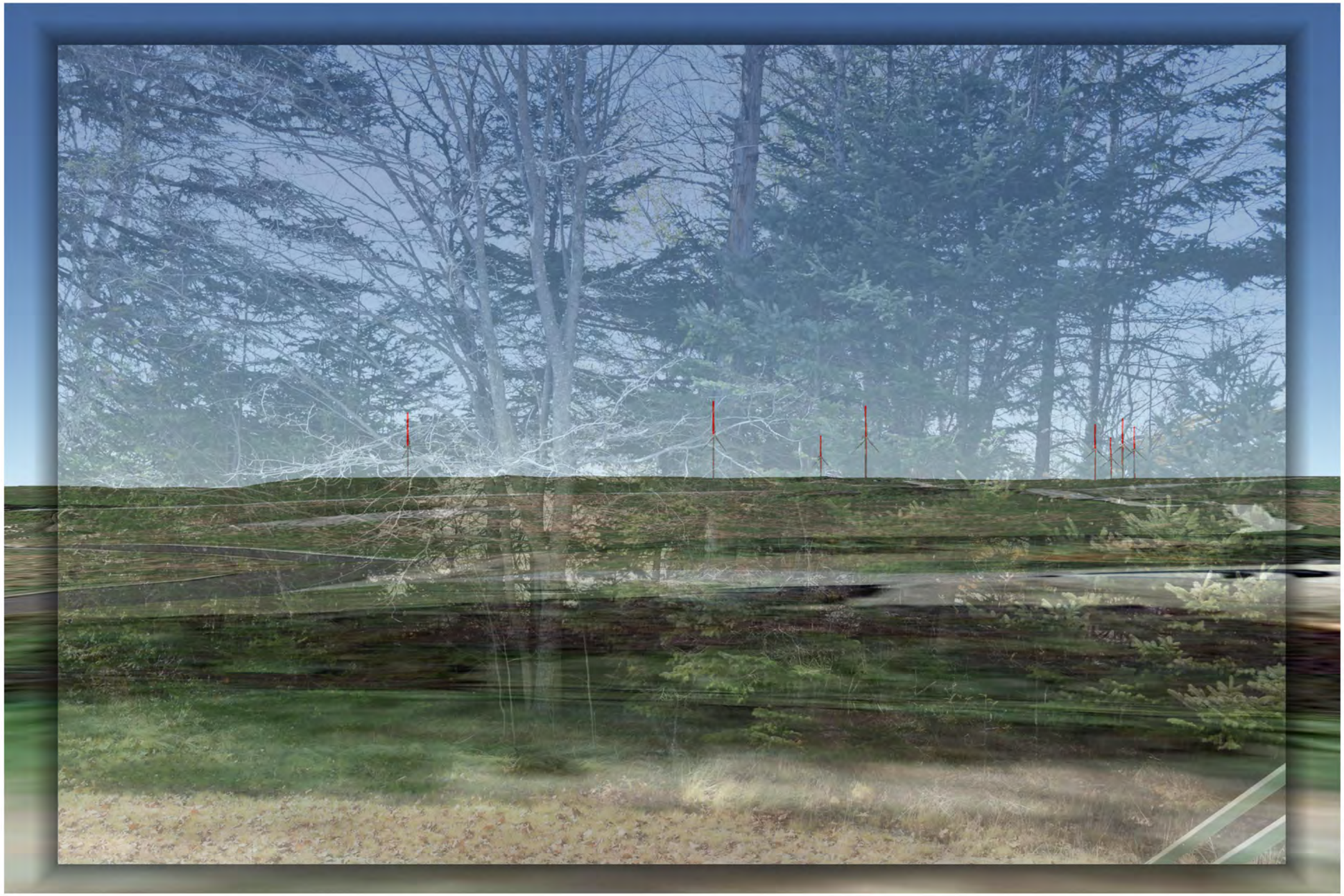


LEGEND

- Study Area Photographs
- Viewpoint Location

APEX CLEAN ENERGY
tjd&a

West facing view from the front step of the Columbia Union Church: Normal View Existing Conditions



West facing view from the front step of the Columbia Union Church: Normal View Photo Overlay / Illustration

Appendix H: Washington and Hancock County Coastal Scenic Viewpoint Forms

Scenic area	**Addison Point**	View Points	See Comments
County	Washington	**District:** Pleasant River Bay	**Subdistricts**	Pleasant River

DESKTOP ANALYSIS

Land Form	Score	
Elevation	1	
Slope	2	
Open Land	5	Marsh
Shoreline	6	
Features	6	Bridge, marsh, village buildings, boats, o
Scenic Quality of Water		
Duration	7	
Type	8	large river
Horizon	6	closed some vertical interest

FIELD ANALYSIS

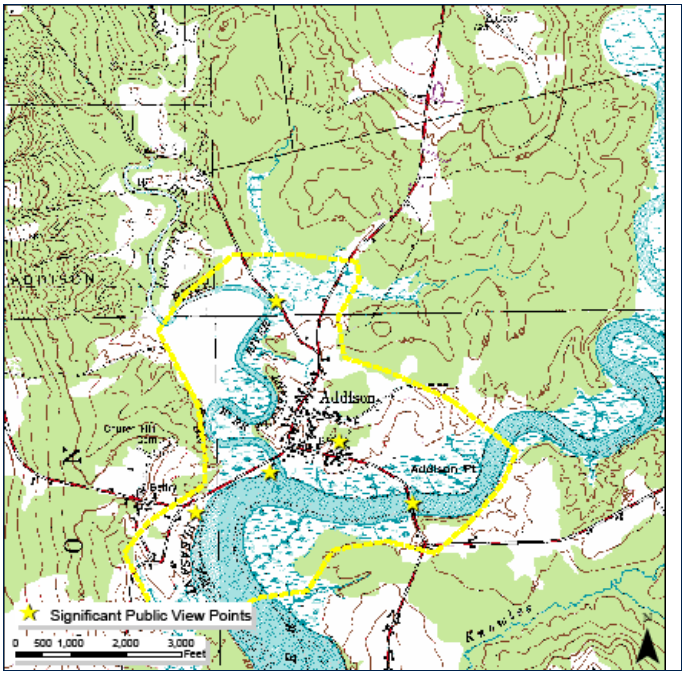
Landscape Characte	Score	
Land Use	4	res. Village, downtown, public waterf
Roadside	3	overhead lines, shoulder on bridge
Settlement	4	village buildings history, residential n
Vegetation	5	marsh grasses
Effect	5	marsh winding
Field Total	**21**	
Desk Total	**41**	
Grand Total	**62**	View from height of bridge beautiful,

Description of Scenic Area:

The Addison Point scenic area is located with in the town of Addison, encompassing the waterfront and downtown area. The scenic area includes distinct village area, waterfront, and configured marsh wetlands. There are numerous scenic features in the foreground including old buildings, boats, marsh, and the old pier. In the mid and background the marsh extends for a large distance. There are sustained views from the roadways and an elevated view from the bridge that crosses the Pleasant River. Other viewpoints include the downtown area and the public boat launch.

AddisonPointMap120909.pdf

Overview of two bridges in Addision that offer scenic view.



addisonbridge01.jpg

View from Addison Bridge of tidal inlet to Pleasant River.

Scenic area	**Harrington Marsh**			**View Points**	Bridge
County	Washington	**District:**	Pleasant River Bay	**Subdistricts**	Harrington

DESKTOP ANALYSIS

	Scor	
Land Form		
Elevation	1	
Slope	1	
Open Land	5	
Shoreline	3	
Features	2	driftwood, old pilings (ship building hist
Scenic Quality of Water		
Duration	4	
Type	7	river
Horizon	3	

FIELD ANALYSIS

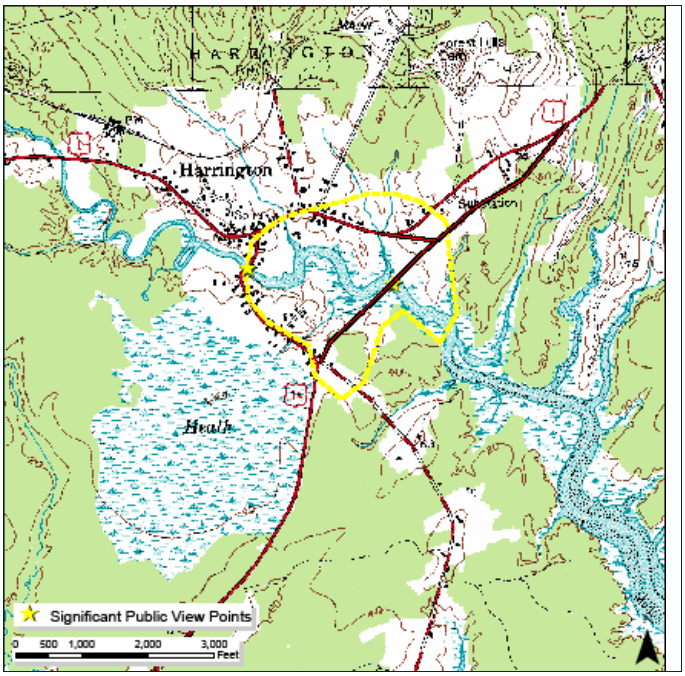
	Score	
Landscape Characte		
Land Use	0	positive -village, negative-commercia
Roadside	0	utility lines, wide shoulders, good gu
Settlement	0	Irving, village buildings
Vegetation	5	lupines draw tourists for photographs
Effect	1	wildlife, mystery
Field Total	**6**	
Desk Total	**26**	
Grand Total	**32**	Shipbuilding history is interesting but

Description of Scenic Area:

Harrington Marsh scenic area is located in the town of Harrington near the junction of Route 1 and Route 1A. This scenic area includes historic Harrington village and an expansive tidal estuary on the Harrington River. To the north, churches and historic buildings in Harrington Village are visible across the marsh from Route 1. To the south, views look out toward Harrington Bay. This area was once the center of a regional significant shipbuilding industry. Though few visible traces remain, over two hundred vessels were launched from the Harrington River. There are sustained views in both directions from Route 1A and shorter, filtered views from Route 1. A large field of lupine just south of Route 1 enhances the areas scenic character in the late Spring.

HarringtonMap.pdf

Map of Harrington and Harrington Marsh Scenic Area



HarrintonMarsh01.jpg

Harrington March seen from Route 1A

Scenic area	**Wescogus**			**View Points**	Cemetery
County	Washington	**District:**	Pleasant River Bay	**Subdistricts**	Pleasant River

DESKTOP ANALYSIS

Land Form	Score	
Elevation	3	
Slope	3	
Open Land	4	
Shoreline	5	far away view, private
Features	3	
Scenic Quality of Water		
Duration	3	
Type	7	distant view of large river
Horizon	7	

FIELD ANALYSIS

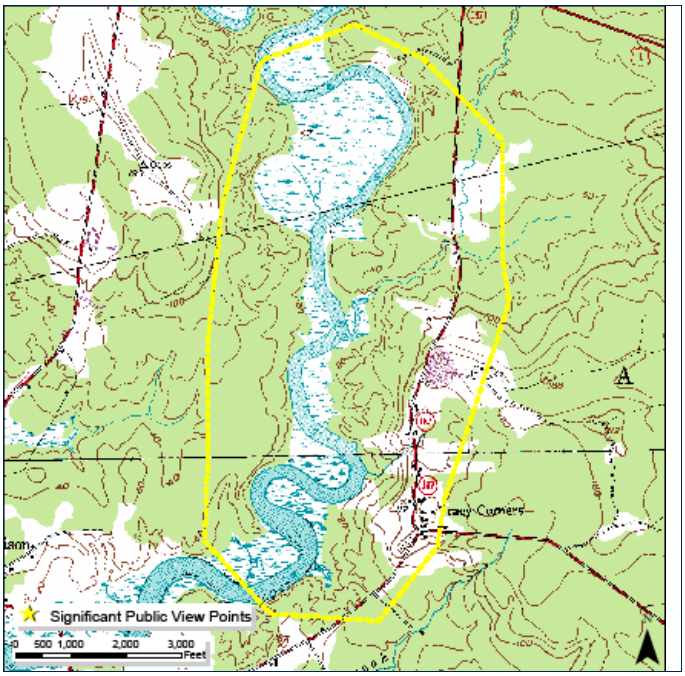
Landscape Characte	Score	
Land Use	4	residential, small scale blueberry
Roadside	3	
Settlement	2	nothing stands out
Vegetation	5	
Effect	2	high view, surprise
Field Total	**16**	
Desk Total	**35**	
Grand Total	**51**	

Description of Scenic Area:

The Wescogus scenic area is located in the town of Addison, the site encompasses the top of a hill and cemetery. The scenic area includes a cemetery and an elevated view of the pleasant River. Notable feature in the foreground is the old cemetery, a feature in the mid-ground is the windmill and blueberry barrens. There are no views from the roadway, as the roadside contains mature stands of trees.

WescogusMap.pdf

Wescogus Map



Wescogus02.jpg

Cemetary as Wescogus

Scenic area	**Pleasant Bay**			**View Points**	
County	Washington	**District:**	Pleasant River Bay	**Subdistricts**	Pleasant River

DESKTOP ANALYSIS

	Scor	
Land Form		
Elevation	3	especially on east side of road
Slope	3	
Open Land	3	multiple large fields, spread out along ba
Shoreline	3	
Features	1	a few large fields/farms
Scenic Quality of Water		
Duration	9	
Type	10	few coves, large bay
Horizon	8	

FIELD ANALYSIS

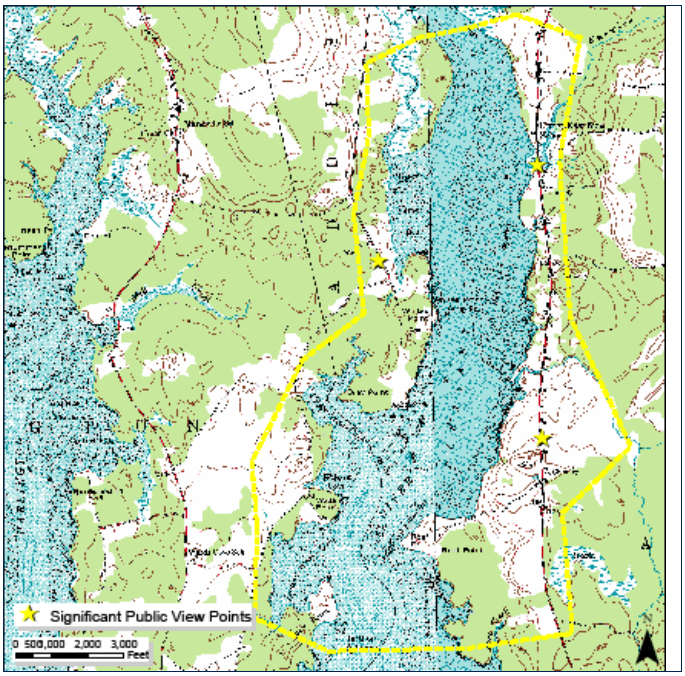
	Score	
Landscape Characte		
Land Use	3	Residential-obstructs views especiall
Roadside	3	decent back roads
Settlement	2	few old farm houses, nothing spectac
Vegetation	7	heavily wooded
Effect	6	open fields
Field Total	**21**	
Desk Total	**40**	
Grand Total	**61**	Multiple views from roads on both si

Description of Scenic Area:

The Pleasant Bay scenic area is located in the town of Addison, it encompasses both sides of the river, as well as a public boat launch located near Upper Wass Cove. The scenic area includes large coves and bays, some fields, a couple old farm houses, heavily wooded areas, and hills. There are few scenic features in the foreground which are some large fields and views to water. There are multiple sustained views to the river, from roadways, including some nice elevated views as well as some nice back roads in the area. Other viewpoints are located at the boat launch/beach.

PleasantBayMap.pdf

Map of Pleasant Bay area in Addison



PleasantBayRoad.jpg

Vew from the road at Pleasant Bay

Scenic area	**Columbia Falls**			**View Points**	Boat Launch (A), Bridge (B), Memorial
County	Washington	**District:**	Pleasant River Bay	**Subdistricts**	Pleasant River

DESKTOP ANALYSIS

	Scor	
Land Form		
Elevation	2	
Slope	2	
Open Land	1	
Shoreline	6	
Features	8	
Scenic Quality of Water		
Duration	4	
Type	6	
Horizon	3	Aspen @ boat launch, memorial, falls, bu

FIELD ANALYSIS

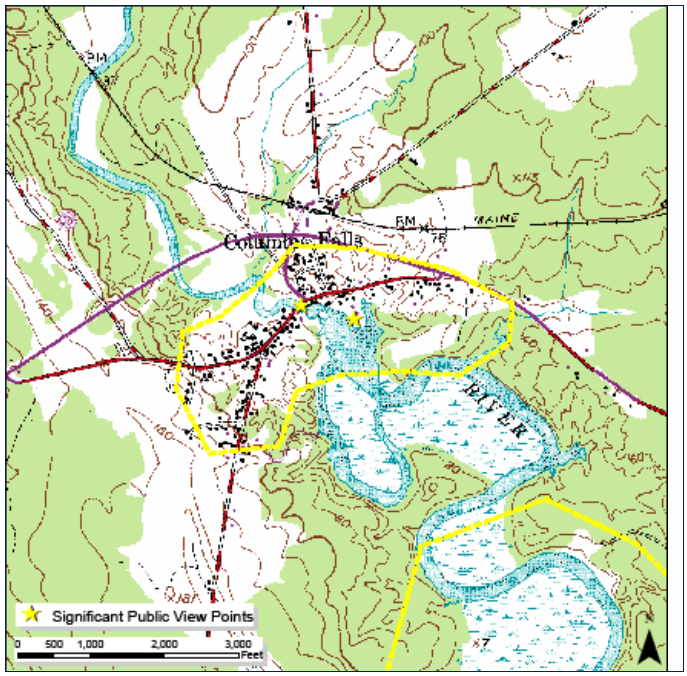
	Score	
Landscape Characte		
Land Use	6	village, residential waterfront, smelt s
Roadside	5	well maintained, walkable, pedestrian
Settlement	6	church, village, buildings
Vegetation	6	
Effect	6	Idyllic village setting, falls
Field Total	**29**	
Desk Total	**32**	
Grand Total	**61**	Boat launch is nice and quiet, bench,

Description of Scenic Area:

The Columbia Falls scenic area is located in the town of Columbia Falls, encompassing portions of the riverfront and downtown area of Columbia Falls. This scenic area includes distinct village and community buildings, and a hatchery. There are numerous scenic features located in the scenic area including the outlet of the Pleasant River, the DSF Hatchery, Church, and old smelt shacks (with the multiple viewpoints features rotate from foreground to mid-ground). There is also a multitude of birds that frequent the area. The scenic area is culturally significant as an old historic town as well as a traditional smelting location in the winter.. There are numerous short views from roadways and pedestrian walkways through the town. Other viewpoints are located near the public hand boat launch.

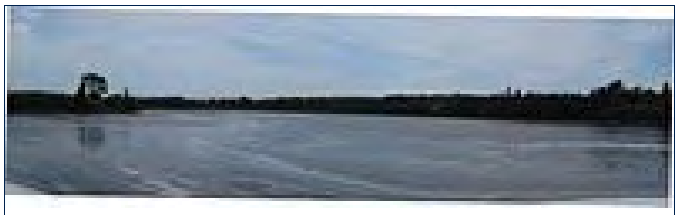
ColumbiaFallsMap.pdf

Map of Columbia Falls



ColumbiaBoat01

Boat Launch at Columbia Falls



Scenic area	**Curtis Creek**	**View Points**	Bridge (A), Top of Hill (B)
County	Washington	**District:** Pleasant River Bay	**Subdistricts** Harrington

DESKTOP ANALYSIS

Land Form	Scor	
Elevation	1	
Slope	2	
Open Land	4	
Shoreline	5	
Features	1	
Scenic Quality of Water		
Duration	4	
Type	7	
Horizon	3	

FIELD ANALYSIS

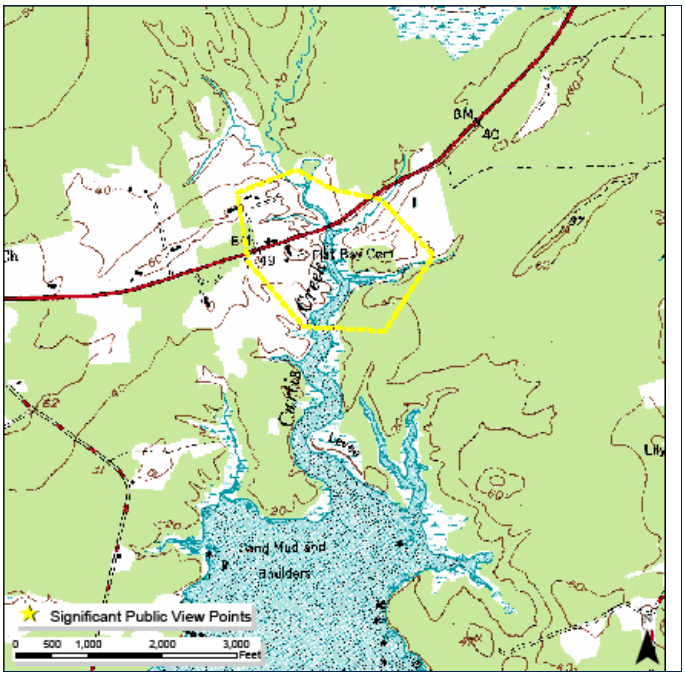
	Score	
Landscape Characte		
Land Use	0	
Roadside	0	Major road, good condition, nice gua
Settlement	0	Verizon station, houses
Vegetation	6	Trees are gorgeous when blossoming
Effect	2	
Field Total	**8**	
Desk Total	**27**	
Grand Total	**35**	This really empties out at low tide - s

Description of Scenic Area:

Curtis Creek is a small scenic area is located in the town of Harrington where Curtis Creek cross Route 1A. This scenic area includes a small coastal marsh along Curtis Creek. Tidal variations affect the scenic quality of Curtis Creek, which empties out at low tide. There are also some adjacent land uses that detract from the areas scenic qualities. There are frequent wildlife sightings in this scenic area. Good views can be had from Route 1A, which has sufficient shoulders to accommodate bicyclists in this area.

CurtisCreekMap.pdf

Map of Curtis Creek



CurtisCreek02.JPG

Curtis Creek

Scenic area	**Cole Creek/Mill River**			**View Points**	
County	Washington	**District:**	Pleasant River Bay	**Subdistricts**	Harrington

DESKTOP ANALYSIS

	Scor	
Land Form		Mill River
Elevation	1	
Slope	1	
Open Land	3	Cole Creek Fields on both sides
Shoreline	6	
Features	1	
Scenic Quality of Water		
Duration	6	
Type	6	
Horizon	3	

FIELD ANALYSIS

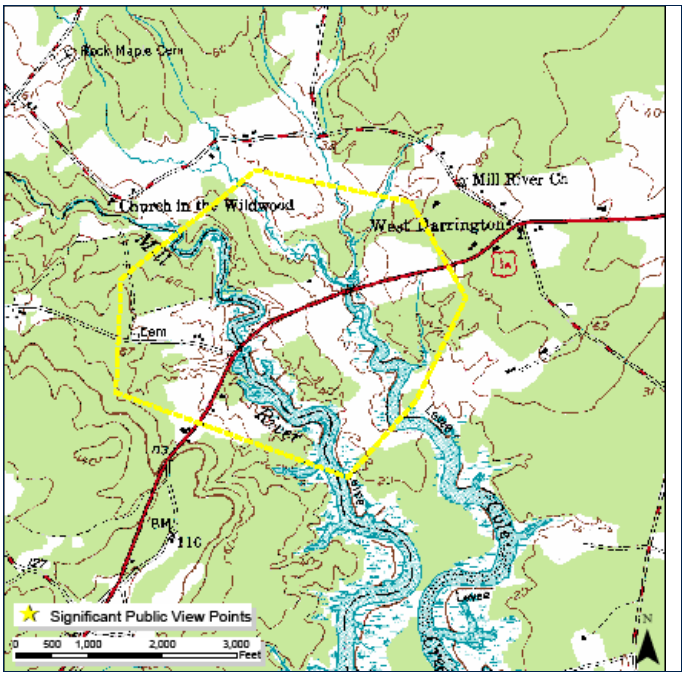
	Score	
Landscape Characte		
Land Use	0	Power line-busy road
Roadside	0	
Settlement	0	
Vegetation	3	
Effect	5	
Field Total	**8**	
Desk Total	**27**	
Grand Total	**35**	Views from road. Cole Creek/Mill Ri

Description of Scenic Area:

The Cole Creek / Mill River scenic area includes two tidal marshes and nearby areas along Route 1A in the towns Harrington and Milbridge. Short, water views within this scenic area punctuate the feeling of enclosure created by driving through coastal spruce forests along Route 1A. There is no significant public land within the scenic area.

MillRiverColeCreekMap.pdf

Map of Mill River and Cole Creek



ColeCreek1.JPG

View up Cole Creek from Route 1A

Scenic area	**Back Bay**			**View Points**	Boat Launch (A), Along road (B)
County	Washington	**District:**	Pleasant River Bay	**Subdistricts**	Harrington

DESKTOP ANALYSIS

Land Form	Score	
Elevation	1	Flats - Tide Out
Slope	2	
Open Land	0	
Shoreline	3	
Features	5	
Scenic Quality of Water		
Duration	3	
Type	9	
Horizon	5	

FIELD ANALYSIS

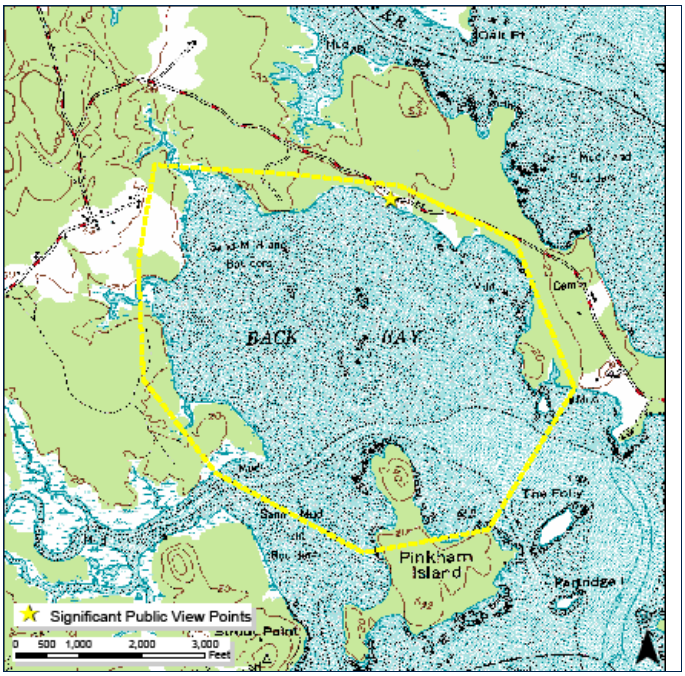
Landscape Characte	Score	
Land Use	1	Very few buildings no boats
Roadside	3	
Settlement	1	
Vegetation	4	
Effect	6	
Field Total	**15**	
Desk Total	**28**	
Grand Total	**43**	

Description of Scenic Area:

Back Bay scenic area is located in the town of Milbridge. This scenic area includes an enclosed, coastal bay with extensive areas of salt grasses and limited shoreline development. Low tide exposes extensive tidal flats that actively used by clammers. Migratory birds are common. There is a public, hand-carry boat launch (accessible at high tide) and short, filtered views from public roads.

BackBayMap.pdf

Map of Back Bay on the Harrington River



BACKBAY01.jpg

View of Back Bay in the Harrington River, seen from Route 1A in Milbridge.

Scenic area	**Cherryfield Downtown**	View Points	Rt. 1 Brdg, Along Main St., Campbell Hill
County	Washington	**District:** Pleasant River Bay	**Subdistricts** Narraguagus

DESKTOP ANALYSIS

Land Form	Scor	
Elevation	2	
Slope	2	Steep banks along river
Open Land	1	
Shoreline	6	
Features	4	garden, railroad, village buildings, 2 brid
Scenic Quality of Water		
Duration	7	
Type	6	
Horizon	3	

FIELD ANALYSIS

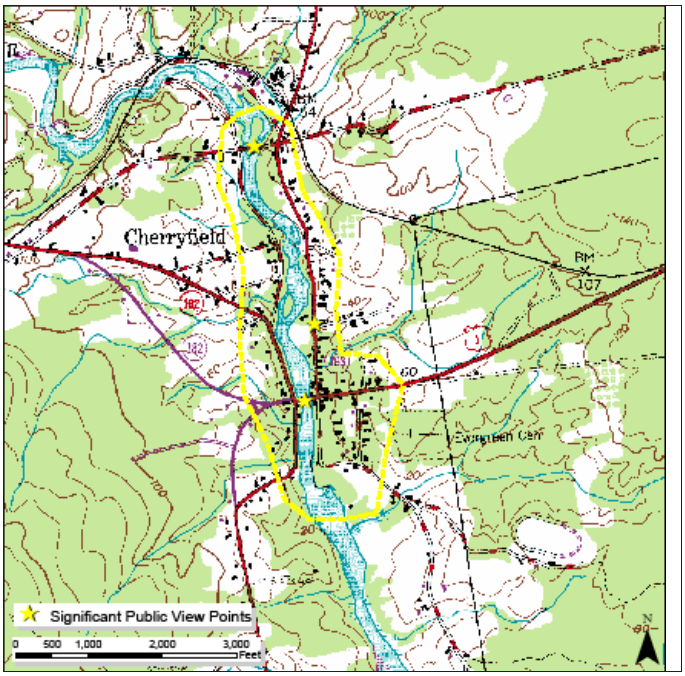
	Score	
Landscape Characte		
Land Use	6	Village downtown, residential
Roadside	4	
Settlement	7	Architecture is positive, a little rundo
Vegetation	4	Japanese knotweed along river road
Effect	6	Historic, mystery/purpose
Field Total	27	
Desk Total	31	
Grand Total	58	Attractive old buildings on Campbell

Description of Scenic Area:

The Cherryfield Downtown scenic area is located in the town of Cherryfield, it encompasses the town of Cherryfield and the riverfront. The scenic area includes a configured river and a busy downtown area. Some notable scenic features in the foreground include village buildings, the bridges, park, and railroad. In the mid and background many of the former features can be viewed from different locations. There are many short views of the river as you pass through town. Other viewpoints can be seen from the walkways through town as well as the park area.

CherryfieldMap.pdf

Map of Cherryfield



Cherryfield (2).jpg

Cherryfield Buildings on Narraguagus River

Scenic area	**Cable Pool**			**View Points**	Dam, Trestle, Cable
County	Washington	**District:**	Pleasant River Bay	**Subdistricts**	Narraguagus

DESKTOP ANALYSIS

	Scor	
Land Form		
Elevation	1	Less than 100' viewable.
Slope	1	
Open Land	2	
Shoreline	4	Inland
Features	8	Trestle bridge, cable system, dam.
Scenic Quality of Water		
Duration	7	
Type	6	
Horizon	3	

FIELD ANALYSIS

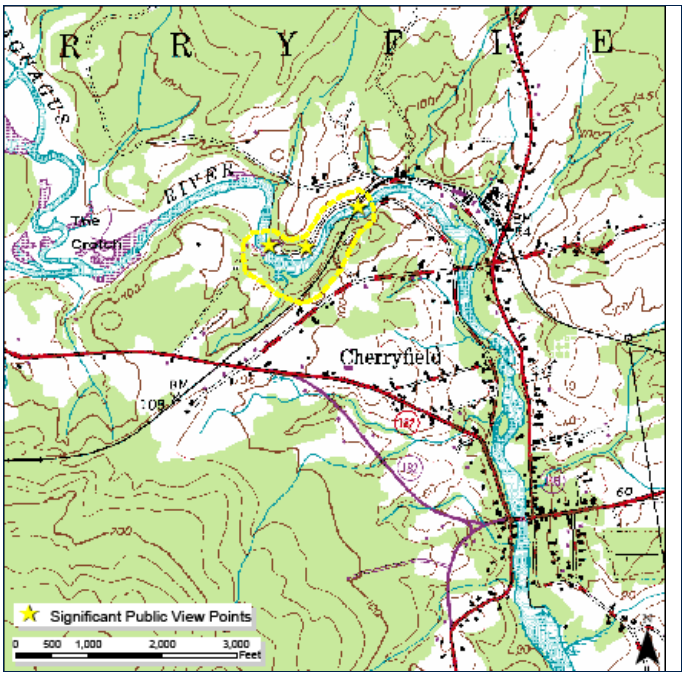
	Score	
Landscape Characte		
Land Use	6	
Roadside	5	
Settlement	8	
Vegetation	6	
Effect	7	
Field Total	**32**	
Desk Total	**32**	
Grand Total	**64**	Test visit for training. Also participat

Description of Scenic Area:

Cable Pool scenic area encompassed the area in and around Cable Pool Park in Cherryfield. The scenic area includes views of the meandering Narraguagus River and pine forests along its shores. Scenic features in the foreground include the suspension cable for which Cable Pool is named and a historic, steel-girder, railway bridge where the Sunrise Trail crosses the Narraguagus River. Cable Pool is culturally significant a major destination for 19th and 20th century salon anglers; and is still frequently visited by fly fishermen today. Good views of the river can be had from a dirt road within the park as well as from the Downeast Sunrise Trail.

cablepoolmap.pdf

Overview of Cable Pool Area from Google Maps



cablepooldam (5).jpg

Fishing at Cable Pool

Appendix I: NRHP Nomination Forms for Gallison Memorial Library and Columbia Union Church

NPS Form 10-900
(Oct. 1990)

OMB No. 10024-0018

1632

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Gallison Memorial Library

other names/site number

2. Location

street & number North side of Route 1, .05 miles west of Junction with Route 1A N/A ☐ not for publication

city or town Harrington N/A ☐ vicinity

state Maine code ME county Washington code 029 zip code 04643

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this ☒ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☒ meets ☐ does not meet the National Register criteria. I recommend that this property be considered significant ☐ nationally ☐ statewide ☒ locally. (☐ See continuation sheet for additional comments.)

Signature of certifying official/Title Date 11/30/00

Maine Historic Preservation Commission
State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. (☐ See continuation sheet for additional comments.)

Signature of certifying official/Title Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that this property is:

☒ entered in the National Register.
☐ See continuation sheet.
☐ determined eligible for the National Register.
☐ See continuation sheet.
☐ determined not eligible for the National Register.
☐ removed from the National Register.
☐ other, (explain): _____

Signature of the Keeper Date of Action

Edson H. Beall 1.11.01

Gallison Memorial Library
Name of Property

Washington, Maine
County and State

5. Classification

Ownership of Property
(Check as many boxes as apply)

- ☒ private
- ☐ public-local
- ☐ public-State
- ☐ public-Federal

Category of Property
(Check only one box)

- ☒ building(s)
- ☐ district
- ☐ site
- ☐ structure
- ☐ object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
1		buildings
		sites
		structures
		objects
1	0	Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)

Maine Public Libraries

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
(Enter categories from instructions)

Education/Library

Current Functions
(Enter categories from instructions)

Education/Library

7. Description

Architectural Classification
(Enter categories from instructions)

Colonial Revival

Materials
(Enter categories from instructions)

foundation Concrete
walls Brick
roof Asphalt
other

Narrative Description
(Describe the historic and current condition of the property on one or more continuation sheets.)

NPS FORM 10-900-a
(8-86)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

GALLISON MEMORIAL LIBRARY WASHINGTON, MAINE
Section number 7 **Page** 2

The Gallison Memorial Library is a Colonial Revival style, one-story, three-bay brick building which features interior end chimneys. It stands along the north side of U.S. Route 1 in Harrington village adjacent to the Harrington United Methodist Church. The building is supported by a concrete foundation and has an asphalt shingle roof.

Facing south, the symmetrically composed front elevation is comprised of a central entrance flanked by eight-over-eight double hung sash windows that are surmounted by round arched fanlights. The recessed six-panel door is framed by a paneled reveal and capped by a fanlight. This entrance is, in turn, defined by paired fluted columns set in antis which support a short, denticulated entablature. The frieze of this entablature bears the words GALLISON MEMORIAL. Five granite steps with wrought iron hand rails rise to the entrance landing. The flanking windows rest on rectangular panels, and the impost blocks and keystones of their brick arched fanlights are made of cast concrete. The overhanging cornice terminates in short returns on the end walls.

There are two six-pane, fixed sash windows on the library's east gable end, and a single window centered on the west gable end that matches those on the facade. Three round arched double hung windows are symmetrically located on the rear elevation. A small shed roofed dormer with three four-pane windows is centered on the rear slope of the roof.

Inside, the library has a single room that retains its plaster over lath walls and ceiling, Colonial Revival style trim, and its original pale yellow paint scheme. A fireplace framed by a paneled mantel is located at the east end of the room. A framed photograph of Forrest Gallison, in whose name the library was originally built, hangs above the mantel. Wooden bookcases are located along the room's outer walls and in the center of the west end.

Gallison Memorial Library
Name of Property

Washington, Maine
County and State

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- ☒ **A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- ☐ **B** Property is associated with the lives of persons significant in our past.
- ☒ **C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ☐ **D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply.)

Property is:

- ☐ **A** owned by a religious institution or used for religious purposes.
- ☐ **B** removed from its original location.
- ☐ **C** a birthplace or a grave.
- ☐ **D** a cemetery.
- ☐ **E** a reconstructed building, object, or structure.
- ☐ **F** a commemorative property.
- ☐ **G** less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance
(Enter categories from instructions)

Education

Architecture

Period of Significance

1922-1950

Significant Dates

1922-23

Significant Person
(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Crowell & Lancaster, Architects

Narrative Statement of Significance
(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography
(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- ☐ preliminary determination of individual listing (36 CFR 67) has been requested
- ☐ previously listed in the National Register
- ☐ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings Survey #
- ☐ recorded by Historic American Engineering Record #

Primary location of additional data:

- ☒ State Historic Preservation Office
- ☐ Other State agency
- ☐ Federal agency
- ☐ Local government
- ☐ University
- ☐ Other

Name of repository:

NPS FORM 10-900-a
(8-86)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

GALLISON MEMORIAL LIBRARY WASHINGTON, MAINE

Section number 8 **Page** 2

Erected in 1922-23 from plans drawn by the Bangor architectural firm of Crowell & Lancaster, the Gallison Memorial Library is a modest Colonial Revival style building constructed of brick. It was a gift to the Town of Harrington by Alice (Strout) Gallison in memory of her husband Forrest Gallison. The library is eligible for nomination to the National Register under Criteria A and C as more fully explained in the Multiple Property Documentation form entitled "Maine Public Libraries."

The Town of Harrington was initially settled by Anglo-Americans in the late 1760s, and it was incorporated on June 17, 1797. According to the description of the town that appeared in George Varney's *Gazetteer of The State of Maine* (1881), the community at that time had three shipbuilding firms, a boat-builder, sail-maker, a boot and shoe manufacturer, and a steam-mill for meal, flour and lumber. In 1880, its population stood at 1,290 persons, a figure that had declined to 1,020 by 1910.

In the 1881 *Gazetteer*, reference is made to a library in the village of Harrington comprised of 300 volumes. The existence of a town library is first confirmed in the 1883 edition of the *Maine Register*, at which time it is listed as the Village Library Association with a collection of about 2,000 volumes. Mrs. U.N. Merritt was the librarian, a position she appears to have held for several years thereafter. Further information about the library's early history is contained in the *Addison and Harrington Register, 1905*. According to this source, the library was the outgrowth of the Martha Washington Society, established "some sixty years since." The Society's book collection was subsequently donated to the Harrington Village Library Association when the latter was organized in 1896 (*Register*, p.94). Although the documentary sources do not establish the precise lineage of Harrington's library, by 1910-11 its collection had reached 2,800 volumes (*Maine Register*). The following year, the Association purchased a small building of undetermined age and prior use on Main Street adjacent to the Methodist Church and moved the library into it.

According to local tradition, in 1921 Mrs. Gallison approached the Library Association with the offer of donating a new library building to the community if the existing building were removed. Mrs. Gallison was a descendent of one of the earliest settlers of Harrington, and she and her husband had moved to Oak Point in Harrington after his retirement from a business career in New York City (Dickson, p.93). After his death, she conceived the idea to build a library in his memory.

It is not been ascertained how Mrs. Gallison selected the architectural firm of Crowell & Lancaster to design the Gallison Memorial Library, although at the time it was among the most prolific design teams in eastern and central Maine. Comprised of the partners C. Parker Crowell and Walter S. Lancaster, the firm had been established in 1919. The Gallison Memorial Library project was the first of the firm's three commissions for public libraries, the others being the Shaw Library in Greenville (1925), and the Lyndon Oak Memorial Library in Garland (1937).

NPS FORM 10-900-a
(8-86)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

GALLISON MEMORIAL LIBRARY WASHINGTON, MAINE

Section number 9 **Page** 2

Bibliography

Dickson, Katharine. *Stockman-Gallison Ancestral Lines*. Henniker, NH: Katharine Brown, 1984.

Maine Register or State Yearbook and Legislative Manual. Various years.

Mitchell and Campbell, comp. *The Addison and Harrington Register, 1905*. Brunswick, ME: H. E. Mitchell Company.

Varney, George J. *A Gazetteer of the State of Maine*. Boston: B. B. Russell. 1881.

Gallison Memorial Library
Name of Property

Washington, Maine
County and State

10. Geographical Data

Acreage of Property Less Than 1

UTM References
(Place additional UTM references on a continuation sheet.)

	Zone	Easting	Northing
1	19	594210	4941100
2			
3			
4			

☐ See continuation sheet

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification
(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Kirk F. Mohney, Architectural Historian

organization Maine Historic Preservation Commission date October, 2000

street & number 55 Capitol Street, 65 State House Station telephone 207/287-2132

city or town Augusta, state Maine zip code 04333-0065

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional Items
(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name _____

street & number _____ telephone _____

city or town _____ state _____ zip code _____

NPS FORM 10-900-a
(8-86)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Verbal Boundary Description

The nominated property occupies the Town of Harrington tax map 1, lot 124.

Boundary Justification

The boundary embraces the entire village lot that is historically associated with the Gallison Memorial Library.

NPS FORM 10-900-a
(8-86)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

GALLISON MEMORIAL LIBRARY **WASHINGTON CO., ME**
Section number ____ Page ____

PHOTOGRAPHS

1 of 3
Kirk F. Mohney
August 1, 2000
Maine Historic Preservation Commission
View from SE

2 of 3
Kirk F. Mohney
August 1, 2000
Maine Historic Preservation Commission
View from NW

3 of 3
Kirk F. Mohney
August 1, 2000
Maine Historic Preservation Commission
View of interior looking east

NPS Form 10-900
(Oct. 1990)

OMB No. 10024-0018

607

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

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1. Name of Property

historic name Columbia Union Church

other names/site number Epping Baptist Church

2. Location

street & number North side of MDOT Road No. 29-608, .05 miles east of Junction with MDOT Road No. 29-610 N/A not for publication

city or town Epping, ☒ vicinity

state Maine code ME county Washington code 029 zip code 04623

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this ☒ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☒ meets ☐ does not meet the National Register criteria. I recommend that this property be considered significant ☐ nationally ☐ statewide ☒ locally. (☐ See continuation sheet for additional comments.)

Signature of certifying official/Title — Date 5/16/97

Maine Historic Preservation Commission
State of Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. (☐ See continuation sheet for additional comments.)

Signature of certifying official/Title — Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

☒ entered in the National Register.
☐ See continuation sheet.
☐ determined eligible for the National Register
☐ See continuation sheet.
☐ determined not eligible for the National Register.
☐ removed from the National Register.
☐ other, (explain:) _____

Signature of the Keeper — Date of Action

Edson H. Beall — 6/20/97

Columbia Union Church
Name of Property

Washington, Maine
County and State

5. Classification

Ownership of Property
(Check as many boxes as apply)

- ☒ private
- ☐ public-local
- ☐ public-State
- ☐ public-Federal

Category of Property
(Check only one box)

- ☒ building(s)
- ☐ district
- ☐ site
- ☐ structure
- ☐ object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
1		buildings
		sites
		structures
		objects
1	0	Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
(Enter categories from instructions)

Religion/Religious Facility

Current Functions
(Enter categories from instructions)

Vacant/Not In Use

7. Description

Architectural Classification
(Enter categories from instructions)

Greek Revival
Gothic Revival

Materials
(Enter categories from instructions)

foundation Stone/Granite
walls Wood/Weatherboard
roof Asphalt
other Two Stage Tower

Narrative Description
(Describe the historic and current condition of the property on one or more continuation sheets.)

Columbia Union Church
Name of Property

Washington, Maine
County and State

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- ☐ **A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- ☐ **B** Property is associated with the lives of persons significant in our past.
- ☒ **C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ☐ **D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply.)

Property is:

- ☒ **A** owned by a religious institution or used for religious purposes.
- ☐ **B** removed from its original location.
- ☐ **C** a birthplace or a grave.
- ☐ **D** a cemetery.
- ☐ **E** a reconstructed building, object, or structure.
- ☐ **F** a commemorative property.
- ☐ **G** less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance
(Enter categories from instructions)

Architecture

Period of Significance

1870

Significant Dates

1870

Significant Person
(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Unknown

Narrative Statement of Significance
(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography
(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- ☐ preliminary determination of individual listing (36 CFR 67) has been requested
- ☐ previously listed in the National Register
- ☐ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings Survey # _____
- ☐ recorded by Historic American Engineering Record # _____

Primary location of additional data:

- ☒ State Historic Preservation Office
- ☐ Other State agency
- ☐ Federal agency
- ☐ Local government
- ☐ University
- ☐ Other

Name of repository:

_____

Columbia Union Church
Name of Property

Washington, Maine
County and State

10. Geographical Data

Acreage of Property Less Than 1

UTM References
(Place additional UTM references on a continuation sheet.)

	Zone	Easting	Northing
1	19	596680	4948250
2			
3			
4			

☐ See continuation sheet

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification
(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Kirk F. Mohney, Architectural Historian

organization Maine Historic Preservation Commission date April, 1997

street & number 55 Capitol Street, 65 State House Station telephone 207/287-2132

city or town Augusta, state Maine zip code 04333-0065

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional items
(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name _____

street & number _____ telephone _____

city or town _____ state _____ zip code _____

NPS Form 10-900-a
(8-86)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

COLUMBIA UNION CHURCH WASHINGTON, MAINE

Section number 7 **Page** 2

The Columbia Union Church is a rectangular frame building whose pedimented gable roof is surmounted by a crenelated two-stage tower. It is sheathed in clapboards and wood shingles, and is supported by a granite block foundation. A slab of granite in front of the church bears the date A.D. 1829, the year in which the building was originally constructed. Its present appearance dates from an extensive remodeling carried out in 1870.

Facing south, the symmetrically composed three-bay front elevation contains a large central window that is flanked by a pair of doorways. The window is comprised of a pair of long six-over-six double hung sash windows featuring fixed louver blinds and a gothic style drip moulding. Similar mouldings surmount the doorways that are comprised of nine-panel doors. The corners of the facade are framed by wide paneled pilasters. They rise to an entablature which carries across the facade and along the side elevations. Rising above the pediment and its raking cornice is the flush sheathed tower. It has a squat base and a tall belfry stage with louvered openings on three of its four sides. The belfry is further articulated with trim detail that matches the main block including drip mouldings, corner pilasters, frieze, and overhanging cornice. Its flat roof is articulated with crenelation.

Both the west and east side elevations feature two symmetrically placed windows whose composition is identical to the one on the facade. The space between the windows on the west side is occupied by a shed roofed addition that houses the furnace (added in 1984). The detailing of the pilasters is repeated at each corner but not on the rear elevation where there are short gable end returns. Unlike the other three elevations, the rear elevation is sheathed in wood shingles. It also features an attached woodshed comprised of shed roofed and gable roofed sections. An interior end brick flue punctuates each plane of the roof near the rear wall.

Unlike many churches from this period, the front doors open directly into the nave rather than into a vestibule. A central aisle separates two groups of pews, each of which features a curved armrest terminating in a volute. A raised platform extends across about two thirds of the north end, to the west side of which is a stove whose pipe enters a projecting flue that is plastered. A second stove and flue are located on the floor to the right of the platform adjacent to the door leading to the woodshed. The plastered walls rise above wainscot to a ceiling that features unusual rib-like detailing extending from the corners to a rectangular area in the center. (This is a virtually identical treatment to the one used in the Union Evangelical Church in Addison.) All of the window and doors have wide heavily molded surrounds typical of the period.

NPS Form 10-900-a
(8-86)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Originally constructed in 1829 and extensively remodeled in 1870, the Columbia Union Church is a Greek Revival style frame building with Gothic Revival detailing around its window and door openings as well as on its two stage tower. In its remodeled state, the church is remarkably similar in form to the Union Evangelical Church (N. R. 6/7/96) in the neighboring town of Addison, a building that was erected in the early 1860s. Unfortunately, their builders have not been identified. The church is eligible for nomination to the National Register under criterion C for its local architectural significance. Criteria Consideration A also applies by virtue of its religious use.

The Columbia Union Church was originally constructed in 1829, at which time it was known as the Epping Baptist Church. It was the first religious building erected in the Town of Columbia, which had initially been settled by Anglo-Americans prior to the Revolution. Columbia was incorporated on February 8, 1796, and at the taking of the 1800 census its inhabitants numbered 357 persons. The Baptist congregation that originally erected the church traces its origins to 1788, and until the church building was constructed meetings were held in private homes and school houses. At what point the Baptists abandoned this building is uncertain. However, on May 10, 1866 the Columbia Union Society was organized with the express intent as stated in Article 3 of its constitution that "The object of the Society shall be to repair the Union Meeting House suitable for public meeting." This statement implies that the building was already considered to be a multi denominational place of worship, and that it was in need of repair. The extensive remodeling in 1870 was carried out under the direction of this organization. The Columbia Union Society continues to hold title to and maintain the church, although it has not been in use for the past three or four years.

The Columbia Union Church is part of a large group of architecturally related mid- nineteenth religious buildings erected in rural areas of the state. The buildings that comprise the general grouping can be further subdivided into three subsets: 1) churches with towers crowned by spires; 2) churches without spires; and 3) churches without towers. Common characteristics shared by all of these churches include their rectangular gable front orientations (often with a pediment), their plans (generally containing vestibules under galleries or adjacent to a raised platform), and an unmistakable Greek Revival style form that is conveyed not only by the general massing, but also by detailing such as corner pilasters and a broad entablature. These classical details are frequently combined with Gothic Revival features such as lancet arches above windows and belfry openings or in paneled pilasters, drip moldings over doors and windows, and crenelated towers. In some of the earliest members of the group, Federal style elements may even appear (St. John's Episcopal Church in Dresden, N. R. *6/14/91*). The Columbia Union Church belongs to the subset of towered buildings that lack spires. In this case the belfry stage of the tower was capped by crenelation, and its mix of detailing includes a wide entablature, paneled pilasters, and pronounced drip moldings. Given its high degree of integrity, the church is a good representative example of a distinct building type erected in Maine during the middle decades of the nineteenth century, a period in which a remarkable number of such buildings appeared on the state's landscape.

NPS Form 10-900-a
(8-86)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Author's telephone interview with Mrs. Ronie L. Strout, Columbia, Maine. April 8, 1997.

Greene, Nancy H., and Drisko, Clarence H. *A History of Columbia and Columbia Falls.* Cherryfield, ME: Narraguagus Printing Co. 1976.

Mohney, Kirk F. National Register of Historic Places Nomination Form for the Union Evangelical Church, Addison, Washington County, Maine. Maine Historic Preservation Commission. Augusta. April, 1996.

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NPS Form 10-900-a
(8-86)

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COLUMBIA UNION CHURCH WASHINGTON, MAINE

Section number 10 **Page** 2

Verbal Boundary Description

The nominated property occupies the Town of Columbia Tax Map 12, Lot 30.

Boundary Justification

The boundary embraces the entire rural lot historically associated with the Columbia Union Church.

Appendix J: Great Heath Memo

Memorandum

To: Department of Environmental Protection

From: Juliet Browne

Date: January 20, 2021

Re: Downeast Wind Project/The Great Heath

Downeast Wind, LLC is developing a grid-scale wind power project located in the unorganized townships of T18MD BPP and T24MD BPP and the Town of Columbia, Maine (the "Downeast Wind Project" or "Project"). The Great Heath is one of the largest multi-unit peatlands in Maine. It extends on both sides of the Pleasant River in T18MD and the Town of Columbia, and is located proximate to the Project. Attached as Figure 1 is a plan showing the location of the Great Heath.

The Project requires permitting by the Maine DEP pursuant to the Site Location of Development Law and is subject to the scenic review standard set forth in 35-A M.R.S. § 3452. Pursuant to Section 3452 the DEP evaluates a project's visibility on statutorily defined Scenic Resources of State or National Significance (SRSNS). For the reasons discussed below, the Great Heath is not a SRSNS and therefore it should not be considered in the Visual Impact Assessment (VIA) for the Downeast Wind project.

A. Statutory Definition of Scenic Resource of State or National Significance

For purposes of evaluating impacts from proposed wind power projects, Maine law (specifically, 35-A M.R.S. § 3451(9)) defines a "scenic resource of state or national significance" (SRSNS) as "an area or place owned by the public or to which the public has a legal right of access" and that also is one of the following:

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 on the National Register of Historic Places;

C) A national or state park;

D) A great pond that is listed in the *Maine's Finest Lakes* study as having outstanding or significant scenic quality or that is listed in the *Maine Wildlands Lakes Assessment* as being outstanding or significant with respect to scenic characteristics;

E) A river segment listed in the *Maine Rivers Study* as having unique or outstanding scenic attributes;

F) A scenic viewpoint on public reserve land or on a trail that is used exclusively for pedestrian activities and that is designated as a SRSNS by Maine Dept. of Agriculture, Conservation and Forestry;

G) A scenic turnout on a public road designated by DOT as being a SRSNS; or

H) Scenic viewpoints in designated coastal areas that are ranked as having state or national significance for scenic quality in one of various reports or inventories.

As a threshold matter, portions of the Great Heath are privately owned and there is no legal right for the public to access those portions of the Great Heath. Therefore, assuming for the sake of argument that the Great Heath were an SRSNS, that designation would apply only to those portions that are owned by the public or to which the public has legal access.[1] The attached Figure 2 shows the portions of the Great Heath that are privately owned. Moreover, as discussed below, there is very limited access to even those portions of the Great Heath that are owned by the State or Town of Columbia.

The Great Heath is not listed on the National Register of Historic Places, is not a state or national park, does not contain a qualifying great pond or river segment, does not contain a designated scenic viewpoint, does not contain a scenic turnout, and is not listed as having state or national scenic significance in any of the referenced reports. As a result, scenic resource designation categories B, C, D, E, F, G, and H above do not apply. The only possible category under which the Great Heath could be considered a SRSNS would be pursuant to category A: a national natural landmark, federally designated wilderness area or other comparable outstanding natural and cultural feature. The Great Heath is not a national natural landmark or federally designated wilderness area. Thus, the only inquiry is whether the Great Heath constitutes an outstanding natural and cultural feature that is *comparable to a national natural landmark or federally designated wilderness area*. For the reasons discussed below it is not.

B. The Wilderness Area Act

The Wilderness Area Act (the "WAA") designates certain lands as wilderness areas. It was enacted to establish a national wilderness preservation system "where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." The WAA further defines "wilderness" as:

[1] *E.g.,* 35-A M.R.S. § 3451(9) (SRSNS limited to areas owned by the public or to which the public has a legal right of access).

> an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.[2]

All lands designated as Wilderness Areas are owned by the federal government (primarily the National Park Service, but also the U.S.D.A. Forest Service, U.S. Fish and Wildlife Service, and the U.S. Bureau of Land Management). None of the properties designated as Wilderness Area are privately owned, and none of the land is managed for long-term economic benefit.[3] Timber harvesting is not permitted within any Wilderness Areas. The WAA also prohibits commercial enterprise, permanent roads, most temporary roads, use of motor vehicles, motorized equipment, motorboats, landing of aircraft, structures, and all forms of mechanical transport (including bicycles).[4]

Maine has two designated Wilderness Areas – the Caribou-Speckled Mountain Wilderness (managed by the National Park Service), and the Moosehorn Wilderness (comprising two, non-contiguous units, both managed by the U.S. Fish and Wildlife Service). Both of Maine's Wilderness Areas are contained within other federally protected lands. The Caribou-Speckled Mountain Wilderness is within the White Mountain National Forest, and the Moosehorn Wilderness is within the Moosehorn National Wildlife Refuge. It is important to note, however, that the Wilderness Area designation is an elevated level of protection, which emphasizes the significance that the areas remain primarily untouched by man. None of Maine's nine other National Wildlife Refuges, one National Park, one National Monument, or two other areas of White Mountain National Forest (within the state) contain designated Wilderness Areas.

C. The National Natural Landmarks Program

The National Natural Landmarks Program (the "NNLP") was established in 1962 under authority of the Historic Sites Act of 1932 (the same enabling legislation as the National Historic Landmark Program (16 USA 461, et seq.)). Its purpose is to "identif[y] and preserve[] natural areas that best illustrate the biological and geological character of the United States, enhance[] the scientific and educational values of preserved areas, strengthen[] public appreciation of natural history, and foster[] a greater concern for the conservation of the nation's natural

[2] WAA § 2(c). Typically, Wilderness Areas smaller than 5,000 acres are self-contained ecosystems such as islands or are adjacent to other, federally-owned wilderness lands. *See, generally*, US Forest Service Handbook § 70.11.
[3] In very limited circumstances, some resource extraction (minerals, oil and gas) is allowed in Wilderness Areas as long as the wilderness character of the land is protected. Timber harvesting and roads are not allowed, however. *See, e.g.,* § 4(d)(3) of the Wilderness Area Act.
[4] *See* WAA § 4(d); *see also*, http://www.wilderness.net/NWPS/wildView?WID=99&tab=Area%20Management

heritage."[5] To be listed as a National Natural Landmark (NNL) under the NNLP, an area must be "*one of the best examples* of a biological or geological feature known to be characteristic of a given natural region."[6] Features include "terrestrial and aquatic ecosystems; geologic structures, exposures and landforms that record active geologic processes or portions of earth history; and fossil evidence of biological evolution."[7]

The primary criteria for evaluating an area for inclusion in the NNLP are (i) the illustrative character of the feature, and (ii) its present condition. The area should exhibit well-developed components recognized in the literature as characteristic of a particular type of natural feature and should be *"unusually illustrative"* of such feature, not merely "representative." Additionally, "the area should be less disturbed by humans than other areas."[8] Secondary criteria include *diversity* (in addition to the primary feature the area contains high quality examples of other biological or geological features), *rarity* (in addition to its primary natural feature the area includes rare features or provides high quality habitat for one or more rare, threatened or endangered species), and *the area's value for science and education*.[9]

Importantly, a NNLP Landmark must be an area "of exceptional natural value to the *nation as a whole rather than to one particular State or locality*."[10]

According to the National Park Service, only 586 NNLs have been designated, 14 of which are in the State of Maine (the remaining 572 are located in 47 other states, 3 U.S. territories, and the Commonwealth of Puerto Rico). The Maine NNLs include Mount Bigelow, a multi-summit ridge including some of Maine's highest mountains; Gulf Hagas, a three-mile gorge that is often referred to as the Grand Canyon of the East; The Hermitage, one of the few undisturbed old growth white pine stands remaining in New England; Carrying Place Cove Bog, a raised plateau bog that is one of only six such fully-featured peatlands in the United States; and Mount Katahdin, Maine's highest mountain and the centerpiece of Baxter State Park.[11]

D. Determination of Whether the Great Heath is a SRSNS

The relevant inquiry for determining whether the Great Heath constitutes a SRSNS is whether it possesses an outstanding *natural and cultural* feature comparable to areas designated as National Wilderness Areas or National Natural Landmarks under the two federal programs discussed above. For the following reasons, the Great Heath does not meet these criteria and, therefore, does not warrant SRSNS designation.

The Great Heath does not possess attributes consistent with a designation as a National Wilderness Area. First, significant portions of the Great Heath are privately owned, including significant portions of river frontage along the Pleasant River in parcels of approximately 5 to 20

[5] 36 CFR § 62.1.
[6] *Id.* at § 62.1(a) (emphasis added).
[7] *Id.* at § 62.5(a).
[8] *Id.* at § 62.5(b)(1).
[9] *Id.* at § 62.5(b)(2).
[10] *Id.* at § 62.1(a) (emphasis added).
[11] http://nature.nps.gov/nnl/state.cfm?State=ME

acres, as well as portions of the abandoned Pine Island subdivision, a nearly 400-acre expanse including many ½ acre parcels lots. This is inconsistent with a wilderness designation. The balance is owned by the Town of Columbia (approximately 1,300 acres) and the State (approximately 6,000 acres). The Pleasant River, which meanders through the Great Heath, allows for motorized boat use. Motor boats and snowmobiling are activities inconsistent with a wilderness designation. Importantly, unlike the Caribou-Speckled Mountain Wilderness and the Moosehorn Wilderness, both of which are contained within other federally protected lands, the areas immediately adjacent to the Great Heath are used for commercial blueberry growing and seasonal recreation including hunting, snowmobiling, ATVing, and fishing. In summary, although there is a feeling of remoteness within the Great Heath, a significant portion of it is privately owned, the predominant surrounding land use is commercial blueberry growing, and there are no restrictions on motorized uses such as boating on the Pleasant River or snowmobiling, both of which occur. These attributes are all inconsistent with designation as a Wilderness Area.

Similarly, the Great Heath does not possess those features that merit NNL designation. The Great Heath includes approximately 2,645 acres of peatland and approximately 800 acres of other non-forested wetland types.[12] There are other large peatlands in the State, including the Sunkhaze complex, Caribou/Orono Bog complex, Meddybemps Heath, Crystal Bog complex, No. 5 Bog, Chemo Bog, and Cold Stream/Passadumkeag Bog complex. Thus, the Great Heath is representative but not unique. Second, although the Great Heath is a Focus Area of Statewide Significance and includes important ecological attributes,[13] such as exemplary wetland and peatland communities, they are not exceptional on a national level. The Maine Natural Areas Program Ecological Reserve Fact Sheet states that there are no documented occurrences of rare animals within the Ecoreserve. Likewise, although Jacob's Ladder, an endangered plant, is present and is extremely rare in Maine, it is secure globally. While there are other rare plant and natural communities present, they do not rise to the level of national prominence or significance required for designation as an NNL. Thus, the Great Heath does not possess ecological attributes that are of exceptional natural value to the *nation as a whole rather than to one particular State or locality,*" which is required for designation as a NNL.[14]

By comparison, the Hermitage, which is a NNL, is "one of the few undisturbed, old growth white pine stands remaining in New England." The No. 5 bog and Jack Pine stand is the "only large, intermontane peatland and one of the few expansive, virgin landscapes in the northeastern United States."[15] The Appleton Bog, Atlantic White Cedar Stand, and the New Gloucester Black Gum Stand likewise contain primarily virgin forest stands unique to the United States in terms of condition, location, or size.[16] The plant and natural communities present in the Great Heath are important ecologically, but do not rise to the level of national or regional significance.

[12] Maine Geological Survey, Bulletin 32, Peat Resources of Maine, Volume 5: Washington County at p. 22.
[13] https://maine.gov/dacf/mnap/focusarea/great_heath_focus_area.pdf
[14] 36 CFR § 62.1(a) (emphasis added).
[15] http://www.nature.nps.gov/nnl/state.cfm?State=ME
[16] http://www.nature.nps.gov/nnl/state.cfm?State=ME

Importantly, even though it possesses important ecological or geologic attributes, the Great Heath does not have the additional attributes of cultural significance required to be considered a SRSNS. For example, there is very limited ability for the public to access the Great Heath or even find information on how to do so. The area is primarily accessed by the Pleasant River, which is not considered scenic in the *Maine Rivers Study*.[17] Accessing the river requires finding one of a handful of remote boat launches on Cherryfield Foods property to the north of the Great Heath (all of which are on posted land) or using the one designated "public" boat launch on Ell Meadow Road in Columbia, for which there are no signs, directions, or markings for the Great Heath, the boat launch, or Ell Meadow Road. Other possible access is on foot and requires traversing either forested and shrub wetland and/or crossing a lagg at the bog/upland interface, which is akin to a moat. Further, the only trails that provide access are unmarked, unmapped, and accessed only from land that is clearly posted with "No Trespassing" signs. There is no signage indicating the presence of the Great Heath, directing drivers to its only point of public access, or describing its significance to the public. Although it includes Maine Public Reserve Land, there are no parking areas or observation points that provide designated access into the Great Heath. Similarly, there are no identified hiking trails within the Great Heath.[18]

By comparison, the Orono Bog and Meddybemps Heath, which are provided as examples of areas with "outstanding natural and cultural" features, possess both natural and cultural attributes. The Orono Bog is part of the Caribou Bog Complex, which is one of the largest wetlands systems in Maine and, like the Great Heath, has important ecological features.[19] In addition to its ecological attributes, however, the Orono Bog also includes a one-mile public access boardwalk trail and is described by the NPS as "uniquely accessible to the public and for teaching and training purposes."[20] The loop trail passes through a wide range of changing vegetation in the environments and is described as "a premier destination in the Bangor/Orono area for persons wishing to experience the beauty and fascinating plants and animals of a Maine bog."[21] There is abundant signage, designated parking areas, and amenities such as benches and wheelchair access that facilitate public access to and understanding of the bog's unique ecological features.[22]

The Meddybemps Heath, like the Orono Bog and the Great Heath, has important ecological features. It is the second largest domed bog ecosystem in the eastern coastal and interior regions of Maine and, like the Orono Bog and Great Heath, it is a Focus Area of Statewide Ecological Significance.[23] Unlike the Great Heath, however, it includes additional cultural attributes. For example, it is located on the southwest side of Meddybemps Lake, which offers broad views of the heath. Beginning with Habitat's description of the Meddybemps Heath

[17] https://mainerivers.org/wp-content/uploads/2009/05/Maine-Rivers-Study3.pdf
[18] For example, AllTrails is a popular website that describes hiking opportunities throughout the United States. It also gives subscribers an opportunity to record and track their hikes. The AllTrails base map shows no hiking trails within the State-owned land that comprises the Great Heath. Under the category of Community Content, no recorded routes have been submitted by hikers as of the site access date on January 7, 2021. https://www.alltrails.com
[19] https://maine.gov/dacf/manp/focusearea/cariboubog.pdf.
[20] https://www.nps.gov/places/orono-bog.htm
[21] https://umaine.edu/oronobog.walk
[22] *Id.*
[23] https://maine.gov/dacf/mnap/fousarea/meddybemps_heath_focus_area

Focus Area notes its economic contributions: i.e., "serves as a valuable recreation resource for local residents, and 'contributes to recreational value of Meddybemps Lake by protecting water quality, fisheries, and wildlife habitat."[24] *The History of Meddybemps* website entry notes that residents continue the historic practice of harvesting "bountiful cranberries on the vast Meddybemps Heath."[25] Meddybemps Lake has long been recognized as one of the best smallmouth bass lakes in eastern Maine. A boat launch with a long dock is located at the outlet of the lake.[26]

For the above reasons the Great Heath, while important ecologically and geologically, is not designated as a National Wilderness Area or a National Natural Landmark and does not possess an *outstanding natural and cultural feature* necessary to qualify it as a SRSNS.

[24] https://www.maine.gov/dacf/mnap/focusarea/meddybemps_heath_focus_area.pdf
[25] https://www.meddybempslake.com/html/history_of_meddybemps.html
[26] https://www.maine.gov/ifw/docs/lake-survey-maps/washington/meddybemps_lake.pdf

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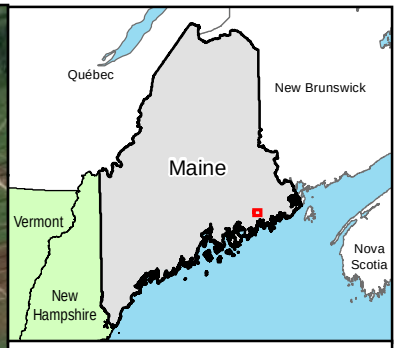

Great Heath

Public Access

Private Access

Town Boundary

N

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Miles

APEX
Downeast Wind
Washington County, Maine

Figure 1
Great Heath

TRC
14 Gabriel Drive
Augusta, ME 04330

1/15/2021

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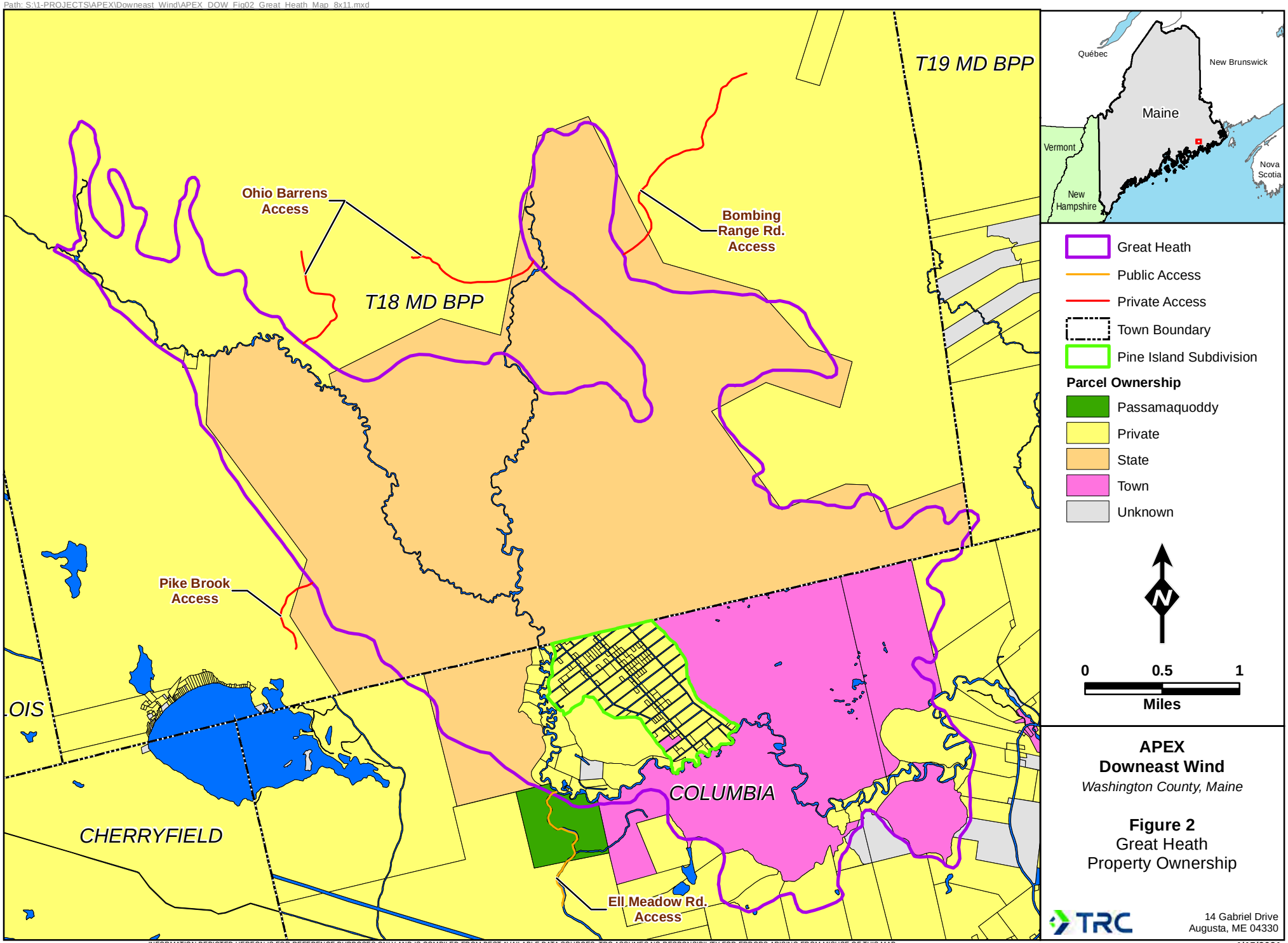

APEX
Downeast Wind
Washington County, Maine

Figure 2
Great Heath
Property Ownership

TRC

14 Gabriel Drive
Augusta, ME 04330

1/15/2021