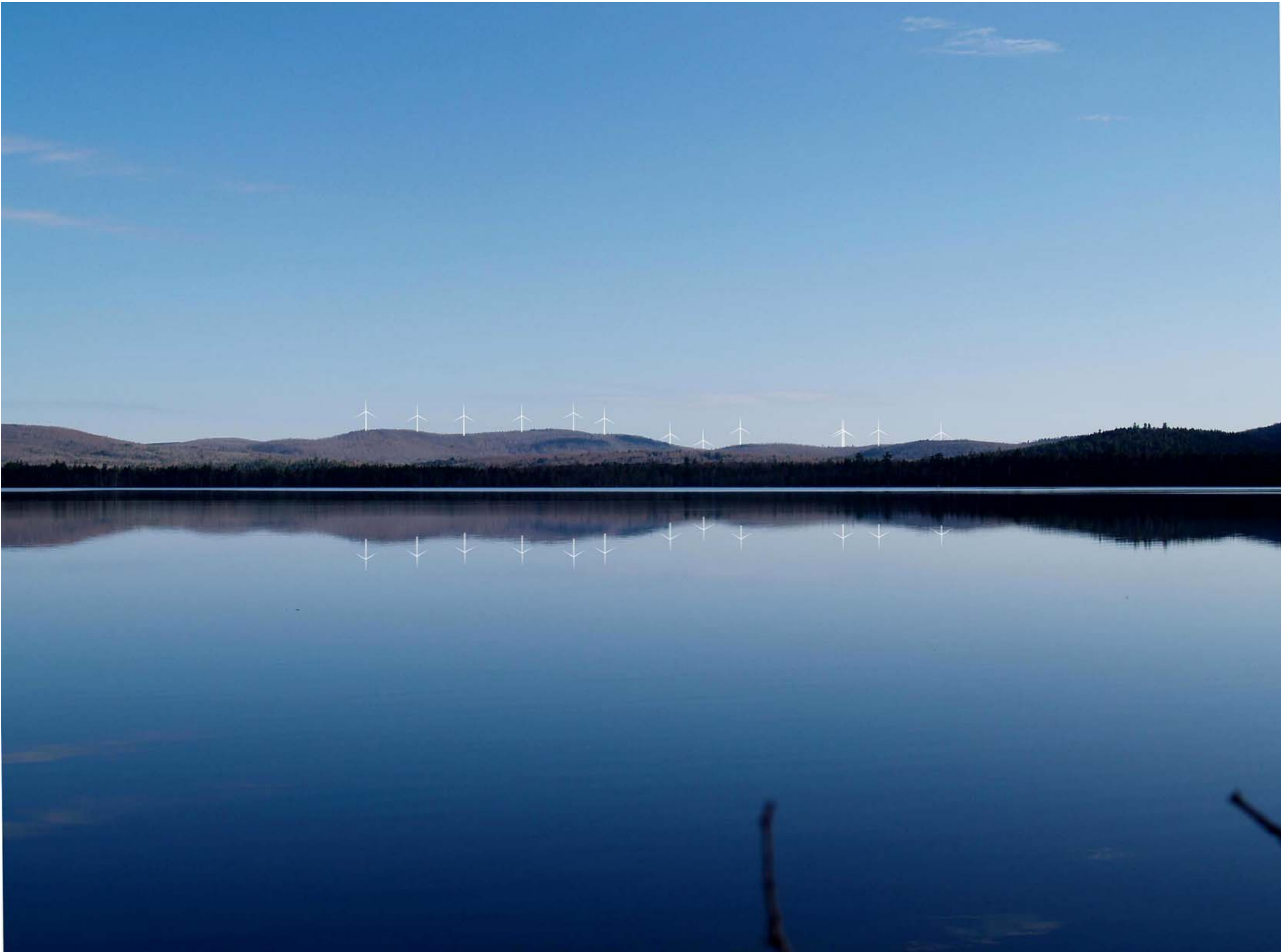


B o w e r s W i n d P r o j e c t - G r a n d L a k e s S c e n i c W a t e r s h e d - D o w n e a s t , M a i n e
V i s u a l Q u a l i t y a n d S c e n i c C h a r a c t e r I m p a c t A s s e s s m e n t R e p o r t D P 4 8 8 9



Prepared for Partnership for the Preservation of the Downeast Lakes Watershed - Lakeville, Maine



Detail Embroidered Pillow—Junior Lake

Table of Contents

I. Introduction/Overview.....	3
Photosimulation Location Key.....	8
II. Visual Impact Assessment	
A. The significance of the potentially affected scenic resource of state or national significance.....	9
B. The existing character of the surrounding area.....	19
C. The expectations of the typical viewer.....	22
D. The project purpose and the context of the proposed activity.....	35
E. The extent, nature and duration of potentially affected public uses of the scenic resource of state or national significance and the potential of the generating facilities' presence on the public's continued use and enjoyment of the scenic resource of state or national significance.....	36
F. The scope and scale of the potential effect of views of the generating facilities on the scenic resource of state or national significance, including but not limited to issues related to the number and extent of turbines visible from the scenic resource of state or national significance, the distance from the scenic resource of state or national significance and the effect of prominent features of the development on the landscape & conclusion.....	57
III. Appendices.....	60



Sunset—April 29, 2011 Grand Lakes Watershed

Exhibit -1

INTRODUCTION/OVERVIEW

On April 29 and 30, 2011, I visited the Grand Lakes Scenic Watershed (West Branch of the St. Croix River), an area in the vicinity of Bowers Mountain, “South Peak” and Dill Hill in Downeast Maine in order to gain a deeper understanding of its spirit and character.

I came at the request of a local non-profit group, The Partnership for the Preservation of the Downeast Lakes Watershed (PPDLW), a group of area citizens concerned that an industrial-scale windturbine development (Bowers Wind Project) proposed to be erected on several mountain ridges on one end of a chain of lakes in their community will alter the natural and scenic beauty that is integral with their lives.

The Partnership specifically requested that I develop a visual impact statement submission for Maine’s Land Use Regulatory Commission that analyzes the project’s effect on the visual character of a chain of lakes that have been determined to have statewide value.

This report asks and attempts to answer three key interrelated questions regarding the consequences of constructing the proposed project;

- ◆ What do people see and experience on and around this chain of lakes?
- ◆ Will the construction of the Bowers Wind Project change people’s experience by what they see?
- ◆ If there is a change, will it be significant enough to cause people to leave, seeking instead a place that has the character and offers the experience that they enjoy today on and near the lakes close to Bowers Mountain?

Before my visit, I studied topographic maps, aerial photographs, engineering drawings and a visual impact assessment prepared by the windturbine developer’s consultants.

After that initial study, I was anxious to get on the ground and on the water to experience what appeared to be a beautiful place. The reports, maps, and photographic images gave me a general sense of a wilderness landscape, yet I needed to acquire a deeper knowledge that only personal contact with a place can give.



Looking South —April 30, 2011— 5 mile long Junior Lake

Exhibit -2

Being on and around this chain of lakes opened my eyes to the area's immense scale. I felt tiny and the landscape was awesome as I traveled in an open boat over what seemed vast areas of water. I experienced firsthand wilderness character - dark blue mountains, miles of forested shoreline against radiant sky mirrored perfectly in absolutely calm water, the smell of cedar, waves splashing on the shore, moose, loons calling at night, eagles in flight, immense blackness of the night, quiet - amazing quiet.

The environment convinced me that the citizens living here have well founded concerns regarding the placement of this large project on some of the highest ridges above this chain of statewide significant lakes.

This Visual Impact Assessment follows the standards outlined in the Maine Legislature's 2008 Wind Power Development Act labeled, "*Determination of effect on scenic character and related existing uses.*"

The law requires that wind power projects not impose an unreasonably adverse effect on the scenic values and existing uses related to the scenic character of a scenic resource of state or national significance. The law determines whether or not it causes that effect by considering the following 6 subjects;

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



Looking Northwest — April 29—2 mile long central bay— Scraggly Lake

Exhibit -3

In order to understand these issues, the law requires the windpower developer to provide a visual impact assessment for the project that the developer is proposing. Landworks, of Middlebury, Vermont provided that assessment for the Bowers Wind Project. Part of my work includes a review of that report.

Visual impact assessments require a lot of detail work. I thought the photosimulations in the visual impact statement prepared by Landworks are similar to those from similar vantage points illustrated here. It is critical to keep the details in perspective, to not miss the forest for the trees. We need to be constantly asking the question, “Will the scenic character of the places with the designation “having statewide significance” because of their inherent scenic quality be compromised or degraded by the proposed Bowers Wind Project?” I believe the photosimulations I have prepared demonstrate that it will.

I disagree with a number of Landworks’ statements regarding the region’s character. The Landworks report states (page 2);

“This region of Maine is not a recognized tourism center.”

In fact, the Native American Passamaquoddy tribes served travelers as the first guides in the Grand Lakes Scenic Watershed as early as 1830. Realizing the recreational/economic value of native landlocked salmon, the State of Maine established a fish hatchery in Grand Lake Stream in 1877. Wilderness recreation has been going on here continuously ever since. Knowing that Ted Williams, Curt Goudy, Norman Mailer, Calvin Coolidge, Dwight Eisenhower and Jimmy Doolittle enjoyed the sporting lodges and the great outdoors here must certainly change Landworks’ mind about tourism. It is certainly more than “seeing the sights” and “visiting the attractions.” Recreation in the Grand Lakes Watershed means allowing yourself to be guided, to observe patiently, to learn from the skilled, wise people who know how to thrive in this rugged yet rich environment.

The Landworks report concludes (page 2) that ;

“throughout most of the study area (area within 8 miles of the proposed Bower Wind Project) topography, forest cover and roadside vegetation block views of the project, limiting views of the overall visual impact.”



Looking North — April 29, 2011— Junior Lake—Bowers Mountain

Exhibit -4

and (page 7);

“The Project area surrounding the proposed Bowers Wind Project is heavily forested for the most part, and this is what limits the visibility of the Project within the 3 and 8 mile radii of the turbine locations.”

The description paints a picture of a windturbine project with low visibility.

These forested lands that Landworks describes are actually not relevant to the visual impact assessment for the Bowers Wind Project because they are not part of a national or state park, national natural landmark or federally designated wilderness area, scenic river or stream, scenic viewpoint on state public reserve land (except the State of Maine Public Reserved Land in Lakeville that abuts Duck Lake where the towers will be visible from shore), Maine Department of Transportation scenic turnout on a scenic highway, or scenic viewpoints located in the coastal area. Therefore they are irrelevant to any visual impact assessment of the project.

What must be considered is the chain of scenic lakes that lie within 8 miles of the proposed project that have been designated as having statewide significance. The Bowers Wind Project is very visible over wide areas of these lakes.

Landworks’ conclusion (page 2):

“that the project will not have an unreasonable adverse effect on the scenic values and existing uses related to scenic character of the state significant resources.”

is erroneous, glossing over the incredible value and importance of the statewide significant lakes in their twin roles:

- ◆ Providing rewarding jobs in an economy for people living in the area
- ◆ Providing respite, in the form of a quiet pace and tremendous natural beauty for those lucky enough to spend time here, people often hassled by hurry, worry and disharmony.

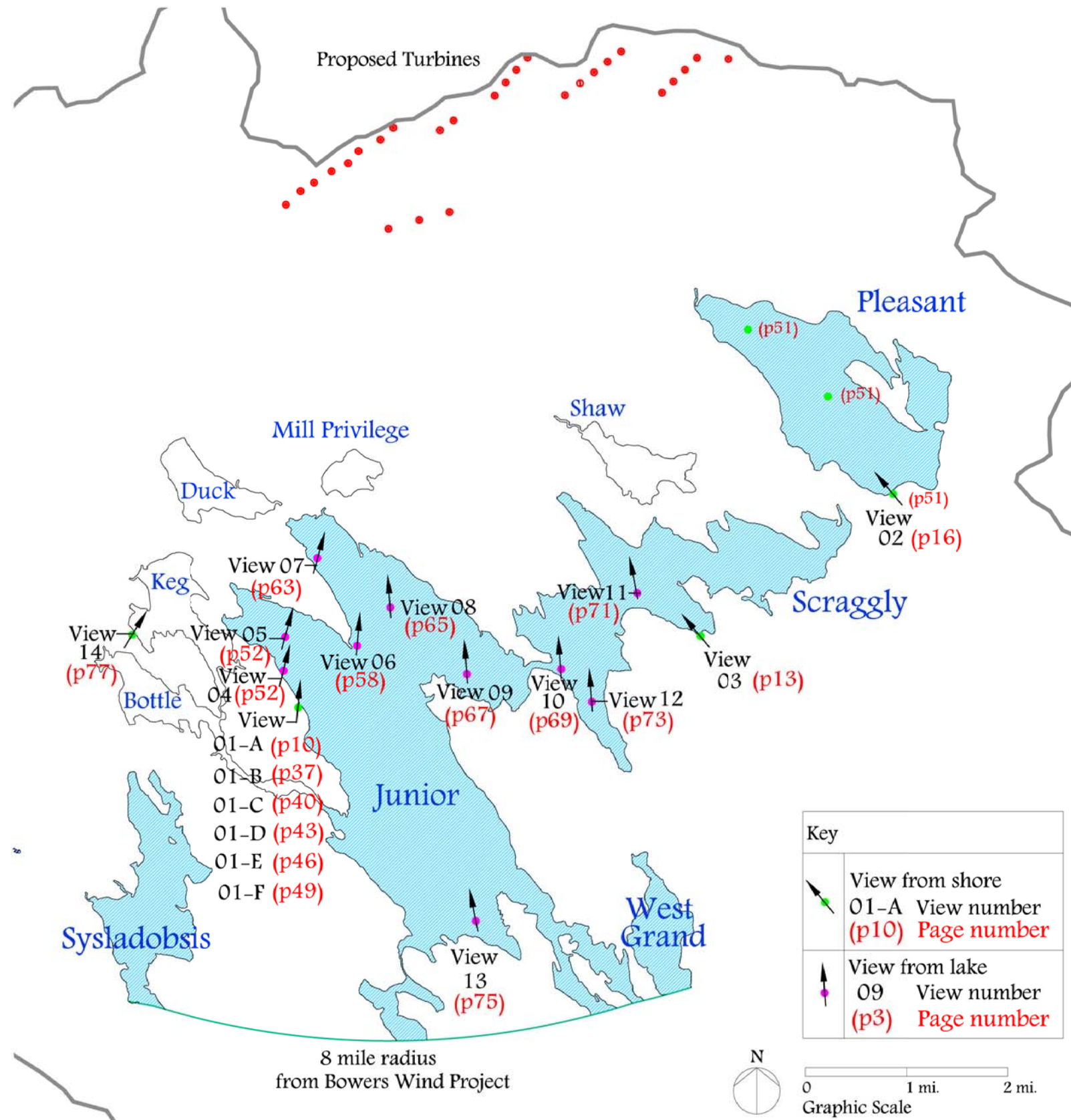


Looking North towards Dill Ridge— April 29, 2011—3 miles of water—

Exhibit -5

I believe that the project **will** have an undue adverse effect on the traditions, uses, scenic values and scenic character of the area especially the state significant lakes that lie within 8 miles of the proposed windpower project.

This visual impact analysis attempts to dig deeper, to go beyond the Landworks' report in describing the historic and present day character of the area including the nature of the resources found here and the expectations of people who love to live here and visitors who discover something so special that they love to come back.



Photosimulation Location Key

Exhibit -6

II. VISUAL IMPACT ANALYSIS

A. Significance of the Potentially Affected Scenic Resources

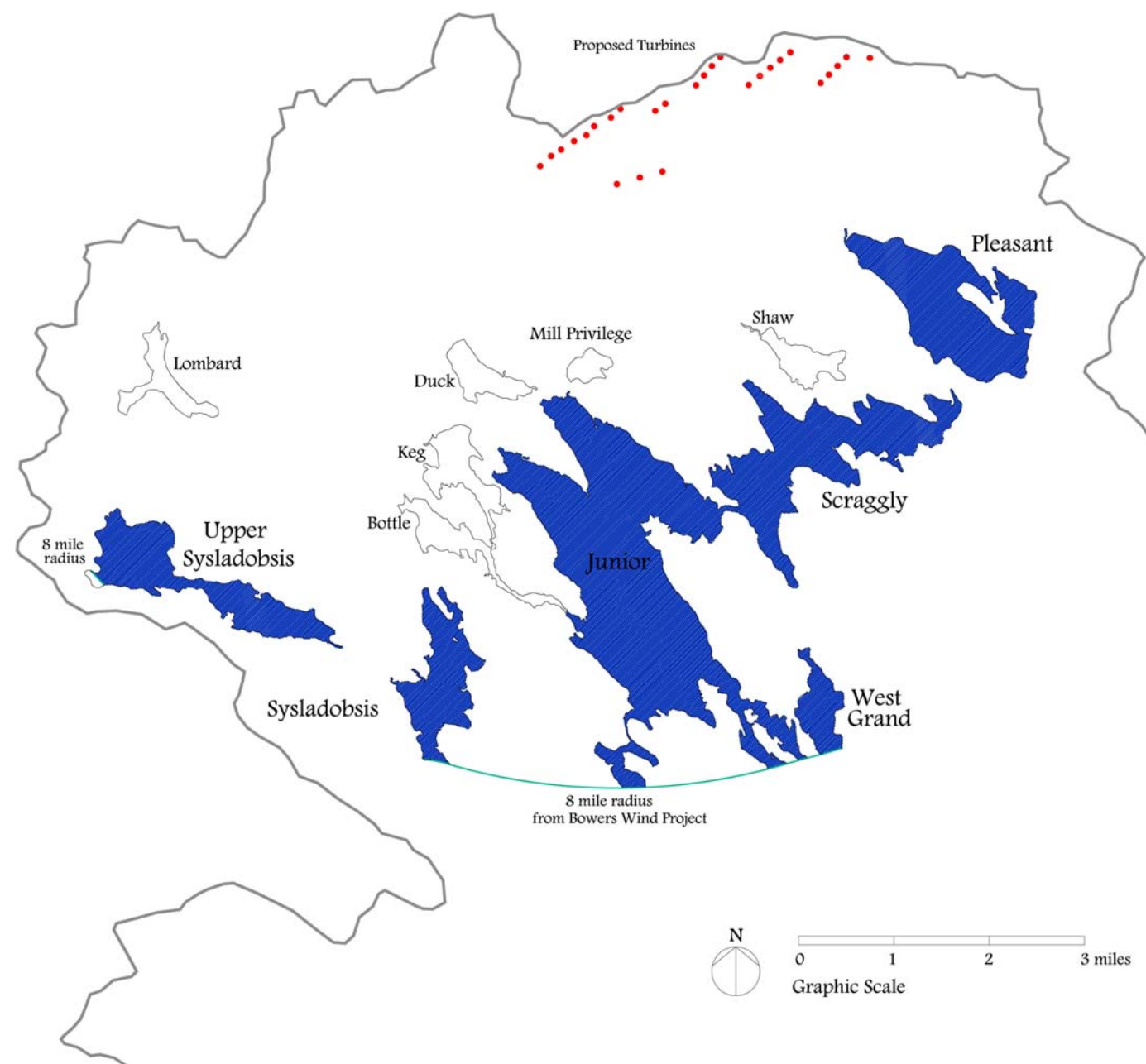
The Bowers Mountain wind turbine project is proposed to be located within 8 miles of six lakes identified in LURC's 1987 report entitled *Maine's Wildlands Lake Assessment* as having statewide significance. The report was initiated by LURC "in order to strengthen the Commission's ability to make informed decisions regarding the protection and use of Maine's precious lake resources by identifying wildland lakes with especially high or exceptional resource values meriting special policy consideration in order to maintain those values."

The introduction to the report concludes with the following; "The next step is for the Commission to consider actions that should be taken to shift development pressures among lakes to protect those with exceptional resource values and to guide development toward those that are most suitable for development."

The rating "statewide significant" is based on seven categories including Fish, Wildlife, Scenic Quality, Shoreline Character, Botanic Features, Cultural and Historic Features and Physical Features (Geology and Hydrology). Each lake has a score of "None", "Significant" or "Outstanding" for each of the seven categories. Of the 1,511 eligible lakes, 166 were rated as having significant scenic quality and 118 were rated with outstanding scenic quality.

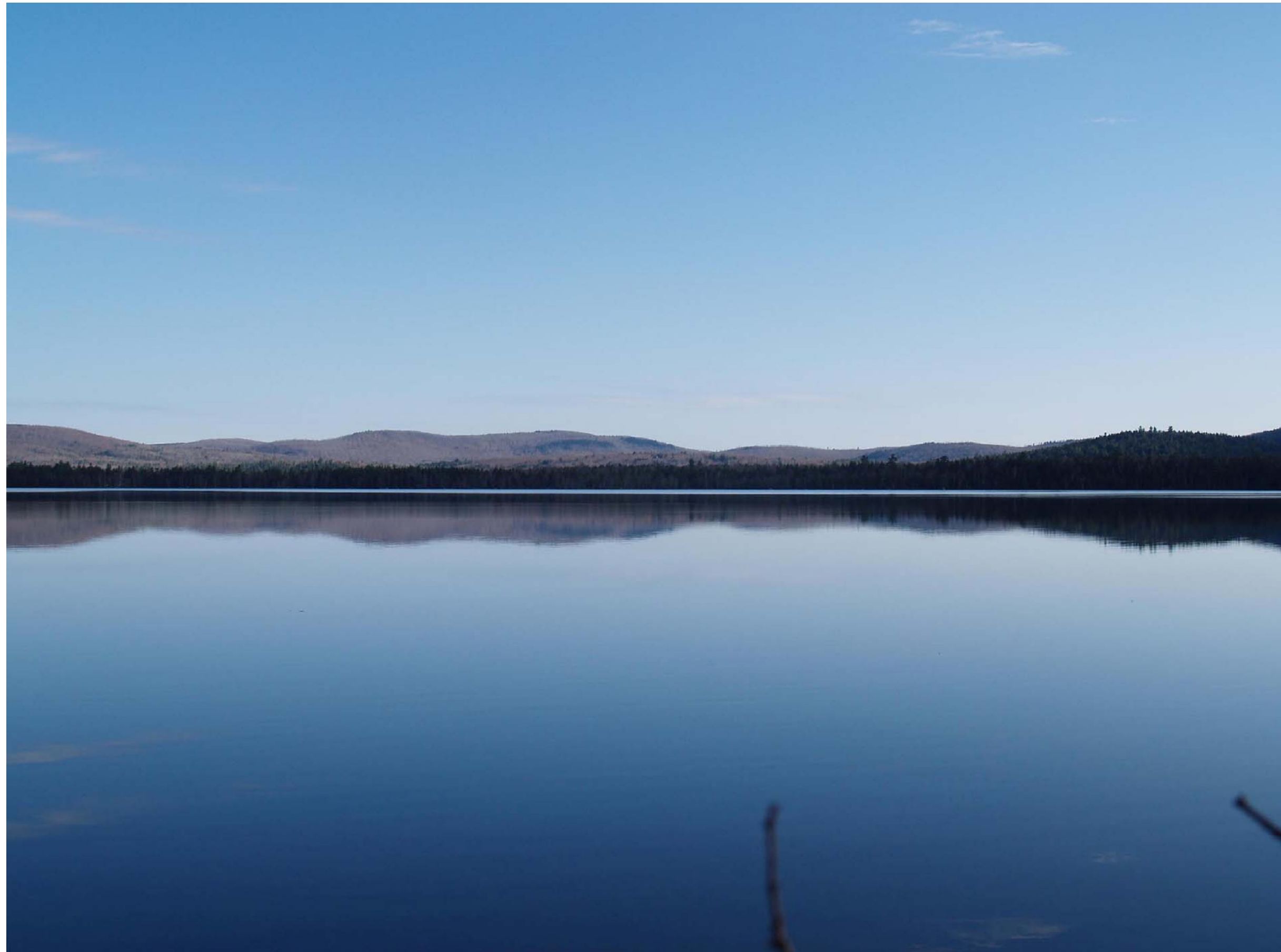
There are a total of 9,800 surface acres of water designated as having either outstanding or significant scenic quality in the 6 lakes within 8 miles of the proposed project (Pleasant, Scraggly, Junior, West Grand, Sysladobsis and Upper Sysladobsis). Bear Mountain screens turbine views from Upper Sysladobsis Lake (1045 ac.). Areas of all the other lakes will have project views.

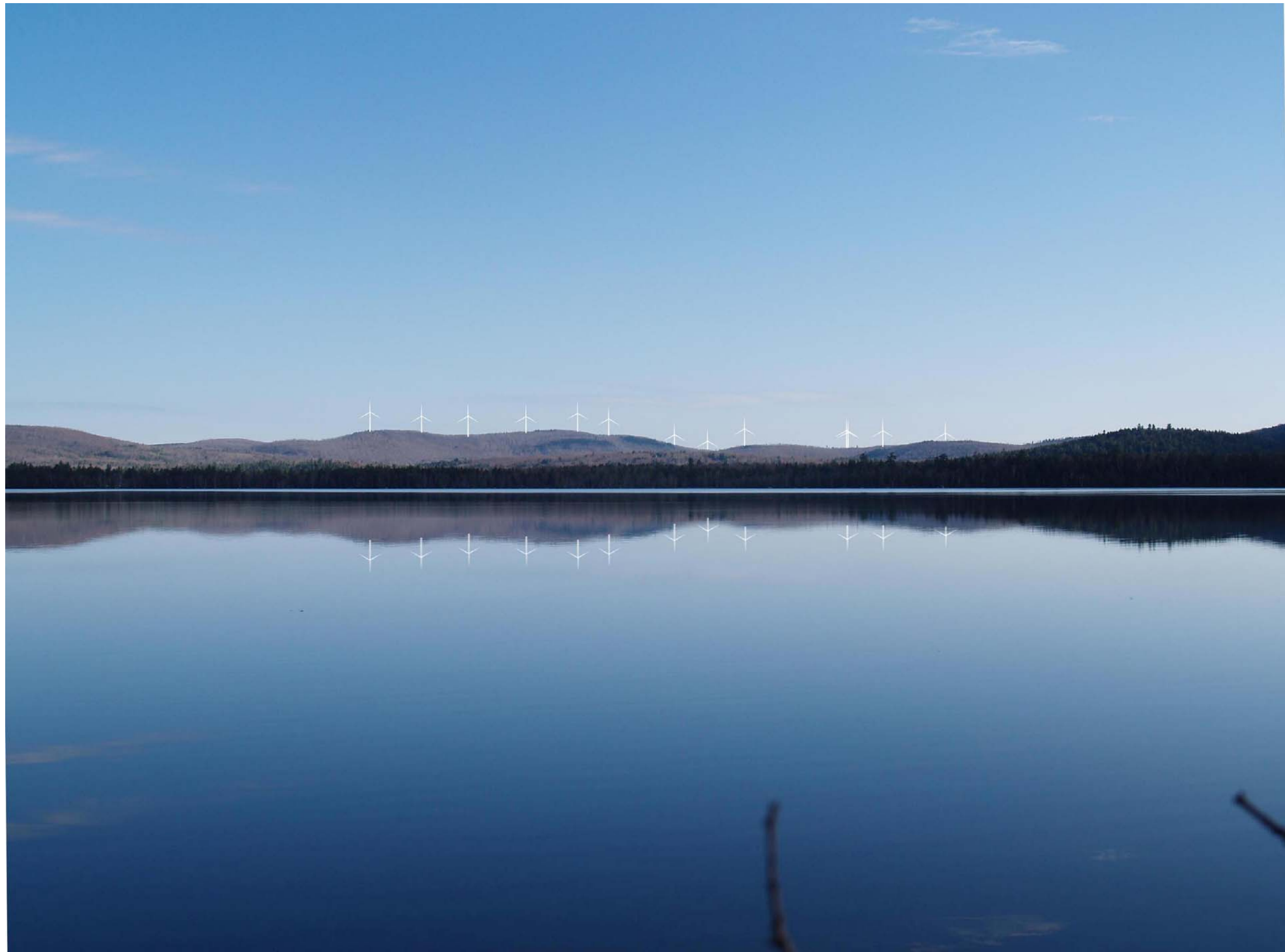
This visual impact assessment concentrates on the three largest lakes (Junior, Scraggly and Pleasant) that cover 7,700 acres within 8 miles of the proposed project.



Lakes of Statewide Significance within 8 miles of Bowers Wind Project

Exhibit -7







These are the major links in the Grand Lake Chain with huge acreages, grand mountain vistas and open viewsheds that will be dramatically and widely affected by the Bowers Wind Project's four and a half mile long row of 428 ft. tall turbines..

Five smaller lakes in the 8 mile zone will be impacted as well. Shaw, Mill Privilege, Bottle, Keg and Duck Lakes, while not on the list of statewide significant lakes, are indeed links or extensions of the Junior-Scraggly chain. Bottle, Keg and Duck are in reality deep bays in Junior Lake. They all share the same water level and people routinely boat between them.

The water elevation of Mill Privilege is 20 ft. above Junior Lake and less than 900 ft. away. Shaw is only 4 ft. above Scraggly and a little over 800 ft. away making all these links readily accessible for light watercraft.

The towers will be visible from many areas on and along the shoreline of these smaller lakes, eroding people's visual tranquility. However, measured in purely spatial terms, the project's visual impact will be greatest over the areas of the three large bodies of water that make up 78 percent of the lake surfaces designated as having significant scenic quality .

Junior Lake

Junior Lake covers 3,866 acres within 8 miles of the proposed project. *Maine's Wildland Lake Assessment* rates its scenic quality as "significant" and its wildland character as "undeveloped" . The lake sits as close as 3 miles from the nearest proposed tower and extends well beyond the 8 mile zone. The Bowers Wind Project will be highly visible silhouetted against the sky from most everywhere on Junior Lake.

Scraggly Lake

Maine's Wildland Lake Assessment rates 2,758 acre Scraggly Lake "significant" in scenic quality and as having "undeveloped" wildland character. Many of the proposed project's towers will be visible from most of the 3 mile long lake at distances ranging from 4.5 to 6 miles.







Pleasant Lake

Of the three lakes, 1,574 acre **Pleasant Lake** with a scenic quality rating of “outstanding” and a wildland character described as “undeveloped” in *Maine’s Wildland Lake Assessment* will have the most intense impact. A high percentage of towers will be readily visible from almost everywhere on this 3 mile long by 1 mile wide lake at distances from 2.6 to 6.9 miles, completely eliminating both the “outstanding” scenic character and feeling of “undeveloped” qualities that make it such a special place.

Sysladobsis Lake

The northern 2 mi. of 10 mile long by 1/2 to 1 mi. wide Sysladobsis Lake sets within the 8 mi. radius of the Bowers Wind Project. There will be views of the turbines from most of that area about 7 mi. distant. *Maine’s Wildland Lake Assessment* rates Sysladobsis’ wildland character, “developed” and “significant” for scenic quality

West Grand Lake

Part of a 1.5 mi. long by 0.5 mi. wide 350 acre bay at the northern end of 11 mi. long by 3 mi. wide, 14,340 ac. West Grand Lake will have views of the towers. The water is located 6.6 to 8 mi. from the project. *Maine’s Wildland Lake Assessment* rates West Grand Lake’s’ wildland character, “developed” and scenic quality “significant.”

Shaw—Duck—Keg—Bottle—Lakes

While Shaw (211 ac.), Duck (256 ac.), Keg (378 ac.), and Bottle (281 ac.) Lakes are not considered to have statewide significance, *Maine’s Wildland Lake Assessment* gives each of them a scenic quality rating of “significant.” Shaw and Keg are rated, “undeveloped” , Duck and Bottle Lakes “developed”. Development consists mostly of seasonal camps, some visible from the lakes, most well screened and set back into thick shoreline vegetation. Duck and Bottle have boat launches, providing access to the northern end of the lake chain.

Junior, Pleasant and Scraggly Lakes are each noteworthy for a sense of vast open space, wildness, serenity, scenic vistas and for offering a distinct



Note; 7 more towers visible on left.



Note; One more tower visible on right.



Looking North—April 29, 2011—5 miles of water—West Grand Lake

Exhibit -14

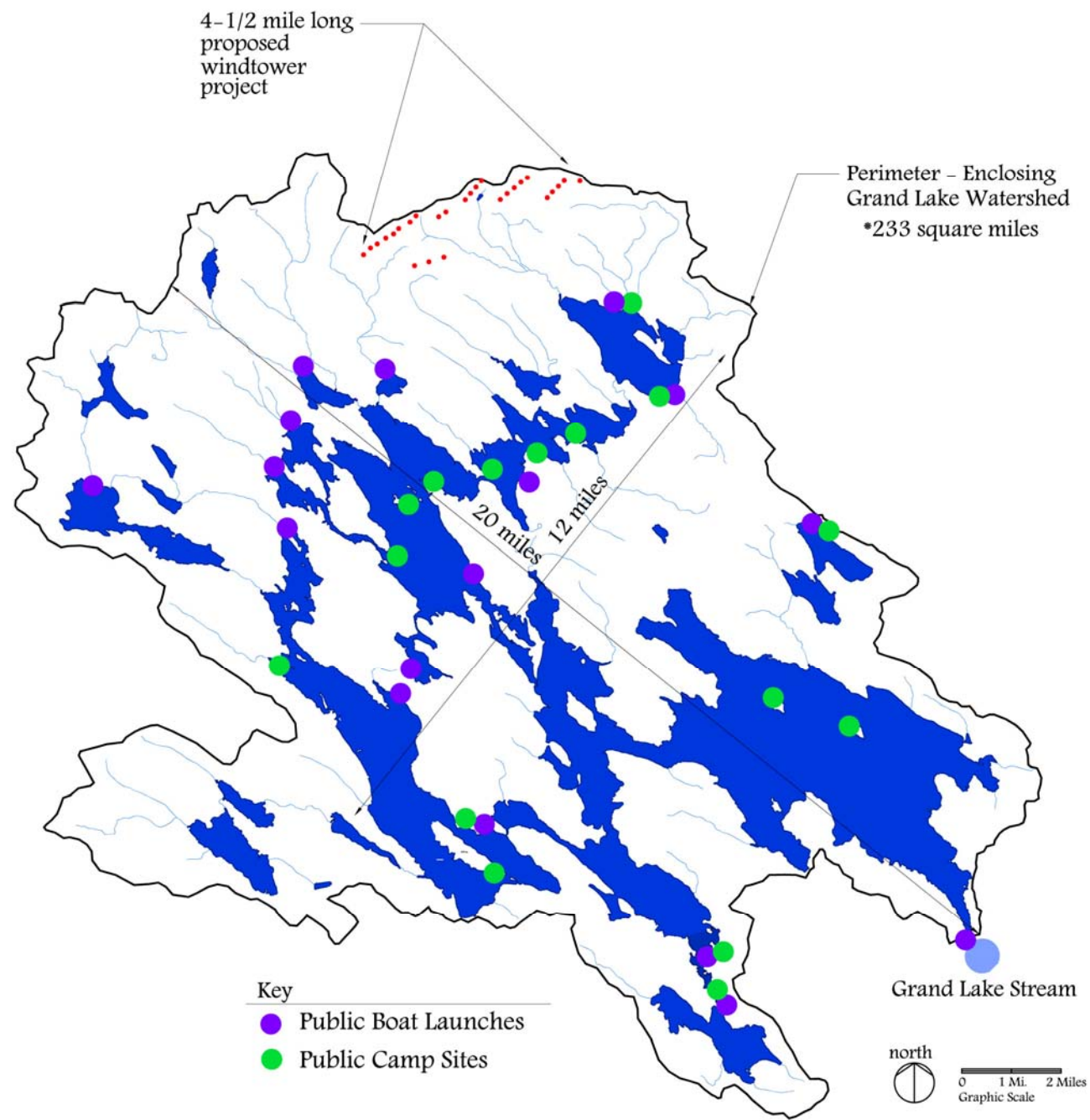
sense of separation from what most of us consider our contemporary built environment. The erosion or loss of the characteristics in even one of the large bodies of water would be cause for concern. The proposed project threatens to adversely effect all three. On top of that it threatens to impact the northern portions of West Grand and Sysladobsis as well as Shaw, Duck, Keg, Bottle and Mill Privilege.

Although the project's visual impact on most of West Grand Lake cannot be considered under Maine's Windpower Law because it is situated beyond the 8 mile limit, the overall character of the area, how people use this chain of lakes and the economic facts of life in the Grand Lakes Scenic Watershed must be considered. Many visitors, vacationers, campers, fishermen, canoeists, and kayakers who visit and enjoy the remoteness, scenery and wild character of the northern lakes of the Grand Lake Chain purchase traditional services including accommodations, guides, boat rentals, drinks and meals offered in Grand Lake Stream.

This visual impact assessment would be vastly different if this was not a lake landscape, if instead the water bodies were forests. The open lake surfaces afford long range vistas of both nearby and distant islands, hills and mountains as well as the all-encompassing dome of the sky presenting an ever-changing show of spectacular color, hue, radiance, clouds and weather. The lake takes all this splendor and reflects it in a million different ways.

Experiencing the landscape from a vehicle on a busy highway or even a quiet country road running within a narrow tree corridor cannot compare to traveling in a boat with miles of open space framed with far-off mountains and ridgelines in every direction. Boats float. Canoes and kayaks move slowly, gracefully, quietly, giving viewers the opportunity to look, listen and appreciate in a different way than usual.

Because the lake is the destination, people are here to listen, look, appreciate. I don't know what first-timers expect. Anyone who's been here and desires to return expects to experience and be immersed in beauty and serenity.



Grand Lakes Scenic Watershed including Public Boat Launch and Camp Site Locations

Exhibit -15

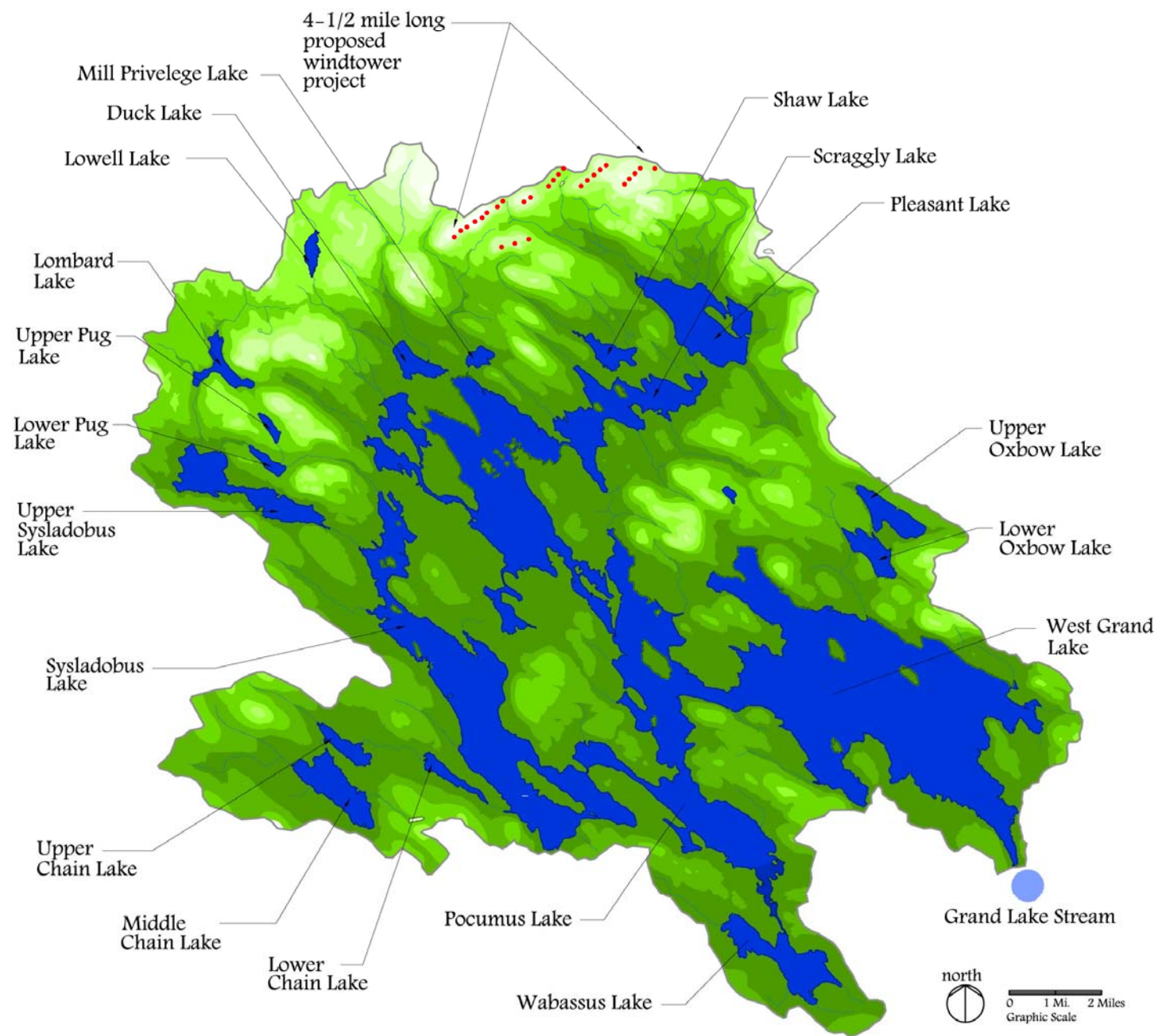
B. Existing Character of the Surrounding Area

The industrial scale project is proposed to occupy 4-1/2 miles of hilltop ridgeline that forms the north central portion of a natural bowl that encircles 233 square miles (143,000 acres) of mountains, hills and lakes. The area referred to as the Grand Lakes Scenic Watershed is named for the chain of interconnected lakes surrounded by hills and low mountains. The watershed's size is about 20 miles long in a northwest to southeast direction and 12 miles wide, southwest to northeast.

The advancing and retreating Laurentide ice sheet sculpted and gouged a complex series of mountains and lake basins. The addition of water resulted in a staggering amount of shoreline, a landscape filled to overflowing with unique and special places. Journeys on, through and across the waterways offer mystery and surprise as the way forward winds and opens, turns and tightens, as the outdoor scale transitions from intimate to grand and everywhere in between.

The highest elevations in the watershed occur near its north edge. Prominent landforms in the vicinity include; Almanac Mountain (el. 995 ft.), Getchell Mountain (1020 ft.), Bowers Mountain (el. 1193 ft.), Penobscot Bald Mountain (el. 846 ft.), Vinegar Hill (el. 939 ft.), Dill Hill (el. 1024 ft.), Highest hills in the central and south end of the watershed have elevations in the 700 to 850 ft. range, Porcupine Mountain (el.712 ft.), Whitney Cove Mountain (850 ft.), Farm Cove Mountain (817 ft.), Amazon Mountain (782 ft.).

Ten lakes including the largest, West Grand Lake (14,340 ac.), third, Junior Lake (3,866 ac.), and fourth, Scraggly Lake (2,578 ac.), fifth Pocumus (2201 ac.), and a number of smaller lakes including Duck Lake (256 ac.), Keg Lake (378 ac.) and Bottle Lake (281 ac.) have the same water elevation and are navigable one to another (el. 298 ft.). The second largest, Sysladobsis Lake (5,376 ac.) and sixth, Pleasant Lake (1,574 ac.) are located in close proximity and elevation to the contiguous chain (el. 308 ft. & el. 320 ft. respectively), making for easy light watercraft carry. A series of smaller lakes step up in elevation requiring more challenging carries. The lakes in the Grand Lakes Scenic Watershed with a water elevation between 298 ft. and 320 ft. have a combined shoreline distance exceeding 200 miles.



Lakes in the Grand Lakes Scenic Watershed

This unique collection of lakes with coves, bays, islands, points, guts, narrows, thoroughfares, channels, wetlands, beaches and campsites offers boaters in all types of watercraft an incredible wealth of places to explore and enjoy.

Lake names are a mix of English (Keg, Bottle, Pleasant, Junior, West Grand, Shaw, Oxbow, Norway, Horseshoe, Pug, Scraggly, Duck, Lombard, Lowell, Chain) and Native American (Sysladobus, Pocumus, Wabassus). Landscape character varies greatly from lake to lake due to surface area, surface conditions, weather, lake shape, season, time of day or night, surrounding topography, vegetation, viewer location and orientation and a host of environmental conditions. Lake depth and water temperature, and mysteries known to the local guides and those they share their wisdom with, cause landlocked salmon to thrive in some lakes, small mouth bass in others, exciting and inviting fishermen from near and far.

The lake chain empties into Grand Lake Stream at the watershed's southeast corner, home to the largest and best-known community in the area. The Village of Grand Lake Stream consists of a mix of year-round houses, summer camps and hunting and fishing lodges oriented to Grand Lake Stream or West Grand Lake and the Grand Lake Scenic Watershed.

Information from the Grand Lake Stream Chamber of Commerce website describes the local landscape and character;

From the grandlakestream.org website :

- Grand Lake Stream is highly regarded as an Eco-Tourism area. "Families can enjoy the wilderness experience--fishing, swimming, hiking, biking, canoeing and boating. Centrally located in the village area public beach, boat dock and ramps, tennis and basketball courts, fire and rescue station, playground, church and post office. Your stay is not complete without a visit to the village store, historical museum, gift shops and the State Salmon Hatchery. Winter vacationers can ice fish, snowmobile, cross country ski or snowshoe.

Exhibit -16



Grand Lakers on the Beach

Exhibit -17

- The village of Grand Lake Stream consists of several sporting camps and lodges and has the most concentrated population of experienced guides in our state. We have a tradition that has been carried on for over 100 years in the same manner of yester-year.
- Our guides are long on knowledge of our water shed. For many generations the "Grand Laker" canoe, built by Grand Lake Stream craftsmen, has been used by our guides and still is today. With a guide you can experience your lunch cooked over an open fire, the contentment of wooded hills, clean water --the silence only broken by the voices of distant loons. This, plus the excellent fishing, offer an unforgettable vacation.
- Having lived in this unique village through generations, the people of Grand Lake Stream feel much pride in offering you a chance to experience and feel the natural beauty and splendor of this community. To those who have visited us, no words are needed to convince them that Grand Lake Stream is the ideal place to spend a vacation and store up health and energy for the return to business and every day pressures."

could blame him? Arriving at the main lodge, David and his wife, Eileen, were met by owner/manager/head guide Charles Driza. After Charles introduced them to their fellow guests, David and Eileen toured this hunter's paradise—set on the scenic shores of a lake teeming with bass, lake trout and landlocked salmon and surrounded by thousands of acres of ideal—and relatively flat—second-growth grouse and woodcock cover. Massive 200-year-old pines canopy the lodge's main dining area, and footpaths lead to separate log cabins used for lodging and entertaining.

Following an evening of dining and pleasant conversation, David delivered the Holland and retired for the night. The next day he departed early, but not without accepting an invitation from Charles



Photos of Ted Williams & friends, sunset & magazine article courtesy of Leen's Lodge

amenities at Leen's, particularly the fine cuisine and tall tales. Both David and I are planning to return this fall.

In addition to everything else, another attractive aspect of Leen's is its location 30 miles from the Moosehorn National Wildlife Refuge—where more than 24,000 acres of prime habitat are dedicated primarily to the study and management of the American woodcock. Many of the woodcock that migrate down the Atlantic Flyway fly through this area. The nearby land hunted by Leen's is owned by large, private timber interests that have granted permission for its use—thus ensuring an exclusive and quality experience.

And that is why the early hunter gets the birds.

For more information, contact Charles Driza, Leen's Lodge, PO Box 40, Grand Lake Stream, ME 04637; 800-99LEENS or 207-796-2929; www.leenslodge.com.

TOP: COURTESY OF LEENS LODGE; INSET: DAVID TREVALLION

Connection with the Environment—
Leen's Lodge

C. EXPECTATIONS OF THE TYPICAL VIEWER

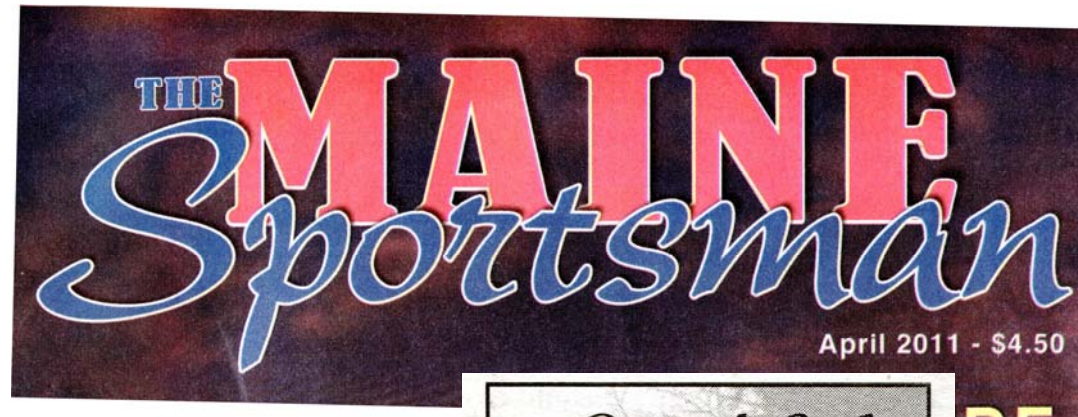
A number of unique communities and businesses including sporting camps, lodges and a camp for young people depend entirely on the area's wilderness setting and natural resources. People responsible for and directly involved in those enterprises express a deep connection between their livelihood to the scenic mountain-lake environment in both personal interviews and on their web sites..

- Leen's Lodge
- Weatherby's the Fisherman's Resort
- Grand Lake Lodge
- Canal Side Cabins
- The Pines Lodge
- Hazelwood Cottages
- Worster's Wild Fox Cabins & Campground
- Grand Lake Wilderness Retreat
- Grand Lake Stream Camps
- Indian Rock Camps
- Maine Wilderness Camps
- Darrow Wilderness Trip Camp
- Spruce Lodge

Leen's Lodge — Interview with lodge owner Charles Driza and comments from Leen's Lodge's web site—

Expresses viewer expectations, desire to return and utilization of lakes within 8 miles of the proposed project.

- This traditional Maine sporting camp was established in 1940 and caters to vacationing fisherman and families. It consists of nine cabins on 23 acres of woodland on West Grand Lake 2 miles north of Grand Lake Stream and supplies Grand Lake fishing guides who demonstrate a very traditional approach to fishing and fly-fishing. They use wooden Grand Lake Stream canoes, cook shore lunches for their guests, and weave wonderful tales about the Maine wilderness. This is a gentleman's fishing experience as it was in the good old days. Guides often take fishing expeditions onto Junior, Scraggly & Pleasant Lakes for small mouth bass and landlocked salmon. This includes shore lunches cooked over open campfires in special coves, beaches and shorelines in around the three lakes. They often travel to Junior and Scraggly by boat, or drive to the Pleasant Lake boat launch at the State Beach and Campground.



*Grand Lake
Wilderness
Retreat*

*Fully-equipped housekeeping
cabins on West Grand Lake,
Junior Bay. Enjoy an authentic
"Maine Woods" experience in
our waterfront, secluded cabins.
Over 40 miles wilderness
waterways, outstanding
fishing & wildlife viewing.*

*Chris & Donna Boone
518 Enfield Rd., Lincoln, ME 04457
207-794-6635 or 760-387-2123
www.grandlakewildernessretreat.com*

Advertisement—*Maine Sportsman Magazine*—
"40 miles wilderness waterways"

Exhibit -19

Charles Driza often hears guests say things like;

- "When I come here, I'm getting away from the hustle-bustle and all the distractions."
- "I need this place to keep me going."
- "It's really not so much about catching fish. It's about being here."
- "I have the best memories of great times."
- "I come here to experience the natural beauty and have a Maine Wilderness Experience as much if not more than to catch fish."
- "At night people sit on the deck looking north and often express their distaste for the red light from the communication tower on Almanac Mountain" (Almanac is in the vicinity of Bowers Mountain approximately 18 miles away)

Canalside Cabins — guest comments on website—

Expresses viewer expectations and desire to return.

- "This is a wonderful place to go to escape from the everyday busy life. Located in the beautiful woods of Grand Lake Stream, Canalside Cabins offers hunting, fishing, swimming, boating along with other outdoor activities. The owners John and Mary make you feel right at home. Overall, the experience was well worth the trip! Looking forward to the next one."

Weatherby's the Fisherman's Resort – website descriptions, guest comments and history—

Describes area's cultural heritage and tradition, viewer expectations and desire to return.

- "As one of the oldest and most famous sporting lodges in the country, Weatherby's Maine fishing and hunting lodge origins stems from the nineteenth century and have become a way of life for many sportsmen looking for a quality fishing and hunting experience. Our unequalled comfort and hospitality distinguish Weatherby's from all other Maine sporting camps. Our traditions run deep. Weatherby's is committed to the protection of the natural environment in and around Grand Lake Stream and supports conservation and restoration initiatives throughout Maine. We are proud to support the Downeast Lakes Land Trust and the Woodie Wheaton Land Trust for their commitment to conservation efforts critical to our heritage and traditions."



Photo—courtesy Leen's Lodge

Exhibit -20

- (History written by Arthur W. Wheaton adapted from a presentation to the Annual Meeting of the Grand Lake Stream Historical Society – Summer 2004)— “Weatherby's continues to be one of the best examples of the grand Maine Sporting Camp and is known far and wide for its classic experience. It is a part of Maine's rich history - the history and landscape of the region. And as long as folks want and can, hunt and fish, Weatherby's will be considered as a premier destination. The White House, Balls Camps, and Weatherby's all-in-one have been an integral part of the village of Grand Lake Stream that has existed for over 100 years and its contribution to the local economy and its reputation stand tall. I know these things! My grandfather was a tannery worker and one of the first Maine guides here, my father, a Maine guide here and later a sporting camp owner, and I, were born in Grand Lake Stream, and my first education was in the James Bright School. My family roots are in Grand Lake Stream.”

“At the very root of the future of this area will be the importance of return visitors with positive experiences to fuel the many needs of the community. Sportsmen "coming back" as well as new ones exposed to this rich experience are the common denominator that will provide a strong future for all who derive a livelihood from this recreational pursuit.”

“And as we face new challenges of the 21st century such as protecting the land, maintaining and improving our fisheries as more and more fisherman come to the region, vigilant conservation of the land and protective regulations such as catch and release must be considered to maintain the high standards set by the guides and sports of yesterday. The interrelationship of the environment - our lakes and forests, our lunch sites, our fisheries and wildlife and more, suggests it will be imperative we all work together for the future. A fragile balance is being tested today by the ever-increasing use of these resources. The good work of folks in this community and the Downeast Lakes Land Trust, with a vision to protect and preserve a tradition, are invaluable to a sporting way of life. The energy to find solutions to the forever growing financial and service oriented needs will be ongoing. Solutions will only be found by working together, recognizing the limited resource as a valued commodity as the economic well being of owners, guides and towns folks are all interconnected and dependent on it.”



Across the water from Grand Lake Lodge

Exhibit -21

Down River Camps — website—

Expresses viewer expectations, history & character of the area, and desire to return.

- “The Down River Camps has been in operation for about 75 years. Our family has owned and operated it for the past 27 years. We are NOT the new kids on the block. “
- Our waters abut Canada and our remoteness keeps us under fished and with very little population, ensures you have what you came looking for, a sense of pristine wilderness and hardly any boat traffic. A typical 8 hour day of fishing, you "might" see 6 boats, there's about 10,000 acres just in "our" water alone.
- “We've been here 27 years and believe it or not, we have a few guests who have been here longer than us.”

Grand Lake Lodge — interview with lodge co-owner Lindsay Wheaton and Grand Lake Lodge’s web site—

Expresses viewer expectations, history & character of the area, and desire to return.

- Grand Lake Lodge has been operated for almost 60 years by Grand Lake Stream natives. Rustic cabins nestle in the pines where you can relax, sit back, unwind without being distracted by the television and take in the view from a screened porch just a few feet from the shore of West Grand Lake. We look forward to your stay and offer you an outdoor country experience perfect for any retreat, whether fishing or family vacation.”

Lindsay Wheaton often hears guests say;

- “We had a wonderful day, exploring and fishing Junior and Scraggly Lakes.”
- “I love hearing the screen door.”
- “This place soothes me.”



Photo—courtesy Leen's Lodge

Exhibit –22

- “What a glorious place!”
- “We started every morning with coffee on the dock, and then spent most of the days kayaking, fishing and exploring the surrounding areas.”
- “The mountains and lakes here are a very important part of my renewal. It’s how I balance my world.”

And says;

- “We have a couple that’s been coming back for 25 years.”

The Pines Lodge and Camps – web site –

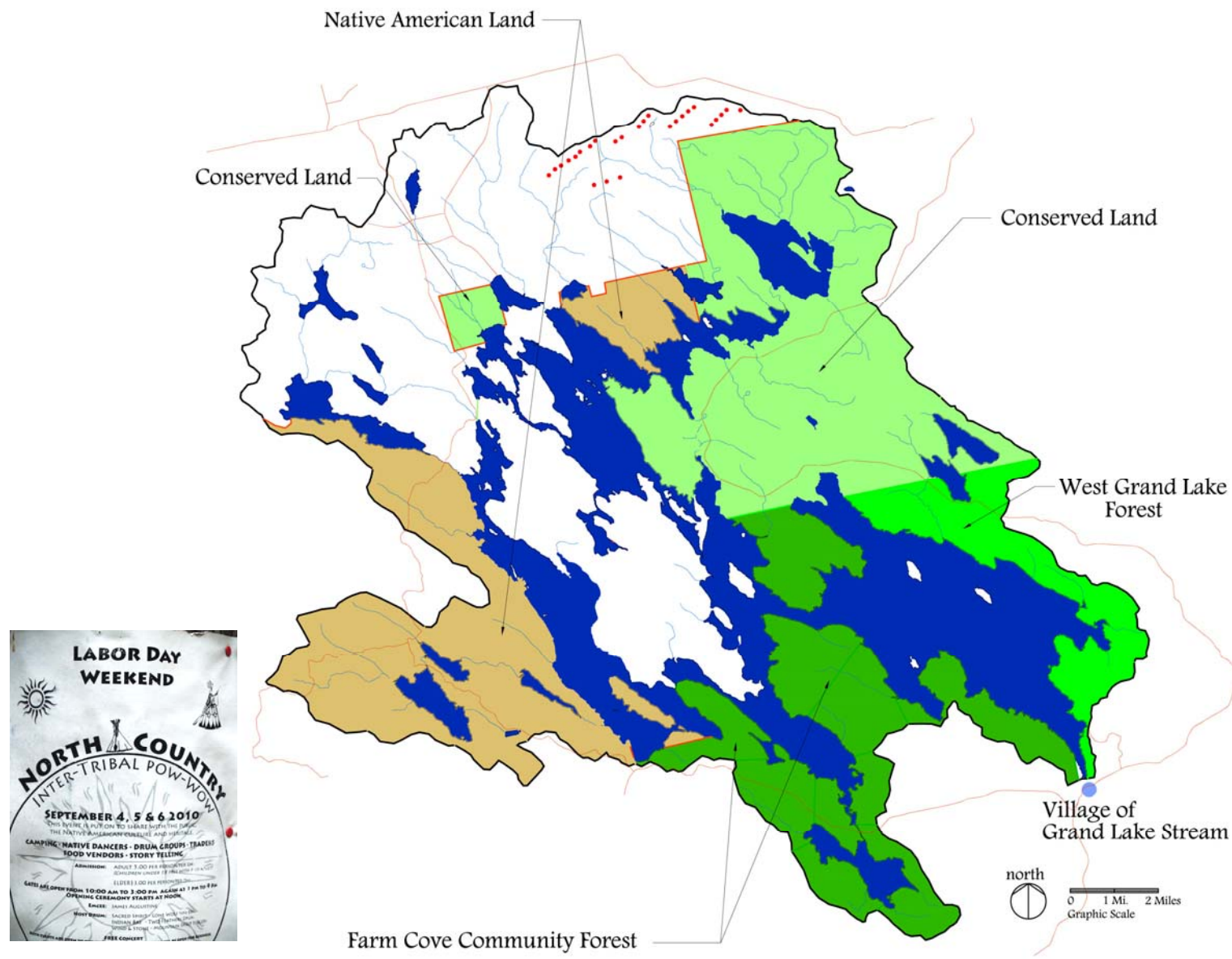
Expresses heritage, viewer expectations and desire to return.

- “The Pines is a special place...a step back in time. This is one of the few places still remote enough to provide a tranquil atmosphere which recalls the more leisurely sporting life of 50 or 100 years ago. Such places must be counted among Maine’s treasures.”
- “Sportsmen for many years have been anxious to return to its tranquil beauty as an escape from the rigors of urban life back home. “
- “Our main lodge, the Norway House was built in 1884. Later the log house was torn down and the present house was built to accommodate William Shaw (AKA “Caribou Bill) and his family.”
- “Among the visitors were such notables as Andrew Carnegie and President Calvin Coolidge.”
- “The current owners have operated the camps since 1992 fulfilling a lifelong dream a way of life that they love.”
- “Come enjoy a bit of history and get away from the hassles of everyday life.”

Indian Rock Camps – web site—

Expresses viewer expectations and character of the area.

- “Indian Rock Camps is situated in Grand Lake Stream, the focal point for a region with



Key		Lake Shoreline Adjacent to Conserved or Native American Lands
	Farm Cove Community Forest	Junior Lake, Scraggly Lake, Pleasant Lake, Shaw Lake, Duck Lake, Keg Lake, Mill Privelege Lake, West Grand Lake, Sysladobus Lake, Upper Sysladobus Lake, Upper Oxbow Lake, Lower Oxbow Lake, Upper Chain Lake, Middle Chain Lake, Lower Chain Lake, Norway Lake, Pocumus Lake, Wabassus Lake
	West Grand Lake Forest	
	Conserved Land	
	Native American Land	

Conservation and Native American Lands in The Grand Lakes Scenic Watershed

Exhibit -23

dozens of lakes, ponds, streams and brooks in a forest area that has seen little change over the decades. Indian Rock Camps offer: lodging, fly fishing school, guides, bait, tackle, rods, reels, flies, boat rentals, docking facilities, guided bird watching tours and gift shop,”

Maine Wilderness Camps— web site—

Expresses viewer expectations and character of the Pleasant Lake area.

- Maine Wilderness Camps is located on Pleasant Lake in Topsfield, Maine. We are nestled in the unspoiled forest of the northeast corner of Washington County, surrounded by mountains, lakes, streams and trees. We are a true wilderness campground, offering fishing, hiking, hunting, lake swimming, and boat rentals. We have cabin rentals as well as camp sites, to accommodate both tents and RVs. Your hosts, Bill and Charlotte, are committed to making your Maine camping vacation here at Maine Wilderness Camps a one of a kind experience, because they offer opportunities that others cannot. This is wilderness at its best.

Fly Rod & Reel Magazine—The Excitement of Fly Fishing. January/February, 2004 Article entitled; *Saving the North Woods* by Ted Williams

Expresses viewer expectations.

“It’s true these lakes provide some of the best smallmouth fishing in the world, that the landlocked fishing is unexcelled south of Canada, and that lake trout are so prolific the state discourages their release, fretting that they’ll get ahead of the forage base. But anglers don’t come here from all over the world just for the fish. They come here for the North Woods experience—to be poled on still waters in Grand Laker canoes, to listen to the loons and warblers and the summer wind through birch, maple, spruce and balsam, to breathe sweet air undefiled by gasoline fumes. There are far more deer per acre in my central Massachusetts woods than in Downeast Maine, but there is not one hunting lodge. So in 2001, the guides allied themselves with sportsmen, lodge owners and local environmentalists to form the Downeast Lakes Land Trust. Their mission: purchase and permanently protect the entire 27,000 acre Farm Cove Peninsula. “

“If you walk around these woods (or ‘puckerbrush’ as Downeasters call it) you wouldn’t see much of anything. The only way to get a feeling for this country is by water, and that



Nesting Loon

Gary Campbell—Photographer

Exhibit -24

since I was going to be on the water anyway, I might as well tote a fly rod. First stop was Tomah Stream, a bit of an anomaly in the area known for its smallmouths, landlocks and lake trout, because in the spring it provides spectacular wild brook trout fishing. One of the reasons is that Tomah sustains the state-threatened Tomah Mayfly, one of the very few predatory mayflies. But in high summer Tomah is low and warm, and I'd have to content myself with smallmouths. For half a day we paddled and pulled canoes through the heart of the project area via as wild and lovely a stream as I have ever encountered. Raptors (barred owls and red-shouldered hawks I think, but couldn't get positive ID's) flushed ahead of us and sailed toward Grand Lake Flowage only to flush again. A ruffed grouse and her brood buzzed out of the alders. Ebony jewelwing damselflies in fantastic numbers fluttered over dry sandbars and perched in iridescent, green black clusters on brush sedges and the drooping seedheads of grass. We drifted over fallfish nests—piles of gravel three feet across and a foot high. Smallmouths, some a foot and a half long, ghosted out of the shallows.

Jeff McEvoy, my stern man and new owner of the storied Weatherby's Lodge at Grand Lake Stream, regaled me with local lore, while his Springer bitch, Madison (named for the river) pranced along the bank. McEvoy, formerly with the Natural Resources Council of Maine and before that, a US Fish and Wildlife Service refuge manager, has been a source of biological enlightenment and political savvy for all committed to the protection of woods, waters and traditional livelihoods. We caught smallmouths—clean, ruby-eyed fish with caudal fins you could shave with—and fat, grunting fallfish on Clousers and beadhead Woolly Buggers. I enjoyed the plucky fallfish nearly as much as the bass. "Cousin trout," Thoreau called them."

"As I eased my first bass towards Chris's outstretched net something big and black and checkered with white spots shot under the canoe, missing the mesh by inches. It was the "obnoxious loon." He surfaced four feet away, watching the bass. Pin feathers protruding from the back of his neck gave him the manic air of Woody Woodpecker. To my delight and Wheaton's pique, he followed us for two miles, eyeballing my rod and surging to the boat each time it bent. An immature eagle sculled over spruce spires. Kingfishers dipped and rattled. There is nothing like fly-fishing out of a cedar-and-ash canoe for North Woods smallmouths, especially when you're being poled within an easy cast of sunken boulders. That's the way bass fishing used to be. Chris Wheaton, one of two people who still build Grand Lakers, has strong opinions about what has befallen bass fishing. If he's guiding you and you want to liven up the conversation (not that you're likely to encounter the need), just ask him what he thinks of all the fancy bass boats they have on the TV shows. Or better still, ask him if he is planning to get one. And as you're fishing keep looking around you. That's the way it can be in Maine and everywhere in the North Woods."

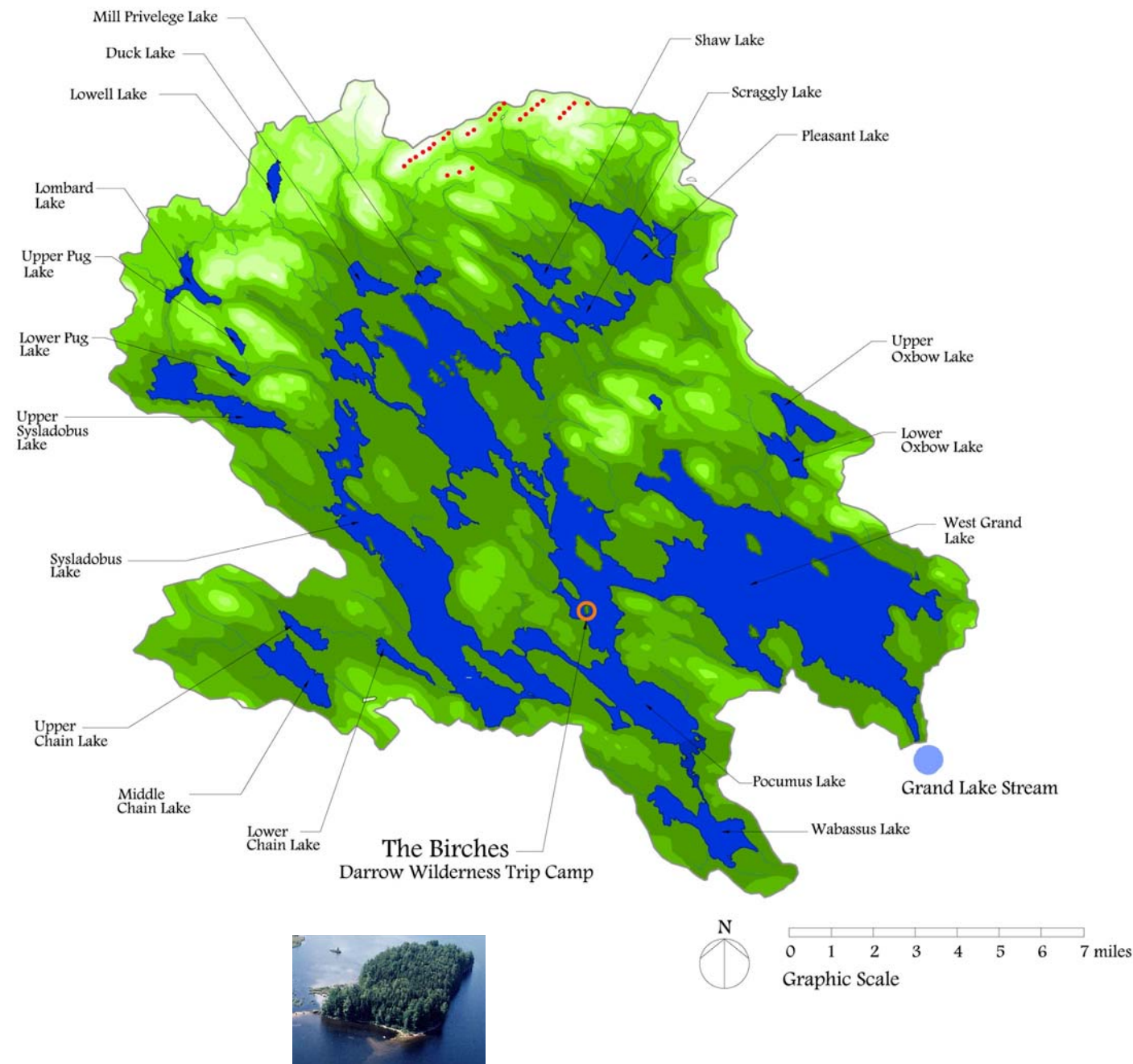


Young people arriving at Darrow Wilderness Trip Camp Darrow Camp Photograph Exhibit -25

Darrow Wilderness Trip Camp –phone conversation with Andrew Buckman, Camp Board of Directors member and Darrow Wilderness Trip Camp website—

Expresses viewer expectations, desire and history of return and utilization of the Lakes of Statewide Significance within 8 miles of the proposed project.

- “Founded in 1957 by two Quaker educators, George and Janie Darrow using wilderness canoe tripping to develop the sense of competence, self confidence, and accomplishment that young people derive from leaving their homes and normal lives and learning to live simply and well in the wilderness. Base Camp is on a remote island in West Grand Lake known as “The Birches” The island is accessible only by boat or seaplane. The Birches has been a traditional summer campsite since time immemorial. Beginning in the mid 19th century the island was used as a lumber camp; it was later developed as a private sporting lodge. It was purchased by the Darrows in 1956 and the Camp has been in continuous operation at the same location since 1957. Many of the original buildings are still in use and the forest remains much the same as it was 100 years ago. Most of the buildings are clustered on the north shore of the island commanding a superb view of the lake, the wild shoreline and the forested mountains to the north including Bowers Mountain.”
- “The Birches is located at the hub of an exquisite wilderness area of over a million acres, bountiful fish and wildlife, 60 major lakes, and hundreds of streams and ponds spanning the headwaters of the Machias and the St. Croix River watersheds. Most of this area is permanently protected under the stewardship of the Downeast Lakes Land Trust, and extensive areas to our west and north are owned by the Passamaquoddy Tribe. Our local waters are world renown for their superb landlocked salmon, smallmouth bass, and lake trout fishing. The Birches is 25 minutes by motor boat from the village of Grand Lake Stream, an epicenter of traditional wood canoe building and the home of several famous fishing lodges established in the 19th century.”
- “Base Camp provides the perfect setting for training and for outfitting canoe trips, and the network of numerous streams and lakes including Junior, Scraggly and Pleasant offers an ideal training ground for the younger sections to explore.”
- “Darrow is organized into small groups called sections. Each section includes a maximum of 12 campers and is led by two or more experienced staff. After initial training and outfitting at Base Camp each section goes out on one or more trips, returning to camp only for necessary supplies.”



Darrow Wilderness Trip Base Camp in the heart of the Grand Lakes Scenic Watershed

Exhibit -26

- “At the core of the Darrow experience is the challenge and adventure of exploring the wilderness. Every day is a new adventure as campers paddle and portage through the grandeur of the great north woods. Our travels take us to a different campsite most nights, with a schedule that allows plenty of time for fishing, exploring, or just relaxing around the campfire. The younger sections explore the numerous local lakes surrounding our base camp, while the older sections are thrilled by shooting whitewater rapids, lining, poling, and wilderness route-finding, as they undertake progressively more challenging and remote trips appropriate to each section's level of experience.”
- “The camp is operated through a foundation made up of former campers. The foundation offers scholarships for campers who can't afford the tuition. Campers come primarily from the Northeast, Mid Atlantic and Midwest US but also Canada, all parts of the US, Europe and South America. Many young people attending camp are third generation.”
- “The call of a loon on a tranquil lake, the scent of the tall pines, the freedom of the wild. The north woods, the excitement of exploration, the taste of trout cooked over a campfire, the beauty of wood canoes, the windswept lakes and rugged shores, the thrill of running whitewater rapids, the warmth of friendships forged by shared adventures, the pride of a job well done - these are some glimpses of a remarkable place called Darrow.”
- “Junior sections typically paddle loop routes through the many beautiful and largely undeveloped lakes surrounding our Base Camp, and the daily schedule is adjusted to allow plenty of time for relaxation and fun.”
- “This experience becomes an intrinsic part of a young person's education that can enrich them for the rest of their lives.”
- “The senses of competent self confidence and accomplishment that young people derive from leaving their homes and normal lives and learning to live simply and well in the wilderness are valuable steps in the development of a rich and rewarding adulthood.”

What campers say;

- “On the days when the problems we have seem greater than who we are, we turn to the light that The Birches has planted in us and use the energy to move us through.”
- “I am left with a smile on my face and a place in my heart that can never be replaced.”



Blinking red lights mounted on turbines and met towers will negatively impact the night-time character from front porch of the Birches and everywhere people enjoy the lake night and incredible display of stars far from city lights.

Exhibit -27

- “I don’t know how to describe to you what it feels like when I have just returned from a month in the rushing waters and peaceful lakes. What I do know is this: my life has been changed by Darrow.”
- “These are some of the things I loved, baking bread over a campfire and paddling silently through the clean water.”
- “I love to come, I hate to leave.”

Interview with Andrew Buckman;

- “The Birches front porch is a favorite place to sit and relax. It sits high on the island and has a commanding view looking north along the length of Junior Lake with Bowers Mountain in the background about 11 miles away. It’s a wilderness view from that includes the lake, miles of undeveloped shoreline and distant hill and mountain ridges.
- “Presently during many nights, people sitting on the front porch experience an inky blackness. The only light visible originates from a propane light in Sammy Sprague’s camp on Bear Island which is about ¾ of a mile east of us across the water. Because the proposed Bowers Wind Project is situated on the high elevations I am concerned that the flashing red lights will cancel the wonderful feeling of ‘being away’ that we have now.”
- “The camp works so well because of its setting, in a series of lakes have a feel of undeveloped wilderness. Young people who come are changed forever by the power, beauty and wonder of what they experience here. The Birches has a rich history too. It’s less than a mile to Bloody Brook, where the Iroquois attacked and slaughtered the Pamsaquoddy over who would dominate trade. Grand Lake Stream is also the epicenter of the wood/canvas canoe industry, home of The Grand Lake Canoe, only one of many skills lost in most places, but living on here.”
- The views are tremendously uplifting and an integral part of the Darrow experience.
- “The importance of this particular relatively unspoiled environment is not that it is used by so many, but by so few. It’s not a park where people have to jockey for a place to beach their canoes. It’s as close to wilderness as you can get. It’s unregulated wilderness. That’s hard to find anywhere. Young people have a great need for it to help them make sense of their lives.



Wilderness beauty impacting young lives

Exhibit -28

Darrow Camp Photograph

- “It’s an opportunity to get unplugged. Nothing moves faster than the speed of a canoe.”
- We take children, their hearts and minds and open them to the glory of the natural world.
- “Our counselors do teach and guide young people. But it’s the environment, the demands of living and moving in the wild environment that provide the myriad of teaching opportunities. The amazing beauty is a catalyst that touches their hearts by letting them know without words, “You are a part of this beauty.”

From Canoe Enthusiast— website - www.wildernessinquiry.org

Describes viewer expectations on Junior Lake.

- “The Junior Lakes Area is an area of breathtaking beauty and centuries of stories. Sparkling pure lakes, tumbling streams, sweeping mountains and the vast Northwoods provide the backdrop for excellent wilderness travel. “

From Outdoor Guide — website- www.Trails.com

Describes viewer expectations on Scraggly and Junior Lake.

- “The lake is only 3.5 miles long, but the highly varied shoreline extends nearly twenty miles along marshy coves and wild undeveloped islands. Wild and remote, this is the paddler’s ideal lake: too shallow for most motorboaters and far enough from road access that you have to do some work to get here. Scraggly Lake is a wonderful place for wildlife. Paddling along the northern shore in the first light of morning, we surprised a magnificent bald eagle that had been feeding at the water’s edge. We saw a number of eagles here, including an active nest in a large white pine tree on an island in Junior Lake. Wood ducks, loons, ring-necked ducks, deer, and a huge snapping turtle were among our other observations here. During a morning paddle from Scraggly up into Pleasant Lake, we watched a playful family of otters in the glass-smooth water. Though we did not happen to see moose while here, it appears to be superb moose habitat. You may also see common terns here; we suspect they nest on large boulders protruding from the lake that are visible from the Scraggly Island campsite.”



Bald Eagle—Scraggly Lake

Gary Campbell—Photographer

Exhibit -29

From Area Citizens—e-mail interview

Describes viewer expectations on the Statewide Significant Lakes

- “Last year my father, brother and his wife were visiting us from Minnesota. From our camp we have water access to 14+ lakes from Duck Lake all the way to West Grand, Pocumcus and Wabassus Lakes. Even though Minnesota is the "Land of 10,000 Lakes", our guests were enthralled by the wild beauty of our lakes and the mountains that surround them. The attached photos were all take during a single outing. We did some fishing and had a picnic at one of the public campsites on Scraggly. My father remarked how it reminded him of what Northern Minnesota was like 60 years ago. None of us will forget that magical day “ -

Gary Campbell – resident Duck Lake

From a Maine Guide —e-mail interview

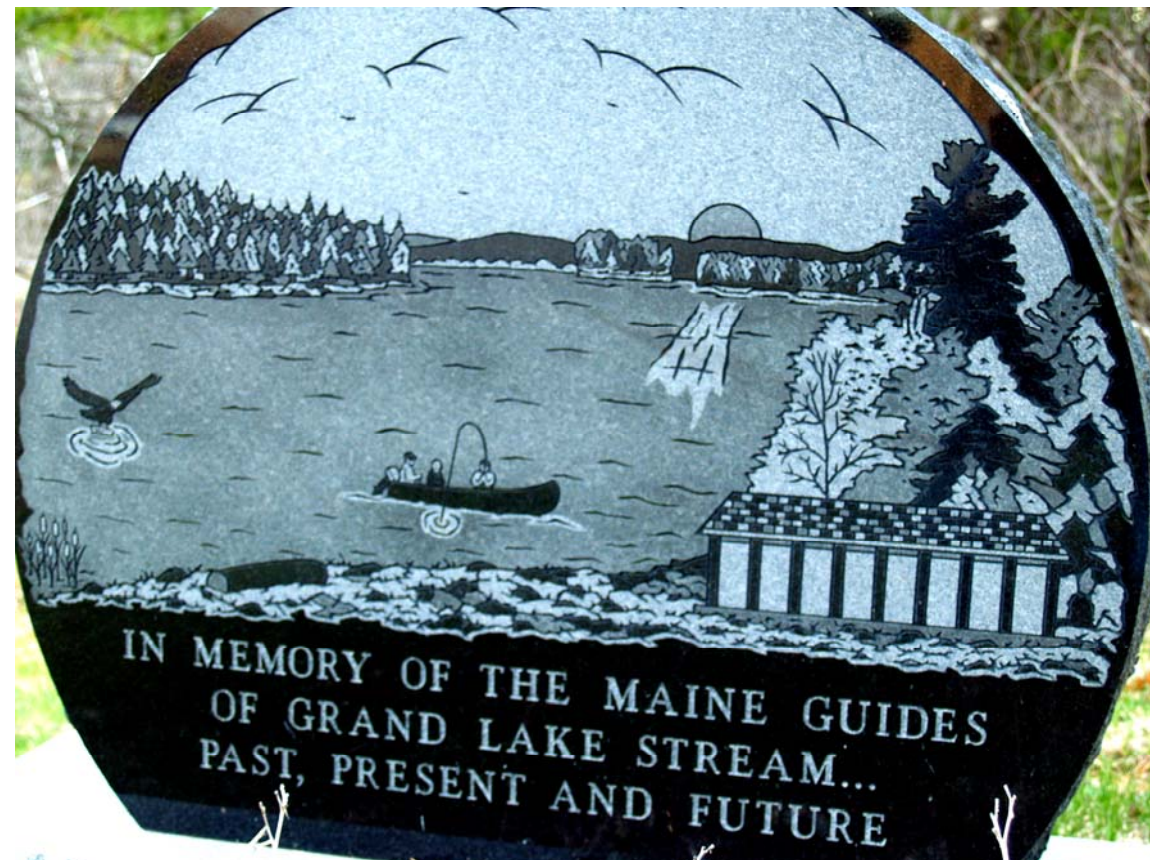
Describes viewer expectations, character of the area, use of Junior, Pleasant and Scraggly Lakes.

- “The highest concentration of fishing guides in Maine leave from the ten lodges in and around Grand Lake Stream every morning. We usually launch from West Grand Lake dam or Pocumus Lake, then spend our day making our way up through the chain of lakes, many days fishing Junior and Scraggly before the days over. The St. Croix watershed ten years ago brought in 5.5 million \$\$ a year from sport fishing. The Grand Lake Chain supports the lions share of this money . Check UMO and the Maine Dept. of Tourism for current figures.

We have generations of clients that come back to a place that hasn’t changed, an important place in their lives, a feeling of ownership. The average mountain around us is 500 ft., so a 428 ft. tower on top of a 1000 ft. mountain will be seen for a long ways. June is the busiest month for fishing with spawning lasting all of June. Bass spawn mostly on the southeast shores because the sun warms these shores first. So that is where the fishermen and guides are. Looking all day at Bowers and Dill.

This (windturbine project) will stop their return and this will change our culture and traditions forever. I’ve been a Master Maine Guide for forty years, past president of GLSGA as well MPGA, past assessor for the town of Grand Lake Stream. I’ve depended and made my living and raised a family from the healthy, unspoiled natural resources in this area since 1973.

David Tobey



Granite Monument to Maine Guides—Grand Lake Stream

Exhibit -30

From a Maine Guide—e-mail interview

Describes viewer expectations, character of the area, use of other lakes in the area.

- “I became a guide because it is a very honorable profession and because being a guide goes back 4 generations in my family (late 1800’s). I am on the south end of Grand Lake. To suggest that the guides don’t go to parts of our lakes where we can see the turbines is a joke. We have to take our clients to the places where the fishing is hot at the time.

The residents of this area have spent countless hours and millions of dollars preserving this area from shoreline development so the public can recreate on these lakes in a natural setting. We have been working on this vision for over 10 years now and are presently working on a 22,000 acre, \$24,000,000 project on West Grand Lake that will look right at the proposed turbines. Its like all our hard work and sacrifice to keep the area looking natural was a huge waste of time.

There are ten sporting camps in the area that draw hundreds of people from all over the world to hunt , fish and vacation. One of the big benefits to vacationing in our area is the remote feeling and the natural setting. One other motivation for us protecting this land was to keep this land open to the public forever. We have almost 400,000 acres of forest surrounding Grand Lake Stream that will always be open to the public for all traditional outdoor recreation. How many places on this planet can compete with that?

The developer of this project made a presentation to our town and told us where these turbines could be seen from , and these areas included most of West Grand Lake, the jewel of the Grand Lake Stream area. I’m afraid that if this project happens our very fragile tourist industry will suffer greatly. I have a client that I’ve fished with for many years and while we were on Baskahegan Lake where there are 30 plus windmills visible on the skyline. He first told me to turn my canoe so he could not see the turbines, then when we got back to the boat landing after a very successful day he said he would prefer not to fish this lake because of the ugly windmills. I think that says it all.

Louie Cataldo—1st Selectman— Grand Lake Stream



Typical undeveloped shoreline along the statewide significant lakes

Exhibit -31

These interviews and web reviews illustrate the passion that residents and visitors share for the area's wild character and reveal a universally high, very high expectation of experiencing great natural beauty here.

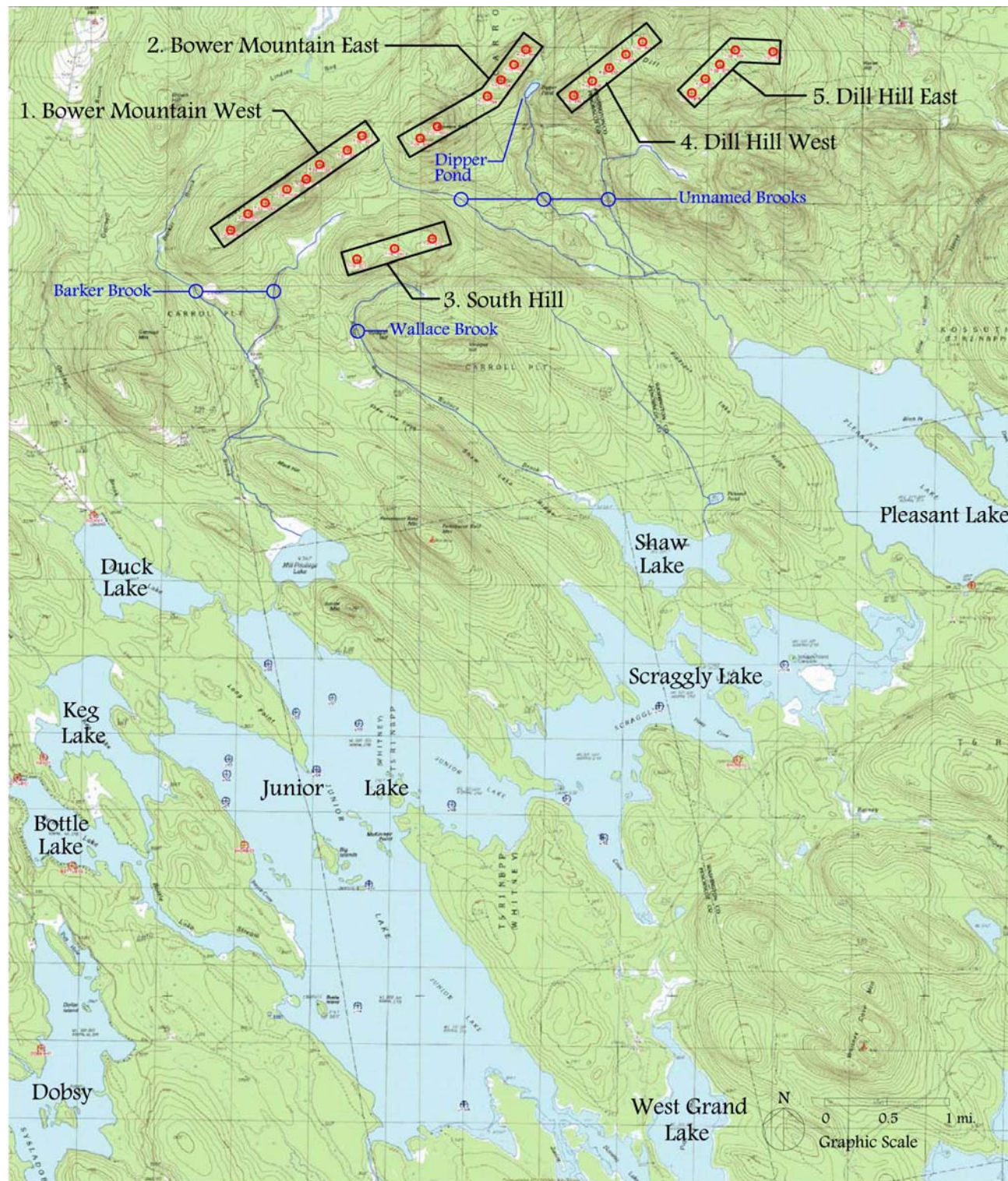
The area's scenic value derives from the relative lack of development in the rich configuration of mountains and lakes. The mountains support a healthy, diverse cover of many coniferous and deciduous tree species. Although the area is being actively logged, it is being done with a level of sensitivity so that operations are hardly noticeable from lake perspectives. In addition a 250 ft. minimal cutting buffer around all the lakes screens adjacent timber harvesting.

Shorelines have seen very little human alteration. Except for several areas on Duck and Keg Lakes, the few rustic seasonal cabins and year-round homes on the other lakes of statewide significance are small in scale, set well below the surrounding tree canopy, well back from the edge of the water and blend softly into the lakeside foliage.

By far the most prominent visual features in this wilderness landscape are the open, reflective lake surfaces, the sharp shoreline edges where water meets land, the solid hills clothed in three-dimensional living layers of vegetation and the clean, ridgelines where soft, rolling horizontal forms contrast with the sky.

D. The Project Purpose and the Context of the Proposed Activity

The purpose of the project is to build 27 windturbines and associated facilities as described in the Landworks' report within a semi-wilderness area of pristine beauty.



Bowers Wind Project turbine clusters relative to the northern lakes and their tributary streams in the Great Grand Lakes Scenic Watershed

Exhibit -32

E. Project Description

Answers to the following series of questions cover the information required to satisfy “The scope, scale and potential effect of views of the generating facilities on the scenic resource of state or national significance.”

The questions were developed by Elizabeth Courtney in “*Vermont’s Scenic Landscapes: A Guide for Growth and Protection*” published by The Vermont Agency of Natural Resources, 1991.

What is the project’s style, scale, mass, patterns, site elements, form of elements?

The Bowers Wind Project consists of 27 windturbines 262 ft. high from the ground to the center of the hub, with a 332 ft. diameter rotor making the tip of the blades as they reach the zenith of their rotation 428 ft. above the finish grade of the roughly 50,000 sq. ft. pad within the 100,000 sq. ft. clearing required for construction.

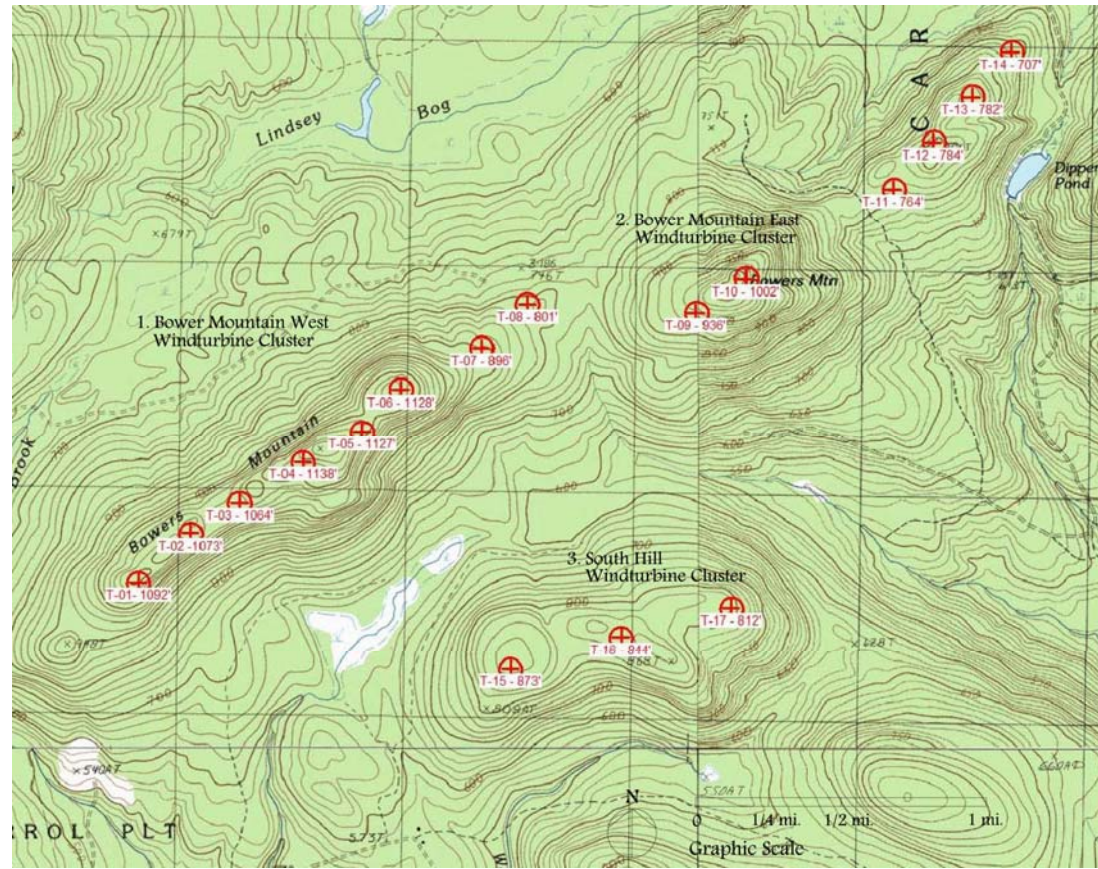
The project is laid out in five clusters consisting of slightly overlapping lines of towers running in a southwest/northeast direction covering four and a half miles of mountain ridges. The area is located roughly four miles north/northwest of Pleasant, Scraggly and Junior Lakes.

To simplify the descriptions I have given names to each cluster:

1. Bower Mountain West Cluster— SW corner (towers 1-8),
2. Bower Mountain East Cluster— (towers 9-14)
3. South Hill Cluster— approx. 1 mi. south of Bowers Mountain (towers 15-17)
4. Dill Hill West Cluster— (towers 18-22)
5. Dill Hill East Cluster— (towers 23-27)

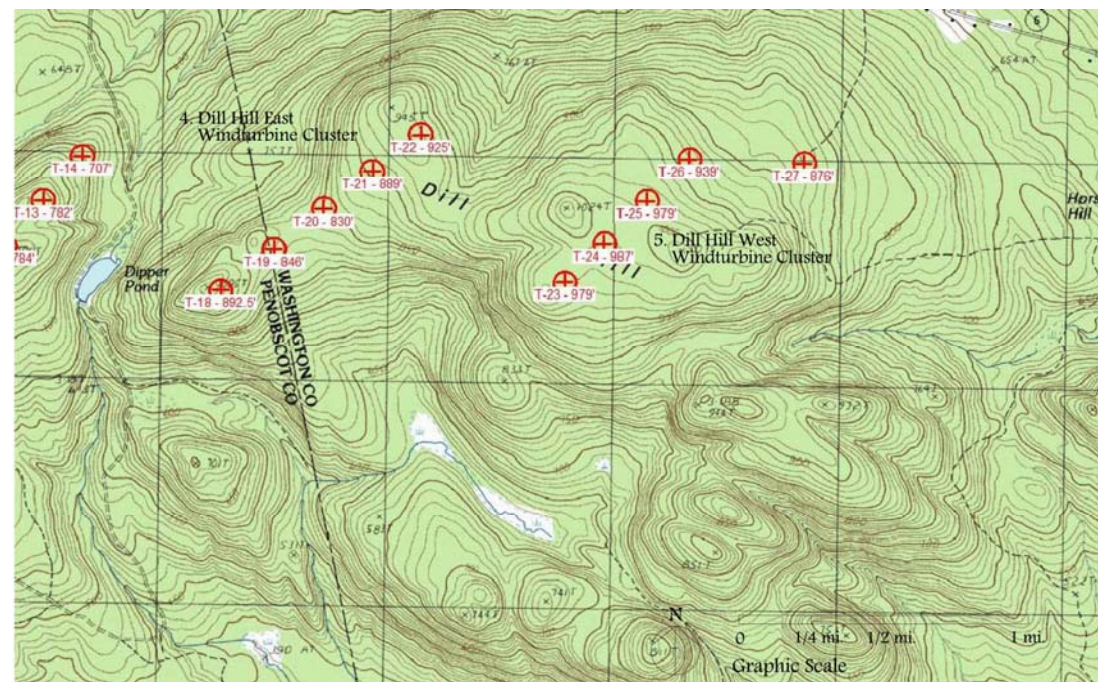






Bowers Wind Project Turbine Clusters 1-3

Exhibit -35



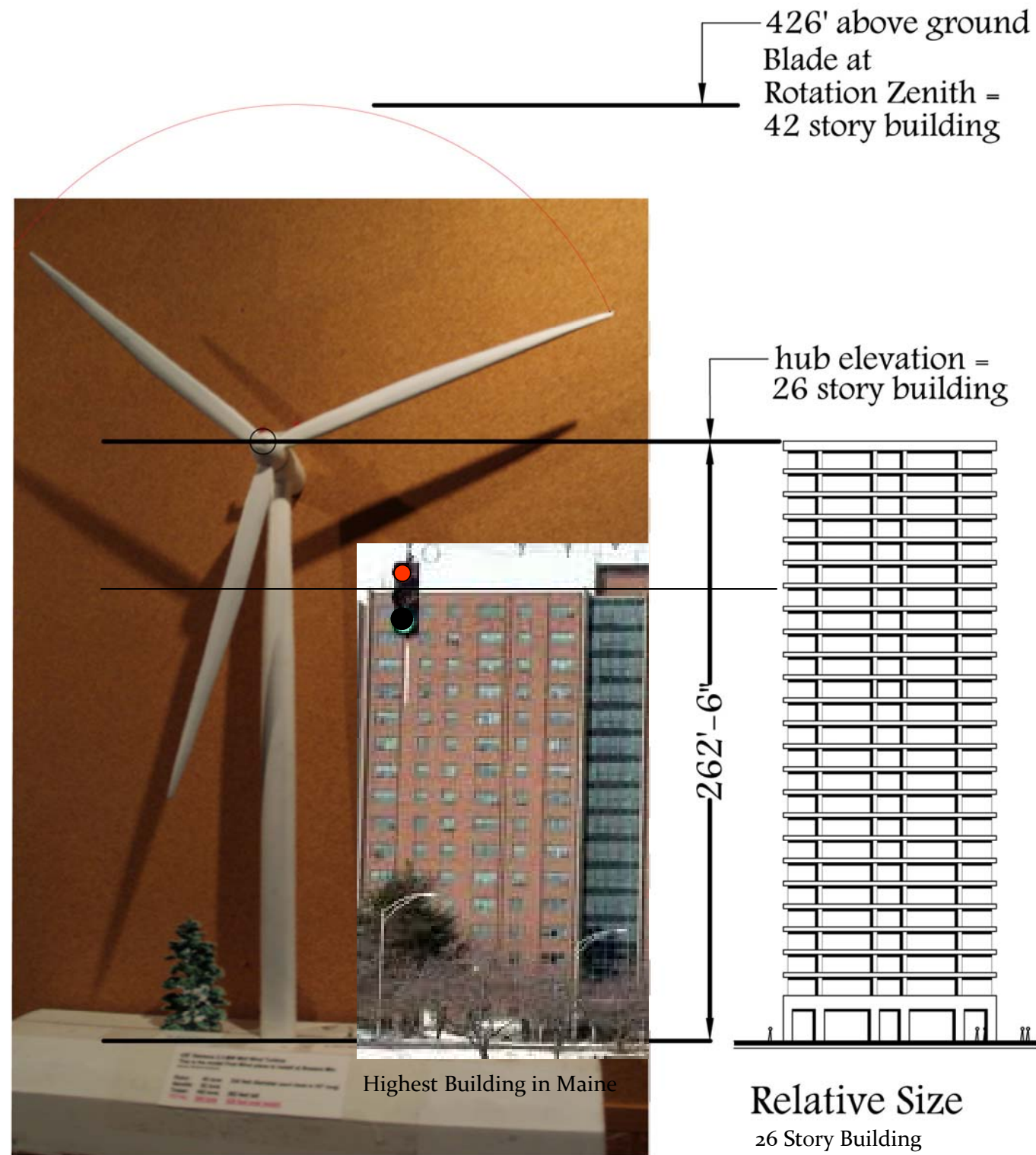
Bowers Wind Project Turbine Clusters 4-5

Exhibit -36

1. **Bowers Mountain West Cluster**— Towers 1-8 line the ridge of the 1.3 mile long Bowers Mountain ridge that runs in a southwest/northeast direction. The towers are spaced at intervals ranging between 800 and 1300 feet. Towers 1-6 occupy all of the 0.9 mile mountain summit (#1— el. 1092 ft., #2— el. 1073 ft., #3— el. 1064 ft., #4— 1138 ft., #5— 1127 ft., #6— el. 1128 ft.). Towers 7 & 8 extend another 0.4 miles east on grade sloping 300 ft down from the summit (#7— el. 896 ft., #8— el. 801 ft.). Both sides of this portion of Bowers Mountain flow into branches of Barker Brook, which supports wild populations of Brook Trout, headwaters of Mill Privilege and Junior Lakes . The west branch of Barker Brook is located 2,400 ft. from the towers across grades ranging between 16 and 30%. The east branch is located 2,800 ft. from the proposed towers across grades ranging from 16-40%.
2. **Bowers Mountain East Cluster**—Beginning 1/2 mile east of cluster 1’s east tower, 6 tower set spans northeast 1.1 miles along Bower’s secondary el. 1000 ft. ridge. Towers 9 & 10 are located 900 ft. from one another along the summit (#9— el. 936 ft., #10— el. 1002 ft.). The ridge descends sharply for about a half mile, then runs along for another half mile at elevations between 700 and 800 ft. Towers 11-14 occupy the entire length of this horizontal ridge. (#11— el. 764 ft., #12— el. 784 ft., #13— el. 782 ft., #14— el. 707 ft.). Water on the north side of Bowers Mountain East flows into the Baskahegan watershed. The closest stream is 1,000 ft. from towers #11, #12, #13 and #14 down slopes of 15-30%. 6 acre Dipper Pond (el. 654 ft) headwaters for Pleasant Lake sits 1,100 ft. southeast of tower #13 down grades ranging from 11-22%. Dipper Pond Brook supports wild populations of brook trout.
3. **South Hill Cluster**— 3 towers set on a 4,000 ft. long southwest/northeast landform across a 500 ft. deep valley from the western end of Bowers Mountain. The valley contains Barker Brook (where wild brook trout originate), headwaters of Mill Privelege Lake. Towers 15, 16 & 17 occupy the full length of the South Hill’s el. 800- 900 ft. summit spaced 1,600 ft. apart (#15— el. 873 ft., #16— el. 844 ft., #17— el 812 ft.). Wallace Brook (support wild populations of brook trout), headwaters of Shaw and Scraggly Lakes is located 1,700 ft. south of the towers at the base of a 400 ft. elevation drop along a 30% grade
4. **Dill Hill West Cluster**— 5 Towers set along 3,700 ft of a saddle-like landform located 1/2 mile east of towers in cluster #2 across a 300 ft. deep valley (Dipper Pond Valley). Towers set 800 to 900 ft. from one another







Bowers Wind Project turbine scale comparison

Exhibit -39

along the ridge (#18— el. 892.5 ft., #19— el. 846 ft., #20— el. 830 ft., #21— el. 889 ft., #22— 925 ft.). Dipper Pond is located 1,500 ft. west of tower #18 down slopes of 14-27%. Surface waters from the southeast side of Dill Hill West also feed Pleasant Lake. An unnamed stream is located 3,300 ft, from tower #18 down grades ranging from 3-10%.

5. Dill Hill East Cluster—Located .5 mi. east of Dill Hill West, 5 towers spanning 4,000 ft. of gently rolling hilltop spaced between 870 and 1600 ft. apart. Topography is relatively flat across the distance. (#23— el. 979 ft., #24— el. 987 ft., #25— 979 ft., #26— el. 939 ft., #27— el 876 ft.) Water flowing north is part of the Baskahegan Lake watershed, the closest brook is 3,800 ft. from tower #27 along slopes of 6-14%. Water flowing south from Dill Hill East feeds Pleasant Lake in a watercourse 3,000 ft. from tower #23 down slopes between 7 and 35%.

The scale of the project is enormous.

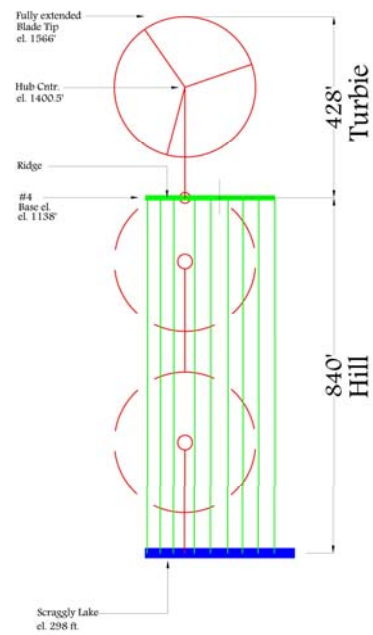
The elevation of the windturbine hub (262 ft.) is equal to height of a 26 story building. Each rotor blade scribes a circle as long as a football field, sweeping 2 acres of area with every rotation at a zenith elevation 426 ft. or the height of a 42 story building. (the tallest building in Maine is 204 ft., 17 stories) The overall length of the projects is 4.5 miles, 1.5 miles longer than Pleasant Lake, 1.3 miles longer than Scraggly Lake, or about the same distance as the northernmost point on Junior Lake beyond Long Point south to Junior Stream and Norway Lake.

Individual windtowers have a tall, proportionately thin vertical mass.

The towers' overall pattern on the landscape is repetitive. Because of their wide spacing and irregular groupings, in many places where two or more groupings are visible, individual towers will appear to overlap one another. They will have a haphazard, jumbled appearance. Their enormous vertical scale and sheer numbers will dominate the landscape.

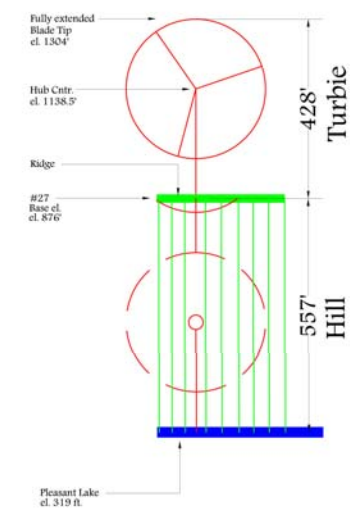






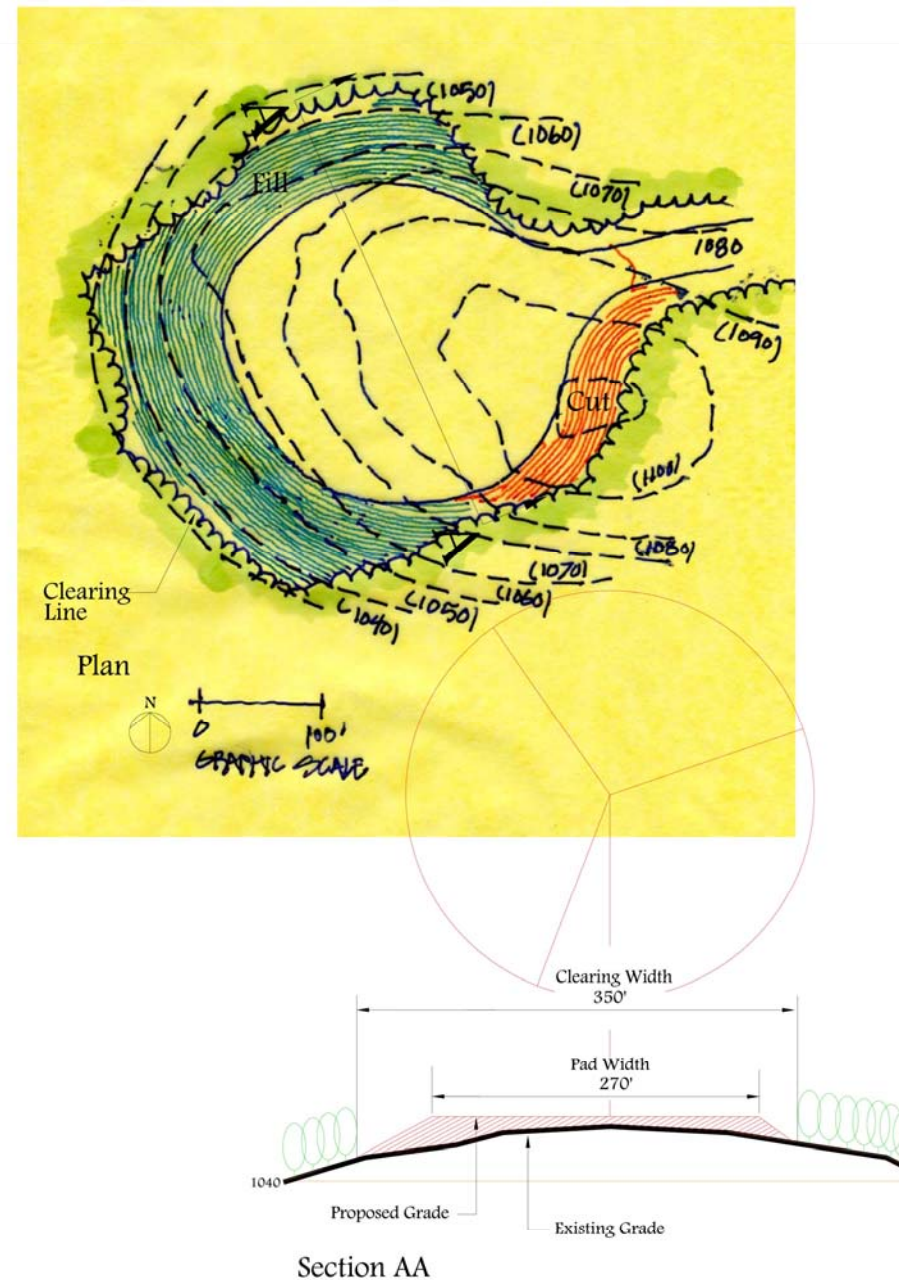
Elevation Illustrating Tower #1 Height Relative to Hill/Mountain Height above Junior/Scraggly Lake Surfaces

Exhibit -42



Elevation Illustrating Tower #27 Height Relative to Hill/Mountain Height above Pleasant Lake Surface

Exhibit -43



Grading Plan Analysis w/Section Illustrating Extent of Proposed Grading & Vegetation Clearing— Tower #1

Exhibit -44

How does the project relate to the topography?

The long axis of both Pleasant and Junior Lakes runs in a southeast/northwest axis. While Scraggly's overall length is east/west, the lake consists of 4 major southeast/northwest oriented bays. Therefore the three largest statewide significant lakes' long dimensions point towards the prominent ridgeline silhouette of Bowers Mountain and Dill Hill where 4.5 miles of 428 ft. towers will be situated at a 90 degree angle. Because they project so much higher than the ridges and are in constant motion, they will be more prominent, visible and commanding than the quiet ridgeline.

The water level of Pleasant Lake is el. 319 ft., Scraggly and Junior el. 298 ft. The towers range between el. 707 ft. and 1138 ft. a lake-level tower base differential anywhere from 386 ft. to 840 ft. Adding 428 ft. for the overall height of the tower structure, the top of the rotors will reach anywhere from between el. 814 ft. and el. 1566 ft. making the proportion of tower height to height between lake and ridgelines to be from 1/1 to 1/3.

A series of low hills between the tower locations and Pleasant, Scraggly and Junior Lakes will block views of some of the towers from certain viewing points on each of the lakes (see map).

However, because the towers are to be constructed on mountains generally higher than those hills and the terrain consists of several valleys which will act as view corridors and the fact that the 4.5 mile long project passes behind those foreground hills, it will be difficult to travel very far on any of these three large lakes without encountering the towers. They will be impossible to get away from.

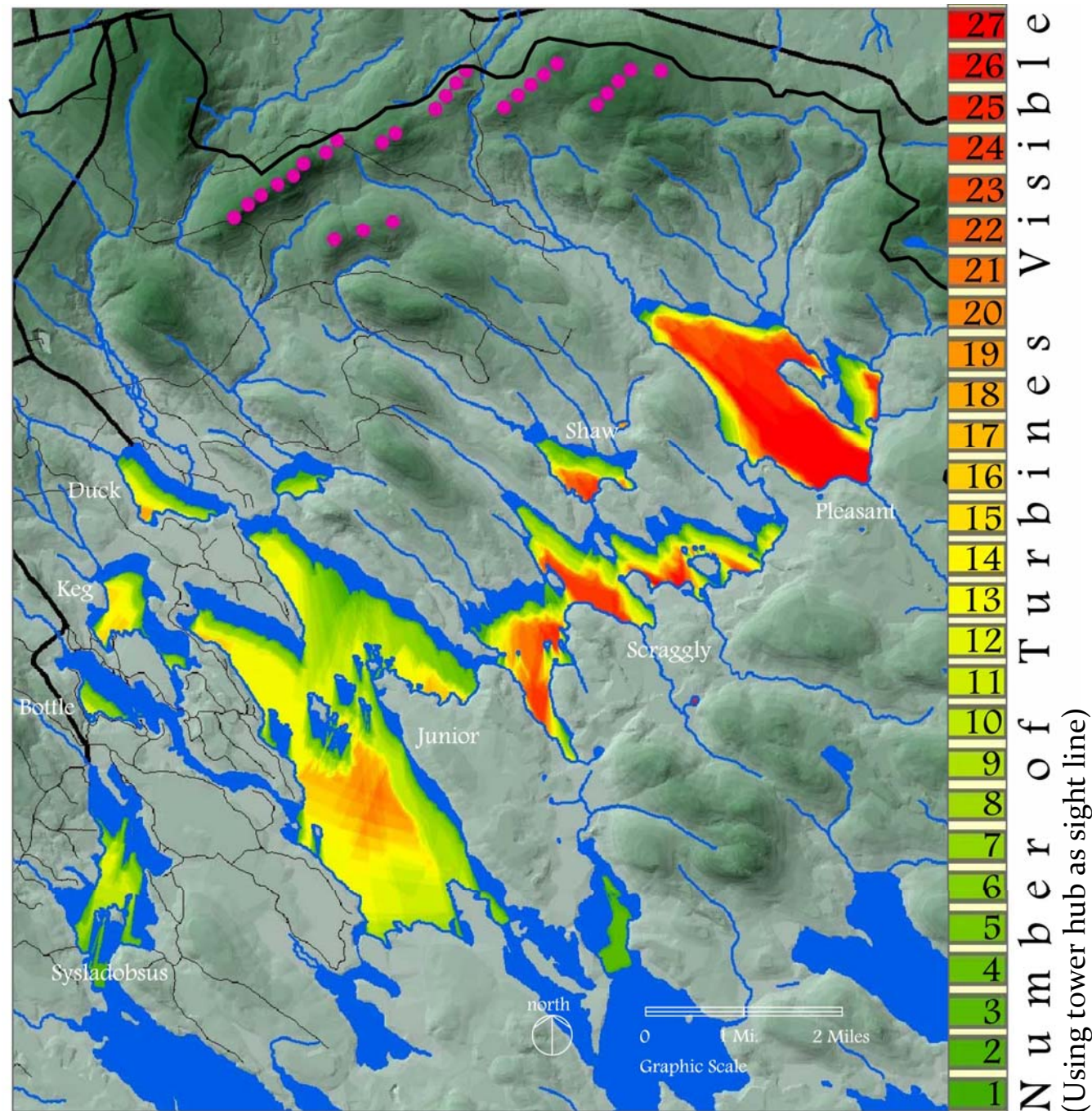
Project grading plans show a 250 ft. diameter flat pad at each tower location. This requires significant quantities of earthwork cutting and filling on the ridgeline mountain topography well beyond the edge of the pad. Cuts and/or fills of 15 and 20 ft. occur regularly through the project. Scaled distances on tower location #1 extends grading required to accommodate side slopes over an irregular rectangle roughly 330 ft. x 340 ft. Tower #2, 340 ft. x 440 ft. Tower #3, 350 ft. x 400 ft. The visual result of these 3+ acre clearings will be bare spots and greater clearings for side slope cut/fill earthwork.

How does the project relate to the vegetation?

At present all of the ridgelines where the towers are proposed are forested.







Visibility map of Bowers Wind Project from lakes of statewide significance and other lakes in the Grand Lake Scenic Watershed within an 8 mile radius .

Exhibit -47

Grading plans show 300+ x 400+ ft. cut/fill areas to accommodate each tower resulting in the need to remove between 2 and 3 acres of trees at each location.

Additional tree clearing is required to develop the construction/ maintenance road winding from tower to tower at or close to the mountain summit. This road grading requires a 60 to 120 ft. cleared width . At tower #1 for instance, the clearing starts at contour 1060, continues to the ridge-line 160 feet away and 32 feet higher. Trees continue to be cleared across the ridge and down the other side for a distance of 200 ft. across a grade dropping 32 ft. When viewing the mountain profile from a distance, all this clearing will create a silhouette of alternating dense textured vegetation between the towers and a semi-transparency across the ridgeline cuts.

What is the project's visibility?

The project will be highly visible from the statewide significant lakes (See turbine visibility map on this page and photosimulations).

Where can it be seen from?

Parts of the 4.5 mile row of towers can be seen from most of Pleasant, Scraggly, Junior, Shaw, Duck, Keg, Bottle and the northern end of Sysladobsus Lakes. (See map and photosimulations)

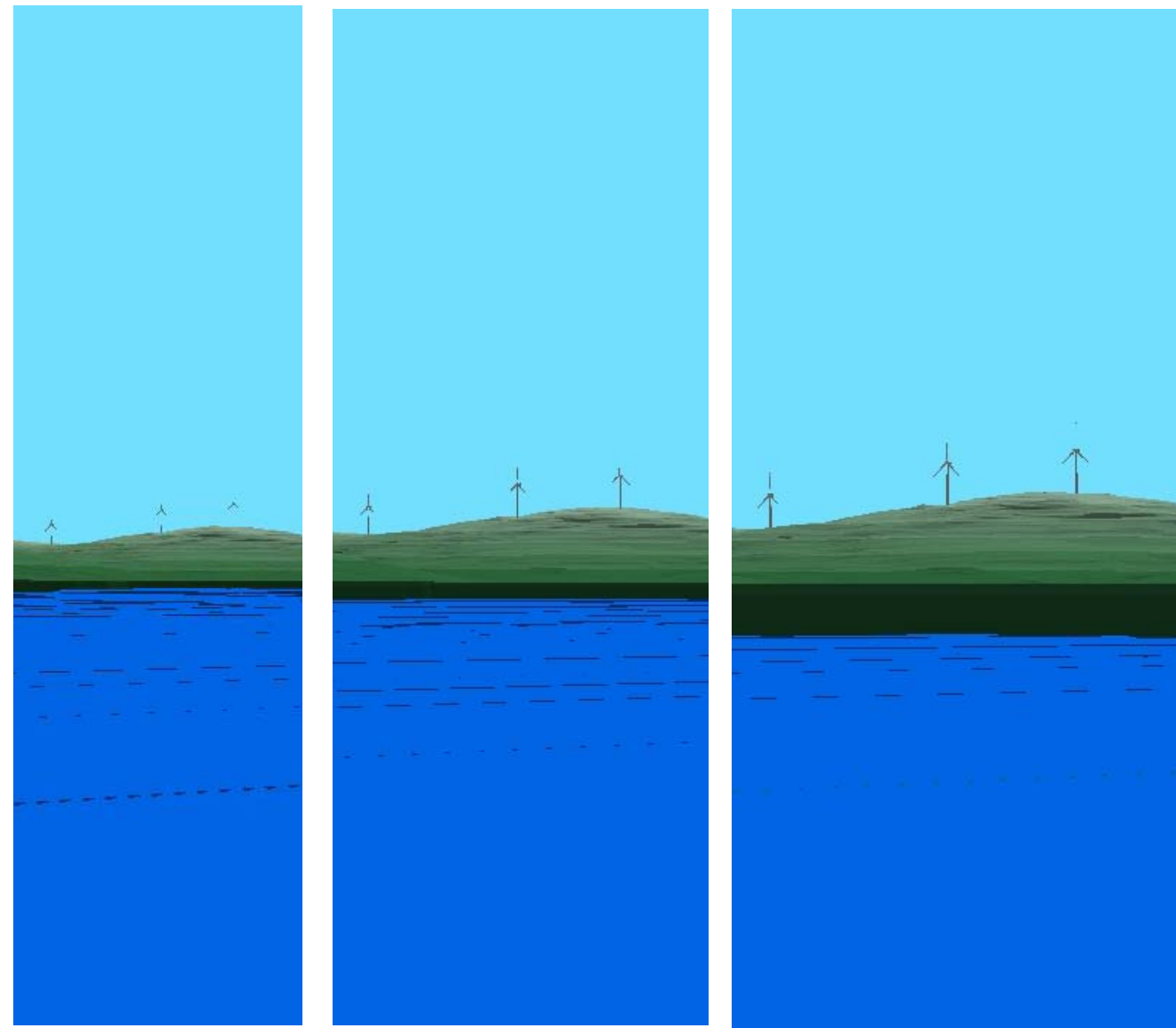
Will the project be in the viewer's foreground, middleground or background?

Landworks (page 8) references the National Forest Service's Handbook on Scenery Management to define distance zones that correspond with fore, middle and background and visual absorption capability (VAC) to assess a landscape's susceptibility to visual change caused by man's activities.

(PAGE 8) "In other words, it is a measure of a land's ability to absorb alteration yet retain its visual integrity. In their report entitled "Visual Absorption Capability," they note that the most used perceptual factor in determining VAC is observation distance: "This is reinforced by the understanding that, with distance, an alteration in the landscape (e.g. turbine array) "takes up" less and less of the total 360 degree panorama. It follows from this that, as a project appears diminished in scale and breadth on the horizon, so is its consequent visual impact."







A. Towers from South End Pleasant Lake—4.5 mi.

B. Towers from Mid Pleasant Lake—3.3 mi

C. Towers from North End Pleasant Lake—2.4 mi.

Note: photo in photosimulation #2—Pleasant Lake (page 17) taken 4.5 miles from towers and matches the scale of Simulation A. Simulations B.&C. illustrate the increasing size of Dill Hill and the towers on approach along the lake. The dark strip along the shoreline is the visual shadow created in the computer model by the 60 ft. tall shoreline trees.

Diagram illustrating how mountains and towers increase in size as viewer approaches.

Exhibit -50

Landworks then includes a diagram showing the angle of view being greater at .5 mile than 5 miles.

(PAGE 12) *“As such, the use of distance zones is used in this Visual Impact Assessment as one methodology for helping to determine the project’s effect on scenic resources of state or national significance. This analysis uses the following classes, as derived by the work of the Forest Service, and based on our own experience with wind projects.”*

“Foreground: 0-2 miles

This is the distance from which details can be perceived, such as color, texture, and form. Turbines appear very large and can dominate the view. Depending on the context, the Project may have an unreasonable adverse effect on scenic values and existing uses when viewed from this distance. There are no scenic resources of state or national significance within this zone.”

“Middleground: 2 to 5 miles

This is the distance at which landscapes are predominantly seen. Individual forms are still distinguishable, such as trees or large boulders, but are generally viewed as a mass or part of the broader landscape. Color, texture, and other details become subordinate to the greater whole. With increasing distance, turbines will appear smaller and smaller. At 5 miles, turbines will be visible, but will not dominate the view since they are viewed as a part of the overall landscape. However, visual impact must be determined on a case-by-case basis to account for distance, context, landform, human activities and other contributing features.”

“Background: Beyond 5 miles

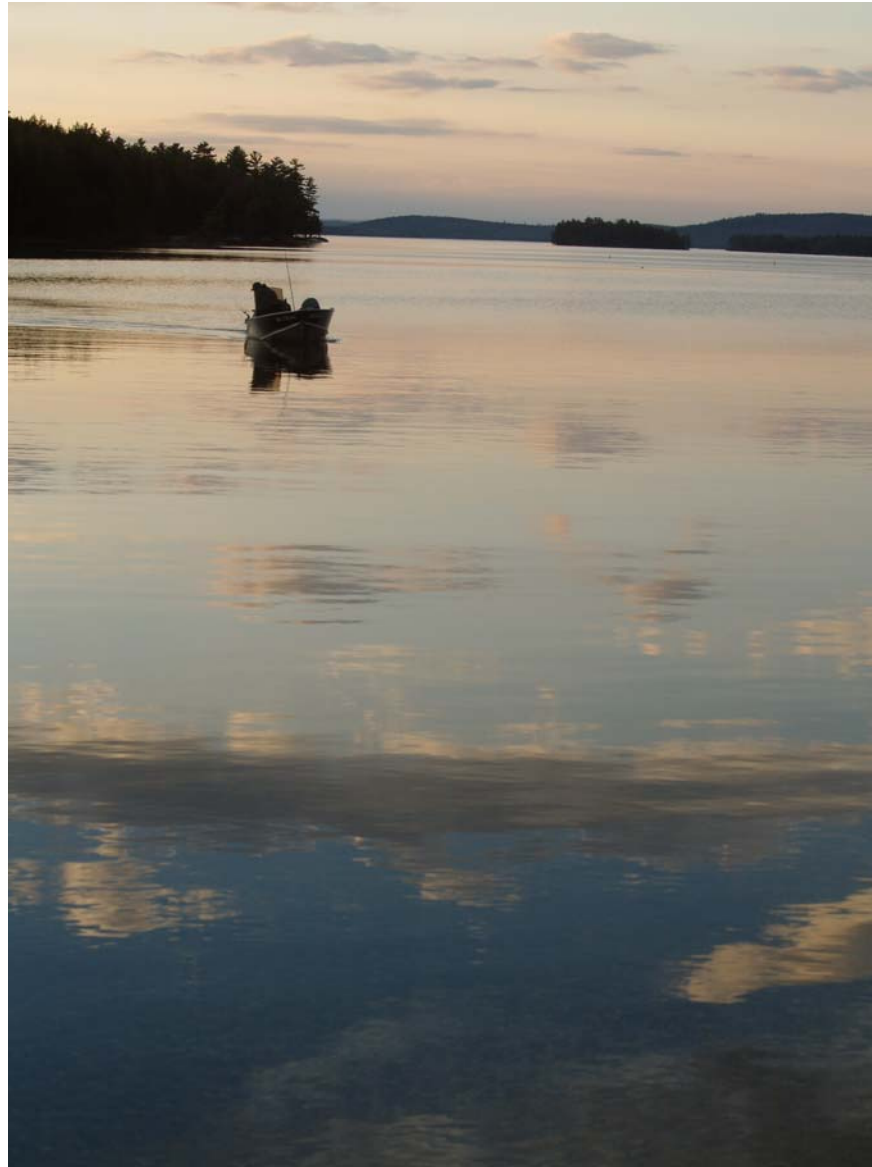
This is the part of the landscape that is usually outside the viewer’s area of interest. Texture is no longer distinguishable and color is invariable. Ridgelines and horizon lines are the prevailing visual characteristics. Intervening and/or nearby visual conditions, development and landscape elements reduce the eye’s tendency to focus on more distant object in the background. Atmospheric conditions may limit the maximum viewable distance to about 8 miles or less. The visibility of individual blades, which are usually around 6 feet plus or minus at their widest point and the entire rotor assembly, is diminished and difficult to see when still or spinning beyond 6 miles. The perceived size of turbines at this distance is greatly reduced, rendering them less prominent and generally making them inconsequential in the overall view.”

The statements in and of themselves are logical, yet the photosimulations show that the towers are highly visible from many locations on the state significant lakes.

The VAC needs to be adjusted when considering the enormous height of







Stationary— slowly moving viewer

Exhibit -53

the towers spread over 4.5 mi. of mountain ridgeline. The VAC must acknowledge that the towers' placement prevents them from being able to blend into background vegetation, instead they stand in stark silhouette against the ever changing background of sky. This VAC does not consider the viewer's, location on a vast open surface where in many locations he or she is afforded a 360 degree view and can see distant horizons silhouetted against the sky. The towers project up dramatically into the sky. Coupled with the movement of their rotating blades they can't help but draw attention to themselves. As the VAC describes, yes at 0.5 miles they would appear to be huge, but given the circumstances described, even at 5 miles and beyond they will be highly visible.

According to the reference material, the project would be defined as being in the background. The size of the towers is so much bigger than the elements we generally perceive in the natural landscape, trees, even very large trees residential and commercial and most industrial buildings don't come close to the overall height and length of the towers. So I propose that the towers at the least be considered to be in the middle ground. Their forms can easily be distinguished at 8 miles and recognizable in clear weather.

Is the viewer likely to be stationary or moving past the project site?

Viewers on the lakes are likely to be staying in one place while camping and fishing, moving slowly in kayaks and canoes or sometimes faster in motor boats.

This is a destination. People travel, often over great distances, to come here in order to slow down and stop.

What is the project's impact on open space?

It greatly reduces the sense of wilderness and natural character of the open space and interjects a sense of being in a mechanized or an environment with machinery overhead.

Will the project be visually congruous within its context?

No.

The thin, sharp vertical spikes with large rotors in constant motion will be





incongruous with the natural flowing form and solid, stable, horizontal mass of the mountains. It will not fit harmoniously into the surroundings

Does it threaten a resource of scenic significance?

Yes. It will change the character of Pleasant, Scraggly, Junior, Shaw, , Keg, and the northern end of Sysladobsis Lakes from “wilderness” to a place with a feeling of “industry.” It will erode the quiet summer camp character of Duck and Bottle Lakes by it’s constant presence in both height and motion. It will have an undue adverse effect on the scenic beauty and traditional uses of this area.

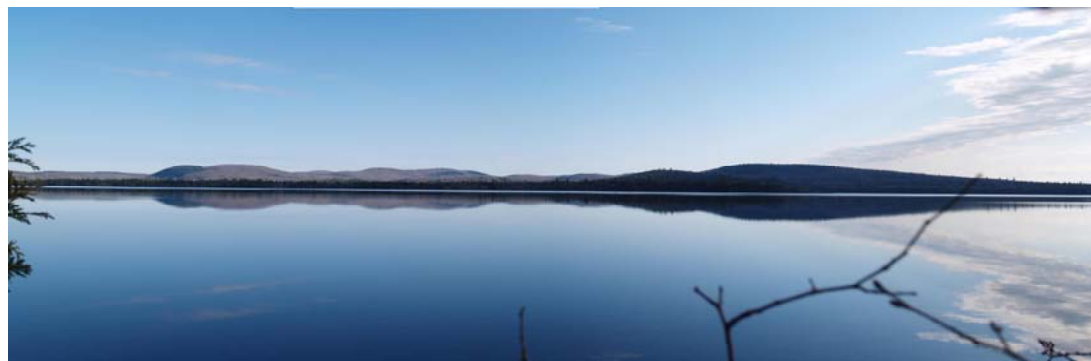
F. Potential Effect of Project on Public Use of Scenic Resource (Conclusion)

The descriptions in sections;

- ◆ A. Illustrating the character of the area’s Lakes of Statewide Significance and their ability to attract and offer visitors much that is unique,
- ◆ B. Illustrating the character of the overall area,
- ◆ C. Expressing residents’ and visitors’ love for the environment and their passionate expectations for a way of life found in the Grand Lakes Scenic Watershed,
- ◆ D. Reviewing the physical elements and layout of the Bowers Wind Project &
- ◆ E. Assessing how the project would drastically alter the existing character of the lakes classified as “having statewide significance

lead me to state that this project will not fit harmoniously into its surroundings but instead have an undue adverse effect on the scenic beauty of the state significant lakes within 8 miles of the project.

The consequent spillover of that negative visual impact will create an undue adverse effect on the traditional uses of the area by causing people to abandon plans to return to the Grand Lakes Scenic Watershed and instead seek another place which can offer in the deepest way, wild beauty and serenity.



Panoramic view of Bowers Mountain across Junior Lake

Exhibit -56







Junior Lake—Island—April 29, 2011

Exhibit -59

IV. APPENCICES

Methodology - Viewshed Map

The visibility analysis for the proposed 27 wind turbines proposed in the Bowers Wind Project was conducted by Green Mountain GeoGraphics Ltd., GIS and visualization services of Essex Junction, Vermont (GMG), using ArcMap, version 10, supplemented with the analysis capabilities in 3d Analyst and Spatial Analysis extensions (GIS software).

Data came from State of Maine databanks and material gleaned from the Bowers Wind Project LURC application. The focus of this analysis was to assess the visibility of the 27 turbines on the region's lakes classified as "having Statewide Significance".

GMG began by creating a terrain model that accurately represents the area including each of the project's windturbine's base elevations. This combined information generated a Triangulated Irregular Network (TIN). With all the elevations incorporated into a single data layer, the TIN was converted to a fine grid or raster data layer where each cell was assigned an interpolated elevation value. Both the TIN and the elevation grid data layers provided a bare earth view of the area under review.

To account for the screening effect of the tree vegetation along lake shorelines, a 60 ft. tall "wall" was created around each lake. The "wall" was added to the elevation TIN construction process and its impact was reflected in the subsequent conversion to an elevation grid used in the visual line of sight analysis.

To create a data layer to illustrate if and how many wind turbines would be visible within 8 miles of any turbine, a separate raster viewshed analysis for each individual turbine was run. For this analysis, the observer was assumed to be approximately 6 ft. tall, the turbine was set at 80 meters (the hub, the largest mass of the turbine) . As with the accounting of the trees, limiting the turbine height to 80 meters conservatively presented the turbine visibility.

Every cell was evaluated in this analysis. If the turbine hub could be seen, the cell was assigned a 1. If the turbine hub was not visible, the cell was as-



Pleasant Lake—Approaching Northern Shore—April 29, 2011

Exhibit -60

signed a 0. Once an analysis of all 27 turbines was complete, they were added in a single layer. Areas that could not see any turbines have a value of 0. The remaining cells have values between 1 and 27. Since the evaluation was to concentrate on the view from the lakes of statewide significance, a mask was used to restrict the final display to the lake boundaries.

Methodology— Photosimulations

Michael Lawrence Associates (MLA) of Essex Junction, Vermont worked closely with Green Mountain Geographics Ltd. (GMG) GIS and visualization services of Essex Junction, Vermont using Google Earth Pro, Arc GIS, Terrain Navigator, Sketchup Pro, Autocad and Photoshop software to help understand and illustrate the physical characteristics of the broad landscape and how the Bowers Wind Project will effect statewide significant lakes.

MLA collected field data during site visits on April 29 and 30, 2011. Six photographs used in the photosimulations were taken from the same perspective point at different times over the two days to illustrate the dynamic, play of weather and light on the same landscape scene. Those 6 views are labeled 01-A through 01-F and found on pages 10, 37, 40, 43, 46 & 49.

All photographs were taken with an Olympus E-500 digital camera recording at a 3264x2448 pixel resolution. All photos used in the photosimulations were taken with a 14-45 mm. Zuiko lens set at 25 mm., the equivalent of a 50 mm. film camera lens. Coordinates were hand recorded from a Garmin Nuvi GPS unit and entered onto base maps.

Photosimulations were prepared by MLA with assistance from GMG. GMG developed a 3d terrain depiction and a 3d graphic model of an individual wind turbine. The terrain was created from a 20 foot contour GIS layer downloaded from the Maine GIS web site. The contour layer was converted to a raster dataset using ArcGIS software and displayed in 3d using the ArcScene viewing environment. The turbines were modeled in SketchUp Pro. Turbine locations (X&Y coordinates) were built into a GIS point layer which was associated with the terrain for 3d display and symbolized with the turbine model. Using ArcScene as the display environment, computer screen captures were developed from the photographic points on and around the statewide significant lakes. These images provided ridgeline profile depictions to accurately superimpose turbine models into the camera images using Photoshop.



Scraggly Lake Shoreline—April 29, 2011

Exhibit -61

The turbines were also modeled into the GoogleEarth environment to compare the terrain profiles with the GIS presentation. The GoogleEarth presentation also provided an interactive viewing perspective allowing assessment from different locations.

In looking at the photosimulations, please keep uppermost in your mind that mechanical cameras do not capture anywhere near the detail and range of color that we see with our eyes. Details that blend together in the distance in photographs are sharp and clear to the human eye.

A good test of this is to take a photosimulation to an existing industrial-scale windtower. Position yourself the same distance from the turbine structure as noted on the photosimulation. Hold the photograph approximately 20" away from your eyes and note the increased level of detail you observe as you compare reality with the paper photographic image.

Actual windturbines appear with greater clarity to us than photosimulations can portray.































