

Pre-Filed Direct Testimony of Partnership for the Preservation of the
Downeast Lakes Watershed (PPDLW)

**STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

CHAMPLAIN WIND LLC	)	PRE-FILED TESTIMONY OF
CARROLL PLT. / KOSSUTH TWP.	)	INTERVENOR,
PENOBSCOT/WASHINGTON COUNTRY	)	PARTNERSHIP FOR THE
#L-25800-24-A-N/#L-25800-TE-B-N	)	PRESERVATION OF THE
	)	DOWNEAST LAKES WATERSHED

**Partnership For The Preservation Of
The Downeast Lakes Watershed**

March, 2013

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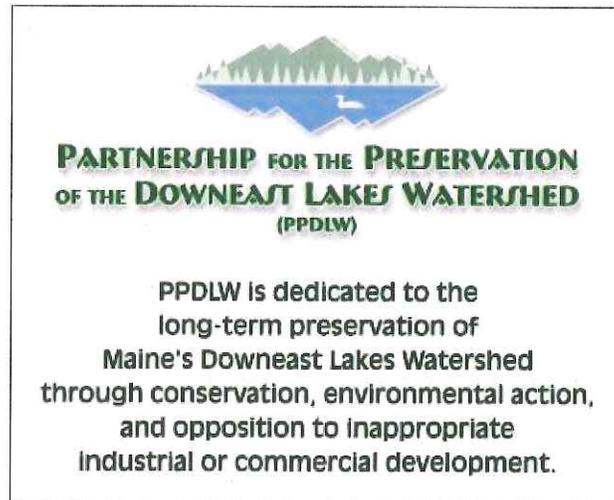
EXHIBIT L Dale Tobey Expert Testimony

EXHIBIT M Dale Wheaton Expert Testimony

EXHIBIT N Michael Lawrence Associates VIA

EXHIBIT O PPDLW Downeast Lakes User Survey

EXHIBIT P PPDLW Petition to DEP



Partnership for the Preservation of the Downeast Lakes Watershed (PPDLW) was an Intervenor in the first Bowers Wind Project (BWP) hearing before LURC (now LUPC). As such, PPDLW is familiar with the Wind Energy Act (WEA), particularly the portions of it that deal with a project's scenic impact. PPDLW is a group of 190+ concerned property owners, residents and small business owners who are committed to protect the scenic area known as the Downeast Lakes Watershed.

PPDLW's president Gary Campbell wrote the PPDLW Intervenor testimony for the current BWP hearing process. Mr. Campbell was one of the founders of PPDLW. He was an expert witness in the first BWP hearings, and on behalf of PPDLW wrote responses to LURC's Procedural Orders as well as the applicant's objections. He represented PPDLW at LURC deliberations and other sessions. Gary is a small business owner who has an MBA from Harvard. He has been visiting Maine since the 1980's, and owns a seasonal camp in the Downeast Lakes region.

EXECUTIVE SUMMARY

The Partnership for the Preservation of the Downeast Lakes Watershed (PPDLW) urges DEP to deny Champlain Wind LLC's (CW) application to construct the Bowers Wind Project (BWP) on Bowers Mountain and surrounding hills in Carroll Plantation and Kossuth Township. This is the second time that CW has proposed an industrial wind project at this site. After 13 months of consideration, hearings and deliberations over the original BWP application, LURC determined that CW had failed to satisfy its burden of proof with regard to scenic impact. LURC Commissioners voted unanimously to deny CW a permit on April 20, 2012.

LURC was critical of the surveys presented by CW and expressed disappointment that CW had not conducted a user survey on the Scenic Resources of State or National Significance (SRSNS) lakes that would be scenically impacted by the project. In preparing the current application, CW has conducted a user survey and eliminated several of the turbines (although a taller model of turbine has been substituted for those that remain).

Although the current project falls in the WEA's expedited permitting area, it is on the very edge of it¹ such that its impact will be felt far into the Downeast Lakes Region which the WEA intentionally and specifically shields from expedited permitting. The Downeast Lakes Region, despite LandWorks assertions to the contrary, therefore merits a greater level of consideration. Since this Region's economy is unusually dependent on tourism, any development that erodes the remote wilderness brand of the Downeast Lakes will have serious local economic consequences.

When considering an expedited permit for a grid-scale wind energy development, the Maine Wind Energy Act (WEA) directs the permitting authority to determine,

"...whether the development significantly compromises views from a scenic resource of state or national significance such that the development has an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the scenic resource of state or national significance."²

¹ Turbine #14 is only 1,220 feet from the boundary of the unexpedited area.

² Maine Wind Energy Act, Chapter 34-A, § 3452. Determination of effect on scenic character and related existing uses.

If it is determined that the proposed project would have an unreasonable adverse effect on either 1) the scenic character of, or 2) existing uses related to the scenic character of a scenic resource of state or national significance, DEP must deny the permit.

Based on results from the applicant's intercept survey (the Kleinschmidt survey), PPDLW's Downeast Lakes Users Survey (the PPDLW Users Survey), considerable public opposition to the first and second Bowers Wind Projects³, consensus from multiple professional organizations and the residents of Grand Lake Stream Plt, PPDLW is convinced that the proposed project will have an unreasonable adverse effect on both the scenic character and the existing uses related to the scenic character of the SRSNS within eight miles of the proposed wind project. Furthermore, given this region's unusual dependence on nature-tourism, serious economic impacts will be felt as well. On the basis of the project's scenic impact and its economic consequences, the application must be denied.

Per 38 M.R.S.A., Section 484-1, the applicant must demonstrate the financial capacity to develop the project. Based on the nature of the financial information provided, the applicant has not demonstrated adequate financial capacity to develop this project. PPDLW recommends that DEP require the applicant to provide the data necessary to prove financial capacity such that the public is shielded from any financial risk associated with the project. If the applicant fails to satisfy the request, that would provide additional justification for denying the project application.

PPDLW respectfully requests that Champlain Wind LLC's application to build a wind energy project in Carroll and Kossuth be denied. If it is denied, it will be the second failed attempt to put a wind facility at this site. In order to be fair to those who have worked so hard and expended so many resources to oppose this project, and to be fair to the taxpayers of Maine, we request that the denial be issued with prejudice.

³ During the first Bowers application, a total of 321 emails and letters were received by LURC with 302 (94%) of them opposing the project. Of the 58 oral comments delivered during the public hearing 43 (74%) of them opposed the project. For opposition to the current application see Exhibit P, PPDLW / Bowers Wind Petition.

INTRODUCTION

Between March 2011 and April, 2012, the Land Use Regulation Commission (LURC – now LUPC) conducted a rigorous and fair 13-month permitting process on CW's first Bowers application which included:

- extensive agency comments,
- a tour of the project site,
- a boat tour in which they viewed the project site from several of the SRSNS lakes,
- two days and two nights of public hearings,
- hundreds of pages of public comments,
- ten months of deliberations,
- the applicant's request to withdraw following a preliminary vote to deny, and
- a total of 16 Procedural Orders.

When an October 2011 straw vote of the Commissioners showed that the application would be denied, CW petitioned to be allowed to withdraw the application without prejudice or put it on hold so they could prepare a slightly modified project that would address the Commission's concerns over the project's unreasonable scenic impact. After much discussion, LURC skeptically agreed to give CW 90 days to convince the Commissioners that it would be possible to reconfigure this project so as not to have an unreasonable scenic impact. Upon reconvening 90 days later, CW reported that

"...despite its best efforts to do so, Champlain is not able to present a particular reconfigured project to the Commission at this time."⁴

In the end, the Commissioners concluded that the project would have an unreasonable adverse effect on the scenic character AND existing uses related to scenic character of all nine SRSNS within eight miles of the project:

"...Views from all 9 of the SRSNS will be significantly compromised by the BWP such that the development would have an unreasonable adverse effect on the scenic character and existing uses related to scenic character. The adverse effect is unreasonable due to turbine number, extent of turbine visibility, turbine proximity to the resources, the nature of the views as users travel through the SRSNS, the scenic significance of the SRSNS, and the evidence showing the scenic impacts will have an adverse impact on uses related to the SRSNS. While the scope and scale of the BWP is less visible from Duck, Keg, Bottle, Sysladobsis, and Pug Lakes... the adverse effect on the views from the SRSNS is unreasonable due to the nature of the views as users travel through the SRSNS water trail. The Commission therefore concludes the BWP would have an unreasonable adverse effect on the scenic character and existing uses related to scenic character of the SRSNS located within 8 miles of the project...."⁵

⁴ Exhibit A, Applicant's Response to 15th Procedural Order, DP4889, p.2.

⁵ Exhibit B, LURC Commission Decision in the Matter of Champlain Wind, LLC Denial of Development Permit DP 4889, April 20, 2012, p.25.

On April 20, 2012 the project was officially denied. On October 3rd the applicant submitted a new permit application, this time to DEP, and the Intervenor must re-argue what is essentially the same case. The proposed project is modified, with fewer but taller turbines shifted to slightly higher ground. Despite this reconfiguration, the BWP will still have an unreasonable adverse effect on the scenic character or existing uses of the affected SRSNS.

The Denial of the First Bowers Application

Of all the criteria required to decide a wind energy permit, scenic impact was the first and only criterion that was addressed and deliberated by the Commission for the first Bowers project. As stated in the conclusion of the final decision document:

“The above conclusions require the Commission to deny the application, and thus the Commission does not make finding and conclusions on those other issues. The Commission noted during its deliberations, however, that this proceeding primarily turned on whether the BWP application met the scenic impact review criteria, and therefore it did not see a need to engage in an extended deliberation on the other applicable criteria.”⁶

This is significant because the applicant has on numerous occasions misrepresented the LURC proceedings, spinning the facts. For example, Matt Kearns, the company’s vice president of development in the northeastern U.S. told Nick Sambides of the Bangor Daily News:

“What we heard from the commission is that the project met 99 out of 100 siting criteria and the one they had issue with was the scenic criterion, which was difficult to evaluate.”⁷

Then on March 9, 2012 in CW’s response to LURC’s Procedural Order 15, Attorney Juliet Browne characterized the process and the straw vote this way:

“Following a public hearing last summer, the Commission deliberated on the Project and determined that the Project satisfied all but one of the applicable review criteria. With respect to the visual impact standard, several Commissioners expressed concern...”⁸

After the final denial was signed on April 20, 2012, CW’s Neil Kiely told Nick Sambides of the Bangor Daily News that:

“the project satisfied all LURC criteria except one — that which regards visual impacts”⁹

We bring this matter to the Department’s attention to in case the Commissioner and/or staff are under the impression that LURC Commissioners “signed off” on any of the statutory criteria.

⁶ LURC Commission Decision in the Matter of Champlain Wind, LLC Denial of Development Permit DP 4889, April 20, 2012, p.26.

⁷ First Wind wants to pull Bowers Mountain wind project — for now, Bangor Daily News, 11/16/11.

⁸ Exhibit A, Applicant’s Response to 15th Procedural Order, DP4889, p.1.

⁹ LURC officially rejects First Wind’s Bowers Mountain proposal, Bangor Daily News, 04/20/12.

The Downeast Lakes Region

The Downeast Lakes have long been appreciated by sportsmen, paddlers and ecotourists as a rare and spectacular chain of forested lakes with a distinct wilderness 'feel'. For the last 150 years the Downeast Lakes Region has become a magnet for people who seek an outdoor wilderness experience. Visitors come to enjoy the outstanding fishing, camping, hunting, canoeing, kayaking, hiking, wildlife photography, birding, XC skiing, ice fishing, snowshoeing and relaxing in an unspoiled wilderness environment. Home to more than a dozen of Maine's traditional sporting camps, fishermen come for the landlocked salmon, lake trout and smallmouth bass. Paddlers make multi-day trips through the area along documented Native American waterways. As night approaches they can choose from more than 50 free-to-the-public primitive campsites on the scenic islands and peninsulas. Beaches beckon boaters to pull up and take a swim in the lakes' clear water. The natural surroundings combine into a remote brand that has called out to people for generations.

280	the number of lakes designated by the Maine Legislature as Scenic Resources of Statewide Significance (SRSNS)
14	the number of SRSNS within 8 miles of the proposed Bowers project
5%	the percent of all SRSNS that are within 8 miles of the Bowers project
9	the number of SRSNS that will have direct views of the turbine hubs and lights

The Downeast Lakes Region comprises about 2 dozen lakes in total with 53,000 acres of clear, clean water. Perhaps its most outstanding feature is that most of the lakes are connected by navigable waterways or short portages. These waters have been a crossroads for travel for the Wabanaki for over 600 generations and the Tribes still own large tracts of land.

"...One of the reasons people will travel long distances to the heart of the Downeast Lakes is precisely to find that remote wilderness experience. If people are simply looking for places to paddle on beautiful lakes where there is evidence of man-made structures, Maine provides many, many choices. But lakes that are undeveloped and interconnected, and that provide opportunities for multi-day loop trips in a remote setting are rare..."

Testimony of
Catherine Johnson
on behalf of NRCM
BWP #1, 6/27/11, Exhibit C

In December of 2012, Lonely Planet named Maine's "woody interior" one of America's top ten travel destinations for 2013. They praised our wilderness lakes, mountains and multi-day canoe trips that let you paddle right up to the Canadian border. "While the coast is the fame of Maine, inland travel offers ample reward. This is, after all, 'the pine state' with forests covering 90% of the land. Thousands of lakes and ponds fill the vast wilderness, with moose and bald eagles far outnumbering humans."¹⁰

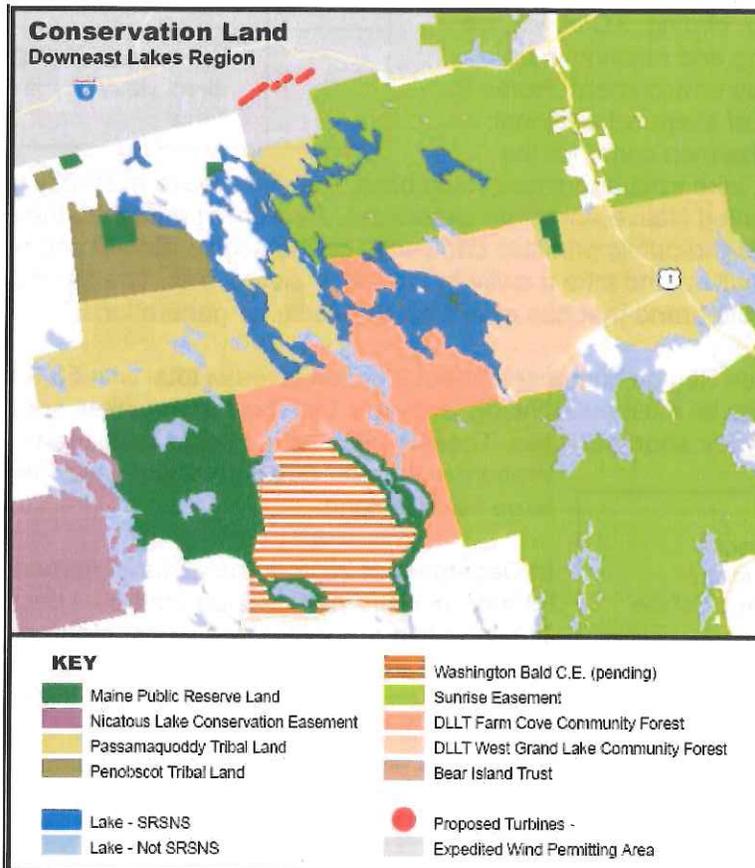
Cold springs in Carroll Plt begin their journey tumbling down the mountains, forming streams¹¹ that are well-known for their native brook trout populations. The water flows south through Keg, Duck, Junior and Scraggly Lakes to West Grand Lake, into Big Lake, Grand Falls Flowage and ultimately into the St. Croix River. This remarkable constellation of interconnected lakes makes up the western branch of the St. Croix Watershed connecting Downeast Maine with New Brunswick.

¹⁰ <http://www.lonelyplanet.com/usa/new-england/maine/travel-tips-and-articles/77583>

¹¹ Getchell, Barker and Wallace Brooks all support native brook trout.

Conservation Success Stories

Many organizations have recognized the unique value of this beautiful scenic area. Thanks to dedicated partnerships among the Passamaquoddy Tribe, the Penobscot Tribe, timber companies, State and federal agencies, conservation groups and local citizens, the Downeast Lakes Region is almost entirely protected. The village of Grand Lake Stream is home to the tremendously successful community-led Downeast Lakes Land Trust that has won numerous awards for the conservation and exemplary management of its forests and waters. Because of these extensive conservation purchases and easements, the lakes are very sparsely developed, offering visitors a chance to experience the feel of the north Maine wilderness.



The Downeast Lakes region is one of the most beautiful places we have ever visited and a place that represents not only one of the last sites in northern United States to experience nature's glorious bounty, but it is also the signature calling card of the great State of Maine. The "natural state" found in the Downeast Lakes region with majestic ecosystems combining land, water, wildlife, into vistas that are breathtaking, are unique, very important ecologically to both Maine and to the nation at large and are rapidly disappearing across the United States."

Comment from PPDW Downeast Lakes Users Survey¹²

¹² PPDW User Survey, p.34. – See Exhibit O.

In December, 2012, the Downeast Lakes Land Trust partnered with the State to conserve 21,870 acres on the east shore of West Grand Lake. In that enormous project, a conservation easement held by the Department of Agriculture, Conservation and Forestry will protect more than 17 miles of lake frontage, 3,000 acres of wetlands and working landscapes that support local guides, sporting camps and timber harvesting.

In announcing the purchase, Governor LePage wrote:

“Maine’s natural resources are the backbone of our economy... The Grand Lake Stream area has outstanding fisheries, wildlife and scenic resources that make it an attraction for recreationists from around the world while supporting the highest concentration of Registered Maine Guides in the State. The historic working forests that have safeguarded these natural assets are now assured for the future.”¹³

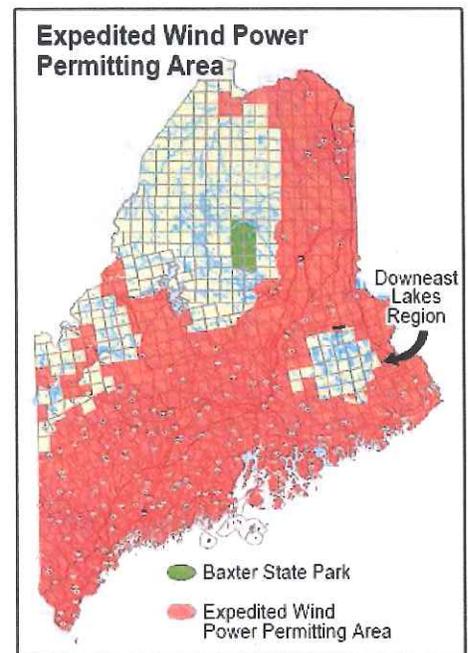
This pristine, protected area is now known as the West Grand Lake Community Forest.

The Downeast Lakes Excluded from the Expedited Wind Power Permitting Area

Maine’s Wind Energy Act allows for expedited wind permitting in most of the state, except for certain areas that were set aside. In describing the land that had been determined to be appropriate for expedited processing, the Governor’s Wind Task Force wrote that they specifically excluded “...broad areas that encompass concentrations of ecological, recreational and/or scenic values that are among the most significant in the jurisdiction”.¹⁴ The Downeast Lakes Region is one such area and so it was specifically excluded from expedited permitting as depicted in the map to the right.

In a joint letter to LURC in connection with the first Bowers proposal, Maine Audubon, The Appalachian Mountain Club and the Natural Resources Council of Maine wrote:

“As members of the Governor’s Task Force on Wind Power Development, we were intimately involved with the drafting of the proposed expedited permitting area boundaries. The proposed area lies at the very northern edge of a large area around the Downeast Lakes that was intentionally excluded from the expedited area because it represents a broadly treasured landscape with significant conservation values... The presence of Pleasant Lake was one of the reasons the southern portion of Kossuth Township was excluded from the expedited permitting area.”¹⁵



¹³ Press Release, www.maine.gov/acf/news/story.shtml?id=467792.

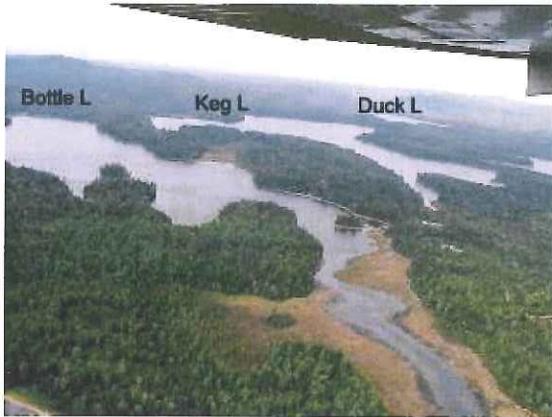
¹⁴ Report of the Governor’s Task Force on Wind Power Development, Feb 2008, p18

¹⁵ Exhibit D, pp.2 and 3.

Although the proposed BWP is inside the expedited permitting area, its turbines would be as close as 1,220 feet from the carved out land determined to be among those "areas that encompass concentrations of ecological, recreational and/or scenic values that are among the most significant in the jurisdiction"¹⁶. It also important to recognize that the turbines proposed for the Bowers project are roughly 100 feet taller than the turbines that were being considered in 2007 when the WEA was being drafted. Due to the topography of the hills and the vast chain of lakes to the immediate south, the proposed 459-foot tall turbines would be visible for many miles across this chain of lakes, well into the heart of the very area that the Wind Task Force intended to protect.

Scenic Quality and the Nature Tourism Economy

The Downeast Lakes economy is reliant on two industries: tourism and forestry. The tourism sector includes sporting camps and lodges, bed and breakfasts, cabin rentals, fishing and hunting guiding, outfitters, restaurants, various support services and retail stores, as well as contractors who build, repair and maintain properties. Yet the project area and the eight mile perimeter around it are sparsely populated, giving the visitor a feeling of being surrounded by forests.



The closest retail hubs – Lincoln, Princeton and Calais – are several miles distant. From the SRSNS nearest to the proposed BWP, it is at least a 40 minute drive to a hardware store and a full-sized grocery store. The nearest gas station is almost eight miles from the boat landing on Bottle Lake. Neither Carroll nor Kossuth has any retail businesses.

South of the proposed site, sporting camps, lodges and cabin rentals span the length of the watershed from Duck Lake, Pleasant Lake, Bottle Lake and Sysladosis

in the north, all the way to Grand Lake Stream in the south where a cluster of them are located. Fishing and hunting guides live in all parts of the watershed and many come from 50 miles or so to bring their clients here. Grand Lake Stream boasts the largest concentration of Maine guides in the entire state.

Most businesses in the area surrounding the Downeast Lakes – from the retail stores in Lincoln to the guides who work out of Princeton - rely on the wilderness brand of the Downeast Lakes area. It is the feel of wilderness that brings visitors to the lakes. Some repeat visitors buy property and in turn invite friends and family to enjoy the area's recreational opportunities and scenic quality. Many families have been coming to the area for generations. They pay property taxes, spend money in retail establishments and

Fly fishing, trolling, and spincasting. Landlocked Salmon, Lake Trout, Brook Trout, Smallmouth Bass, Chain Pickerel, White Perch, and Whitefish. Easy wading on famous Grand Lake Stream, or cruising over 30 nearby lakes in a locally crafted "Grand Laker". Upland Bird Hunting, Wilderness Canoe Trips, Shore lunches cooked over open fire, Wildlife, Undeveloped Scenery.

Local Guide's ad on fishing destination website Viamigo.com

¹⁶ Report of the Governor's Task Force on Wind Power Development, Feb 2008, p.18

service businesses and hire local contractors. Significantly, those who visit seasonally pay the same taxes as residents but demand very little in the way of municipal services.

Tourism is Maine's largest industry and greatest economic engine, providing 170,000 full time jobs, \$535 million in tax revenues and \$10B in goods and services. Trends for nature-based outdoors tourism are encouraging. The U.S. Fish and Wildlife Service's 2011 National Survey of Fishing, Hunting and Wildlife-Related Recreation¹⁷ reports that:

- The number of US resident adults who participated in wildlife-related recreation is up 3% with the greatest increase among those who hunt and fish.
- Those who got out and enjoyed wildlife spent \$144.7B on those activities in 2011, accounting for 1% of America's GDP.
- An impressive 71.8 million people participated in at least one form of wildlife-watching.
- Contrary to common belief that hunting and fishing are activities mainly pursued by rural residents, 89% of all anglers and 80% of all hunters live in metropolitan areas.
- In 2011, hunters spent \$2,465 per person on trips and equipment.
- In 2011, anglers spent \$1,262 per person on trips and equipment.

The PPDLW Downeast Lakes Users Survey, conducted in February and March, 2012, asked visitors to the area lakes (non-property owners only) what they spent money on when they came to the Downeast Lakes. The top three categories for spending were gas, eating meals out, and fishing licenses.¹⁸ Of the visitors surveyed, 42% said they spent \$100-\$500 per visit,¹⁹ and 43% said they stayed in the area from 4-7 days.²⁰ Again, these were visitors only, not property owners.

As demonstrated in the Kleinschmidt survey, the people who recreate on the SRSNS lakes within eight miles of the proposed turbines assign the lakes high scenic value, and they expect a very high overall quality experience when visiting the lakes.²¹ These results are also reflected in the comments found in the PPDLW Users Survey.²²

These surveys show conclusively that if there are turbines visible on Bowers Mountain, the Downeast Lakes region will lose its unique allure and many of these visitors will recreate elsewhere. The local economy, being almost entirely dependent on tourism, will be seriously damaged. Traditional Maine Sporting Camps will suffer. Professional Guides will suffer. Small businesses will close. Jobs will be lost.

¹⁷ Available at: www.census.gov/prod/2012pubs/fhw11-nat.pdf

¹⁸ PPDLW User Survey, p.11.

¹⁹ Ibid. p.12.

²⁰ Ibid. p.10.

²¹ Kleinschmidt survey, p.27, 30.

²² PPDLW User Survey, pp.34-49.

Nine Scenic Lakes Affected by BWP

The proposed turbines of BWP will be visible from a total of nine SRSNS lakes within eight miles of the turbines. This number of SRSNS lakes so close to an industrial wind project is unprecedented. In fact, the Bowers Wind project achieves a number of firsts:

- Only wind project with an Outstanding SRSNS lake within 3 miles
- Most SRSNS lakes within 3 miles
- Most SRSNS lakes between 3 and 8 miles
- Most SRSNS lakes within 8 miles
- Most SRSNS lakes with Significant Scenic rating between 3 and 8 miles
- Most SRSNS lakes with Outstanding Scenic rating within 8 miles
- Most SRSNS lakes with Significant Scenic rating within 8 miles

	Bowers-2	Passadumkeag	Rollins	Oakfield	Bull Hill	Canton Mtn	Hancock	Record Hill	Kibby Exp.
Number of Turbines	16	19	40	50	19	7	18	22	15
Turbine Height to Tip in feet	459	476	389	459	476	448	512	420	410
SRSNS within 3 miles	2	1	0	0	1	0	0	0	1
Outstanding for scenic	1	0	0	0	0	0	0	0	0
Significant for scenic	1	1	0	0	1	0	0	0	1
SRSNS within 3 - 8 miles	7	3	0	2	2	1	3	0	2
Outstanding for scenic	1	1	0	0	1	0	0	0	0
Significant for scenic	6	2	0	2	1	1	3	0	2
Total SRSNS within 8 miles	9	4	0	2	3	1	3	0	3
Outstanding for scenic	2	1	0	0	1	0	0	0	0
Significant for scenic	7	3	0	2	2	1	3	0	3

Water Trails

Twelve of the fourteen SRSNS that lie within 8 miles of the project are connected by water or short portages. Nine of those twelve would have views of turbines closer than 8 miles. In spring, summer and fall, fishermen motor among the lakes, trolling and casting in favorite fishing spots along shore as well as over the deep troughs in the middle of the lakes. In winter, ice fishermen access the lakes on snowmobile and set up ice fishing shacks, spending days and sometimes entire weekends in their ice shacks.

From May through October, paddlers visit the network of lakes, following one of several routes. There are short day trips among the lakes and popular multiple day trips. Dozens of primitive tent sites, found on the shores and islands of Junior, Keg, Scraggly, Pleasant and Sysladobsis Lakes, are available to the public on a first-come-first-served basis.

The myriad paddling opportunities are noted in the Appalachian Mountain Club's book, "Quiet Water Maine."

"...Pocumcus, Junior and Sysladobsis Lakes in the heart of eastern Maine's lake country offer one of the best extended quiet water loop trips in the state, especially when one detours for a few days into Scraggly Lake...."²³

During the public hearings for the first BWP, NRCM attorney Catherine Johnson spoke at a public session and presented written testimony and a map of water trails and conservation lands surrounding the SRSNS (see next page). In describing the Downeast Lakes Region, Ms. Johnson wrote the following.

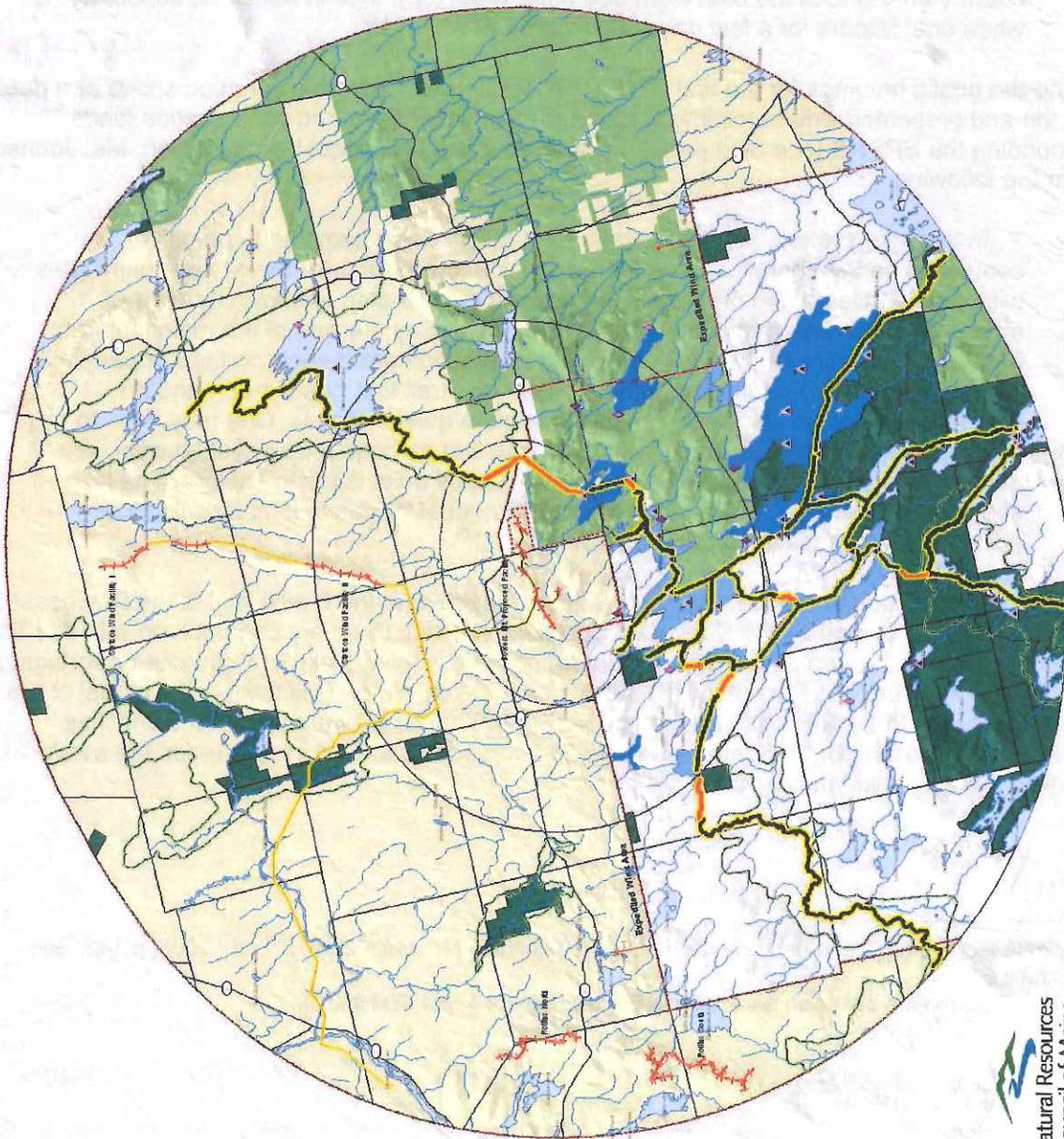
"...In this lake system, you can paddle for multiple days, camping at primitive campsites on the shorelines and on islands: DeLorme Atlas shows at least eight sites within eight miles of the proposed project, and there are an unknown number of others. Sysladobsis, Bottle, Junior and Pug/Junior Bay are part of the main loop trail. Pleasant, Scraggly, Shaw, Duck, Keg and Horseshoe are a short portage or paddle off the main loop or on the longer one way canoe trail that heads north and are wonderful places for paddlers wanting to explore quieter places. One may have to travel to the Boundary Waters in Minnesota to find as large a lake system with multiple opportunities for loop paddling and nearby quiet lakes to explore. The jagged shoreline of Scraggly, Shaw, and Pleasant are great places to look for wildlife and enjoy the wilderness character of the region...."²⁴

These trails don't stop at the statutory 8-mile limit. Just beyond the 8-mile limit is the Downeast Lakes Water Trail owned by the Downeast Lakes Land Trust. Paddlers can hook up with this Trail by paddling south through Junior Stream, portaging from Norway Lake to Pug Lake or portaging from Sysladobsis Lake to Pocumcus. The Downeast Lakes Water Trail follows the model of the island campsites that ARE within 8-miles of the BWP. That is, they are primitive campsites available to the public for free on a first-come-first served basis. This Trail extends the available paddling waters considerably.

²³ Quiet Water Maine, Canoe and Kayak Guide, Appalachian Mountain Club, 2nd ed., 2005, p.142. See Exhibit E.

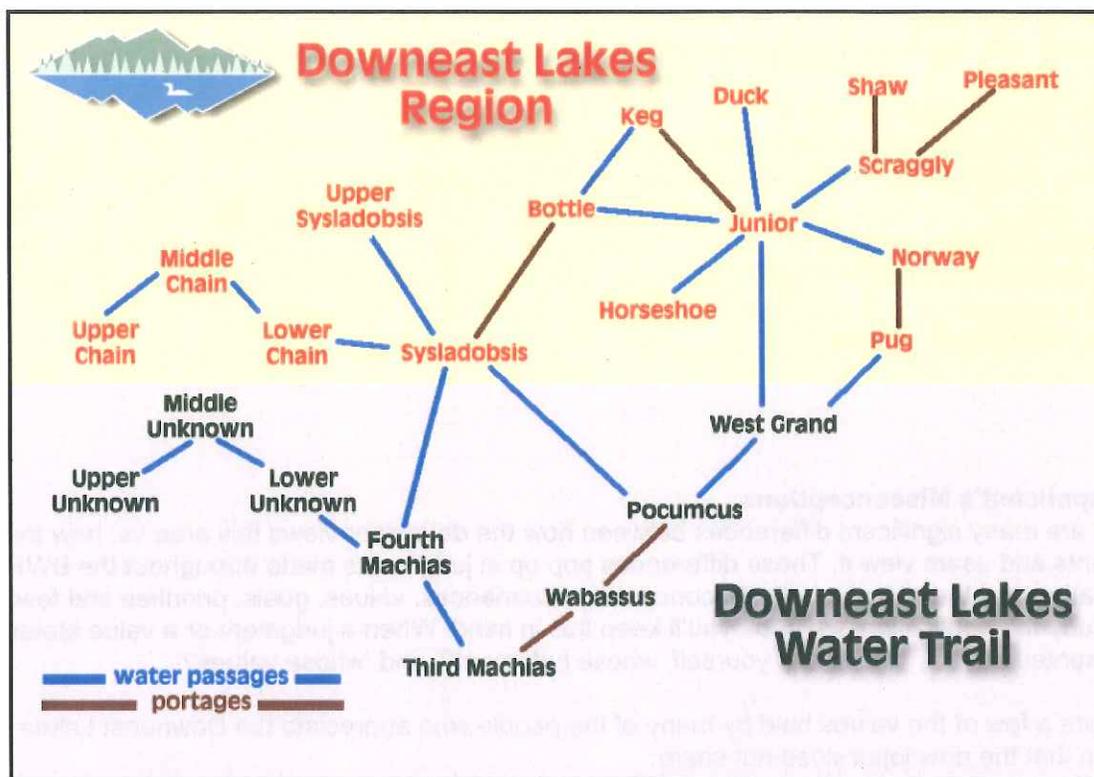
²⁴ Catherine Johnson Letter on behalf of NRCM re: Bowers 1, p.4 (Exhibit C).

Conservation Lands and Key Recreation and Scenic Resources within 20 miles of Bowers Wind Project



- Map Features**
- 3 Mile Radius
 - 8 Mile Radius
 - State Highway
 - Campsites
 - Herd Camp Boat Launch
 - Trailer Boat Launch
- Wind Facilities**
- Rollins Wind Facility
 - Station Wind Facility
 - Bowers Mt. Proposed Facility
 - Expedited Wind Zone Border
- Transmission Lines**
- Existing
 - Proposed
- Lake Classification**
- Outstanding Scenic Resource within 8 miles
 - Significant Scenic Resource within 8 miles
 - All Other Water Bodies
- Land Type**
- Fee Conservation Lands: State and NGO Land
 - Conservation Easements: Publicly and NGO Held
 - Beginning with Habitat Focus Areas
- Canoe Routes**
- Portages
 - Water Routes





Contrary to what the applicant says, these water trails are noted on a number of websites for paddling enthusiasts including:

REI

<http://www.rei.com/guidepost/detail/maine/flatwater-paddling-canoeing/scraggly-lake-southern-and-pleasant-lake/37889>

<http://www.rei.com/guidepost/detail/maine/flatwater-paddling-canoeing/pocumcus-junior-and-sysladobsis-lakes/37888>

MIT Outing Club

http://mitoc.mit.edu/gallery/main.php?g2_itemId=62876

Downeast Lakes Land Trust

<http://www.downeastlakes.org/visitors-guide/canoeing-kayaking/>

Downeast Lakes Water Trail Trip Journals

<http://www.downeastlakes.org/visitors-guide/canoeing-kayaking/downeast-lakes-water-trail-trip-journals/>

Paddling.net

<http://www.paddling.net/launches/>

Trails.com

http://www.trails.com/tcatalog_trail.aspx?trailid=CGN022-047

http://www.trails.com/tcatalog_trail.aspx?trailid=CGN022-046

Wilderness Inquiry

<http://www.wildernessinquiry.org/destinations/index.php?dest=juniorlakes>

Wild Turkey Paddlers

<http://www.wtpaddlers.org/phpBB3/viewtopic.php?f=3&t=2149>

<http://www.wtpaddlers.org/phpBB3/viewtopic.php?f=3&t=2151>

Mahoosuc Guide Service

<http://www.mahoosuc.com/pricing2.html>

Maine Wilderness Camps²⁵**The Applicant's Misconceptions**

There are many significant differences between how the developer views this area vs. how the residents and users view it. These differences pop up in judgments made throughout the BWP application and the VIA and indicate contrasting experiences, values, goals, priorities and fears. As you study the application, we hope you'll keep this in mind. When a judgment or a value statement is presented as fact, please ask yourself 'whose judgment?' and 'whose values?'

Here are a few of the values held by many of the people who appreciate the Downeast Lakes Region that the developer does not share:

- CW hardly ever refers to a boat ramp without the word 'public' in front of it. Public Ramps have concrete aprons, docks, parking lots, lighting, trash cans and a turquoise plastic porta-potty. Our definition of a boat launch is simpler. It can be an opening in the trees, without too many rocks, where you can get your boat into the water. We're OK with that. We're happy to park alongside the road and we'll pick up our own trash. It doesn't bother us if the launch isn't 'designated'.
- CW views portages as obstacles to travel. We see them as opportunities to stretch our legs.
- For us a campsite is a clearing with a reasonably level place for a tent and some rocks to make a fire ring. We don't need signs, benches, picnic tables, trash bins, etc.
- We'd much rather have campsites that are free of charge and available on a first-come-first served basis. In return, we take our trash and leave some firewood for the next camper.
- We don't consider gravel logging roads to be a hardship. We're glad they're there.

²⁵ For Maine Wilderness Camps website, see Exhibit F.

- It doesn't bother us to go slowly through a naturally boulder-strewn cove or channel.
- Sometimes we ice fish without a shack. We like the flexibility of being able to move quickly to another part of the lake or another lake.
- Experienced paddlers don't mind traveling when there's a wind on the lake. It keeps the black flies down. If it gets too rough for comfort, we simply paddle along the lee shore.
- Not all of us fish in order to fill the freezer. For some of us, catching fish to eat is way down on the list of rewards of an outing on these lakes.
- While the developer tries to minimize the value of the lakes because they are lightly used, we find that to be their most desirable quality.

The Applicant Minimizes the Scenic and Economic Importance of the Area

Despite the fact that the WEA shielded the Downeast Lakes Region for its scenic, environmental and high natural resource value, CW and LandWorks have strained to minimize the importance of these lakes and the impact they will suffer.

For example, although the VIA presents four viewshed maps depicting views from hubs and blade tips, with and without vegetation, all of the subsequent analysis is based solely on the visibility of the turbine hub, not the blade tips. To ignore 184 feet of white turbine blade, rotating against the sky, severely understates the turbine's scenic impact. This is hardly the worst case scenario the developer is supposed to present.

Another blatant example appears in the VIA analysis of each lake. LandWorks describes the scope and scale of visibility from Pleasant Lake on page 82:

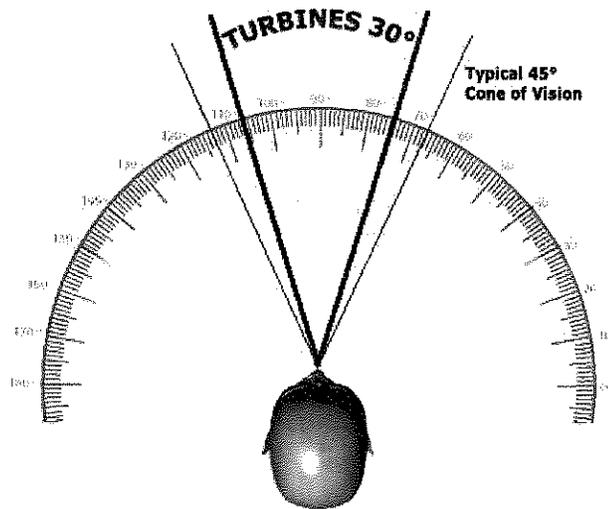
"Based on viewshed mapping, up to 16 turbines, or portions of turbines, may be visible at the southeastern end of the lake as middle ground views. At this viewpoint, the turbines would take up a limited portion of the 360° view – 30° or only 8.3% of the 360° view, which occupies a small portion of the human field of view and therefore has decreased visual impact."

LandWorks claims that the entire line of 16 turbines will be visible, but says they will only take up only 30°, a small portion, only 8.3%, of the 360° view. To refer to the view as 360° is misleading. No human can see 360°. And yet this flawed approach is compounded when in VIA Exhibit 23, LandWorks presents a spliced 360° photo taken from Pleasant Lake. When 360° is laid out flat, 8.3% does indeed look small.

On page 38 of the VIA, LandWorks says the human field of stereoscopic vision is only about 120° and that the central angle of view occurs within 40- 60 degrees and that is the area that most highly influences human perception of a scene.

The Report of OEIS Assessment of Cumulative Visual Impacts from Wind Energy Development (March 2012)²⁶, refers to “a typical cone of vision (45± degrees)” which seems more practical than 360°.

The VIA says that the 16 turbines visible from Pleasant will take up only 8.3% of the 360° view. It would be more practical and accurate to say that the 16 turbines will take up 67% of the typical 45° cone of vision. That sounds like a lot.



This kind of slant, favoring the developer, is woven through every phase of the VIA, from the introduction to the conclusion. Following are some other examples of how the VIA attempts to minimize the scenic value and importance of the affected SRSNS and the region overall.

Character of the Land In describing the Project Area,²⁷ the VIA briefly mentions that the 2010 Comprehensive Land Use Plan (CLUP) recognizes the Downeast Lakes region for its natural features and fisheries. Below is the text from the CLUP about the region, showing that the CLUP considers the area of much higher value than LandWorks implies. The underlines have been added for emphasis.

“...A unique combination of geology, natural forces and climate have combined to produce an area of unparalleled natural resources and values. Lakes abound with names like Pocumcus, Wabassus and Sysladobsis, reminiscent of the area's Indian heritage. Stands of white birch, eastern hemlock and white pine attest to the economic importance of the natural resources that first drew settlers hundreds of years ago. Today, the forest and fisheries continue to sustain the unique community in and around Grand Lake Stream Plantation. This community has more Registered Maine Guides than any place in Maine. These professionals provide a vital link between visitors and the complex ecosystem of lakes, marshes, woodlands, bogs and their wildlife in an area scientists recognize as one of unmatched biodiversity....”²⁸

Impact of Forestry Activities LandWorks asserts that the areas surrounding the SRSNS lakes are ‘heavily forested’ and are essentially a ‘working forest’, with the implication that they are therefore not pristine and not worth protecting from ridgeline industrial wind development. When DEP was deliberating on the Passadumkeag Wind project, NRCM offered the following written

²⁶ OEIS Assessment of Cumulative Visual Impacts from Wind Energy Development, March 2012. p.4.

²⁷ LandWorks VIA, p.21.

²⁸ Comprehensive Land Use Plan, Land Use Regulation Commission, 2010, p.54.

testimony regarding visible evidence of harvesting:

We find visible evidence of working forest use in general, and in this case, to be of much less (scenic) consequence than the applicant—this use is nearly ubiquitous within the unorganized territories and can hardly be used in all of those cases to indicate a significant scenic detractor. It is also not a permanent scenic impact.²⁹

The forest industry has been an integral part of the Downeast Lakes for centuries. Forestry and the tourism sector have coexisted harmoniously for over a century. In fact sportsmen have long benefited from the logging roads that provide access to remote ponds and lakes. The LandWorks VIA³⁰ presents a very dramatic satellite image of what modern forest harvesting practices leave behind. Seen from a satellite the harvested hills around the lakes appear like the veins in a leaf. Fortunately this is not the view visitors see. Seen from the lakes, these cuts are almost entirely invisible. If the Bowers project is built, the Bowers Mountain and Dill Hill ridgeline will be cut and will look far worse than the harvested ridgelines. The traditional forestry industry is considered a proud tradition and a major employer in the area, not a modern intrusion.

Conservation Efforts As noted above, the Downeast Lakes region is home to the Downeast Lakes Land Trust – and approximately 374,000 acres of conserved land. The largest parcel of these conservation lands, the 312,000 acre Sunrise Economic Easement, borders four of the SRSNS within eight miles of the project: Pleasant Lake, Junior Lake, Shaw Lake and Scraggly Lake. LandWorks minimizes this by noting that ‘only’ 31,700 acres border the lakes in question, and that this is on ‘the very periphery’ the conservation lands.³¹ LandWorks writes that it is “primarily a working forest conservation easement,”³² while briefly mentioning that it also will conserve ‘historic public recreation opportunities.’ The LURC Decision Document from the first BWP makes the public benefit of this easement much clearer, emphasizing that the lands also have a ‘public access easement’ from the Bureau of Public Lands that overlays the Sunrise Conservation Easement.

“...Under the terms of the Sunrise Conservation Easement, the land is managed to provide the perpetual ability to produce forest products, as well as to conserve and/or enhance forest and wildlife habitats, undeveloped shoreline, and historic public recreation opportunities for present and future generations. Overlaying the Sunrise Conservation Easement is a Public Access Easement acquired by the Bureau of Public Lands. The Public Access Easement grants public access to this area for the purposes of “*hunting, fishing, trapping, picnicking, swimming, cross-country skiing, snowshoeing, hiking, nature observation, and enjoyment of open space in accordance with applicable state rules and regulations.*”³³

Relevance of Tourism In attempting to minimize the importance of the region, LandWorks states that the “nearest tourist destination to the Bowers Project is the West Grand Lake and Grand Lake Stream,”³⁴ and that the “recreational and guiding activities based out of that area take place on

²⁹ NRCM letter to DEP 7/27/12 Comments on the Passadumkeag Wind Project, p.4.

³⁰ LandWorks VIA, pp.24-5.

³¹ Ibid. p.21.

³² Ibid.

³³ LURC Decision Document, p.9.

³⁴ LandWorks VIA, p.45.

West Grand Lake and in the immediate vicinity, not the lakes within the 8-mile Project radius"³⁵ It then goes on to state that the current proposed turbine configuration "has eliminated visibility of the Project from the village."³⁶

LandWorks was retained by the Department to critiquing the VIA that was presented in connection with the Passadumkeag Wind application. In that critique, LandWorks defines Nicatous Lodge on Nicatous Lake is a 'tourist destination'.

On Nicatous Lake, for example, there are over 100 camps along the shorelines of this major lake as well as an established tourism destination in Nicatous Lodge, situated at the northern end of the lake.³⁷

This is inconsistent. Why would LandWorks consider Nicatous Lodge a tourist destination when the lake has over 100 camps and which LURC's Wildlands Lake Assessment considers 'developed' but would not consider Maine Wilderness Camps on Pleasant Lake a 'tourist destination'? Pleasant Lake has an Outstanding Scenic rating, has only four camps and is considered 'undeveloped' by LURC. Consider also that Maine Wilderness Camps is within three miles of BWP while Nicatous is approximately six miles from Passadumkeag.

LandWorks is simply wrong in saying that "recreational and guiding activities based out of that area take place on West Grand Lake and in the immediate vicinity, not the lakes within the 8-mile Project radius". We will address this more in the section about the Kleinschmidt survey but suffice it to say that LandWorks' conclusion is based on boat counts at Junior Stream, a single point of access to Junior Lake and beyond. Consider, however, that several Grand Lake Stream guiding websites and the Grand Lake Stream Chamber of Commerce website mention Junior and Scraggly Lakes and there will undoubtedly be guides testifying under oath at the public sessions that they regularly bring clients to the northern end of the watershed.

As for turbine visibility from Grand Lake Stream, LandWorks is not completely correct. Certainly there are many places in the village where turbines will not be seen. But having performed a line of sight analysis using the turbine Lat/Long coordinates and Maptech software, there absolutely will be turbine visibility from the water. For example, we analyzed Bowers turbine lighting impact on the deck of Leen's Lodge, where guests often enjoy the sunset over a glass of wine and dinner. Our analysis shows that from Leen's deck, the red strobes of the aircraft warning lights of turbines 1, 3, 6, 10 and 16 will be visible.

LandWorks' Extensive Bibliography Starting on page 10 of the VIA LandWorks presents an extensive list of sources under the heading "Research and Publications". Only rarely do they attribute specific information to specific sources. Under Guide Services they generalize what they found in this way:

"Research also indicates that the lakes located within the study area are not key destinations. Testimony of the Guides during review of the previous Bowers project suggests that they heavily use the Project area lakes. However, in our extended research and review of guide services online, only one referred to any of the lakes in the study area..."

³⁵ Ibid.

³⁶ Ibid.

³⁷ Review of Passadumkeag Wind Project Visual Impact Assessment, LandWorks, p.15.

Many of the Guides mention GLS because it's nationally-known and that's where almost all of the sporting camps are. It's also noteworthy that many of the sites LandWorks consulted are cooperative sites (e.g., Maine Professional Guides Association) which allow each member a brief, maybe 50 word description of their services. These are nothing more than mini-billboards for the Guides. If they were to list every one of the Downeast Lakes they fish there would be no room left for their phone number. Many of them, Laney's Guides Service for example, simply say something general like "fishing is done on all area lakes". Another example is Sunrise International which refers to "trips through the Grand Lake Chain". Some of the Guide services that LandWorks chose to research are simply too far away to mention the subject lakes by name. One case in point is Runaway Heath Guide Service is located 95 miles away in East Machias.

Another reason some of the Guides' websites don't mention the lakes is that they are HUNTING Guides. Two examples are The Maine Hunting Guide and Hawkeye Hunting. Finally, we heard from one Guide who saw his name on the list of Guide services that LandWorks supposedly researched. In a phone conversation Mike Kerr, owner of Almanac Mountain Outfitters told us that "I don't have a website, I don't have a brochure and I have never been contacted by anyone so that would be an outright lie. I have not been contacted in any regard." Mike will undoubtedly provide written and/or oral testimony to this.

As for the list of Sporting Camps and Lodging resources, many of the same criticisms apply. Several have maps that depict the lakes in the subject area but do not mention them in the text. Others refer to the lakes generally as 'the Downeast Lakes watershed', 'our vast network of lakes' or '...a region with dozens of lakes, ponds, streams and brooks in a forest area that has seen little change over the decades.' Weatherby's mentions the lakes by name.

Worster's Wild Fox Resort is located right on Junior Lake. Their website says: "Enjoy the gorgeous Maine scenery from the water. Rent a canoe or kayak from our boathouse and cruise the vast waterways and well-maintained routes available to you. Be sure to pack a lunch -- the surrounding waters are dotted with islands you'll want to explore, many of which offer picnic facilities and campsites. Boat camping -- traveling by canoe or kayak from campsites to campsites throughout the lake system -- is a popular activity. You can retrace some of the Historic Native American canoe routes maintained by State of Maine."

As with the list of Guides' websites, some of the Sporting Camps listed are as much as 92 miles away and their failure to mention Junior, Scraggly and Pleasant Lakes should not be taken as proof that these lakes are not a "key destination".

Without reading every pamphlet, website and book cited by LandWorks, we would just like to point out that some of their sources are dated (e.g. the map from the Downeast Lakes Land Trust site) and all them need to be scrutinized. Clearly the developer is trying to skew the results here, much like they've tried to do with their user survey.

BWP: COSTS / BENEFITS

Evaluating the BWP comes down to a cost/benefit analysis from Maine's perspective. Proponents tell us wind projects will help advance Maine toward its wind energy goals, that they will create jobs, generate cheap, clean energy and deliver community benefits. Let's look at each of these benefits for the Bowers project specifically.

Benefits: How Much Energy? When the applicant petitioned LURC to add a portion of Kossuth to the Expedited Wind Permitting Area, they were asked to provide output projections for the BWP. To support those projections, CW provided power output data for Stetson I which it maintained is at a similar elevation and approximately 8 miles to the north. CW explained that 8 miles is well within the limits that the applicability of the Stetson site wind data can be extended to. CW's Neil Kiely testified "I would like to expand on one of the points, which is Bowers' proximity to the Stetson Wind Project. Approximately 9 years of wind data have been collected by meteorological wind towers at Stetson, which is relevant to Bowers because of its proximity and similar elevation...In addition, the Bowers project has been collecting wind data from 3 meteorological towers since November of 2009."³⁸

It sounds as though because of the proximity, elevation and wind resource, the wind data collected at Bowers and Stetson must have been very comparable. The following table shows the actual electricity produced at the Stetson I project during 2012:

STETSON I					
2012 Production Data					
source: FERC					
# Turbines	38				
Turbine Type	GE 1.5MW				
Nameplate Capacity	57				
	Q1	Q2	Q3	Q4	TOTAL
# days in QTR	91	91	92	92	366
Generation (MWH)	36,779	19,473	24,927	25,973	107,152
Capacity Factor	29.5%	15.6%	19.8%	20.6%	21.4%

These figures show, in addition to the seasonal variations in output, the fact that Stetson I is performing at only 21.4% of its nameplate capacity. Stetson I must be a major disappointment for First Wind³⁹. In January 2009, First Wind CEO Paul Gaynor told RenewableEnergyWorld.com that

³⁸ Presentation to LURC by Neil Kiely, 9/22/10, p.2. – See Exhibit G.
http://www.maine.gov/doc/lupc/projects/windpower/firstwind/champlain_bowers/Rulemaking/Testimony%20from%20Neil%20Kielymsg.pdf

³⁹ In an article entitled Pitfalls of Living Off the Grid, then-Rep. Stacey Fitts wrote "People often criticize wind power because it produces only a fraction of its nameplate capacity. For most commercial wind turbines the figure has to be 30 percent or more to be feasible." Fitts should know. He served on the Utilities and Energy Committee and was a member of the Governor's Wind Power Task Force, the Ocean Energy Task Force, the Joint Select Committee on Maine's Energy Future and the Energy Infrastructure Study Commission. (http://www.maine.gov/legis/house_gop/opinion/fitts_offgrid.htm).

the project would produce 167 million KWh annually. That would equate to 167,000 MWh or a capacity factor of 33.4%.

Let's assume Bowers also operates at a capacity factor of 21.4%:

$$16 \text{ turbines} \times 3 \text{ MW} \times 24 \text{ hours} \times 365 \text{ days} \times 21.4\% = \underline{89,983 \text{ MWh}}$$

At two places in the application⁴⁰, CW states that the proposed BWP is expected to generate 157,000 MWh annually⁴¹. This suggests that CW's projections may be overstated by 75.5%. Of course turbine efficiency has improved since 2010 when the Stetson project went online, but how likely is it that it's advanced 75.5%?

Benefits: Clean Energy? With a production shortfall of 75.5% Evergreen Windpower V, LLC (the Stetson I operating company) probably had to buy power to fulfill its contractual supply obligation(s). That may be part of the reason Evergreen Windpower V was Bangor Hydro's fifth largest customer during 2012.⁴²

To have a wind project actually be in the Top Five *users* of power from the grid is shocking to say the least. That alone renders inaccurate the statements that wind turbines do not contribute CO₂. If they are using this much electricity from the grid, unless it's all been generated from hydro, wind projects are contributing to the release of CO₂, to say nothing of all the CO₂ that's released in the course of their transport, site clearing, road construction and invariably required transmission build. If the Stetson project has to be propped up with purchases of electricity from nonrenewable sources, how "green" can Evergreen V be?

Benefits: How many Jobs? For the first Bowers project, which was to have 27 turbines, First Wind's Matt Kearns testified that Champlain "anticipates hiring three permanent, full-time employees to operate and maintain the facility. In addition, it is anticipated that five technicians employed by the manufacturer will be on-site for the first three years of the project."⁴³

In response to the Sixth Procedural Order of the Bull Hill hearing, the applicant stated that

"Once operational, the Bull Hill Wind Project anticipates hiring three permanent, full-time employees to operate and maintain the facility. In addition, it is anticipated that five technicians employed by the manufacturer will be on-site for at the first three years of the Project."

In the current Bowers application, the applicant states "Champlain anticipates a staffing plan of three to five permanent employees to operate and maintain the facility, including onsite staff of the turbine manufacturer."⁴⁴

⁴⁰ BWP Application, Sec 1.2: Project Context and Purpose, p.2. and Sec 28.7.7: Ratepayer Benefits p.28.9

⁴¹ 157,000 MWh output from a project with a nameplate capacity of 48MW suggests an expected capacity factor of 37.2%

⁴² see Exhibit H, Letter: FERC Form 566, Filing Pursuant to Part 46, January 24, 2012.

⁴³ LURC DP4889, Pre-Filed Direct Testimony of Matt Kearns, Neil Kiely and Geoff West on behalf of Champlain Wind, LLC, p.16.

⁴⁴ BWP Application, Sec 28: Tangible Benefits, p.28-8.

DEP should ask the applicant the following questions:

- Is "anticipating a staffing plan" the same as "hiring"?
- You say three to five employees. Are you really embarking on a \$100 million project without knowing how many people it will take to run it? What is it: 3, 4 or 5?
- The Bull Hill project has five manufacturer's technicians on site. How many of those three to five Bowers employees will be technicians employed by the manufacturer?
- At the Bull Hill project the manufacturer's technicians are only there for three years – presumably the length of the warranty. But you say at Bowers they're all going to be permanent? Really?
- At the Bull Hill hearing Mr. Kearns admitted there would be job-sharing between Bull Hill and Stetson and Rollins. Won't there be job sharing at Bowers too? How much?
- If there are five employees, the maximum of your range, three of them may be employed by the manufacturer and therefore temporary. That leaves two local hires that are permanent. But if there's job sharing, it may amount to one full time job. Is that correct?

An honest analysis raises very serious questions about the value of the BWP to Maine. How much power will really be generated? How clean is wind energy if it has to be backed up and if you have to buy fossil-generated power to meet your contracts? And how many jobs will be created? Not term construction assignments for people who live south of Augusta. Not jobs for the turbine manufacturer in Denmark or Oregon, jobs for people in Carroll and Kossuth.

The benefits are vague but the damages are very real.

The following sections present our analysis of the Kleinschmidt survey and our statutory evaluation of the nine affected SRSNS lakes within 8 miles. We believe our analysis will show that the damages the BWP will cause are tangible and unacceptable.

THE KLEINSCHMIDT SURVEY AND DR. BOYLE'S INTERPRETATION

Summary

During the Bowers-1 hearing, LURC criticized the applicant for submitting several flawed surveys while neglecting to produce a user intercept survey from the SRSNS within eight miles of the BWP. During the summer of 2012, the applicant conducted a user intercept survey for the current application. The results prove that the Bowers project would have an unreasonable adverse impact on the scenic character of the SRSNS or the uses related to the scenic character of the SRSNS. The applicant is to be credited for conducting the survey and presenting the results for DEP's use in reaching a decision. However, we feel that the applicant, LandWorks and Dr. Boyle have discounted the results in order to further the cause of project approval.

The applicant contends that the results of the Kleinschmidt survey show that the scenic impact of the proposed project will *not* cause an unreasonable adverse effect on either the scenic character or the existing uses of the scenic resources being analyzed.

PPDLW disagrees with LandWorks' conclusion. The survey clearly shows that the project *will* drastically change the scenic character of the region, and will significantly reduce user enjoyment of the lakes, causing an unreasonable adverse effect on the scenic character AND the existing uses related to scenic character of the SRSNS. To arrive at its conclusion, LandWorks selectively discounted or ignored the survey results in the VIA. Dr. Boyle, in his review of the survey, discounts findings that are not favorable to the applicant's cause, contending that PPDLW's opposition efforts in defeating the first Bowers Wind Project have created a 'publicity bias' that has unfairly skewed the survey results.

Survey Shortcomings

The Kleinschmidt survey was designed using best practices that are consistent with established survey-research procedures. However, there are flaws in the way it was written and implemented. The local game warden reported that Fridays and Saturdays were the busiest days on the lakes and so the survey was only administered on those days. This results in a 'convenience sample' of only those people who enjoy using the lakes, or who are willing to use the lakes, when they are the busiest. It could be argued that those are exactly the days that professional guides and those who live on the lakes are most likely not to use the lakes. (We asked several guides if they had taken clients up to Junior, Scraggly or Pleasant Lakes during June and July 2012. Some of their replies appear on page 28.) By only surveying users on Thursdays and Fridays, the randomness of the sample is diminished.

While there is good reason not to survey all the passengers in a boat due to cross-influencing, it is unfortunate that this limited the overall sample size. Seventy individuals is not a large sample. As a result, the sample is a 'convenience sample' that represents the opinions of only those who took the survey, not the total population of users using the lakes on those days.

Upon reading that the Kleinschmidt surveyors only encountered one Guide during their interviews, we emailed several Guides and asked them to check their logbooks for the number of clients they took to Junior, Scraggly and Pleasant Lakes during June and July 2012. Here are some of the answers we received:

Subject: Bowers Wind project
From: Eagle Mountain Guide Service
Date: 3/6/2013 10:43
To: gary@ppdlw.org
 Hi Gary,

You asked if I ever guided clients in Pleasant, Scraggly and Junior Lakes. The answer is yes. When I was a guide for Leen's Lodge I used to go up through Junior Stream on a regular basis. As many as five days a week. A little less now that my clients aren't all in GLS. There's a launch on the south side of Scraggly that saves a lot of travel time. Those lakes are so beautiful. It would be a shame to build a windfarm there. Let me know if I can help.
 Matt Whitegiver, Eagle Mountain Guide Service

Subject: Bowers Wind project
From: "Dale Tobey" <djtobery@maineiac.net>
Date: 2/15/2013 16:56
To: "Gary" <gary@ppdlw.org>
 Gary

I spent 8 days in Junior Lake and Scraggly. 4 of them I put in at Scraggly off Amazon Rd. with my canoe. 1 time I came up through the stream one early morning in my canoe and saw the surveyors illegally camped on private property. The other times I was in my bass boat and never saw anyone asking any questions. End of May first of June I spent another 15 days Early May late June in Junior, sysladobsis, Junior Bay Pug and Compass .
 Dale Tobey

Subject: Bowers Wind project
From: "Bob LaForge" <boblaforge@hotmail.com>
Date: 2/15/2013 12:16
To: "Gary" <gary@ppdlw.org>
 Hi, Gary. I guided in that area a lot over the years but I have since relocated to another area. When I was guiding in the Downeast Lakes region I averaged 8 to 10 trips a year on the lakes you mentioned. Also, during that period, a wind project was constructed within sight of Baskahegan Lake. Some of the wilderness character of the area was diminished compared to previous visits. It hurt the experience of my clients so I stopped going there. While I think there is a need to pursue wind and solar energy, we need to consider avoiding such projects in sensitive areas such as the Downeast Lakes.
 Bob LaForge Registered Maine Master Guide

Subject: Bowers Wind project
From: "Al LaPlante" <al@chetscamps.com>
Date: 1/30/2013 11:20
To: "Gary" <gary@ppdlw.org>

Hi Gary,
 I used Junior Lake 5 times in June and 3 in July. I used Scraggly 3 times in June, 1 in July and 3 in September
 Al LaPlante

Subject: Bowers Wind project
From: Charles Driza <cdriza@leenslodge.com>
Date: 1/28/2013 09:43
To: "Gary" <gary@ppdlw.org>

Hi Gary,
 The boats from Leen's that go to Junior Stream are both guided and unguided trips. Tim, who guides at the lodge from a Lund Alaskan, guides in Junior almost every day he is on the lake. All of my boat guests also go to Junior lake to fish. Probably 3-4 boats per day during May and June, some trailer to using the Hasty Cove launch.
 Let me know if I can be of further help. I'll keep my fingers crossed. Regards, Charles

Subject: Bowers Wind project
From: "Wheaton's Lodge" <wheatons1@hotmail.com>
Date: 1/24/2013 17:52
To: "Gary" <gary@ppdlw.org>

Gary,
 In my personal guiding from Forest City in 2012, I guided Pleasant (salmon) two days in May and Junior (bass) one day in June, accessing Junior through Scraggly. I was never interviewed. I was in a Grand Laker. My sports on Scraggly commented that they were really pleased that the wind project had been defeated. One fellow was from CT and his friend from OH. The single fellow I had on Junior was from Rochester, MA. We go to those places *because* there are few people there, and *because* the landscape is scenic and wild! You can no longer get the same experience on Baskahegan Lake, although we still fish it once in a while depending on the client. Because of the nearness of the turbines, we have stopped fishing the Hot Brook Lakes altogether. Regards, Dale

Subject: Bowers Wind project
From: "Lou Cataldo" <lou.cataldo@yahoo.com>
Date: 2/15/2013 12:47
To: "Gary" <gary@ppdlw.org>

Hi , I fish From Pocumsus Lake over into Junior Stream and up into Junior 5 trips in June 3,4, 9 , 14 , 17 . I fished from Scraggly landing over into Junior 3 trips June 10 and 20 and July 2 . I fish from Pocumsus Lake up into Junior Stream 4 evenings June 22, 25 and 28 and July 6 .
 I hope this helps , Louie

In addition to the above implementation issues, there are several flaws in the survey.

Still Photograph Simulations

A still photograph cannot simulate the visual reality of a wind project unless it accurately depicts the movement of the blades. This is not a criticism of this particular survey, as it is true of all user surveys including the PPDLW User Survey of 2012. The movement of the turbine blades is one of their most striking and riveting visual features when set against a static landscape. A still photograph of 16 turbines cannot capture the full impact of the actual turbine blades in motion, creating shadows, reflecting sunlight or reflecting red strobe lights. Still simulation photographs will never accurately depict moving turbines.

Night Lighting

The scenic impact of night lighting was not addressed in the Kleinschmidt survey, even though Question 9 of the survey asked respondents about their night time activities on the lakes. (The results of this question were reported in the Basic Frequencies section only).⁴⁵ Since the FAA has not approved the use of OCAS lighting in industrial wind projects, the survey should have included night lighting in its simulations and the results should have been analyzed and reported.

Due to these limitations – still photographs and no night-time simulations, the survey simulations have not captured the full 24 hour experience of seeing rotating turbine blades by day and simultaneous blinking strobe lights by night. They therefore understate the scenic impact of the proposed project on these undeveloped hills.

Questions 2 and 25 – Owning and Renting Property vs. Just Visiting

Question 2 asked respondents if they 'have a home or camp on this lake', and Question 25 asked whether they 'own or rent' property on the three lakes being studied: Pleasant, Scraggly and Junior. These questions are critical since they feed into the issue of the impact on current use of the SRSNS per the statutory scenic impact evaluation. The survey results show that 61% of those surveyed said they were likely to return to the lakes if the project were built. Yet ownership of property on the lakes would skew these results.

- Those who own property on the lakes are almost certainly going to return, even if their enjoyment was greatly reduced. The survey should have broken out those who own from those who rent or visit, since the latter two categories of users can easily change their mind about returning, instead choosing to visit or rent property on some other lake, presumably one with no industrial development visible.
- Removing property owners from this question, or at least reporting how each group responded separately, would have more meaningful and useful data. What matters is the scenic impact of the project on users who have a choice about returning.
- The respondents were only asked if they owned property on Junior, Scraggly or Pleasant Lakes. They were not asked if they owned property on the neighboring lakes connected by water, such as Duck Lake, Keg Lake, Bottle Lake, West Grand

⁴⁵ Kleinschmidt survey, p.79.

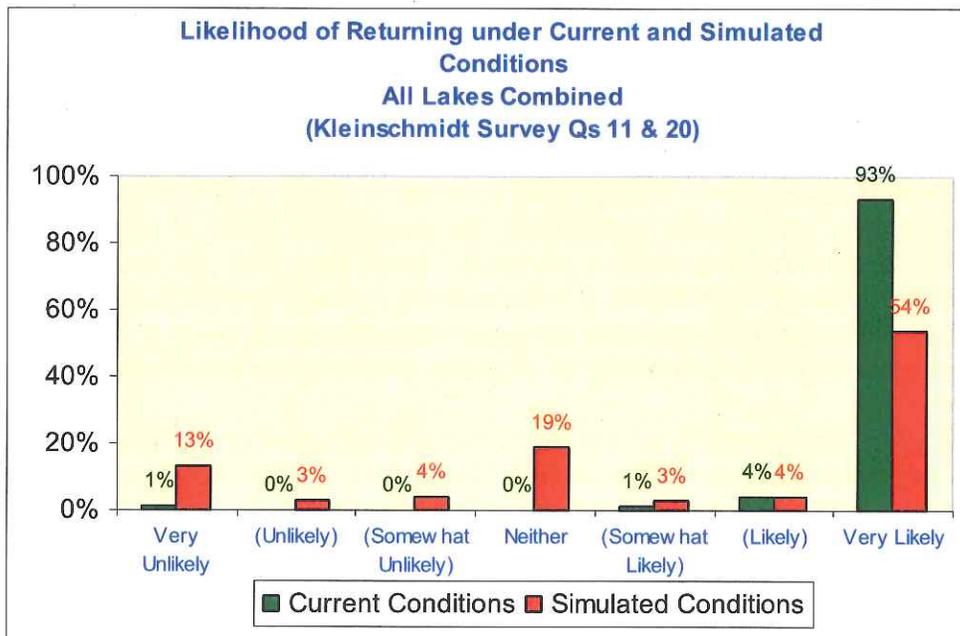
and Pocumcus. Our experience in the area shows that many property owners from these adjacent lakes motor or paddle into Junior, Scraggly and Pleasant. They would have answered negatively to the question about property ownership on those three lakes. Yet they too are vested in the area and their response about likelihood of returning would skew the results.

- This flaw can easily account for the fact that although a large number of respondents said the turbines would hurt the scenic character, it did not seem they would go elsewhere.

Question 20 – Likelihood of Returning Under Simulated Conditions

As noted in Dr. Palmer’s review questions,⁴⁶ the phrasing of this question is confusing.

The Kleinschmidt survey asked respondents to rate on a scale of 1 to 7 (with named points being “very unlikely”, “neither likely nor unlikely/no effect” and “very likely”) the likelihood of their returning. Of course if the respondent owns property in the area, he would be “very likely” to return. As a result, under simulated conditions only 19% gave a neutral rating of “no effect” while 54% said they would still very likely return.⁴⁷



In contrast, the intercept survey for the Passadumkeag Mountain Wind Project asked whether seeing views of the proposed project would make the respondents “more likely” or “less likely” to return, with a possible neutral rating that the project would not change the

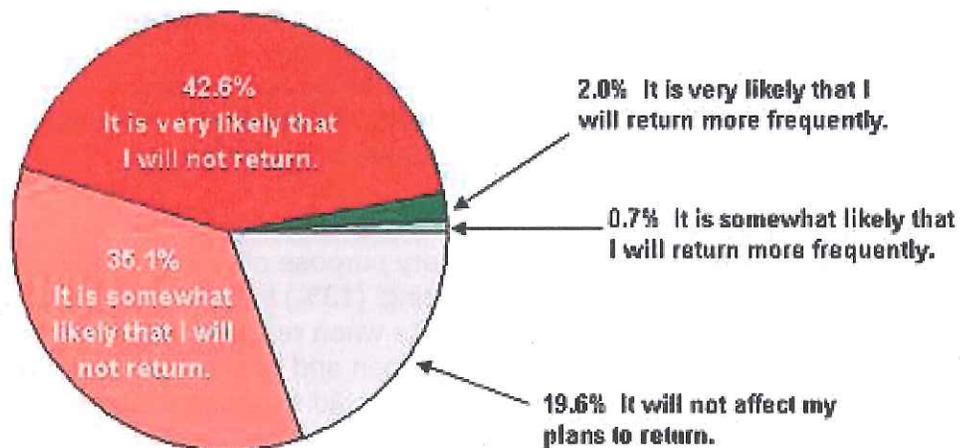
⁴⁶ Dr. Palmer, Memo to Jessica Damon 1/17/13, pp.2-3.

⁴⁷ Kleinschmidt survey, p.34.

likelihood of returning. The results showed for approximately 77%⁴⁸ of those surveyed, the project would not change their likelihood of return. (It should be noted that area residents made up 52% of those surveyed. They were not specifically asked if they owned property on the lakes in question, but whether they were full or part time residents in the general area.)⁴⁹

The PPDLW User Survey applied a 'piped' approach. By segregating those who owned property in the area from those who are only visiting, we were able to direct this question only to visitors. We assumed that those who own property in the area would be likely to return even if the presence of wind turbines severely affected their enjoyment of the resource. By contrast visitors have far less of a stake in the area and can easily switch from the Downeast Lakes Region to some other area for their next vacation. Visitors will therefore provide a more meaningful set of responses to this question. The results obtained from visitors who did not own property in the Downeast Lakes Region are much clearer. 77.7% of them said that it is somewhat likely or very likely that they will not return. This suggests that a large portion of those who responded to the Kleinschmidt survey that under the simulated conditions they are still "very likely to return" may be property owners who feel they have no choice.

As a visitor to the Downeast Lakes Region, how will the presence of the Bowers Mountain Wind project affect the likelihood of your returning to the Region to recreate?



⁴⁸ Boyle Report, p.12. This figure averages the 'neutral' rating for Saponac Pond, Nicasious Lake and Lower Pistol Lake.

⁴⁹ Passadumkeag Mountain Wind Power Project Intercepts, Report to Terrence J. DeWan & Associates, p.73.

Other Issues

On Page 24, the survey states that “it is notable that most lakeshore development identified is outside of the viewshed of the proposed project.”⁵⁰ That simply is not true. Many camps face east and north on Junior Lake, the largest lake whose entire surface is within eight miles of the project. All of the camps on Keg face directly at Bowers Mountain and Bottle Lake’s most developed shoreline is its west side, also facing the turbines.

Other intercept surveys, as well as the PPDLW Users Survey, provided open comments from people surveyed.⁵¹ The Kleinschmidt survey did not include any open-ended comments, only paraphrased reasons for certain responses.⁵²

LandWorks’ Discounting and Ignoring the Survey Results

In the VIA’s statutory evaluation of the individual SRSNS, LandWorks ignores or attempts to discount the survey results when they do not support the applicant’s objective. In several cases, LandWorks contradicts the Bowers survey results by citing data from the surveys on Baskahegan Lake, even though Baskahegan is not a comparable resource:

- Baskahegan Lake is not a SRSNS and does not have a reputation for its scenic value.
- Those surveyed were more than 8 miles from the Stetson turbines.
- The sample was self-selected, that is, the only people interviewed had already decided to use the lake despite the visibility of turbines.
- Baskahegan is easily accessible. Judging from the open ended comments it is clearly a lake of convenience for many users.
- Baskahegan is a lake that can be fished for an hour or two.
- (It’s good that those who use Baskahegan don’t mind the turbines because if Bowers is built they will be able to see 16 more!)

The survey found that the most common primary purpose of visits on the subject lakes was ‘relaxing’ (40%), with ‘fishing’ (32%) and ‘camping’ (13%) the secondary and tertiary purposes.⁵³ Yet LandWorks discounts the results when respondents gave the simulated views a lower scenic value, asserting that fishermen and boaters are less likely to be concerned with scenic views.⁵⁴ In other words, they did not answer according to the way LandWorks believes they SHOULD have answered. This attitude also ignores the fact that the largest percentage of respondents reported they were out on the lakes to relax and that the top three ‘secondary activities’ mentioned were ‘observing wildlife’, ‘relaxing’ and ‘viewing/enjoying scenery’.⁵⁵

⁵⁰ Kleinschmidt survey, p.24.

⁵¹ Passadumkeag Mountain Wind Power Project Intercepts, pp.25-6, pp.27-8, pp.33-4, p.43.

⁵² Kleinschmidt survey, p.35 – shows paraphrased explanations for returning or not returning under simulated conditions.

⁵³ Ibid., p.26.

⁵⁴ LandWorks VIA, p.69.

⁵⁵ Kleinschmidt survey, p.26.

Junior Lake

- Question 10 shows that 100% of visitors expect a quality experience on Junior Lake.⁵⁶ But when discussing Typical Viewer Expectations, LandWorks ignores this very important and powerful statistic. Instead, the analysis mentions the fact that 81% of Junior Lake visitors rated the lake's scenic character high, and then proceeds to explain it away saying that the respondents are simply wrong because the primary activity is 'fishing and boating' and that should result in a lower rating. This is a blatant example of discounting the opinions of those who do not support your objective. Interestingly, on Junior Lake, 'relaxing' was the most common primary activity noted.⁵⁷ Despite this result, LandWorks rates Typical Viewer Expectations on Junior Lake as MEDIUM in the VIA.
- LandWorks mentions the fact that 60% of those surveyed said the project would adversely affect their enjoyment of Junior Lake. However, the VIA then tries to taint that result by bringing in data from the surveys on Baskahegan Lake, which is not an SRSNS and has an arguably different user profile. They also attribute this result to public opposition and outreach by PPDW as having unfairly influenced respondents' answers to that question.⁵⁸ In the end, despite the survey results to the contrary, LandWorks concludes that the project's effect on continued use enjoyment would be LOW.

Pleasant Lake

- Fully 93% of respondents said that Pleasant Lake has high scenic quality. LandWorks refuses to accept this result because they are convinced that people who engage in 'fishing and boating' do not care much for scenic quality and therefore should have rated it lower.⁵⁹ LandWorks completely ignores the results of Question 9 that show that the primary activity on Pleasant Lake is 'relaxing'.⁶⁰ Similarly they do not mention the fact that 39% of respondents said that the simulated turbine views had low scenic value. The VIA discounts the survey results and rates Pleasant Lake MEDIUM-HIGH for Typical Viewer Expectations.
- LandWorks states that on Pleasant Lake, "...fishing is the primary use, which is an activity where there is evidence that people do not place as high a value on scenic quality with regard to their overall enjoyment...."⁶¹ Are we to take LandWorks' word that "there is evidence"? Apparently so because none is offered. This is very disturbing as the most commonly reported activity on Pleasant Lake was 'relaxing'.⁶²

⁵⁶ LandWorks VIA, p.69.

⁵⁷ Kleinschmidt survey, p.77.

⁵⁸ LandWorks VIA, p.70.

⁵⁹ *ibid.* pp.80-1.

⁶⁰ Kleinschmidt survey, Lake by lake analysis of primary activity. p.77.

⁶¹ LandWorks VIA, p.81.

⁶² Kleinschmidt survey, p.77.

Scraggly Lake

- In the case of Scraggly Lake, LandWorks correctly states that the primary activity among respondents was fishing. However, even though 100% of those surveyed said they rated the scenery as 'high' (and most of them were fishermen), LandWorks again discounts the results because they are fishermen and therefore their assessments should be lower. Once again the Baskahegan Surveys are cited as proof that those surveyed on Scraggly must not have been truthful.⁶³ The VIA rates Typical Viewer Expectations as MEDIUM-HIGH.
- LandWorks reports that 50% of those surveyed said that the presence of turbines would have no effect or a positive effect on their enjoyment of Scraggly. Said another way, this means that 50% of them said that the sight of turbines would have a negative effect on their enjoyment, with fully 25% giving the simulated view the lowest possible score. Still, LandWorks claimed the project would have a LOW impact on the continued use and enjoyment of Scraggly Lake.⁶⁴

The Boyle Report

The Boyle Report concludes that the Kleinschmidt survey results show that the BWP will *not* have an unreasonable adverse impact on the scenic character or existing uses of the SRSNS.

- Dr. Boyle writes, "The survey results indicate some respondents believe the Bowers wind farm will lower scenic quality..."⁶⁵ In this case, "some" is 45%. Many American presidents have been elected with just "some" votes.
- The summary charts on page 8 of the Kleinschmidt survey omit the following key findings:
 - 58% of those surveyed said the scenic value of the view of the lakes with the turbines was low, with 39% rating the scenic value at the lowest possible level.
 - 44% of those surveyed said that the scenic impact of the turbine views would have a negative effect on their enjoyment of their visit to the lakes.

It is notable that on Dr. Boyle's visit to the SRSNS in July, 2012, he stopped at a boat launch on Baskahegan Lake, which is not an SRSNS. That launch is more than nine miles from the Stetson turbines, which, per the WEA, has negligible scenic impact and therefore cannot be considered.

⁶³ LandWorks VIA, p.91.

⁶⁴ Ibid. p.92.

⁶⁵ Boyle Assessment, p.8.

During his visit to Junior Lake, Dr. Boyle says “the camps had aluminum docks that reflected the sun, red roofs and other features that disrupted the view of a natural shore line”⁶⁶. After consulting several year round residents of the Lake, we found no one knew of more than one aluminum dock and one red metal roof on the entire Lake. Also, all but a handful of the oldest camps are set back from the high water line 100’ or more by law. And yet Dr. Boyle claims that these camps are “likely more intrusive to a natural scene than would be the Bowers Project...”⁶⁷ With this statement he is concluding that sixteen 459’ tall rotating white wind turbines by day, and eight flashing strobe lights on an otherwise undeveloped ridgeline averaging 650’ feet above the water level would be *less* intrusive than the modest and highly-regulated camp development on Junior Lake. The facts simply do not support his contention.

Baskahegan Surveys

Dr. Boyle cites the two post-construction Baskahegan surveys as proof that use and enjoyment will not be diminished on the SRSNS by construction of the Bowers project. Using any of the data from either Baskahegan Survey would be misleading for the following reasons:

- There was no survey data gathered prior to the construction of the Stetson project. There are now two Baskahegan surveys but both deliver post-construction attitudes. This is meaningless for determining what impact a wind project will have on users as the most meaningful segment, those who used to recreate there but no longer do, is entirely omitted.
- This was a self-selected group. Those who were surveyed had already decided to recreate on Baskahegan despite the presence of turbines. In this way it is similar to the group surveyed at First Wind’s snowmobile BBQ that took place under the Stetson turbines.
- Baskahegan Lake is not an SRSNS
- Those surveyed were standing more than nine miles from the nearest turbine.
- Asking Baskahegan users if they also use the Downeast Lakes is useless unless you also ask Downeast Lakes users if they also use Baskahegan Lake. Who’s to say the Baskahegan users don’t get tired of fishing under turbines and every so often fish Pleasant Lake to escape them?

⁶⁶ Ibid., p.4.

⁶⁷ Ibid.

PPDLW's 'Publicity Bias'

Throughout his report, when Dr. Boyle encounters statistics that show the project will have a negative impact on scenic character, will decrease enjoyment, and will result in a lower likelihood of return, he attributes all these opinions to what he calls PPDLW's 'publicity bias'. Yet he also concludes that the results in most respects were similar to those of the Baskahegan and Bull Hill surveys.

PPDLW is an organization run entirely by dedicated volunteers who appreciate and protect the Downeast Lakes. We are very concerned about the scenic and economic impact of the BWP. This is not the first time that concerned residents and property owners in this area have stood up to fight against inappropriate development. In the 1980's, the federal government proposed building a nuclear waste storage facility in the territory between Lincoln and Calais. A massive grassroots campaign successfully defeated this proposal, with support from the state government. The Downeast Lakes Land Trust is another local example of people with an interest in preserving the area banding together to prevent inappropriate development. PPDLW is doing the same.

PPDLW has been successful because its members are alarmed that this project was even proposed, given 1) that these nine SRSNS, and a vast portion of the Downeast Lakes Watershed were explicitly carved out of the Expedited Permitting Area as being inappropriate for expedited wind development, and 2) the nationally-recognized conservation efforts underway in the watershed. The fact that PPDLW can communicate effectively and efficiently does not mean that it has created a publicity bias. Our web site is factual. Our sources are cited. Quotations are attributed and articles from the press are made available.

Dr. Boyle asserts that the people who were surveyed have "unfounded fears" of the scenic effects of the project. To the contrary, the people who use these SRSNS are very familiar with the Rollins project and the two Stetson projects. Every time they go to the grocery store, they see them in the distance and then up close as they enter Lincoln. As they drive on Route 6 at night, they see the lines of flashing strobe lights of both the Rollins and Stetson projects. They see the many real estate listings for camps and houses for sale on the lakes with views of the Rollins project. They know people who have had their homes on the market for two years without a single offer. They hear stories from people who own homes and camps on the lakes about how distracting the turbines and lights are. They have seen what these turbines will do to their views, both day and night. In sum, their opinion of the scenic impact of the proposed Bowers Project is not based on fear, it is based on reality.

In fairness to Dr. Boyle, he is probably not aware of the extensive effort the applicant has exerted over the past several years to influence public opinion. The applicant has planted a far more effective publicity bias than PPDLW ever could. Consider the following facts about the applicant:

- They have a large staff.
- They have an enormous and very effective PR department in Boston.

- They place such a high priority on managing public relations that their Director of Corporate Relations is an owner of the company.
- They have had a presence in the Downeast Lakes Region long before PPDLW was founded.
- Through grants and subsidies they have access to millions of dollars. PPDLW's total budget for fighting this project is less than \$10,000.
- They have several of Maine's major law firms on retainer.
- They can make statements to the press knowing they will not be fact-checked and they will be printed.
- They have the ability to promise certain Lodges and Sporting Camps that they will house construction workers.
- They have the ability to offer work for construction workers.
- They can afford to retain polling and surveying companies and consultants.
- They can lease land from politicians⁶⁸.
- They have the ability to go door to door around the lakes asking residents "what can we do to get you to support this project?"
- They have the ability to go to Grand Lake Stream and offer a new boat ramp or a fish stocking program.
- They have the ability to promise the local Guides the equivalent of a certain number of Guiding days.
- They can afford to donate money to:
 - schools
 - snowmobile clubs
 - scholarship programs
 - a lot owner's association the Treasurer of which is also the chair of Carroll's Community Benefits Negotiating Committee
 - a veterans service organization
 - Sportsman's Alliance of Maine
 - Maine Audubon
 - Bat Conservation International
 - George Smith's blog and website
 - Maine Chapter of the Sierra Club
 - Conservation Law Foundation
 - Appalachian Mountain Club
 - the Springfield Fair
 - a community benefits package
 - every household in Carroll \$350/year

PPDLW's effectiveness, on the other hand, is partly due to a growing state-wide opposition to land-based industrial wind projects in Maine.⁶⁹ Since the WEA was passed in 2008,

⁶⁸ http://fenceviewer.com/site/index.php?option=com_k2&view=item&id=79992:aurora-eyes-big-zoning-change&Itemid=938

⁶⁹ Maine Wind Energy Development Assessment, Report and Recommendations, Governor's Office of Energy Independence and Security, 2012, p.41.

more than a dozen opposition groups have formed. Towns are passing ordinances to control wind development and moratoriums in order to study the issues involved with hosting a wind project. The 2012 OEIS Report calls for changes to the WEA. Statewide groups are also working with the State Legislature to change portions of the WEA.

Dr. Boyle also discredits PPDLW's User Survey, which was conducted in early 2012 using the on-line survey company Survey Monkey. The survey is not perfect and PPDLW did not present it as a perfect survey. This was a "better than nothing" approach to show what a very large group of users believe about the impact of the project. It was conducted at a time of year when many of the lake users are not in the area. PPDLW reached the users of the resources as efficiently as they could under the circumstances. Not all respondents were opposed to the project, and not all said it would have a negative impact. It was designed so that the survey could not be taken twice at the same computer. Ironically the applicant immediately dismissed the survey because it was conducted online. The Kleinschmidt survey names Marcia Phillips as the technical expert before presenting a page and a half of her qualifications which include web-based surveys⁷⁰. Contrasting with the Kleinschmidt survey, the PPDLW Users Survey was very careful to divide the respondents between those who own property, and those who visit. For example, those who owned property were not asked about their likelihood of returning to the lakes if the project were built. Although the PPDLW User Survey was not perfect, it does provide useful data and LURC Commissioners entered it into the official record over the objection of CW's attorney.

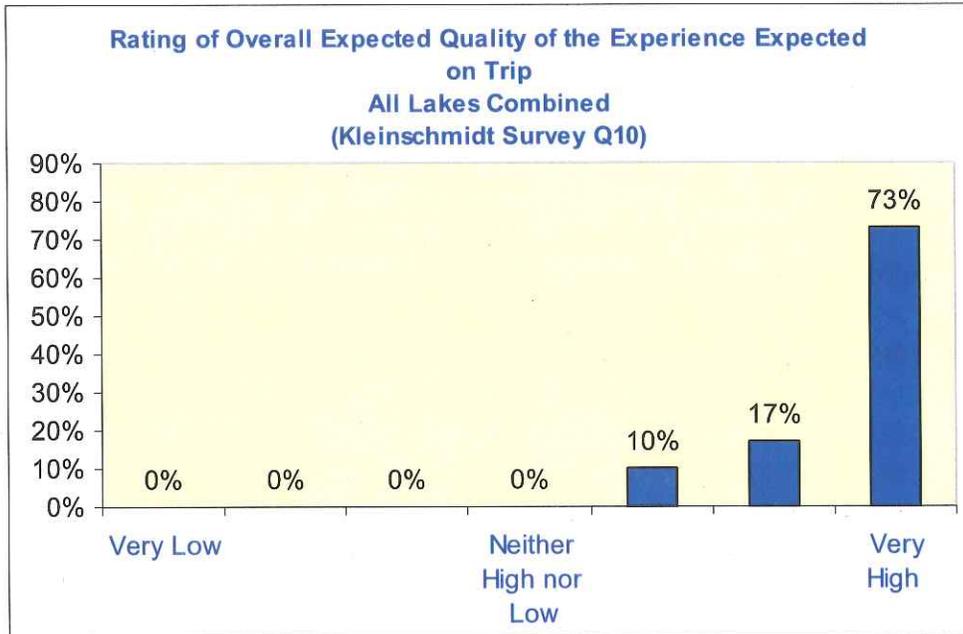
Conclusion

The results of the Kleinschmidt survey support the conclusion that the proposed project would have an unreasonable adverse effect on the scenic character or the existing uses of the SRSNS within eight miles with turbine visibility. Despite the attempts by LandWorks and Dr. Boyle to discount this evidence, the results are clear.

⁷⁰ Kleinschmidt survey, p.2.

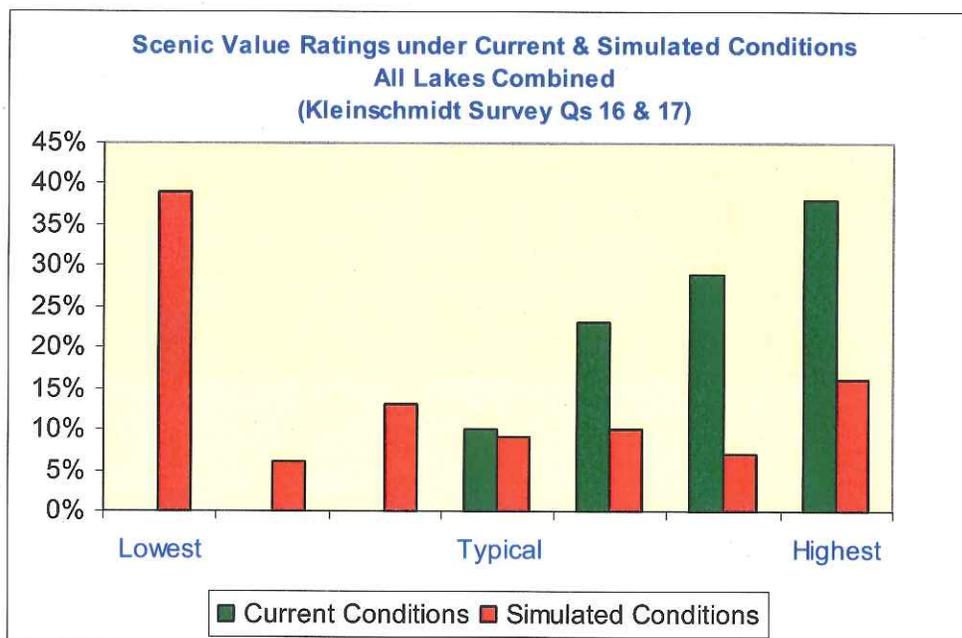
Key Findings of Kleinschmidt Intercept Survey

1. Users surveyed have very high expectations of overall quality during their visit to the lakes.



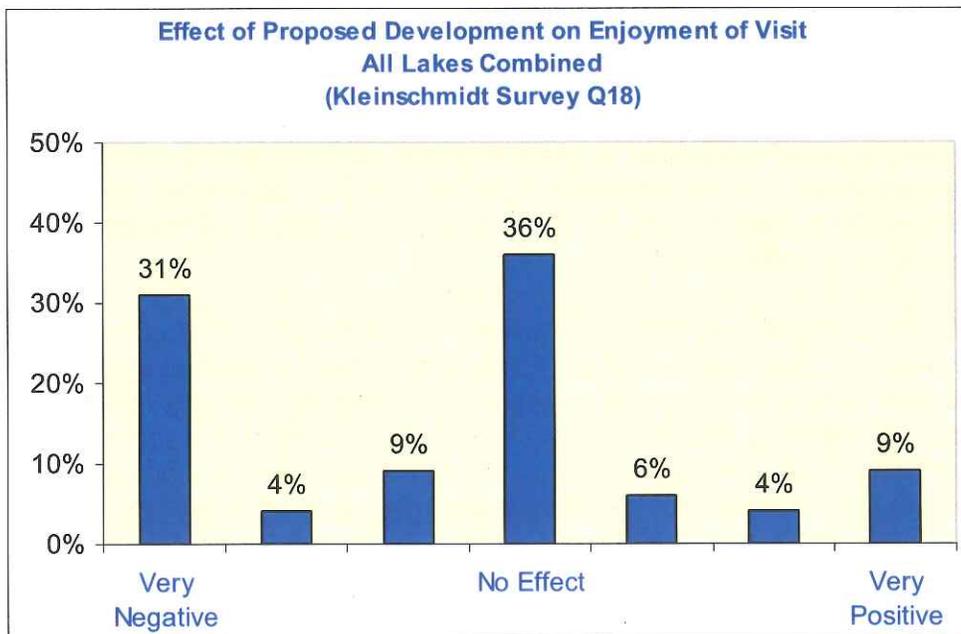
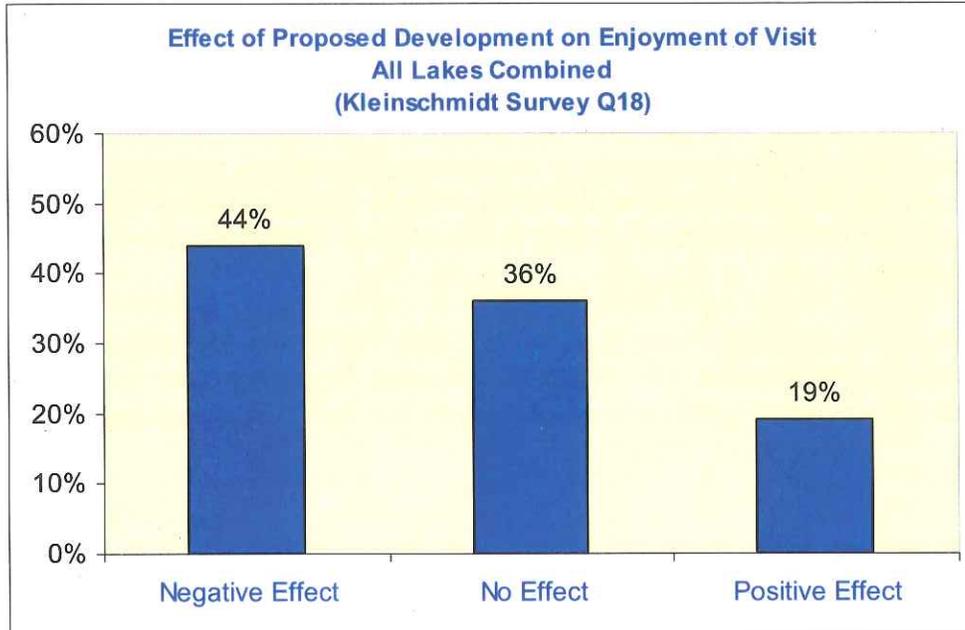
2. The proposed project would have an unreasonable adverse impact on the scenic character of the SRSNS:

- 90% rated scenic value with current conditions as high.
- 58% rated scenic value with simulated conditions as low.
- 39% rated scenic value with simulated conditions as lowest.



3. The proposed project would have an unreasonable adverse effect on the existing uses of the SRSNS:

- 44% said that the presence of the wind project would have a negative effect on their enjoyment of the lakes.
- 31% said the project would have a very negative effect on their enjoyment.



VISUAL IMPACT ANALYSIS

Introduction to Lake by Lake Analysis and Statutory Evaluation

The LandWorks Visual Impact Assessment (VIA) consistently minimizes and understates the scenic quality of the Downeast Lakes Region and the nine Scenic Resources of State or National Significance (SRSNS) with visibility of turbines within eight miles. Not surprisingly, the LandWorks VIA concludes that the project would not result in an unreasonable adverse effect on the scenic character or the existing uses related to the scenic character of any of the SRSNS.

PPDLW rejects the LandWorks conclusion as well as its some of its underlying assumptions and ratings. We therefore appreciate the opportunity to present a balanced and accurate analysis which brings us to the conclusion that the proposed array of 16 industrial turbines will cause an unreasonable adverse scenic effect on the scenic character and the existing uses of several of the SRSNS, and collectively on the entire network of lakes.

We have chosen to limit our in-depth analysis to only five of the SRSNS lakes: Junior, Keg, Pleasant, Scraggly and Shaw. The SRSNS Evaluation Summary Chart on page 53 presents all nine of the SRSNS Lakes including Bottle, Duck, Pug and Sysladobsis.

The Statutory Evaluation Criteria

CRITERION A: Significance Of The Scenic Resource

In measuring each of the SRSNS Lakes against this criterion the LandWorks VIA relies on the 1986 publication, Scenic Lakes Character Evaluation in Maine's Unorganized Towns ("the Evaluation"). The VIA's brief explanation of how it used data from the Evaluation was confusing, so PPDLW studied it in depth.⁷¹

The purpose of the Evaluation was to systematically evaluate the scenic quality of lakes in the unorganized towns. The results were used by LURC to identify and manage lakes requiring especially sensitive land use controls and to guide growth toward those with greater capacity for development⁷².

Starting with the 3,000 lakes in the Unorganized Territories, the Evaluation first eliminated all lakes under 10 acres in size. This left 1,509 lakes. The 1,509 lakes were then screened for the presence of hills and mountains surrounding them as well as a minimum 'Edge Index' which indicated the shoreline length vs. a perfect circle of the same area⁷³. These two screens filtered out 1,198 lakes leaving the 311 lakes that were included in this study. It's important to bear in mind that the lakes being evaluated were already in the top 20% of

⁷¹ LandWorks VIA, pp.29-30.

⁷² Scenic Lakes Character Evaluation in Maine's Unorganized Towns, 1986, rev. 1987, p. ii.

⁷³ Ibid, pp.6-9.

scenic lakes to begin with. The LandWorks VIA fails to mention this fact.

The Evaluation provided a good starting point for assessing the scenic significance of Maine's lakes. It broke scenic character down into six component categories: relief, physical features, shoreline configuration, vegetation diversity, special features and inharmonious development. Each of the 311 lakes was assigned a score for each of the six components. The six scores were then totaled. Out of a possible 100 points, the highest total score achieved was 80. The authors then distributed the totals into three broad classes along a curve. Lakes with 50+ points were deemed "outstanding". Lakes with total points between 20 and 45 were deemed "distinctive", the remaining lakes were deemed "scenic".

The Evaluation predates the Maine Wildlands Lake Assessment ("the Assessment") that is referenced in Maine's Wind Energy Act (WEA). The authors of the Assessment consulted the Evaluation as one resource in scoring "Scenic Quality". In some cases the scenic quality scores in the Assessment appear to follow closely from the Evaluation. But in other cases it is obvious that the authors modified or tempered the Evaluation's score to correct an error or to recognize additional data. In every case, the adjustment made would have resulted in the lakes receiving a higher rating than it had under the Evaluation.

The Evaluation can be a useful tool when evaluating the significance of one of the scenic resources in the study. In fact, it has been referenced in several wind energy VIAs. However, it should not be followed blindly as the Evaluation has several shortcomings.

- The 311 scenic lakes in the study were visited by float plane. Surveyors filled out a one-page check sheet for their evaluation.⁷⁴ They also consulted DEP and MDIFW for some data. After the fact, other state experts concurred with the data and conclusions. However, the Evaluation provides no notes or details to back up the individual ratings.
- The surveyors and analysts rated each lake along several criteria with scores of Low, Medium and High, giving corresponding numerical scores. Those scores were totaled up to a single number. The total scores were then used to put the 311 already scenic lakes into three categories: 'Outstanding', 'Distinctive' and 'Scenic'. All nine of the SRSNS Lakes within eight miles of the proposed project received ratings of Outstanding or Distinctive. Put another way, they were all in the top 2/3 of the top 20% of lakes (i.e. 87th percentile or higher). The LandWorks VIA does not mention this.
- There are errors in the ratings. For instance, on all the lakes being evaluated, wildlife is viewed frequently. The Kleinschmidt survey shows that 90% of the users interviewed planned on viewing wildlife during their visit. And yet remarkably, none of the SRSNS lakes being evaluated here were given any points for this component.

⁷⁴ See Exhibit I for the data form used when gathering information for the "Evaluation".

- The diversity of vegetation was assessed from flyovers in the float plane. Only those with four vegetation types visible from the air were rated 'high'. We assert that all these SRSNS lakes have several vegetation types on their shores, based on our extensive experience on the waters in question, as well as data from USGS forest maps.
- There are a number of conflicts between the Evaluation and the Assessment in the ratings of the SRSNS lakes we are analyzing. In every case, the rating reported in the Assessment is higher, suggesting the Evaluation under-rated the lakes' scenic quality. LandWorks, however, ignores these conflicts and makes no adjustment for them.
- After tallying each lake's total score, the Evaluation assigned them to three groups: Outstanding, Distinctive and Scenic. At no time does the Evaluation translate these categories into High, Medium and Low, presumably because even the lowest scoring lake was in the top 20% of scenic lakes. It would be hard to call that lake "Low" for scenic character. Nonetheless, in its VIA LandWorks translates these scores into five categories: High, Med-High, Medium, Med-Low and Low. That is an assignment made by LandWorks for the VIA using a scale that is not described. As a result, although the Assessment rates Keg Lake Significant for scenic character, the VIA rates it Low.

We have adjusted some of the component ratings assigned to the SRSNS lakes. These adjustments appear in both the detailed analyses of the five lakes and in the SRSNS Evaluation Summary Chart on page 53.

The six component categories used in the Evaluation, and therefore the LandWorks Bowers VIA, are as follows:

Relief – The Evaluation interprets this criterion only for 'complex and dramatic' relief features, as seen from multiple viewpoints on a given lake. The SRSNS close to the proposed project are rimmed with forested hills with few if any manmade structures, but display complexity with their layers of hills. These hills combine harmoniously with the chain of largely undeveloped lakes to produce a wilderness 'feel'. This harmonious relief adds to the area's tranquility and scenic quality.

Physical Features – The Evaluation rated lakes "High" for this category only if they had four of the following characteristics: cliffs, vertical ledges, slab ledges, rockslides, boulders, islands and beaches. All the SRSNS lakes here have three of the distinctive features listed: boulders, islands and beaches.

Shoreline Configuration – This score was based on the "Edge Index" which depicts the irregularity of the shoreline by comparing the length of shoreline to the circumference of a perfect circle of similar area. No individual Edge Index scores for the lakes were provided in the Evaluation. The SRSNS being evaluated here are known for their scenic coves and inlets that are particularly attractive to fishermen,

paddlers, campers, and viewers of wildlife. Some were also rated Significant or Outstanding for shoreline by the Assessment.

Vegetation Diversity – The shoreline of every SRSNS being evaluated here qualifies for the maximum rating for this factor, as they are all rimmed with mixed hardwoods and softwoods, marshes and super-story trees. Because current law places limits on harvesting trees within 250 feet of a Great Pond, this natural vegetative diversity will be maintained.

The website of the Downeast Lakes Land Trust states, “Eastern and northern Maine’s Acadian forests are part of the largest contiguous block of forest matrix in the eastern United States. According to The Nature Conservancy, this is the largest intact temperate broadleaf and mixed forest in the country and one of the largest in the world. It is an ecological resource of global significance providing habitat to a great diversity of plant and animal life.”⁷⁵

According to the USGS National Gap Analysis Program, the shores of the nine SRSNS include five forest types, one floodplain system group, and two swamp systems. These classifications demonstrate a wide variety of hardwoods and softwoods. Super story trees are notable along the shores. See Exhibit J for a listing and description of these types.⁷⁶

Water Clarity and Wildlife Viewing – The Evaluation only gave points here for ‘extreme water clarity’ and a ‘moderate to high’ probability of viewing wildlife on a lake.⁷⁷ While water clarity data is not available for Duck Lake, the other lakes all rate average or above average⁷⁸. Residents and visitors commonly and frequently encounter eagles, ospreys, loons, moose, deer, beaver, otter, fox, porcupines, martens, and migrating warblers and water fowl. Viewing wildlife is a major attraction on every SRSNS being evaluated.

Inharmonious Development – The only lake given a ‘demerit’ for inharmonious development in the Evaluation was West Grand Lake. Why it received a demerit of 5 points was not explained.

In summary, the Evaluation assigned unfairly low scores to components of Criterion A. The authors of the Assessment appear to have recognized this and made adjustments. LandWorks, on the other hand has accepted the Evaluation’s component scores at face value, totaled them for each SRSNS and then in some cases felt justified in assigning an even lower rating to the final score.

⁷⁵ <http://www.downeastlakes.org/conservation/your-community-forests/wildlife-habitat-management/>

⁷⁶ http://gis1.usgs.gov/csas/gap/viewer/land_cover/map.aspx

⁷⁷ Scenic Lakes Character Evaluation in Maine’ Unorganized Towns, 1986, rev. 1987, p.12.

⁷⁸ Maine Lakes Report 2011, Maine Volunteer Lake Monitoring Program, pp.41-44, Bottle Lake Campowner Newsletter, August, 2012.

Clearly this was not intended by, nor is it supported by, the Wind Energy Act. In fact, the Governor's Task Force on Wind, the body responsible for the Wind Energy Act, sequestered the Downeast Lakes Region, intentionally excluding it from expedited processing. In describing the land that would be appropriate for expedited processing, Task Force's final report explains that they specifically excluded "1) broad areas that encompass concentrations of ecological, recreational and/or scenic values that are among the most significant in the jurisdiction, and 2) smaller areas (primarily, but not necessarily limited to, P-MA zones) that possess ecological, recreational and scenic values of particular significance".⁷⁹ In addition, NRCM, The Appalachian Mountain Club and Maine Audubon, all of whom were members of the Governor's Task Force on Wind, provided testimony during the LURC hearing on the Bowers project that this was indeed the Task Force's intention (see Exhibit D).

PPDLW has meticulously examined the Criterion A component scores assigned by the Evaluation and adjusted them to correct for errors and oversights. After doing so, the scores matched or slightly exceeded the scores the Assessment came up with. In the end, we concluded that the Assessment's conservative approach is correct and the Assessment's ratings for Scenic Character are accurate. Lakes which the Assessment rates as Significant for scenic character we gave a rating of Medium-High. Those lakes that the Assessment rates as Outstanding, we gave a rating of High. Our ratings are therefore consistent with the Assessment and the Assessment is the Wind Energy Act's authority for establishing the significance of a scenic resource.

CRITERION B: Existing Character of the Surrounding Area

LandWorks states that because the hills that rim the Downeast Lakes are a 'working forest', they are not pristine. The implication is that logging destroys forests, making them appropriate for industrial development. The VIA uses satellite images to show the areas that have been harvested. Seen from above, harvested areas appear like the veins of a leaf. But these images are not relevant to this evaluation as none of the users see the area from above. Forestry has long been an important part of the region, and has served to enhance the recreational value of the forest and the lakes. Current law limits harvesting trees within 250 feet of a Great Pond, making logging activity all but invisible to those who recreate on the lakes. In fact, the Kleinschmidt survey shows that visitors and recreational users consider them highly scenic. Fully 38% of the users of the surveyed lakes gave them the highest rating for scenic value⁸⁰. Table 10 shows the results of an open ended question about what characteristics would cause a lake to have low scenic value. The most common answers given were city development, too many camps, and wind turbines. Logging activity was not mentioned by any of the respondents⁸¹.

Fishing has drawn sportsmen to these SRSNS lakes for over 150 years, in both summer and winter. The SRSNS lakes offer outstanding warm water fishing for small mouth bass

⁷⁹ Report of the Governor's Task Force on Wind Power Development, Feb 2008, p.18

⁸⁰ Kleinschmidt survey, p.30, Table 11

⁸¹ Ibid. p.29, Table 10

and white perch, and cold water fishing for landlocked salmon and lake trout. The local brooks and remote ponds are famous for their native brook trout.

The area's many opportunities for remote paddling and camping trips draws visitors from around the country. Published and on-line resource guides to the area, such as the AMC's Quiet Water Maine⁸², the REI website⁸³, and the website of canoe trip company Wilderness Inquiry⁸⁴ and the Mahoosuc Guide Service⁸⁵ attest to the special character of the lakes, their connectedness and their attractiveness for canoeing and kayaking.

The AMC Quiet Water Maine Guide states, "Pocumcus, Junior, and Sysladobsis lakes in the heart of eastern Maine's lake country offer one of the best extended quiet water loop trips in the state, especially when one detours for a few days into Scraggly Lake...."⁸⁶

Wilderness Inquiry is a Minnesota-based company that runs canoe trips around the country, including Bottle, Junior, and Pocumcus Lakes as well as Junior Bay (West Grand 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.

The area's scenic value derives from the relative lack of development. The mountains support a healthy, diverse cover of many coniferous and deciduous tree species. The shoreline area has seen very little human alteration. Rustic cabins, on several of the islands and a few stretches of the river, represent the only visible signs of residential development. These simple wooden structures blend into the natural setting. The most prominent landscape features are the surrounding hills, mountains and shoreline.

This trip is an ideal backcountry canoeing experience. In the shadow of Attean Mountain and near the border of Maine and Canada lies a series of pristine wilderness lakes, similar in kind to Minnesota's Boundary Waters and anchored by Junior Lake. Maine's rugged Junior Lake area is a maze of interconnected bays and islands, rocky shorelines and hills of spruce. As you paddle around protected coves and pristine inlets, fish for the area's well-known largemouth bass. Spot eagles and ospreys soaring overhead.

⁸² Quiet Water Maine, Canoe & Kayak Guide, Alex Wilson & John Hayes, Appalachian Mountain Club Books, 2005, Boston, MA, pp.140-149, See Exhibit E.

⁸³ <http://www.rei.com/guidepost/detail/maine/flatwater-paddling-canoeing/scraggly-lake-southern-and-pleasant-lake/37889>

⁸⁴ <http://www.wildernessinquiry.org/destinations/index.php?itinerary=juniorlakes>

⁸⁵ www.mahoosuc.com

⁸⁶ Quiet Water Maine, p.142.

Enjoy the feeling of wilderness just north of the hustle and bustle of Portland and Boston....⁸⁷

The Mahoosuc Guide Service writes, "...Sandy beaches, interconnecting lakes and the surrounding mountains are some of the uniqueness of this area...."⁸⁸

CRITERION C: Expectations of the Typical Viewer

Given the results of the Kleinschmidt survey, it is clear that recreational users expect a high quality scenic experience on the SRSNS lakes.

The Survey reveals that:

- 90% expect 'high' or 'very high' quality from their visit to the lakes surveyed,⁸⁹
- 90% of them engage in viewing scenery⁹⁰, and
- 90% rate the lakes as scenic to highly scenic.⁹¹

The WEA asks us to consider a 'typical' viewer. Instead of describing the typical viewer, LandWorks describes numerous types of users and then presents theories about their reactions to the proposed project. They posit that most respondents don't care about scenery and those who say they do are biased in some way. The LandWorks VIA⁹² breaks describes users as:

- Camp Owners (but they have a financial interest in resisting change)
- Anglers (but they're not concerned about scenery)
- Paddlers (but they hug the shoreline and their eyes are drawn away from the hills)
- Campers (but they are typically engaged in food preparation, reading and relaxation)
- Ice Fishermen (but they're focused on the fishing and the camaraderie of fellow anglers)

Despite this attempted 'misdirection', the Kleinschmidt survey is very convincing evidence that nearly all users rate the Downeast Lakes Region as highly scenic and said that they expect a high quality experience while on the lakes. Based on the results of the Kleinschmidt survey and the PPDLW Users Survey, we have rated this criterion HIGH for all of the SRSNS lakes being evaluated.

CRITERION D: Purpose and Context of the Proposed Activity

This criterion asks the permitting agency to make a broad cost/benefit judgment comparing the proposed project's impact on the scenic resources (the cost) with its purpose and context (the benefit). A rating of 'high' means that the scenic impact outweighs the project's promised benefits. A rating of 'low' means that the project's promised benefits

⁸⁷ <http://www.wildernessinquiry.org/destinations/index.php?itinerary=juniorlakes>

⁸⁸ <http://www.mahoosuc.com/pricing2.html>

⁸⁹ Kleinschmidt survey, p 27.

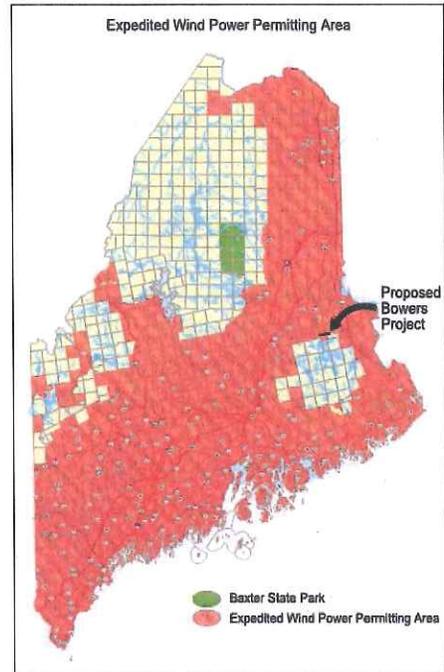
⁹⁰ Ibid. p.26.

⁹¹ Ibid. p.30.

⁹² Visual Impact Assessment, pp.34-5.

outweigh the project’s scenic impact. We believe this analysis yields a rating of “High” for the following reasons:

- Nine SRSNS lakes within eight miles of the project would have turbine visibility. These nine lakes are all connected to each other and recreational users often visit multiple lakes in one visit and camp on the many free-to-the-public island campsites available;
- The Downeast Lakes network, including the nine SRSNS within eight miles of the project, was specifically protected as being inappropriate for expedited wind permitting. Clearly the intent was to maintain their existing resource values;
- The Downeast Lakes Region is largely protected by conservation land that prohibits industrial developments such as the Bowers Wind project and promotes public enjoyment of the natural resources (see map, p. 10).
- This project is not critical to helping Maine reach its wind energy goals. The initial goal is to have a total installed nameplate capacity of 2000 MW by 2015. Currently Maine has a total nameplate capacity of only 430.3 MW, or 21.5% of the goal. To reach the goal, an additional 1,570 MW must be designed, permitted, built and commissioned in the next two years. The proposed Bowers Wind project, representing 48MW of nameplate capacity will fulfill only 3% of the shortfall.



“Maine Wind Assessment 2012: A Report”, which was prepared for the Governor’s Office of Energy Independence and Security, notes that it has taken five years to achieve 21.5% of the goal and there is no reason to expect that this pace will pick up. Political support has waned, the best sites have been built, many towns have enacted moratoriums on wind development, and opposition has evolved from local groups to statewide groups.⁹³ Maine’s arbitrary target of 2000MW of installed capacity by 2015 has become meaningless.

Total MW Installed (nameplate capacity)	
Mars Hill	42.0
Kibby	132.0
Record Hill	50.6
Spruce Mtn	20.0
Stetson I	57.0
Stetson II	25.5
Rollins	60.0
Vinalhaven	4.5
Freedom	4.5
Bull Hill	34.2
Total MW:	<u>430.3</u>

⁹³ MAINE WIND ASSESSMENT 2012, A REPORT, Prepared for the Governor's Office of Energy Independence and Security pursuant to Resolve 2011, Chapter 93 "To Clarify the Expectation for the 2012 Assessment of Progress On Meeting Wind Energy Development Goals"

The Bowers Wind project does not make a significant contribution to Maine's wind energy goals. Its meager short-term benefit to a few Maine residents is far outweighed by the irreparable long-term damage it will do to the State's scenic resources and tourism industry. We therefore rate this criterion "High" for every affected SRSNS.

CRITERION E.1: Extent, Nature and Duration of Public Use

The Downeast Lakes are never crowded. That adds to their attraction and charm. Locals consider these lakes to be one of Maine's "best-kept secrets". The very nature of being lightly used enhances their scenic character and value.

Grand Lake Stream Master Maine Guide Louis Cataldo writes, "We stay away from other boats and camps to try to show our clients a remote wilderness experience. It's common for a client to say after a day's fishing that they didn't see another boat or person all day .That really means a lot to them."⁹⁴

In addition, it is not an area you stumble across on your way to somewhere else. It's not so convenient that you would just visit for an hour, or turn off the highway and have a picnic by the shore. Recreating there requires a plan and a modest investment in time and distance. Years of observation have convinced us that people generally explore multiple lakes, whether they're fishing, motoring, paddling or snowmobiling. As such, while the total volume of boats might be low on a given day, the nature and duration of each visit takes people across multiple lakes for a trip of at least several hours. This would expose them to the turbines from multiple viewpoints during their trip. In addition, many of the summer fishermen troll over deep holes and drop-offs. This means they are often out in the middle of the lakes, not only along the shore as LandWorks contends.

For these reasons we rate this criterion High on most of the SRSNS lakes.

CRITERION E.2: The Project's Effect on Continued Use and Enjoyment of the Scenic Resource

Table 14 of the Kleinschmidt survey reveals that 44% of respondents said that views of the project would have a negative effect on their enjoyment of the lakes.⁹⁵

In terms of returning to the lakes, under current conditions, 98% said they would likely return. If the project were built, that number falls to 61%, with 20% saying they were unlikely to return.⁹⁶ Since 45% of those surveyed own or rent camps on the surveyed lakes the results are most likely skewed in favor of returning. Property owners have an investment in the region and have little choice but to return even if the project is built. It is unfortunate that Kleinschmidt did not provide the breakdown on this question between property owners/renters in the lake chain vs. visitors who are not invested in the area.

⁹⁴ Personal e-mail to Gary Campbell, 1/28/13.

⁹⁵ Kleinschmidt survey, p.31.

⁹⁶ Ibid. p.34.

Even given these weaknesses of the survey, it still shows that overall, the proposed wind project will dramatically diminish the users' continued use and enjoyment of the scenic resources.

Based on these results we rate this criterion High for all the lakes.

CRITERION F: Scope and Scale of the Project's Effect on the Scenic Resource

We rated this criterion for each lake based on the maximum number of turbines visible and the percentage of the lake surface that would have turbine visibility, based on the VIA Viewshed Map Exhibit 4 (visibility of hubs with 40 foot vegetation height).

LandWorks VIA did not factor in night lighting when addressing this criterion. Since the FAA has not approved the use of radar-assisted lighting for industrial wind projects, we include it in our evaluation. The LandWorks VIA also does not mention that each Vestas V112 3.0 MW turbine will be lit with two red strobes, due to the size and shape of the Vestas nacelle.⁹⁷



Vestas V112 3.0MW turbine

The strobe lights flashing across the otherwise dark hills above the lakes, and their reflections in the water, will add to the already adverse scope, scale and visibility of the phalanx of 459' tall turbines.

Scope, scale and visibility must also take into account the cumulative scenic impact on recreational users. Cumulative scenic impact comes in three forms:

- There is the sequential cumulative impact on users who are traveling through the landscape, moving from lake to lake, perhaps camping overnight on islands, finding little respite from the views of turbines.

⁹⁷ <http://www.vestas.com>

- Another form of sequential cumulative impact occurs when the public must travel through other wind projects en route to a destination. For example, approaching Pleasant Lake from the west on Route 6 one sees the 60-turbines of the Rollins Wind project. Approaching it from the east on Route 6 one sees the 38 turbines of the Stetson I project and the 17 turbines of the Stetson II project.
- Then there is the cumulative impact of multiple wind projects being visible from a single static viewpoint. Although Baskahegan Lake is not a SRSNS, much of the lake will have views of all 16 of the Bowers turbines in addition to the turbines of the Stetson I and Stetson II projects already visible from the lake. That means many users will see 71 turbines when they visit Baskahegan Lake.

CONCLUSION: OVERALL SCENIC IMPACT

The Wind Energy Act asks the permitting authority to consider whether the scenic impact of a proposed wind project would cause an unreasonable adverse effect on either the 'scenic character' or 'existing uses related to the scenic character' of an SRSNS. It is clear from the results of the Kleinschmidt survey as well as the PPDW Users Survey, that the proposed project would have an unreasonable adverse effect on the scenic character of the lakes in question. The Kleinschmidt survey found that regarding all the lakes surveyed, in current conditions, 90% said the lakes had above average to high scenic value, but that under the simulated conditions, 58% said the lakes would have a below average scenic value. Further, in current conditions, 38% gave the views the highest rating, while 39% gave the simulated conditions the lowest scenic value.⁹⁸ As for the effect of the project on existing uses, 44% of those surveyed said their enjoyment would be reduced by the visual impact of the BWP.⁹⁹ We have also commented on these questions in the individual lakes' evaluations below.

Based on our evaluation, it is clear that the proposed project will have an unreasonable adverse effect on the scenic character or the existing uses of several of the SRSNS within eight miles of the project, and collectively on all of them.

The table below summarizes our findings on a lake-by-lake basis for all nine SRSNS within eight miles of the proposed project.

⁹⁸ Kleinschmidt survey, p.30.

⁹⁹ Ibid. p.31.

SRSNS Evaluation Summary Chart

LURC Scenic Rating	Nearest Visible Turbine ² (miles)	Max Turbines Visible ²	Scenic Impact Evaluation Criteria ¹							OVERALL ³		
			A	B	C	D	E.1	E.2	F			
Pleasant Lake	O	2.4	16	High	High	High	High	High	High	High	High	High
Duck Lake	S	2.7	16	Med-High	High	High	High	Med	High	Med-High	Med-High	Med-High
Junior Lake	S	3.2	16	Med-High	High	High	High	High	High	High	High	High
Shaw Lake	S	3.5	16	Med-High	High	High	High	Low	High	High	High	Med-High
Keg Lake	S	3.7	12	Med-High	High	High	High	Med	High	Med-High	Med-High	Med-High
Scraggly Lake	S	4.1	16	Med-High	High	High	High	High	High	High	High	High
Bottle Lake	S	5.1	12	High	High	High	High	High	High	High	Low	Med-High
Sysladobsis Lake	S	6.3	16	Med-High	High	High	High	High	High	High	Med	High
Pug (West Grand) Lake	O	7.7	8	High	High	High	High	Low-Med	Low	Low	Low	Medium
West Musquash Lake	O	8.1	4	*	*	*	*	*	*	*	*	*
Norway Lake	O	n/a	n/a	*	*	*	*	*	*	*	*	*
Horseshoe Lake	S	n/a	n/a	*	*	*	*	*	*	*	*	*
Lombard Lake	S	n/a	n/a	*	*	*	*	*	*	*	*	*
Upper Sysladobsis Lake	S	n/a	n/a	*	*	*	*	*	*	*	*	*

¹ Key to the Evaluation Criteria: (A) Significance of Scenic Resource, (B) Existing character of surrounding area, (C) Expectations of the typical viewer, (D) Purpose and context of the proposed activity, (E.1) Extent, nature and duration of public use, (E.2) Project's effect on continued use and enjoyment, (F) Scope and scale of project's effect on the Scenic Resource.

² Based on Landworks Viewshed Map depicting **hub visibility** with topography and vegetation accounted for (VIA Exhibit 4).

³ Numerical average of each lake's 7 criteria scores where: 1.0=Low, 1.5=Low-Med, 2.0=Med, 2.5=Med-High and 3.0=High

Lake by Lake Scenic Impact Evaluation

In the following pages we have prepared a detailed evaluation of five of the nine SRSNS lakes affected by the proposed project: Junior Lake, Keg Lake, Pleasant Lake, Scraggly Lake, and Shaw Lake. We have also rated Bottle Lake, Duck Lake, Pug Lake (West Grand) and Lower Sysladobsis Lake using the evaluation approach described above. Their ratings of all nine SRSNS are included in our SRSNS Evaluation Summary Chart.

Junior Lake

The Assessment rates Junior Lake's Scenic Quality as Significant, making it a Scenic Resource of State or National Significance. In addition to its significant scenic quality, it is also recognized for its significant shoreline character, fishery, and cultural features. Junior Lake is the largest of the SRSNS lakes that would be impacted by the Bowers project. Its 3,866 acres spans both Penobscot and Washington Counties.

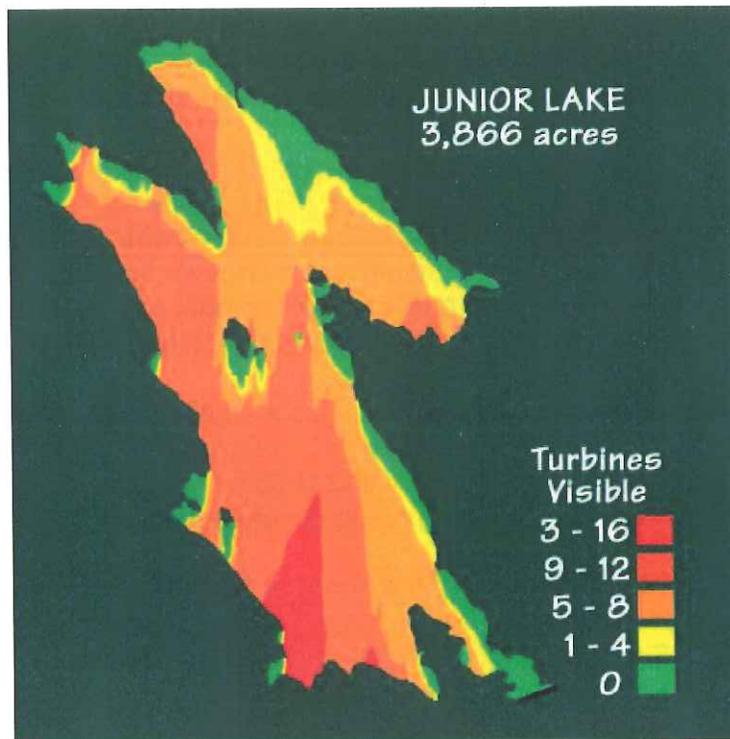


According to the LandWorks VIA there are 87 camps on Junior Lake¹⁰⁰. This is incorrect. According to the Lakeville Tax Log, there are only 42 camps. There are five additional camps that are on Passamaquoddy land which brings the true total to 47 camps. Junior Lake was off limits for development until the late 1980's when a small portion of its 29 miles of shoreline was re-zoned as a Great Pond subdistrict.¹⁰¹ LUPC's strict standards for lot dimensions, distance between structures, setbacks and vegetation removal are designed to maintain the natural character of shoreline. Several of the older, grandfathered structures are hand-hewn camps built in the 1800's and early 1900's. The Sunrise Conservation Easement protects part of the eastern shore, with the northeastern and southern shores owned by the Passamaquoddy Tribe. The native people have been paddling and camping on Junior Lake for thousands of years; a network of historic native canoe routes crosses the Downeast Lakes and is still used today by recreational paddlers.¹⁰²

¹⁰⁰ LandWorks VIA, p.68.

¹⁰¹ The purpose of the Great Pond Subdistrict is to regulate residential and recreational development on Great Ponds to protect water quality, recreation potential, fishery habitat, and scenic character.

¹⁰² See the map on page 16 submitted by NRCM as testimony in the Bowers-1 hearing, June 27, 2011



CRITERION A: Significance of the Scenic Resource

The Assessment assigns Junior Lake a rating of Significant for Scenic Quality making it a Scenic Resource of State Significance under the WEA. The Assessment also recognizes Junior Lake's significant Fishery, Shoreline Character and Cultural Value. Using the component categories from the Evaluation utilized by LandWorks, we supply the following accurate evaluation of its scenic attributes and quality.

Relief: Like all nine of the SRSNS lakes within eight miles of the project, Junior Lake is rimmed by forested hills. As one moves around the surface of this large lake, the hills give the viewer a sense of the scale and size of the water body. The old growth slopes of Almanac Mountain, Bowers Mountain, Getchell Mountain, and Junior Mountain combine to create a harmonious 'feel' of wilderness. The Evaluation as quoted by LandWorks focuses on complex or dramatic relief. The harmonious vista of numerous forested hills is a complex relief feature that adds to the scenic value of this Scenic Resource. **Rating: Medium**

Physical Features: The shoreline of Junior Lake is varied, and features three of the seven characteristics noted in the evaluation. It includes boulder-strewn coves, three sand beaches, numerous inlets, and peninsulas as well as more than a dozen islands. Some of the boulders are the size of a small house. **Rating: Medium**

Shoreline Configuration: Junior Lake is elongated with numerous small coves and inlets providing visual interest. This is supported by the Assessment rating of Significant for shoreline character. **Rating: High**

Vegetation Diversity: Like all the SRSNS being considered here, the forests around Junior Lake and on the surrounding hills are both mixed hardwoods and softwoods. There are marshy areas, and super-story trees. **Rating: High**

Special Features: There are ample opportunities to view wildlife while visiting Junior Lake. Eagles, loons, moose, deer, beavers, otters, muskrats, warblers and other migrating birds can be observed there. Water clarity is well above average.¹⁰³ Additional special features are the significant ratings for fishery and cultural features assigned by the Assessment. Surprisingly, and without explanation, the Evaluation gave Junior Lake a score of "None" for this criterion. **Rating: High**

Inharmonious Development: Junior Lake has a small number of camps relative to the many miles of shoreline under conservation easement. All but a few of these camps have been built in accordance with LURC's shoreland zoning standards. This lake deserves no demerit for inharmonious development.

Using the above adjusted criteria results in a score of 80, well above the threshold of 50 for an Outstanding rating. However, we assign Junior Lake an overall rating of **Medium-High** to keep in line with the Significant rating assigned by the Assessment.

¹⁰³ Maine Lakes Report 2011, Maine Volunteer Lake Monitoring Program, 2011 Average Secchi Disc Transparency of 6.6 meters – p.41 vs. 2011 Mean of 5.3 - p.14.

WEA Criterion A: Significance of the Scenic Resource**Junior Lake**"Assessment" Scenic Rating: **SIGNIFICANT**

Criteria used in "The Evaluation"	Max Points	"The Evaluation"		LandWorks		PPDLW	
		Score	Rating	Score	Rating	Score	Rating
Relief ¹	30	10	Low	10	Low	20	Med
Physical Features ²	25	15	Med	15	Med	15	Med
Shoreline Configuration ³	15	10	Med	10	Med	15	High
Vegetation Diversity ⁴	15	10	Med	10	Med	15	High
Special Features ⁵	15	0	None	0	None	15	High
Inharmonious Development ⁶	0	0	None	0	None	0	None
	100	45	Significant	45	Medium	80	Med-High

¹ Presence of complex (layered) relief and dramatic relief only

² Presence of scenic physical features (cliffs, vertical ledges, slab ledges, rockslides, boulders, islands and beaches)

³ Index of complexity of shoreline based on a lake's variation from a perfect circle.

⁴ Presence and diversity of four major types: 1) mixed hardwoods and softwoods, 2) softwoods, 3) marsh and 4) the presence of super-story trees

⁵ Extreme water clarity and opportunity for observing wildlife

⁶ Points taken away for camps lacking vegetative screening and buffers between them, heavily eroded shorelines, powerlines or roads that are sited intrusively, dammed lakes with drastic drawdowns, dams that are intrusive, etc. Possible demerits range from 0 to -20.

CRITERION B: Existing Character of the Surrounding Area

The character of the Downeast Lakes is distinguished by forested hills that surround a network of more than a dozen interconnected lakes, with a distinct remote feel. Sportsmen have been coming to the area for more than 150 years.

Over the centuries the area's forests have been harvested several times with no detriment to recreational value or use. In fact, logging roads give the public better access to the lakes and forests. The Downeast Lakes Land Trust works to preserve the special character of the area through its purchases and management of forest lands in the area. Lastly, the Downeast Lakes were specifically carved out of the WEA's Expedited Wind Permitting Area by the Governor's Wind Task Force. **Rating: High**

CRITERION C: Expectations of the Typical Viewer

Viewer expectations of Junior Lake are very high and the proposed project would seriously diminish the scenic quality of the lake.

The Kleinschmidt survey revealed that 88% of respondents on Junior Lake expected a high (15%) or very high (73%) quality experience.¹⁰⁴

Under current scenic conditions, 58% of those surveyed rate Junior Lake's scenery as very high (35%) or highest (23%).¹⁰⁵ Should the project be built, however, 46% of those surveyed rated the view with turbines with the lowest scenic value.¹⁰⁶ This shows that the proposed project would clearly have an unreasonable adverse effect on the scenic character of the lake. **Rating: High**

CRITERION D: Purpose and Context of the Proposed Activity

This criterion asks the permitting agency to make a broad cost/benefit judgment comparing the proposed project's impact on the scenic resources (the cost) with its purpose and context (the benefit). A rating of 'high' means that the project's negative scenic impact outweighs the project's expected benefits. A rating of 'low' means that the project's expected benefits outweigh its negative scenic impact. We believe this analysis yields a rating of "High" for the following reasons:

- Nine SRSNS lakes within eight miles of the project would have turbine visibility. These nine lakes are all connected to each other and recreational users often visit multiple lakes in one visit and camp on the many free island campsites available;
- The Downeast Lakes Network of lakes, including the nine SRSNS within eight miles of the project, were specifically carved out of the Expedited Wind Permitting area as being inappropriate for expedited permitting. Clearly the intent was to maintain their existing resource values;
- The Downeast Lakes Region is largely protected conservation land that prohibits industrial developments such as the Bowers Wind project. (See map p. 10).
- This project is not critical to helping Maine reach its wind energy goals. The initial goal is to have a total nameplate capacity of 2000 MW installed and operating by 2015. Currently Maine has a total nameplate capacity of only 430.3 MW, or 21.5% of the goal. An additional 1570 MW must be designed, permitted, built and commissioned in the next two years. The proposed Bowers Wind project, representing 48MW of nameplate capacity would fulfill only 3% of the shortfall.

The "Maine Wind Assessment 2012: A Report", prepared for the Governor's Office of Energy Independence notes that it has taken five years to achieve 21.5% of the goal

¹⁰⁴ Kleinschmidt survey, Table 8, p.27.

¹⁰⁵ Ibid, Table 12, p.30.

¹⁰⁶ Ibid, Table 13, p.31.

and there is no reason to expect that this pace will pick up. Political support has waned, many towns have enacted moratoria on wind development, and opposition has evolved from local groups to statewide groups.¹⁰⁷ Maine's arbitrary target of 2000MW of installed capacity by 2015 has become meaningless.

The Bowers Wind project does not make a significant contribution to Maine's wind energy goals. Its meager benefit to Maine residents is far outweighed by the irreparable damage it would do to the State's scenic resources.

For these reasons, we believe the Bowers Wind project's scenic damage would outweigh its projected benefits. **Rating: High**

CRITERION E.1: Extent, Nature and Duration of Public Use

Junior Lake is a four season destination for fishing, ice fishing, paddling, camping, snowmobiling and nature viewing. Like the other SRSNS being evaluated here, Junior Lake is never crowded, adding to its charm. In addition to being used year round, it is common for visitors to use Junior Lake for extended periods of time.

Summer visitors can launch their boats at Bottle Lake, Duck Lake, or Scraggly Lake and access Junior through the connected waterways. Boaters also approach Junior Lake from Pug Lake/West Grand Lake via Junior Stream. In the winter, ice fishermen can access the Lake from any number of points. An informal launch site near Bottle Island even allows them to drag an ice shack onto the Lake

The eight primitive tent sites on Junior Lake attract campers in spring, summer and fall. The islands offer many opportunities for camping, exploration, picnics and wildlife viewing. Its four sand beaches are also popular picnic spots in summer.

From Junior Lake, paddlers have access to the rest of the Downeast Lakes network with its 50+ free-to-the-public campsites. Junior Lake is part of an extensive network of loop canoe trails used by independent and guided multi-day paddles. Quiet Water Maine spotlights a trip from Pocumcus Lake to Junior, Bottle and Lower Sysladobsis.¹⁰⁸ The REI and Wilderness Inquiry websites also recommend the area's water trails. Extended paddling/camping trips are common on these waters. Until recently the Maine Wilderness Camps website included descriptions of these popular multi-lake paddling routes and recommended them to their guests. Maine Wilderness Camps also operates a shuttle service; delivering and collecting paddlers and their canoes to and from drop off and pick up points in the network of lakes.¹⁰⁹

¹⁰⁷ Maine Wind Assessment 2012, A Report, Prepared for the Governor's Office of Energy Independence and Security pursuant to Resolve 2011, Chapter 93 "To Clarify the Expectation for the 2012 Assessment of Progress On Meeting Wind Energy Development Goals"

¹⁰⁸ Quiet Water Maine, pp.141-146.

¹⁰⁹ See Exhibit F, Maine Wilderness Camps Web Site, Pleasant Lake. Following the June 2011 LURC hearing for Bowers Wind project, Maine Wilderness Camps removed this feature from their site.



Kayakers enjoying a beach on Junior Lake
Source: <http://www.panoramio.com/photo/46212785>

With its four-season use, the special appeal of a low-usage scenic lake, its connection to the eight other scenically significant lakes with numerous free campsites, Junior Lake rates High for this criterion. **Rating: High**

CRITERION E.2: The Project's Effect on Continued Use and Enjoyment of the Scenic Resource

The proposed project would have a negative effect on continued use and enjoyment of Junior Lake. The Kleinschmidt survey shows that 60% of those surveyed said the views of the proposed project would have a negative or very negative effect on their enjoyment of Junior Lake.¹¹⁰ Under its current scenic conditions, 100% of Junior Lake users in the Kleinschmidt survey said they would be likely or very likely to visit the lake in the future.¹¹¹ However, when those surveyed were shown a simulation of the turbines on Junior Lake, only 66% said they would be likely or very likely to visit the lake in the future. This represents a decline of 34 percentage points. In addition, should the project be built, 19% said that they would be very unlikely to return.¹¹²

¹¹⁰ Kleinschmidt survey, Table 16, p.33.

¹¹¹ Ibid, Table 19, p.36.

¹¹² Ibid, Table 20, p.36.

It is clear that the Bowers Wind project would have a negative impact on the public's continued use and enjoyment of Junior Lake. **Rating: High**

CRITERION F: Scope and Scale of the Project's Effect on The Scenic Resource

We rate this criterion based on the number of turbines visible and the percentage of the lake surface that would have turbine visibility. Only a very small area of this large lake would *not* have turbine views and 80% of the lake would see five or more turbines. People using the lake would have multiple turbines in view most of the time.

Daytime Turbine Visibility:

- 48% of the lake surface would have views of 9 to 12 turbines and an additional 37% would have views of 5 to 8 turbines.¹¹³
- Approximately 10% of the Lake would have visibility of the MET tower within eight miles.¹¹⁴

Nighttime Strobe Light Visibility:

- Roughly 90% of the lake's surface would have a view of at least 3-4 of the lighted turbines and approximately 48% would see 4-6 lighted turbines.¹¹⁵
- If each lighted turbine is illuminated with two strobes (as depicted in Vestas literature), that would mean that 90% of the lake would have a view of 8 flashing strobe lights.

Scope, scale and visibility must also take into account the cumulative scenic impact on recreational users. Cumulative scenic impact can take several forms. In the case of the Bowers Wind project, it can refer to the sequential cumulative impact on users who are traveling through the landscape, moving from lake to lake, perhaps camping overnight on islands, finding little respite from the views of turbines. Another form of sequential cumulative impact occurs when the public must travel through other wind projects en route to a destination. Approaching Junior Lake from the west on Route 6 one sees the 60-turbines of the Rollins Wind project. Approaching from the east on Route 6 one sees the 38 turbines of the Stetson I project and the 17 turbines of the Stetson II project.

Due to all these factors, the rating for Scope, Scale and Visibility is High. **Rating: High**

Conclusion:

Based on this analysis, it is clear that the proposed development would compromise scenic views from Junior Lake such that it would have an **unreasonable adverse effect on its scenic character or existing uses related to its scenic character.**

¹¹³ LandWorks VIA, Exhibit 4.

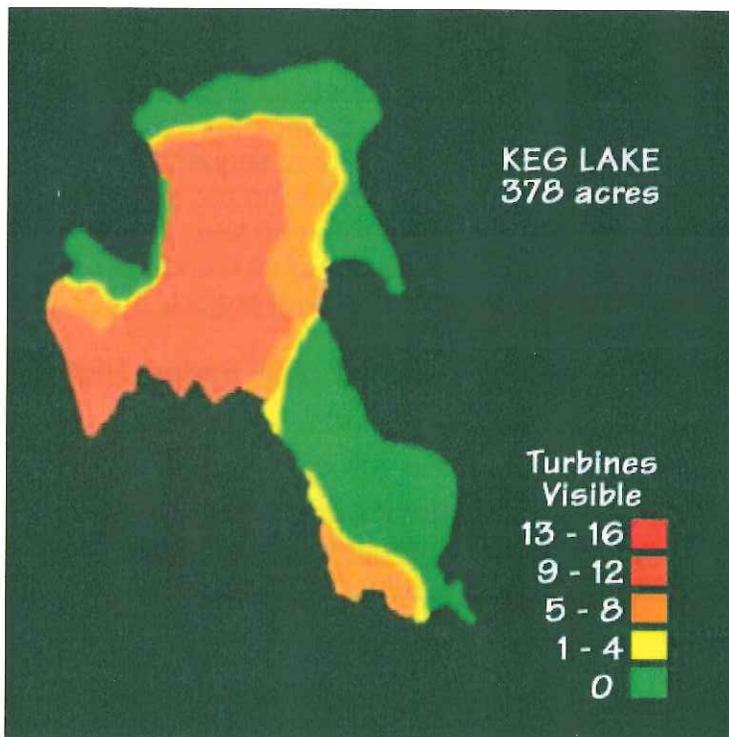
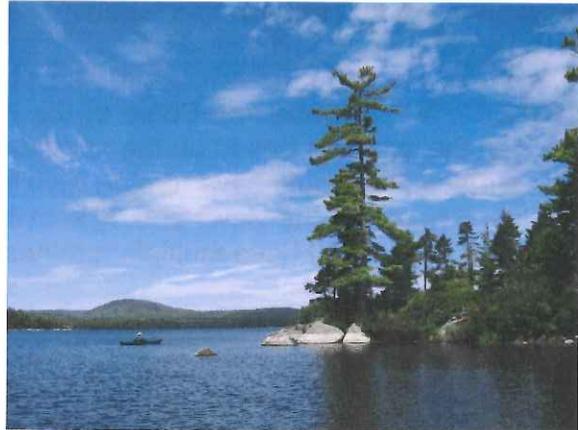
¹¹⁴ Ibid, Exhibit 8.

¹¹⁵ Ibid, Exhibit 9.

Keg Lake

The Assessment rates Keg Lake's Scenic Quality as Significant, making it a Scenic Resource of State or National Significance. In addition to its significant scenic quality, it is also recognized for its significant shoreline character and fishery.

With only 12 seasonal camps, Keg Lake is a quiet and peaceful lake. Maine's Bureau of Public Lands owns a parcel on its northern shore, and has plans to establish some primitive tent sites there¹¹⁶. There are already two primitive tent sites on its eastern shore.¹¹⁷ Anglers and paddlers can enter Keg Lake from Bottle Lake via scenic Keg Stream, a boulder-strewn, but calm, stream where moose graze in the morning. As the stream opens up into Keg Lake, there is an active Bald Eagle nest on the left which produced two chicks in 2012. The lake can also be reached from Junior Lake via a 50' portage. A popular circuit-paddle runs from Bottle Lake, up Keg Stream to Keg Lake, portage to Junior Lake, paddle south to Bottle Island, up Bottle Lake Stream and back to Bottle Lake. Keg Lake's undeveloped character and majestic red pines and cedar trees give visitors a feeling of true wilderness.



CRITERION A: Significance of the Scenic Resource

The Assessment assigns Keg Lake a rating of Significant for Scenic Quality making it a Scenic Resource of State Significance under the WEA. Using the component categories from the Evaluation" utilized by LandWorks, we supply the following accurate evaluation of its scenic attributes and quality.

Relief: Like all nine of the SRSNS lakes within eight miles of the project, Keg Lake is rimmed by hills to the north,

¹¹⁶ Per George Ritz of Maine BPL, host of guided tour of the Lakeville parcel, July 13, 2012.

¹¹⁷ LandWorks VIA, p.76.

northwest and northeast, which create a harmonious 'feel' of wilderness. The Evaluation rates on complex or dramatic relief. The harmonious vista of forested hills is a complex relief feature that adds to the scenic value of this remote and undeveloped Scenic Resource. **Rating: Medium**

Physical Features: Keg Lake's shore is lined with boulders. Its sand beaches are popular with picnickers. A generous high-bush blueberry thicket is another attraction for people, birds and bears. While Keg has no islands, its many bouldered coves and inlets attract paddlers and anglers alike. One unusual feature is a massive boulder (glacial erratic) in the middle of the lake. All alone it rises from a depth of 20 feet to break the surface. **Rating: Medium**

Shoreline Configuration: Keg Lake is elongated and numerous small coves and inlets provide visual interest along its undeveloped shores. The Assessment rated this feature as Significant. **Rating: High**

Vegetation Diversity: Like all the SRSNS being considered here, the forests around Keg Lake and on the surrounding hills are both mixed hardwoods and softwoods. There are marshy areas, and super-story trees. (Note: The Evaluation inexplicably gave this feature a score of None). **Rating: High**

Special Features: There are ample opportunities to view wildlife while visiting Keg Lake, owing to its relative lack of development. Eagles, loons, moose, deer, beavers, otters, muskrats, warblers and other migrating birds can be observed there. Water clarity is above average.¹¹⁸ It should be noted that without explanation the Evaluation gave Keg Lake a score of "None" for this scenic component. **Rating: Medium**

Inharmonious Development: There is no demerit for this factor on Keg Lake.

Using the above criteria, correcting for errors and considering the additional factors from the Assessment, our Rating for WEA Criterion A for Keg Lake is **Medium-High**. While the adjusted score of 75 is well above the threshold of 50 for Outstanding, we assign the score of Medium-High to keep in line with the Significant rating for scenic assigned by the Assessment.

¹¹⁸ Bottle Lake Campowner Newsletter, August, 2012, p.1, Average 2008 Secchi Disc Transparency of 5.9 meters vs. 2011 Mean of 5.3 (Maine Lakes Report 2011, Maine Volunteer Lake Monitoring Program, p.14).

WEA Criterion A: Significance of the Scenic Resource**Keg Lake**"Assessment" Scenic Rating: **SIGNIFICANT**

Criteria used in "The Evaluation"	Max Points	"The Evaluation"		LandWorks		PPDLW	
		Score	Rating	Score	Rating	Score	Rating
Relief ¹	30	10	Low	10	Low	20	Med
Physical Features ²	25	15	Med	15	Med	15	Med
Shoreline Configuration ³	15	5	Low	5	Low	15	High
Vegetation Diversity ⁴	15	0	None	0	None	15	High
Special Features ⁵	15	0	None	0	None	10	Med
Inharmonious Development ⁶	0	0	None	0	None	0	None
	100	30	Significant	30	Low	75	Med-High

¹ Presence of complex (layered) relief and dramatic relief only

² Presence of scenic physical features (cliffs, vertical ledges, slab ledges, rockslides, boulders, islands and beaches)

³ Index of complexity of shoreline based on a lake's variation from a perfect circle.

⁴ Presence and diversity of four major types: 1) mixed hardwoods and softwoods, 2) softwoods, 3) marsh and 4) the presence of super-story trees

⁵ Extreme water clarity and opportunity for observing wildlife

⁶ Points taken away for camps lacking vegetative screening and buffers between them, heavily eroded shorelines, powerlines or roads that are sited intrusively, dammed lakes with drastic drawdowns, dams that are intrusive, etc. Possible demerits range from 0 to -20.

CRITERION B: Existing Character of the Surrounding Area

The character of the Downeast Lakes is distinguished by forested hills that surround a network of more than a dozen interconnected lakes, with a distinct remote feel. Sportsmen have been coming to the area for more than 150 years.

Over the centuries the area's forests have been logged, with no detriment to recreational use. In fact, logging roads give the public better access to the lakes and forests. The Downeast Lakes Land Trust works to preserve the special character of the area through its purchases and management of forest lands in the area. Lastly, the Downeast Lakes were specifically carved out of the WEA's Expedited Wind Permitting Area by the Governor's Wind Task Force.

Rating: High

CRITERION C: Expectations of the Typical Viewer

Since the Kleinschmidt survey team did not survey users of Keg Lake, we utilize the survey results for all the lakes surveyed. Of the visitors surveyed, 17% expect a high and 73% expect a very high quality experience.¹¹⁹

Under current scenic conditions, 67% of those surveyed rated the lakes' scenery as very high (29%) or highest (38%). Should the project be built, shows that 45% of those surveyed rated the view with turbines with low (6%) and lowest (39%) scenic value. This shows that the proposed project would clearly change the scenic character of the area in the eyes of the recreational users of Keg Lake.¹²⁰ **Rating: High**

CRITERION D: PURPOSE AND CONTEXT OF THE PROPOSED ACTIVITY

This criterion asks the permitting agency to make a broad cost/benefit judgment comparing the proposed project's impact on the scenic resources (the cost) with its purpose and context (the benefit). A rating of 'high' means that the project's negative scenic impact outweighs the project's expected benefits. A rating of 'low' means that the project's expected benefits outweigh its negative scenic impact. We believe this analysis yields a rating of "High" for the following reasons:

- Nine SRSNS lakes within eight miles of the project would have turbine visibility. These nine lakes are all connected to each other and recreational users often visit multiple lakes in one visit and camp on the many free island campsites available;
- The Downeast Lakes Network of lakes, including the nine SRSNS within eight miles of the project, were specifically carved out of the Expedited Wind Permitting area as being inappropriate for expedited permitting. Clearly the intent was to maintain their existing resource values;
- The Downeast Lakes Region is largely protected conservation land that prohibits industrial developments such as the Bowers Wind project. (See map p. 10).
- This project is not critical to helping Maine reach its wind energy goals. The initial goal is to have a total nameplate capacity of 2000 MW installed and operating by 2015. Currently Maine has a total nameplate capacity of only 430.3 MW, or 21.5% of the goal. An additional 1570 MW must be designed, permitted, built and commissioned in the next two years. The proposed Bowers Wind project, representing 48MW of nameplate capacity would fulfill only 3% of the shortfall.

The "Maine Wind Assessment 2012: A Report", prepared for the Governor's Office of Energy Independence notes that it has taken five years to achieve 21.5% of the goal and there is no reason to expect that this pace will pick up. Political support has waned, many towns have enacted moratoriums on wind development, and opposition has

¹¹⁹ Kleinschmidt survey, p.27.

¹²⁰ Ibid, p.30.

evolved from local groups to statewide groups.¹²¹ Maine's arbitrary target of 2000MW of installed capacity by 2015 has become meaningless.

The Bowers Wind project does not make a significant contribution to Maine's wind energy goals. Its meager benefit to Maine residents is far outweighed by the irreparable damage it would do to the State's scenic resources.

For these reasons, we believe the Bowers Wind project's scenic damage would outweigh its projected benefits. **Rating: High**

CRITERION E.1: EXTENT, NATURE AND DURATION OF PUBLIC USE

Keg Lake is a popular destination for fishermen and paddlers from Bottle and Junior Lake. Paddlers travel there via a picturesque stream connecting with Bottle Lake or via a short portage to Junior Lake. The small number of camps, clustered along one shoreline, make it attractive to visitors who can paddle or cruise most of its shores and inlets without viewing any camps or manmade structures. Keg is known to be a very generous white perch lake. While more users may visit Keg in the future via the Maine Bureau of Public Lands parcel which connects it to Duck Lake, its current level of use qualifies as Medium.

Rating: Medium

CRITERION E.2: THE PROJECT'S EFFECT ON CONTINUED USE AND ENJOYMENT OF THE SCENIC RESOURCE

While the Kleinschmidt survey team didn't survey users of Keg Lake, we point to the survey results of the combined lakes that show the users would be less likely to return if the project were built. Table 17 shows that under current conditions, 93% of users surveyed are very likely to return in the future.¹²² After viewing the project simulations, only 54% are likely or very likely to visit in the future. This represents a decline of 39 percentage points. Should the project be built, 13% said that they would be very unlikely to return¹²³. Lastly, the Kleinschmidt survey shows that 44% said the proposed project would have a negative effect on their enjoyment of the lakes.¹²⁴

From these results, representing the opinions of all those surveyed on Pleasant, Scraggly and Junior Lakes, it seems reasonable to conclude that the Bowers Wind project would have a profound negative impact on the public's continued use and enjoyment of Keg Lake. **Rating: High**

¹²¹ MAINE WIND ASSESSMENT 2012, A REPORT, Prepared for the Governor's Office of Energy Independence and Security pursuant to Resolve 2011, Chapter 93 "To Clarify the Expectation for the 2012 Assessment of Progress On Meeting Wind Energy Development Goals"

¹²² Kleinschmidt survey, p.34.

¹²³ Ibid.

¹²⁴ Ibid, p.31.

CRITERION F: SCOPE AND SCALE OF THE PROJECT'S EFFECT ON THE SCENIC RESOURCE

We rate this criterion based on the number of turbines visible and the percentage of the lake surface that would have turbine visibility.

Daytime Turbine Visibility:

- One third (35%) of Keg Lake would have visibility of at least 9-12 turbines, and an additional 16% would see 5-8 turbines.¹²⁵
- A small portion of the lake's western shore would also have visibility of the MET tower.¹²⁶

Nighttime Strobe Light Visibility:

- Approximately 35% of the lake would see 5-6 lighted turbines at night, while 41% would see no lighted turbines.¹²⁷
- If each lighted turbine is illuminated with two strobes (as depicted in Vestas literature), that would mean that 35% of the lake would have a view of 12-16 flashing strobe lights.

Scope, scale and visibility must also take into account the cumulative scenic impact on recreational users. Cumulative scenic impact can take several forms. In the case of the Bowers Wind project, it can refer to the sequential cumulative impact on users who are traveling through the landscape, moving from lake to lake, perhaps camping overnight on islands, finding little respite from the views of turbines. Another form of sequential cumulative impact occurs when the public must travel through other wind projects en route to a destination. Approaching Keg Lake from the west on Route 6 one sees the 60-turbines of the Rollins Wind project. Approaching from the east on Route 6 one sees the 38 turbines of the Stetson I project and the 17 turbines of the Stetson II project.

Due to all these factors, including the fact that 41% of the lake would have no turbine visibility, the rating for Scope, Scale and Visibility is Medium High. **Rating: Med-High**

Conclusion:

Based on this analysis, it is clear that the proposed development would compromise scenic views from Keg Lake such that it would have an **unreasonable adverse effect on its scenic character or existing uses related to its scenic character.**

¹²⁵ LandWorks VIA, Exhibit 4.

¹²⁶ Ibid, Exhibit 8.

¹²⁷ Ibid, Exhibit 9.

Pleasant Lake

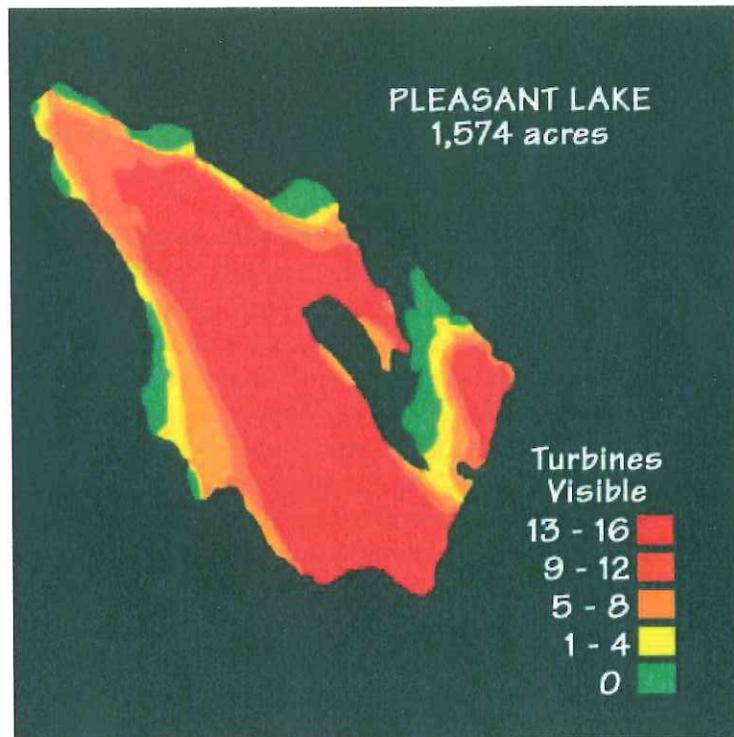
The Assessment rates Pleasant Lake's Scenic Quality as Outstanding, making it a Scenic Resource of State or National Significance. In addition to its outstanding scenic quality, it is also recognized for its significant shoreline character, outstanding fishery, and outstanding botanic features.

Pleasant Lake has only four private camps on it. One sporting camp, Maine Wilderness Camps operates there, as well as a campground where tourists can rent campsites. Recreational users access Pleasant Lake at the Maine Wilderness Camps boat launch, the campground boat launch (free to the public), or by a short portage from Scraggly Lake. Pleasant Lake is almost entirely surrounded by the Sunrise Conservation Easement, owned by Typhoon LLC (Wagner Forest Management) and managed by the New England Forestry Foundation. The stated purpose of the Easement is:

“...to maintain the property in its present and historic undeveloped condition that allows its continued operation as a working forest with the perpetual ability to produce forest products, and to conserve and/or enhance forest and wildlife habitats, undeveloped shoreline, and historic public recreation opportunities of the Property for present and future generations.”¹²⁸

The same land is also protected by an access easement held by the Maine Department of Conservation, Bureau of Parks and Lands.

¹²⁸ Conservation Easement on Land of Typhoon LLC Located in Washington and Penobscot Counties, Maine; Penobscot County Deeds, Book 988, Page 105; May, 25, 2005.



CRITERION A: Significance of the Scenic Resource

The Assessment assigns Pleasant Lake a rating of Outstanding for Scenic Quality making it a Scenic Resource of State Significance under the WEA. Using the component categories from the Evaluation utilized by LandWorks, we supply the following accurate evaluation of its scenic attributes and quality.

Relief: Like all nine of the SRSNS lakes within eight miles of the project, Pleasant Lake is rimmed by forested hills. Less than a mile northeast of the lake and running parallel to it is Trout Lake Ridge which rises 480' above the lake. These features combine to create interesting relief and a harmonious 'feel' of wilderness. While the Evaluation rates this feature only on complex or dramatic relief, these two factors are not part of the WEA. The harmonious vista of forested hills is a complex relief feature that adds to the scenic value of this Scenic Resource. **Rating: Medium**

Physical Features: The shoreline of Pleasant Lake is lined with boulders, beaches and coves. The lake's large peninsula has an island-like feel. Behind the peninsula is Dark Cove, which is popular with paddlers. The cove has a maximum depth of 14' whereas the main lake is 92' deep. **Rating: Medium**

Shoreline configuration: Pleasant Lake is elongated with numerous coves and inlets providing visual interest. This is supported by the Assessment rating of Significant for shoreline. **Rating: High**

Vegetation Diversity: Like all the SRSNS being considered here, the forests around Pleasant Lake and on the surrounding hills are both mixed hardwoods and softwoods. There are marshy areas, and super-story trees. It's noteworthy that Pleasant Lake is recognized in the Assessment for having "Outstanding" botanic qualities. **Rating: High**

Special Features: There are ample opportunities to view wildlife while visiting Pleasant Lake. Eagles, loons, moose, deer, beavers, otters, muskrats, warblers and other migrating birds can be observed there. Overall water quality is high, helped in part by its minimal development. Water clarity is well above average.¹²⁹ Pleasant Lake is unusual in that it offers two segregated fisheries: coldwater and warmwater, a fact not lost in Maine's Inland Fisheries and Wildlife. The main lake is deep and provides excellent fishing for salmon, togue, whitefish and brook trout while Dark Cove, which is shallower, offers fishing for smallmouth bass, white perch and sunfish. Dark Cove also provides ample spawning habitat for coldwater species while the four brooks that feed the lake provide spawning and nursery areas for brook trout.¹³⁰ The Assessment rates the quality of this fishery Outstanding. **Rating: High.**

Inharmonious Development: This lake is relatively undeveloped and therefore there is no demerit for this factor.

¹²⁹ Maine Lakes Report 2011, Maine Volunteer Lake Monitoring Program, Average Secchi Disc Transparency of 7.0 meters – p. 43 vs. 2011 Mean of 5.3 - p.14.

¹³⁰ Maine Department of Inland Fisheries and Wildlife, Maine Lake Survey Maps, http://www.maine.gov/ifw/fishing/lakesurvey_maps/washington/pleasant_lake_t7r2.pdf

Using the above criteria, correcting for errors and considering the additional factors from the Assessment, our Rating for WEA Criterion A for Pleasant Lake is **High** as illustrated below. This is consistent with the Outstanding scenic rating given to Pleasant Lake in the MWLA.

WEA Criterion A: Significance of the Scenic Resource							
Pleasant Lake				"Assessment" Scenic Rating: OUTSTANDING			
Criteria used in "The Evaluation"	Max Points	"The Evaluation"		LandWorks		PPDLW	
		Score	Rating	Score	Rating	Score	Rating
Relief ¹	30	10	Low	10	Low	20	Med
Physical Features ²	25	15	Med	15	Med	15	Med
Shoreline Configuration ³	15	5	Low	5	Low	15	High
Vegetation Diversity ⁴	15	10	Med	10	Med	15	High
Special Features ⁵	15	10	Med	10	Med	15	High
Inharmonious Development ⁶	0	0	None	0	None	0	None
	100	50	Outstanding	50	Medium ⁷	80	High

¹ Presence of complex (layered) relief and dramatic relief only

² Presence of scenic physical features (cliffs, vertical ledges, slab ledges, rockslides, boulders, islands and beaches)

³ Index of complexity of shoreline based on a lake's variation from a perfect circle.

⁴ Presence and diversity of four major types: 1) mixed hardwoods and softwoods, 2) softwoods, 3) marsh and 4) the presence of super-story trees

⁵ Extreme water clarity and opportunity for observing wildlife

⁶ Points taken away for camps lacking vegetative screening and buffers between them, heavily eroded shorelines, powerlines or roads that are sited intrusively, dammed lakes with drastic drawdowns, dams that are intrusive, etc. Possible demerits range from 0 to -20.

⁷ LandWorks believes that the Evaluation overrates Pleasant Lake Even though the Assessment arrived at the same "Outstanding" rating. The VIA says the configuration of the lake itself is ordinary, the vegetation is typical of the region, there are no other dramatic or unique scenic features and there's evidence of logging. It ignores its "Outstanding" botanical rating, Trout Lake Ridge and Dark Cove.

CRITERION B: Existing Character of the Surrounding Area

The character of the Downeast Lakes is distinguished by forested hills that surround a network of more than a dozen interconnected lakes, with a distinct remote feel. Sportsmen have been coming to the area for more than 150 years.

The website of Maine Wilderness Camps, a sporting camp located on the northern shore of Pleasant Lake, states: "...According to the old log books dating back to the 1800s, Pleasant Lake was known as a sportsman's paradise. Private groups and fishing club members traveled by canoe from Junior, Duck and Scraggly Lakes just to fish Pleasant Lake..."¹³¹

Over the centuries the area's forests have been harvested several times, with no detriment to recreational use. In fact, logging roads give the public better access to the lakes and forests. The Downeast Lakes Land Trust works to preserve the special character of the area through its purchases and management of forest lands in the area. Lastly, the Downeast Lakes were specifically carved out of the WEA's Expedited Wind Permitting Area by the Governor's Wind Task Force. **Rating: High**

CRITERION C: Expectations of the Typical Viewer

Viewer expectations of Pleasant Lake are high and the proposed project would seriously diminish the scenic quality of the lake.

The Kleinschmidt survey found that 97% of respondents on Pleasant Lake expected a high (26%) or very high (71%) quality experience.¹³² The survey also found that 93% of visitors to Pleasant Lake rated the current scenic quality greater than "typical", with 77% rating it with high or highest scenic value.¹³³ Should the project be built, that figure drops to only 33%, a decline of 44 percentage points. In addition, 23% of those surveyed gave the simulated view the lowest scenic score.¹³⁴ This demonstrates an unreasonable adverse effect on the scenic character of the lake. **Rating: High**

CRITERION D: Purpose and Context of the Proposed Activity

This criterion asks the permitting agency to make a broad cost/benefit judgment comparing the proposed project's impact on the scenic resources (the cost) with its purpose and context (the benefit). A rating of 'high' means that the project's negative scenic impact outweighs the project's expected benefits. A rating of 'low' means that the project's expected benefits outweigh its negative scenic impact. We believe this analysis yields a rating of "High" for the following reasons:

¹³¹ <http://www.mainewildernesscamps.com/fishing.html>

¹³² Kleinschmidt survey, p.27.

¹³³ Ibid. p.30.

¹³⁴ Ibid. p.31.

- Nine SRSNS lakes within eight miles of the project would have turbine visibility. These nine lakes are all connected to each other and recreational users often visit multiple lakes in one visit and camp on the many free island campsites available;
- The Downeast Lakes Network of lakes, including the nine SRSNS within eight miles of the project, were specifically carved out of the Expedited Wind Permitting area as being inappropriate for expedited permitting. Clearly the intent was to maintain their existing resource values;
- The Downeast Lakes Region is largely protected conservation land that prohibits industrial developments such as the Bowers Wind project. (See Map p.10).
- This project is not critical to helping Maine reach its wind energy goals. The initial goal is to have a total nameplate capacity of 2000 MW installed and operating by 2015. Currently Maine has a total nameplate capacity of only 430.3 MW, or 21.5% of the goal. An additional 1570 MW must be designed, permitted, built and commissioned in the next two years. The proposed Bowers Wind project, representing 48MW of nameplate capacity would fulfill only 3% of the shortfall.

The “Maine Wind Assessment 2012: A Report”, prepared for the Governor’s Office of Energy Independence notes that it has taken five years to achieve 21.5% of the goal and there is no reason to expect that this pace will pick up. Political support has waned, many towns have enacted moratoriums on wind development, and opposition has evolved from local groups to statewide groups.¹³⁵ Maine’s arbitrary target of 2000MW of installed capacity by 2015 has become meaningless.

The Bowers Wind project does not make a significant contribution to Maine’s wind energy goals. Its meager benefit to Maine residents is far outweighed by the irreparable damage it would to the State’s scenic resources.

For these reasons, we believe the Bowers Wind project’s scenic damage would outweigh its projected benefits. **Rating: High**

CRITERION E.1: Extent, Nature and Duration of Public Use

Pleasant Lake is a four season destination for fishing, ice fishing, paddling, snowmobiling and nature viewing. Like the other SRSNS being evaluated here, Pleasant Lake is never crowded, adding to its charm. In addition to being used year round, it is common for visitors to use Pleasant Lake for extended periods of time. If someone just wants a swim or a few hours of fishing, there are many lakes that are more convenient. Those who use Pleasant Lake tend to stay several days or more. After a short portage to Scraggly Lake, paddlers have access the rest of the Downeast Lakes network with its 50+ free-to-the-public campsites. Extended paddling/camping trips are common on these waters. Until

¹³⁵ MAINE WIND ASSESSMENT 2012, A REPORT, Prepared for the Governor’s Office of Energy Independence and Security pursuant to Resolve 2011, Chapter 93 “To Clarify the Expectation for the 2012 Assessment of Progress On Meeting Wind Energy Development Goals”

recently the Maine Wilderness Camps website included descriptions of these popular multi-lake paddling routes and recommended them to their guests. Maine Wilderness Camps also operates a shuttle service, delivering and collecting paddlers and their canoes to and from drop off and pick up points in the network of lakes.¹³⁶ With four-season use, the special appeal of a low-usage scenic lake, its connection to the eight other scenically significant lakes with numerous free campsites, Pleasant Lake earns a high rating for this criterion. **Rating: High**

CRITERION E.2: The Project's Effect on Continued Use and Enjoyment of the Scenic Resource

The proposed wind project would have a negative effect on both the continued use of and enjoyment of Pleasant Lake. This is born out by the results of the Kleinschmidt survey. Under current conditions, 97% of Pleasant Lake users surveyed are likely (3%) or very likely (94%) to visit the lake in the future.¹³⁷ However, after viewing a simulation of project views, only 57% are likely or very likely to visit the lake in the future. This represents a decline of 40 percentage points.¹³⁸ Should the project be built, 14% of those surveyed said that they would be unlikely or very unlikely to return.¹³⁹ In addition, the survey revealed that 30% of those surveyed said the proposed project would have a negative or very negative effect on their enjoyment of Pleasant Lake.¹⁴⁰ The Bowers Wind project would have a negative impact on the public's continued use and enjoyment of Pleasant Lake. **Rating: High**

CRITERION F: Scope and Scale of the Project's Effect on The Scenic Resource

We rate this criterion based on the number of turbines visible and the percentage of the lake surface that would have turbine visibility. Nearly 70% of the surface of Pleasant Lake would have views of all 16 of the project's turbines.

Daytime Turbine Visibility:

- 67% of the lake surface would have views of 13 to 16 turbines and an additional 19% would have views of 9 to 12 turbines.¹⁴¹
- Approximately 80% of the Lake would have visibility of the MET tower.¹⁴²

Nighttime Strobe Light Visibility:

- Roughly 67% of the lake's surface would have a view of 7-8 lighted turbines at night plus the lighted MET tower¹⁴³.

¹³⁶ See Exhibit F, Maine Wilderness Camps Web Site, Pleasant Lake. Following the June 2011 LURC hearing for Bowers Wind project, Maine Wilderness Camps removed this feature from their site.

¹³⁷ Kleinschmidt survey, p.36.

¹³⁸ Ibid. p.36.

¹³⁹ Ibid.

¹⁴⁰ Ibid. p.33.

¹⁴¹ LandWorks VIA, Exhibit 4.

¹⁴² Ibid, Exhibit 8.

¹⁴³ Ibid, Exhibit 9.

- If each lighted turbine is illuminated with two strobes (as depicted in Vestas literature), the majority of the lake would see 17 flashing lights (two per lighted turbine plus the MET tower).

Scope, scale and visibility must also take into account the cumulative scenic impact on recreational users. Cumulative scenic impact can take several forms. In the case of the Bowers Wind project, it can refer to the sequential cumulative impact on users who are traveling through the landscape, moving from lake to lake, perhaps camping overnight on islands, finding little respite from the views of turbines. Another form of sequential cumulative impact occurs when the public must travel through other wind projects enroute to a destination. Approaching Pleasant Lake from the west on Route 6 one sees the 60-turbines of the Rollins Wind project. Approaching from the east on Route 6 one sees the 38 turbines of the Stetson I project and the 17 turbines of the Stetson II project.

Due to all these factors, the rating for Scope, Scale and Visibility is High. **Rating: High**

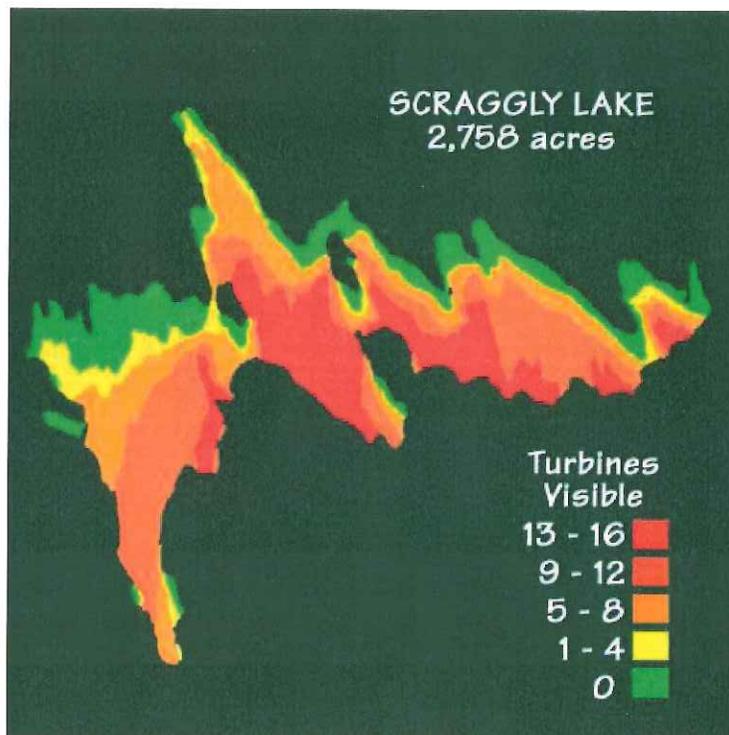
Conclusion:

Based on this analysis, it is clear that the proposed development would compromise views from Pleasant Lake such that it would have **an unreasonable adverse effect on its scenic character or existing uses related to its scenic character.**

Scraggly Lake

The Assessment rates Scraggly Lake's Scenic Quality as Significant, making it a Scenic Resource of State or National Significance. In addition to its significant scenic quality, it is also recognized for its significant shoreline character, fishery, and cultural features.

Scraggly Lake has only a handful of private camps. Approximately one third of the shoreline, on the north side of the lake, is owned by the Passamaquoddy Tribe. The remainder of the lake shore is protected under the Sunrise Conservation Easement that guarantees the land will never be developed and will always be open to the public. Visitors to Scraggly Lake enter by water from Junior Lake, by portage from Pleasant Lake, or via the boat launch at Hasty Cove off of Amazon Road. The boat launch at Hasty Cove is frequently used by the Guides from Grand Lake Stream.



CRITERION A: Significance of the Scenic Resource

The Assessment assigns Scraggly Lake a rating of Significant for Scenic Quality making it a Scenic Resource of State Significance under the WEA. Using the component categories from the Evaluation utilized by LandWorks, we supply the following accurate evaluation of its scenic attributes and quality.

Relief: Like all nine of the SRSNS lakes within eight miles of the project, Scraggly Lake is rimmed by layers of forested hills, which create a multilayered visual frame to the lake. The Evaluation rates this factor on complex or dramatic relief. The

harmonious vista of forested hills is a complex relief feature that adds to the scenic value of this Scenic Resource. **Rating: Medium**



Physical Features: Scraggly Lake has three of the features the Evaluation looks for: several boulder-lined coves, large and small. It also has several beaches and more than a dozen islands. **Rating: Medium**

Shoreline Configuration: Scraggly Lake was clearly scratched out by the retreating glaciers at the end of the Ice Age. It is a zigzag of coves and inlets punctuated with islands that make it one of the Downeast Lakes Region's most beautiful lakes. This is supported by the Assessment rating of Significant for shoreline. **Rating: High**

Vegetation Diversity: Like all the SRSNS being considered here, the forests around Scraggly Lake and on the surrounding hills are both mixed hardwoods and softwoods. There are marshy areas, and super-story trees. The Evaluation rates this High for Scraggly Lake. **Rating: High**

Special Features: There are ample opportunities to view wildlife while visiting Scraggly Lake. Eagles, loons, moose, deer, beavers, otters, muskrats, warblers and other migrating birds can be observed there. There are at least two active Bald Eagle nests on Scraggly (MDIF&W nest #189E and #189F). Both have been active for a number of years. Nest #189E is located on one of the islands and in 2012 produced two chicks which survived.

Quiet Water Maine writes about visiting Scraggly Lake, "...We saw a number of eagles here, along with wood duck, loon, ring-necked duck, deer, and a huge snapping turtle. During a morning paddle up into Pleasant Lake, we watched a playful family of otters in the glass-smooth water...."¹⁴⁴

Overall water quality is high, helped in part by springs and its minimal development. Water clarity is above average.¹⁴⁵ In addition, the Assessment rates the quality of this fishery and cultural features as Significant. **Rating: Medium**

Inharmonious Development: Owing to its relative lack of development (only five primitive camps), there is no demerit for this factor.

Using the above criteria, correcting for errors and considering the additional factors from the Assessment, our Rating for WEA Criterion A for Scraggly Lake is **Medium-High** as

¹⁴⁴ Quiet Water Maine, p.149.

¹⁴⁵ <http://www.lakesofmaine.org/lake-water-clarity.html?m=9649> - Average Secchi Disk Transparency of 5.5 in 2009, vs. mean of 5.3, per Maine Lakes Report 2011, Maine Volunteer Lake Monitoring Program, p.14.

illustrated below. While the total adjusted score moves it from 45 to 70 – well above the minimum 50 for the ‘Outstanding’ ranking of the Evaluation, we rate it Medium-High, adhering to the Assessment’s “Significant” rating.

WEA Criterion A: Significance of the Scenic Resource							
Scraggly Lake				"Assessment" Scenic Rating: SIGNIFICANT			
Criteria used in "The Evaluation"	Max Points	"The Evaluation"		LandWorks		PPDLW	
		Score	Rating	Score	Rating	Score	Rating
Relief ¹	30	10	Low	10	Low	15	Med
Physical Features ²	25	10	Low	10	Low	15	Med
Shoreline Configuration ³	15	10	Med	10	Med	15	High
Vegetation Diversity ⁴	15	15	High	15	High	15	High
Special Features ⁵	15	0	None	0	None	10	Med
Inharmonious Development ⁶	0	0	None	0	None	0	None
	100	45	Significant	45	Medium	70	Med-High

¹ Presence of complex (layered) relief and dramatic relief only

² Presence of scenic physical features (cliffs, vertical ledges, slab ledges, rockslides, boulders, islands and beaches)

³ Index of complexity of shoreline based on a lake's variation from a perfect circle.

⁴ Presence and diversity of four major types: 1) mixed hardwoods and softwoods, 2) softwoods, 3) marsh and 4) the presence of super-story trees

⁵ Extreme water clarity and opportunity for observing wildlife

⁶ Points taken away for camps lacking vegetative screening and buffers between them, heavily eroded shorelines, powerlines or roads that are sited intrusively, dammed lakes with drastic drawdowns, dams that are intrusive, etc. Possible demerits range from 0 to -20.

CRITERION B: Existing Character of the Surrounding Area

The character of the Downeast Lakes is distinguished by forested hills that surround a network of more than a dozen interconnected lakes, with a distinct remote feel. Sportsmen have been coming to the area for more than 150 years.

Over the centuries the area's forests have been logged, with no detriment to recreational use. In fact logging roads give the public better access to the lakes and forests. The Downeast Lakes Land Trust works to preserve the special character of the area through its purchases and management of forest lands in the area. Lastly, the Downeast Lakes were

specifically carved out of the WEA's Expedited Wind Permitting Area by the Governor's Wind Task Force.

Rating: High

CRITERION C: Expectations of the Typical Viewer Viewer expectations of Scraggly Lake are high and the proposed project would seriously diminish the scenic quality of the lake.

The Kleinschmidt survey found that 77% of respondents expected a very high quality experience during their visit to Scraggly Lake.¹⁴⁶ All (100%) of surveyed visitors rated the current scenic quality on Scraggly Lake greater than "typical", with 39% rating it with the highest scenic value.¹⁴⁷ However, were the project to be built, 61% gave the simulated view of the lake with turbines the lowest scenic value.¹⁴⁸ This demonstrates an unreasonable adverse effect on the scenic character of the lake. **Rating: High**

CRITERION D: Purpose and Context of the Proposed Activity

This criterion asks the permitting agency to make a broad cost/benefit judgment comparing the proposed project's impact on the scenic resources (the cost) with its purpose and context (the benefit). A rating of 'high' means that the project's negative scenic impact outweighs the project's expected benefits. A rating of 'low' means that the project's expected benefits outweigh its negative scenic impact. We believe this analysis yields a rating of "High" for the following reasons:

- Nine SRSNS lakes within eight miles of the project would have turbine visibility. These nine lakes are all connected to each other and recreational users often visit multiple lakes in one visit and camp on the many free island campsites available;
- The Downeast Lakes Network of lakes, including the nine SRSNS within eight miles of the project, were specifically carved out of the Expedited Wind Permitting area as being inappropriate for expedited permitting. Clearly the intent was to maintain their existing resource values;
- The Downeast Lakes Region is largely protected conservation land that prohibits industrial developments such as the Bowers Wind project. (See map p.10).
- This project is not critical to helping Maine reach its wind energy goals. The initial goal is to have a total nameplate capacity of 2000 MW installed and operating by 2015. Currently Maine has a total nameplate capacity of only 430.3 MW, or 21.5% of the goal. An additional 1570 MW must be designed, permitted, built and commissioned in the next two years. The proposed Bowers Wind project, representing 48MW of nameplate capacity would fulfill only 3% of the shortfall.

The "Maine Wind Assessment 2012: A Report", prepared for the Governor's Office of

¹⁴⁶ Kleinschmidt User Survey, p.27

¹⁴⁷ Ibid. p.30.

¹⁴⁸ Ibid. p.31.

Energy Independence notes that it has taken five years to achieve 21.5% of the goal and there is no reason to expect that this pace will pick up. Political support has waned, many towns have enacted moratoria on wind development, and opposition has evolved from local groups to statewide groups.¹⁴⁹ Maine's arbitrary target of 2000MW of installed capacity by 2015 has become meaningless.

The Bowers Wind project does not make a significant contribution to Maine's wind energy goals. Its meager benefit to Maine residents is far outweighed by the irreparable damage it would to the State's scenic resources.

For these reasons, we believe the Bowers Wind project's scenic damage would outweigh its projected benefits. **Rating: High**

CRITERION E.1: Extent, Nature and Duration of Public Use

Scraggly Lake is a four season destination for fishing, ice fishing, paddling, snowmobiling and nature viewing. Like the other SRSNS being evaluated here, Scraggly Lake is never crowded, adding to its charm. In addition to being used year round, it is common for visitors to use Scraggly Lake for more than one day, owing to its many campsites. If someone just wants to swim or enjoy a few hours of fishing, there are many lakes that are more convenient. From Scraggly Lake, boaters usually visit one or more of the connected lakes in the Downeast Lakes network with its 50+ free-to-the-public campsites. Extended paddling/camping trips are common on these waters, and are referenced in guidebooks and on-line references. With four-season use, the special appeal of a low-usage scenic lake, its connection to the eight other scenically significant lakes with numerous free campsites, Scraggly Lake earns a high rating for this criterion. **Rating: High**

CRITERION E.2: The Project's Effect on Continued Use and Enjoyment of the Scenic Resource

The Kleinschmidt survey shows that under current conditions 100% of Scraggly Lake users surveyed said they were likely (8%) or very likely (92%) to visit the lake in the future.¹⁵⁰ However, after seeing the LandWorks simulation with the proposed wind turbines, 62% said they were likely or very likely to visit the lake in the future, a decline of 38 percentage points. Should the project be built, 15% said that they would be very unlikely to return.¹⁵¹ In addition, the Kleinschmidt survey shows that 50% said the proposed project would have a negative or very negative effect on their enjoyment of Scraggly Lake.¹⁵²

¹⁴⁹ MAINE WIND ASSESSMENT 2012, A REPORT, Prepared for the Governor's Office of Energy Independence and Security pursuant to Resolve 2011, Chapter 93 "To Clarify the Expectation for the 2012 Assessment of Progress On Meeting Wind Energy Development Goals"

¹⁵⁰ Kleinschmidt User Survey, Table 19, p.36.

¹⁵¹ Ibid. p.36.

¹⁵² Ibid. p.33.

It is clear from the Kleinschmidt survey that the Bowers Wind project would have a serious negative impact on the public's continued use and enjoyment of Scraggly Lake. **Rating: High**

CRITERION F: Scope and Scale of the Project's Effect on the Scenic Resource

We rate this criterion based on the number of turbines visible and the percentage of the lake surface that would have turbine visibility. Only a small area of this large lake would not have turbine views and 65% of the lake would see five or more turbines. People using Scraggly Lake would have multiple turbines in view most of the time.

Daytime Turbine Visibility:

- 65% of the lake surface would have views of more than nine turbines.
- 30% of the surface would have visibility of 13-16 turbines.¹⁵³
- In addition approximately 50% of the Lake would have visibility of the MET tower.¹⁵⁴

Nighttime Strobe Light Visibility:

- Roughly 65% of the lake's surface would have a view of at least 5-6 of the lighted turbines and 30% would see all eight lighted turbines.¹⁵⁵
- If each lighted turbine is illuminated with two strobes (as depicted in Vestas literature), then 65% of the lake would see up to 13 flashing lights (two per lighted turbine plus the MET tower).

Scope, scale and visibility must also take into account the cumulative scenic impact on recreational users. Cumulative scenic impact can take several forms. In the case of the Bowers Wind project, it can refer to the sequential cumulative impact on users who are traveling through the landscape, moving from lake to lake, perhaps camping overnight on islands, finding little respite from the views of turbines. Another form of sequential cumulative impact occurs when the public must travel through other wind projects en route to a destination. Approaching Scraggly Lake from the west on Route 6 one sees the 60-turbines of the Rollins Wind project. Approaching from the east on Route 6 one sees the 38 turbines of the Stetson I project and the 17 turbines of the Stetson II project.

Due to all these factors, the rating for Scope, Scale and Visibility is High. **Rating: High**

Conclusion:

Based on this analysis, it is clear that the proposed development would compromise views from Scraggly Lake such that it would have an **unreasonable adverse effect on its scenic character or existing uses related to its scenic character.**

¹⁵³ LandWorks VIA, Exhibit 4.

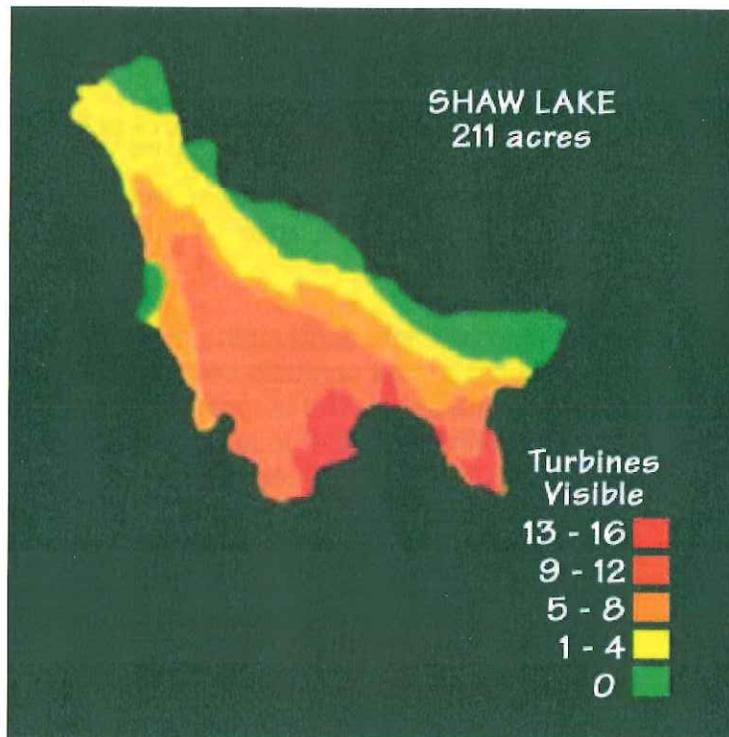
¹⁵⁴ Ibid, Exhibit 8.

¹⁵⁵ Ibid, Exhibit 9.

Shaw Lake

The Assessment rates Shaw Lake's Scenic Quality as Significant, making it a Scenic Resource of State or National Significance. In addition to its significant scenic quality, it is also recognized for its significant fishery.

Shaw Lake is a remote and undeveloped lake, completely surrounded by the Sunrise Conservation Easement and Passamaquoddy tribal land. Paddlers and fishermen access the lake via a small stream and short portage from Scraggly Lake or from a gravel road. Its undeveloped character gives visitors an experience of wilderness. The applicant's VIA states that there is a 'subdivision' nearby. In reality the Vinegar Hill Subdivision consists of sixty off-the-grid 40+ acre lots of which only a few have hunting camps on them. This 'subdivision' has no visual or noise impact on the users of Shaw Lake.



CRITERION A: Significance of the Scenic Resource

The Assessment assigns Shaw Lake a rating of Significant for Scenic Quality making it a Scenic Resource of State Significance under the WEA. Using the component categories from the Evaluation utilized by LandWorks, we supply the following accurate evaluation of its scenic attributes and quality.

Relief: Like all nine of the SRSNS lakes within eight miles of the project, Shaw Lake is rimmed by hills and ridges, namely Shaw Lake Ridge, Vinegar Hill, Pleasant Lake Ridge, Dill Hill and others, which combine to create a harmonious 'feel' of wilderness.

The Evaluation rates this factor on complex or dramatic relief. The harmonious vista of forested hills is a complex relief feature that adds to the scenic value of this remote and undeveloped Scenic Resource. **Rating: Medium**

Physical Features: Shaw Lake has two of the seven physical features listed in the Evaluation. It is lined with boulders and there is one island. Moose frequent the marshy area where Wallace Brook enters the lake. **Rating: Medium**

Shoreline Configuration: Shaw Lake is elongated and has small coves and inlets that provide visual interest along its entirely undeveloped shores. **Rating: Low**

Vegetation Diversity: Like all the SRSNS being considered here, the forests around Shaw Lake and on the surrounding hills are both mixed hardwoods and softwoods. There are also marshy areas, and super-story trees. **Rating: High**

Special Features: Because it is devoid of development, Shaw Lake offers ample opportunities to view wildlife. Eagles, ospreys, loons, moose, deer, beavers, otters, muskrats, warblers and other migrating birds can be observed there. Water clarity is slightly below average.¹⁵⁶ The Assessment gives Shaw Lake a significant rating for its fishery. Remarkably, the Evaluation inexplicably gave Shaw Lake a score of "None" for this criterion. **Rating: Medium.**

Inharmonious Development: Due to the fact that Shaw Lake is undeveloped, there is no demerit for this factor.

Using the above criteria, correcting for errors and considering the additional factors from the Assessment, our rating for WEA Criterion A for Shaw Lake is Medium-High as illustrated below. While the total score with updated and accurate information exceeds the 50 point threshold for 'Outstanding', we rate this Criterion **Medium-High**, in line with the Significant designation in the Assessment.

¹⁵⁶ Maine Lakes Report 2011, Maine Volunteer Lake Monitoring Program, Secchi Disc Transparency for Shaw Lake of 4.6 (p. 44) vs. mean of 5.3 (p.14).

WEA Criterion A: Significance of the Scenic Resource**Shaw Lake**"Assessment" Scenic Rating: **SIGNIFICANT**

Criteria used in "The Evaluation"	Max Points	"The Evaluation"		LandWorks		PPDLW	
		Score	Rating	Score	Rating	Score	Rating
Relief ¹	30	10	Low	10	Low	20	Med
Physical Features ²	25	15	Med	15	Med	15	Med
Shoreline Configuration ³	15	5	Low	5	Low	5	Low
Vegetation Diversity ⁴	15	10	Med	10	Med	15	High
Special Features ⁵	15	0	None	0	None	10	Med
Inharmonious Development ⁶	0	0	None	0	None	0	None
	100	40	Significant	40	Medium	65	Med-High

¹ Presence of complex (layered) relief and dramatic relief only

² Presence of scenic physical features (cliffs, vertical ledges, slab ledges, rockslides, boulders, islands and beaches)

³ Index of complexity of shoreline based on a lake's variation from a perfect circle.

⁴ Presence and diversity of four major types: 1) mixed hardwoods and softwoods, 2) softwoods, 3) marsh and 4) the presence of super-story trees

⁵ Extreme water clarity and opportunity for observing wildlife

⁶ Points taken away for camps lacking vegetative screening and buffers between them, heavily eroded shorelines, powerlines or roads that are sited intrusively, dammed lakes with drastic drawdowns, dams that are intrusive, etc. Possible demerits range from 0 to -20.

CRITERION B: Existing Character of the Surrounding Area

The character of the Downeast Lakes is distinguished by forested hills that surround a network of more than a dozen interconnected lakes, with a distinct remote feel. Sportsmen have been coming to the area for more than 150 years.

Over the centuries the area's forests have been harvested, with no detriment to recreational use. In fact, logging roads give the public better access to the lakes and forests. The Downeast Lakes Land Trust works to preserve the special character of the area through its purchases and sustainable management of forest lands. Furthermore, the region's valuable character was affirmed when the Governor's Task Force on Wind specifically excluded it from the WEA's Expedited Wind Permitting Area. **Rating: High**

CRITERION C: Expectations of the Typical Viewer

Shaw Lake receives very little traffic. It is not surprising that the Kleinschmidt survey team did not encounter anyone on the Friday and Saturday they visited the Lake. Even if they had, the number interviewed would have been statistically insignificant to reach any conclusions. However, if we look at the results for the other lakes surveyed we see that a combined 17% expect a high and 73%¹⁵⁷ expect a very high quality experience. We think it's reasonable to assume that those who make the effort to visit Shaw Lake do so with even higher expectations than the norm. Similarly, with nothing manmade visible from the lake, we believe that the users would consider wind turbines as an even more egregious intrusion on the remote and wild scenic character of Shaw Lake. **Rating: High**

CRITERION D: Purpose and Context of the Proposed Activity

This criterion asks the permitting agency to make a broad cost/benefit judgment comparing the proposed project's impact on the scenic resources (the cost) with its purpose and context (the benefit). A rating of 'high' means that the project's negative scenic impact outweighs the project's expected benefits. A rating of 'low' means that the project's expected benefits outweigh its negative scenic impact. We believe this analysis yields a rating of "High" for the following reasons:

- Nine SRSNS lakes within eight miles of the project would have turbine visibility. These nine lakes are all connected to each other and recreational users often visit multiple lakes in one visit and camp on the many free island campsites available;
- The Downeast Lakes Network of lakes, including the nine SRSNS within eight miles of the project, were specifically carved out of the Expedited Wind Permitting area as being inappropriate for expedited permitting. Clearly the intent was to maintain their existing resource values;
- The Downeast Lakes Region is largely protected conservation land that prohibits industrial developments such as the Bowers Wind project. (See map p.10).
- Maine's wind energy goal is to have a total nameplate capacity of 2000 MW installed and operating by 2015. Maine currently has a total installed nameplate capacity of only 430.3 MW, or 21.5% of the goal. An additional 1570 MW must be designed, permitted, built and commissioned in the next two years. The Bowers Wind project is not critical to helping Maine reach its wind energy goals. At 48MW of nameplate capacity, the project would fulfill only 3% of the shortfall.

The "Maine Wind Assessment 2012: A Report", prepared for the Governor's Office of Energy Independence notes that it has taken five years to achieve 21.5% of the goal and there is no reason to expect that this pace will pick up. The report notes that political support has waned, many towns have enacted moratoria on wind development

¹⁵⁷ Kleinschmidt survey, p.27.

and opposition has evolved from local groups to statewide groups.¹⁵⁸ Maine's arbitrary target of 2000MW of installed capacity by 2015 has become meaningless.

The Bowers Wind project does not make a significant contribution to Maine's wind energy goals. Its meager benefit to Maine residents is far outweighed by the irreparable damage it would do to the State's scenic resources.

For these reasons, we believe the Bowers Wind project's scenic damage would outweigh its projected benefits. **Rating: High**

CRITERION E.1: Extent, Nature and Duration of Public Use

Due to its remoteness, Shaw Lake is a destination for determined bass fishermen and paddlers who seek a very remote experience on the water. Although it is just a short drive, paddle or portage from the rest of the lake chain, it receives only light use, and thus its rating for this criterion is low. **Rating: Low**

CRITERION E.2: The Project's Effect on Continued Use and Enjoyment of the Scenic Resource

While the Kleinschmidt survey team didn't encounter anyone using Shaw Lake, we point to the survey results of the combined lakes that show the users surveyed would be less likely to return if the project were built. The survey shows that under current conditions, 93% of the users of the lakes combined are very likely to visit the lake in the future. After viewing the project simulation, only 54% are likely or very likely to visit in the future. This represents a decline of 39 percentage points. Should the project be built, 13% said that they would be very unlikely to return.¹⁵⁹ The survey also shows that 44% said that the proposed project would have a negative effect on their enjoyment of the lakes.¹⁶⁰

From these results, representing the opinions of all those surveyed on Pleasant, Scraggly and Junior Lakes, it seems reasonable to conclude that the Bowers Wind project would have an even more pronounced negative impact on those who use and enjoy remote Shaw Lake. **Rating: High**

CRITERION F: Scope and Scale of the Project's Effect on the Scenic Resource

We rate this criterion based on the number of turbines visible and the percentage of the lake surface that would have turbine visibility.

Daytime Turbine Visibility:

- 45% of the lake would see 9-12 turbines and an additional 17% would see 5-8 turbines.¹⁶¹
- More than half of Shaw Lake would also have a view of the Met Tower.¹⁶²

¹⁵⁸ MAINE WIND ASSESSMENT 2012, A REPORT, Prepared for the Governor's Office of Energy Independence and Security pursuant to Resolve 2011, Chapter 93 "To Clarify the Expectation for the 2012 Assessment of Progress on Meeting Wind Energy Development Goals".

¹⁵⁹ Kleinschmidt survey, Table 17, p.34.

¹⁶⁰ Ibid, Table 14, p.31.

¹⁶¹ LandWorks VIA, Exhibit 4.

¹⁶² Ibid, Exhibit 8.

Nighttime Strobe Light visibility:

- Roughly half the lake would see 5-6 lighted turbines and nearly the entire lake would have views of at least one lighted turbine.¹⁶³
- More than half of the lake would also see the lighted MET tower.

Scope, scale and visibility must also take into account the cumulative scenic impact on recreational users. Cumulative scenic impact can take several forms. In the case of the Bowers Wind project, it can refer to the sequential cumulative impact on users who are traveling through the landscape, moving from lake to lake, perhaps camping overnight on islands, finding little respite from the views of turbines. Another form of sequential cumulative impact occurs when the public must travel through other wind projects en route to a destination. Approaching Shaw Lake from the west on Route 6 one sees the 60-turbines of the Rollins Wind project. Approaching from the east on Route 6 one sees the 38 turbines of the Stetson I project and the 17 turbines of the Stetson II project. In the case of Shaw Lake, the recreational user making the extra effort to seek out this remote lake would not escape them even there.

Due to all these factors, the rating for Scope, Scale and Visibility is High. **Rating: High**

Conclusion:

Based on this analysis, it is clear that the proposed development would compromise scenic views from Shaw Lake such that it would have a **Medium adverse effect on its scenic character or existing uses related to its scenic character.**

¹⁶³ Ibid., Exhibit 9.

FINANCIAL CAPACITY

The applicant is required to demonstrate to DEP's satisfaction that the public's health, safety and general welfare will be adequately protected should the project be permitted. "General welfare" includes shielding the public from any financial risk associated with the project. In the case of a wind energy project, financial risk to the public comes from the possibility that 1) the developer may abandon the project prior to completion due to financial stress; or 2) abandons the project at some point after completion placing the burden of decommissioning on the public. In both cases the cost to Maine taxpayers would be considerable.

After reviewing the applicant's submissions we believe that the documents submitted do not provide adequate data to satisfy the Financial Capacity requirement.

DEP Rules Chapter 373 presents the submissions required for approval of proposed developments. Note that these submissions are required with the application and can not be deferred. The underlining is ours.

Ch 373: Financial Capacity Standard of Site Location Law

- B. Submissions.** Applications for approval of proposed developments shall include evidence that affirmatively demonstrates that the developer has the financial capacity to undertake the proposed development, including information such as the following, when appropriate:
- (1) Accurate and complete cost estimates of the development.
 - (2) The time schedule for construction and for satisfying pollution abatement measures.
 - (3) A letter from a financial institution, governmental agency, or other funding agency indicating a commitment to provide a specified amount of funds and the uses for which the funds may be utilized.
 - (4) In cases where funding is required but there can be no commitment of money until approvals are received, a letter of "intent to fund" from the appropriate funding institution indicating the amount of funds and their specified uses.
 - (5) The most recent corporate annual report indicating availability of sufficient funds to finance the development together with explanatory material interpreting the report, when requested.
 - (6) Copies of bank statements or other evidence indicating availability of funds, when the developer will personally finance the development.

To satisfy the statutory Financial Capacity requirement, the applicant has provided:

- A table breaking the total project cost into six cost components.
- A valid Certificate of Good Standing from the Secretary of State
- A "Letter of Financing Commitment" dated 09/24/12 signed by First Wind Holdings, LLC President and CFO Michael Alvarez. Mr. Alvarez states that "First Wind is funding the development of the Project".
- A single page condensed, consolidated balance sheet with no notes.
- On February 11, 2013 KeyBank, N.A. provided a letter to Commissioner Aho stating that if First Wind Holdings LLC satisfies three conditions, the bank would be willing to "enter into negotiations to provide a Summary of Terms and Conditions". It is not an offer or a commitment and is not legally binding.

We understand that the six submissions described in Chapter 373 are not all required of all projects. However, we believe the application is severely deficient in providing the financial information that is necessary to prove that the public will not be exposed to financial risk should the project be approved.

Project Cost Estimates

Chapter 373 calls for "accurate and complete cost estimates of the development". The following table provided on page 3-1 of the application lacks sufficient precision and detail to be useful. For example, after hardware, the largest component at over 20% of the project cost is labeled "other construction costs". Where do these figures come from? How 'hard' are the figures? Do these figures assume the Obstacle Collision Avoidance System will ultimately be approved by the FAA? Is the cost of retrofitting the turbines with this system reflected in these numbers?

This should not be considered "accurate and complete cost estimates of the development".

Category	Amount (\$MM)
Turbines and Foundations	58.8
Transportation	2.3
Turbine installation cost	5.3
Roads	8.7
Electrical collector lines	4.7
Other construction costs	20.4
Total	100.2

Evidence of Sufficient Funds

In order to prove availability of sufficient funds to finance the project, the applicant is asked to provide the most recent corporate annual report and/or copies of bank statements or other evidence. Apparently First Wind intends for the one page consolidated balance sheet to satisfy the corporate reporting requirement.

Bank statements are basically meaningless unless the availability of those funds is fully disclosed. Record Hill Wind provided such a document during its permitting process but it was later determined that the full funds on deposit in New Hampshire (\$125MM) were not available for any purpose including funding the wind project for which the funds were deposited.

Letter of Commitment or Letter of Intent

Until a permit has been issued it is not reasonable to expect the developer to provide a commitment letter from a financial institution, governmental agency, or other funding agency. This is why Chapter 373 offers the option of providing a letter of "intent to fund" from the appropriate funding institution indicating the amount of funds and their specified uses. The term "letter of intent" is vague enough that the February 11, 2013 letter from KeyBank to Commissioner Aho probably satisfies the definition. However, Chapter 373 specifies that the letter of intent must indicate "the amount of funds and their specified uses". The letter from KeyBank, N.A. does not satisfy this requirement.

KeyBank is principally a short-term construction lender and an underwriter/syndicator of long term debt. Typically the bank books the construction loans then sells off the debt (the "long term" financing) once a project is operational.¹⁶⁴ In the event that the debt is not immediately sold under a commitment then the debt is structured so that the interest rate ratchets upward punitively over just a couple of years in order to compel the developer to find someone to buy the debt. European banks have been the largest issuers of fixed rate long term debt in wind projects for the past decade but that market evaporated in 2011-2012 due to the economic crisis in Europe. The DOE stepped in to fill the gap with loan guarantees (e.g. Record Hill Wind) but have been forced to scale back future activity due to huge losses (e.g. Solyndra et al). US banks avoid long term debt in wind projects with its costly liquidity and reserve requirements. The wind industry's growing body of historical production figures isn't helping any as it shows that many projects are not performing up to the developers' optimistic projections.¹⁶⁵

The signer of the KeyBank letter, Andrew Redinger, recently co-authored a Renewable Energy Finance Forecast¹⁶⁶ indicating that they are looking into the "public markets" for scarce long term debt. Given the high cost of floating registered securities, this tends to affirm the dearth of long term debt available in the market. If KeyBank were to provide construction funding for the Bowers Wind project, how likely are they to find relief in the public market? Prospects appear slim as savvy public investors have consistently shown that they are unwilling to take on all the risks and uncertainty of a non-dispatchable energy source.

The Consolidated Balance Sheet

There is too little data provided in the one-page unaudited balance sheet even begin an intelligent analysis. It appears that First Wind has consolidated all of its subsidiaries, probably worldwide, and

¹⁶⁴ For example, on 12/03/10, First Wind announced that KeyBank and Norddeutsche Landesbank Girozentrale agreed to provide an \$81 million construction loan and a \$17 million letter of credit to allow First Wind to finish its \$130 million Rollins project. Once construction is complete, JPM Capital agreed to provide long-term capital to take out the construction loan. See:

<http://bangordailynews.com/2010/12/03/news/first-wind-wins-98-million-in-financing-for-lincoln-wind-farm/>

¹⁶⁵ "Evaluating Emerging Capital Sources for Wind", Alan T. Marks, North American Wind Power, May 2012.

¹⁶⁶ "Year Of The YieldCo? 2013 Renewable Energy Finance Forecast", Andrew Redinger & Daniel Brown, RenewGrid, February 2013.

reported it as a single aggregate entity. Without having access to, or a breakdown of, all of the subsidiaries, it is impossible to accurately analyze their financial condition and reach a reliable or comprehensive judgment of this entity's financial capacity to build the Bowers Wind Project.

One danger is that you can't gauge either the amount or quality of revenue. There is a risk of non-operating income appearing as revenue. We also don't know how the sale-leaseback of the Bull Hill project was accounted for. And what about government loans, grants and subsidies? Such infusions could be mistaken for operating revenue and could disguise significant net operating losses. These dangers are compounded when the only figures we have represent the sum of all subsidiaries and entities.

If we look at the category of "Total Current Assets" (\$281.7MM) vs. "Total Current Liabilities" (\$396.5MM), we see that on 06/30/12 First Wind Holdings LLC has a liquidity problem. In other words, it does not have enough Current Assets to cover its Current Liabilities. In addition to the \$396.5MM in current liabilities, they have another \$597.2MM in long term liabilities, and ostensibly all of these debts (\$993.7MM) have to be paid using cash on hand and/or revenue coming in. It's important to know where that debt is held. The holding company? Two of the subsidiary LLC's? Fifty of the subsidiary LLC's? Are the debts cross-defaulted, such that if one loan goes into default, the rest of them fall like dominos? This shortfall would quickly become a crisis if their long-term debt were to be 'called' prior to maturity. What financial covenants are attached to the long-term debt? The balance sheet submitted with the project application gives virtually no information about the terms or conditions behind any of their debt obligations, including what collateral may have been pledged for each of these debt instruments.

It should also be noted that a single balance sheet is a snapshot in time and provides no indication of First Wind's revenues or profitability. The industry standard for evaluating the financial viability of an entity is cash flow analysis. Without a Profit and Loss and cash flow statement we have no way of determining the company's operating profits and cash flow. A quick review of First Wind's Form S-1 (filed with the SEC in connection with their failed 2010 IPO attempt) and various project applications shows that First Wind has a sustained history of losses and that the rate at which they are losing money is increasing dramatically:

First Wind Holdings, LLC and Subsidiaries
Accumulated Deficit & Members' Capital (in thousands)

	Data Source					
	10/27/10 SEC Filing: Form S-1	application: Bowers-1 Champlain Wind LLC	application: Bull Hill-1 Blue Sky East LLC	application: Bowers-2 Champlain Wind LLC	application: Bowers-2 Champlain Wind LLC	application: Bull Hill-2 Hancock Wind LLC
	December 31, 2008	December 31, 2009	December 31, 2010	December 31, 2011	June 30, 2012	September 30, 2012
Accumulated deficit	(131,610)	(191,229)	(267,940)	(341,245)	(393,786)	(528,795)
Members' capital	668,189	847,251	850,933	850,952	807,626	808,537

Note that in the first two quarters of 2012 they lost \$50MM and in the 3rd quarter they lost another \$135MM. It appears that First Wind has burned through the cash infusion provided by the Emera merger and now needs an additional cash infusion. Looking at the first two quarters of 2012 we

see that Members' Capital decline by \$43.3MM which indicates the original investors may be pulling out their cash. This does not bode well for First Wind.

Another concern is that more 82% of First Wind's "assets" — \$1.8B out of \$2.2B — consists of "hard assets" such as turbine deposits, plants, factory, construction, etc. It is disturbing that 81% of their total assets have no liquid value, trading value, nor any real fungibility. And yet no explanatory notes are provided. First Wind's total assets "in excess of \$2.2 billion" could be completely arbitrary or inflated, depending on how those illiquid/hard assets were valued and by whom (no accounting firm is cited).

Note that First Wind Holdings' President's "Letter of Financing Commitment" provided with the Bowers application states that the company "has assets in excess of \$2.2 billion". Those were the assets at 06/30/12. In the "Letter of Financing Commitment" he provided with the Hancock Wind application he uses the balance sheet dated 09/30/12 and states that the company "has assets in excess of \$2 billion". In other words, in three short months First Wind lost almost enough value to pay for both the Bowers and Hancock Projects combined!

The numbers First Wind has provided with the Bowers application are bad enough. But looking forward, we have to wonder how they'll be able to fund the development they have in the pipeline. These projects may or may not be accounted for in the condensed consolidated balance sheet they provided. DEP should be concerned that First Wind has four projects at various stages of development in Maine alone:

Oakfield Wind LLC with amendment	(permitted)	\$363MM
Champlain Wind LLC / Bowers	(permit in process)	\$100MM
Hancock Wind LLC / Bull Hill Phase II	(permit in process)	\$110MM
Bingham Wind LLC	(application expected in March)¹⁶⁷	\$428MM
	Total:	\$1,001MM

Given that First Wind Holdings LLC has a liquidity issue it will be difficult for them to demonstrate that they have the financial capacity to develop \$1B worth of projects simultaneously, particularly as their financial submittals appear to call on the same vague assets to justify every project.

The Kahuku Facility in Hawaii

In August 2012 a catastrophic fire inside First Wind's Kahuku Wind facility's battery storage system shut the operation down. The wind turbines have been at a standstill ever since. It turns out it was the third fire at the facility. First Wind's Wren Wescoatt has said that they haven't yet determined the cause of the final fire. First Wind could potentially face serious sanctions under a 20-year

¹⁶⁷ Bingham will reportedly use 3MW turbines similar to those used for Oakfield, Champlain and Hancock. Those three projects total 84 turbines for \$573MM, or approx \$6.8MM per turbine. For Bingham we are assuming 63 turbines at \$6.8M each for a total of \$428MM project cost.

contract if they can't get it back online soon.¹⁶⁸ How serious is the resulting loss of revenue? Does the balance sheet provided reflect a write-down of those assets? Is there a potential liability for air, ground or water contamination? Does the balance sheet include a contingent liability for such sanctions? We have no way of knowing.

The Emera Transaction

In April 2011 First Wind announced a partnership to jointly own and operate wind energy projects with Algonquin Power and Emera Inc. (parent of Bangor Hydro). Emera was essentially providing a much needed cash infusion to First Wind after its plan to go public was cancelled in 2010. As Mr. Alvarez explains in Exhibit 3A "Letter of Financing Commitment", the deal called for Emera to invest \$211MM and make a loan of an additional \$150MM.

Approval for the deal seemed doomed when staff at the Public Utilities Commission recommended the commissioners oppose the deal, saying the risk to Maine ratepayers exceeds the benefits. But the Commissioners voted unanimously to approve the deal. The decision was immediately appealed by Maine's Office of the Public Advocate and others. Regardless, in June 2012 First Wind and Emera went ahead and closed the deal. "I was somewhat surprised" said Eric Bryant, the attorney in the public advocate's office who filed one of the appeals. "It's unusual for a company to make a decision when there's risk involved that it may have to undo it because of a legal matter."¹⁶⁹

The appeal is currently outstanding. If Appellants prevail, it will be an extremely complex and expensive deal to unwind and First Wind will be severely damaged. If this happens during project construction, what will the financial fallout be? In our opinion DEP should insist on receiving two sets of financials before deciding the Bowers application: one which assumes the merger stands, and one that reflects the condition of First Wind should they have to unwind the deal.

About the Emera transaction, Mr. Alvarez states simply that "The transaction received unanimous approval from the Maine Public Utilities Commission in May of this year." He makes no mention of the pending appeal.

Financial Conclusions

- There are very serious deficiencies in the financial material First Wind submitted with the Bowers Wind application. The application doesn't satisfy Department Rules, Chapter 373.
- In order to protect the interests of the public, DEP should insist on detailed audited financials along the lines of the ones First Wind was required to provide to the PUC in connection with the Emera transaction. These would be a full set of financials, with notes for both the holding company and the operating company (Champlain Wind LLC). This should be a non-negotiable condition before a permit is issued. The issue of confidentiality can easily be addressed. Nothing short of full financial disclosure can provide the

¹⁶⁸ See: <http://www.stationarystoragenews.com/articles/765911/no-cause-no-answers-seven-months-after-kahuku-wind/>

¹⁶⁹ See: <http://bangordailynews.com/2012/06/27/energy/energy-firms-announced-wind-deal-despite-risk-posed-by-legal-appeal/>

information necessary to make a credible analysis.¹⁷⁰

- First Wind Holdings LLC should provide an up to date organization chart that clearly informs the DEP of where project assets and liabilities will be held. If every project in the US is a different operating subsidiary, a different LLC, then where are the debts held? At the subsidiary level? How does a problem like the fire at Kahuku affect the other subsidiaries? These questions must be answered.
- There should be two sets of financials provided: one set should reflect Champlain Wind LLC's condition if the Emera transaction is upheld and the second should be a pro-forma set depicting Champlain Wind LLC's condition if it should be overturned. This can be very significant as \$360MM of assets may suddenly become debt.
- The project's cost figures for the Bowers project should include the cost of purchase and installation of the OCAS lighting system as the applicant has agreed to install the system when and if it is approved by the FAA.
- The Department should retain, at the applicant's expense, a CPA firm with experience in energy project financings. That firm must be empowered to have full access to all meaningful reports in order to properly assess the financial condition of First Wind Holdings LLC and Champlain Wind LLC. First Wind will most likely argue that providing full financial disclosure would reveal competitive information. This objection can be overcome by requiring a confidential review by approved third party financial experts mutually agreeable to both parties.
- DEP must be satisfied that Champlain Wind LLC has the financial capacity to build this project, operate this project, fully fund the Community Benefit Package and fund the Decommissioning of the project at the end of its useful life. This is necessary to protect the interests of the public.

¹⁷⁰ This is also one of the recommendations to come out of the MAINE WIND ENERGY DEVELOPMENT ASSESSMENT – 2012 prepared by the Governor's Office of Energy Independence and Security. See page 6, Recommendation 5: "Require independent analysis to evaluate the 'financial capability' of a wind developer and expected output and capacity rating of a project's turbines."

CUMULATIVE IMPACT AND A THIRD BWP?

LURC received a rulemaking petition from Champlain Wind on May 26, 2010 requesting that a portion of Kossuth Twp be added to the Expedited Area for Wind Energy Development¹⁷¹. The Commission initiated rulemaking and there was a public hearing on September 22, 2010. A LURC Commissioner asked CW's Neil Kiely why those seven turbines planned for Kossuth are so important that we need to change the boundary established by the legislature.

Kiely explained that the Bowers project will hook up to First Wind's transmission Line 56 which runs on the northern edge of Carroll Plt. First Wind invested a great deal of money into building Line 56 so it could handle the power generated by four projects: Stetson I, Stetson II, Rollins and Bowers. He said that Bowers was designed so that "With the construction of Bowers the capacity on Line 56 will be fully utilized".

Building a transmission corridor like Line 56 is a massive investment and it's to be expected First Wind would want to fill it to capacity. PPDLW is concerned that if CW is granted a permit to build the current Bowers project, at only 48MW nameplate capacity, how can they fill the remaining capacity of Line 56?

PPDLW is concerned that the applicant has plans to apply for an amendment or a second project, should it receive a permit for Bowers Wind project. Please consider the following evidence that suggests there may be a Bowers Phase II:

1. It would be relatively straightforward to add seven 3.0MW turbines to achieve the 69MW nameplate capacity of the original Bowers application that was designed to fill the remaining capacity of Line 56.
2. The land in Kossuth Twp that would host the additional turbines remains in the Expedited Wind Permitting Area even though the first Bowers project was rejected.
3. The leases for the additional land in Kossuth Twp would still apply.
4. Stetson I consists of 38 turbines of 1.5M each. Just as Stetson I was nearing completion, First Wind applied for a permit to extend that line of turbines, adding 17 more calling that Stetson II. On the First Wind website these two projects are referred to as Stetson Phase One and Phase Two.
5. The original Oakfield application and permit called for 34 turbines of 1.5MW each. One year after receiving their permit, they petitioned successfully to amend the permit to incorporate 50 turbines of 3.0MW each.
6. A fascinating exchange took place during the LURC deliberations on First Wind's Bull Hill project (19 turbines of 1.8MW each). In the record was a letter from Maine's Bureau of Public Lands which expressed disappointment that the Bull Hill Phase I project would be considered separate from the Bull Hill Phase II project. None of the Commissioners were aware of any plans for a second phase to the project. Commissioner Ed Laverty

¹⁷¹ All documents associated with this rulemaking are available at:
http://www.maine.gov/doc/lupc/projects/windpower/firstwind/champlain_bowers/Champlain_Rulemaking.html

(EL) wanted to know more and asked First Wind attorney Kelly Boden (KB) about it.¹⁷²

EL: Is there an anticipated second phase of this project in Eastbrook?

KB: There is no phase two plan pending before the Commission at this time.

EL: Are you considering a second phase in Eastbrook?

KB: There is no plan currently in development for Eastbrook.

EL: OK, you have no intentions, is that right?

KB: Maybe Dave should... (inaudible)

EL: The Bureau of Public Lands has concerns that the phase two plan of this project in Eastbrook is not being considered at this time.

KB: There is nothing... that's been actively considered at this time or is pending before the Commission.

EL: (inaudible)

KB: There is no Phase two planned at this time.

Two weeks after Bull Hill was completed, First Wind announced its intentions to build an 18 turbine project that would tie into the now-existing Bull Hill Wind Project substation. First Wind Project Manager Dave Fowler outlined the project, called Hancock Wind, at a special town meeting in Osborn.¹⁷³

7. Finally, in the application, VIA, page 113, CW addresses Cumulative Impact and states that applicants are directed by MDEP and the NRPA to consider the effects of "past, present and reasonably foreseeable activities when evaluating potential cumulative impacts". Reference is made to MDEP Guidance Doc. Num. DEPLW00630-A2004 which states:

"Reasonably Foreseeable Future Activities. The activity will proceed or there is a high likelihood that the activity will proceed, i.e., valid permits have been granted for projects in the vicinity of the proposed project; projects are constructed or under construction, or; applications for permits to construct projects in the vicinity of the proposed project are currently under consideration."¹⁷⁴

The fact that they are so concerned with establishing the definition of "reasonably foreseeable activities" is a concern. By applying this definition, CW is able to disavow knowledge of plans to amend the Bowers project or construct a separate project in Kossuth and still satisfy the letter of the law. Applicant then writes "Because none of the existing or proposed turbines associated with other wind

¹⁷² The audio file, Project Introduction from Applicant and Intervenor, available at: http://www.maine.gov/doc/lupc/projects/windpower/firstwind/blue_sky_east_bullhill/BlueSkyEast.html The exchange begins at 13:10.

¹⁷³ http://fenceviewer.com/site/index.php?option=com_k2&view=item&id=78114:new-wind-farm-proposed-for-county&Itemid=938

¹⁷⁴ MDEP Guidance Doc. Num. DEPLW00630-A2004. When studying this MDEP Guidance Document, we learned that First Wind's attorney, Juliet Browne was on the Working Group that developed the document.

projects in the region will be visible from scenic resources of state or national significance within the 8-mile Project viewshed, there will be no cumulative impacts."

PPDLW believes that given all this evidence, if CW is granted a permit for Bowers it is perfectly reasonable to expect them to amend the permit with seven more 3.0MW turbines in order to max out the capacity of Line 56.

CONCLUSION

In 2006 the State of Maine contracted with the Brookings Institute to study Maine's economic prospects. Consider the following quotes from the final report, "Charting Maine's Future, An Action Plan for Promoting Sustainable Prosperity and Quality Places"¹⁷⁵.

"In the long run, the slow degradation of Maine's vivid and distinctive quality of place (and the reputation it supports) may be the greatest cost to Maine of all."

"Another problem, meanwhile, is the defacement of Maine's scenic corridors."

"Maine's stellar quality of place, its traditional towns and beautiful landscapes and seacoasts, constitutes a major, appreciating asset in an age when retaining and attracting workers and retirees matters intensely."

"The state should continue to invest urgently in protecting and enhancing its top-notch quality of place, for that is its 'calling card,' its brand, and its truest source of prosperity."

"As its world-famous brand declares, Maine has - in its vivid small towns and waterfronts, its lakes and fields and rocky coastline - exactly the sort of authenticity and quality of place that can set a place apart. Maine is unforgettable and distinctive, and that matters."

In competing for tourist dollars, Maine has something other states don't have: we have natural unspoiled mountains and lakes. Let other states build their amusement parks and zoos. What we have they can't duplicate! Our coastline, our mountains and lakes give Maine a powerful and sustainable competitive advantage. If we can protect our pristine areas, clean waters and wildlife, over time the scarcity and value of those areas will only increase. That's why Tourism is our #1 industry. Let's not kill the goose that lays the golden eggs. Let's protect the Maine brand from industrial projects like Bowers. The wind industry likes to talk about tangible benefits. Let's not overlook the tangible damages.

LURC has already denied one wind project at this site. That decision ought to carry some weight, particularly since CW did not appeal it. Not only did LURC deny the project, but they expressed doubt that it could be reconfigured in such a way that the scenic impact on the Downeast Lakes could be made reasonable.

¹⁷⁵ Brookings Institute to study Maine's economic prospects. Consider the following quotes from the final report, "Charting Maine's Future, An Action Plan for Promoting Sustainable Prosperity and Quality Places

Commissioners Ed Laverty and Sally Farrand made this very clear:

"We are trying to be reasonable. I have to say... that the impact on these lakes that are not just Great Ponds and therefore deserve evaluation even in expedited areas, but they're Great Ponds that were identified as having outstanding or significant scenic value. You as an applicant chose to locate this project within 3 miles of four of these. I mean, that was a decision that YOU made. OK? We didn't make that decision.... I feel sorry for the challenge it presents to you but you had some knowledge about the difficulty of locating in this area before you began your original design."¹⁷⁶

"For the life of me, how are you going to take Pleasant Lake which is classified as outstanding and is visually impacted by 27 of the turbines, I mean to me that seems to be... how that can be done boggles my mind. And also the impact to the others, particularly the other four. So I have very substantial concerns about the ability of this project to be redesigned."¹⁷⁷

LURC Commissioner Ed Laverty
12/07/11

"I have some serious concerns about how this could be modified but cumulative impact is almost less important than absolute impact and I think that the profound effect on some of these lakes is going to be a real challenge. I mean if I look at Junior, Pleasant and Scraggly that's not cumulative impact unless you define cumulative as hitting you over the head all at once, sitting in one canoe on one lake."¹⁷⁸

LURC Commissioner Sally Farrand
12/07/11

The Governor's Office of Energy, Independence and Security (OEIS) is responsible for recommending changes to law to achieve a cost-effective, sustainable energy, environmental and economic policy strategy. In addition, the OEIS is required to examine permitting standards and processes, visual impact criteria, decommissioning plans and other issues and formulate recommendations to improve Maine's wind energy policies.

After consulting with experts and the public, the OEIS released its Maine Wind Energy Development Assessment: Report and Recommendations in March 2012. The report provides recommendations to help guide policymakers to improve the process related to the permitting of wind energy development. These recommendations propose changes to wind goals and criteria for

¹⁷⁶ Audio record of LURC's December 7th meeting in Lincoln re: DP4889:
http://www.ppdw.org/audio_dp4889/ChamplainWind_part3.mp3. 04:10

¹⁷⁷ Audio record of LURC's December 7th meeting in Lincoln re: DP4889:
http://www.ppdw.org/audio_dp4889/ChamplainWind_part2.mp3. 07:36

¹⁷⁸ Audio record of LURC's December 7th meeting in Lincoln re: DP4889:
http://www.ppdw.org/audio_dp4889/ChamplainWind_part2.mp3. 23:35

wind permitting; visual and cumulative visual impact. While these recommendations have not yet become law, PPDLW believes it is important to keep the recommendations in mind when deciding applications for wind energy projects.

We believe the following recommendations, taken from the report, have very specific relevance to the BWP:

Amend the wind law to identify “those regions and view sheds that are most critical to the state’s recreational and tourism economy and would be unacceptably degraded by any significant level of wind power development” and “remove any area within fifteen miles of them from the Expedited Permitting Area (EPA)” unless the wind project is not visible from them.

PPDLW believes that the Downeast Lakes Watershed falls into this category and deserves to be formally recognized as critical to the State’s recreational and tourism economy. If this recommendation were in effect now, it is likely that the BWP application would not be considered through the expedited wind permitting process.

Review whether sporting camps should be specifically listed as a “scenic resource of state or national significance”.

The Downeast Lakes Region boasts more than a dozen traditional Maine Sporting Camps. These businesses are extremely dependent on the quality of the natural environment for their survival.

Review whether remote ponds should be listed as a “scenic resource of state or national significance”

There is one remote pond within 4 miles of the planned Bowers turbines, Trout Lake (1.2 miles NE of Pleasant Lake). Trout Lake is one of only 176 Management Class 6 remote ponds in the State. This designation means that Trout Lake is afforded special protection to maintain its remote status, natural resource value and the primitive recreational experience in a remote setting¹⁷⁹.

Amend the wind law to require scenic impact evaluations to eight miles, with a fifteen mile standard option and provisions made for review to greater distances.

The turbines of Rollins Wind project are clearly visible days and night from Weatherby Hill in Springfield. That’s a distance of approximately 14 miles.

Support a clear statutory authority for permitting agencies to consider cumulative visual impacts.

Cumulative scenic impact should be defined to address the impact a visitor endures while traveling through the landscape. An example is someone who is paddling among multiple lakes all of which are scenically impacted.

¹⁷⁹ Comprehensive Land Use Plan, 2010; Appendix C: The Commission’s Lake Management Program, Page C-26

For now, these are nothing more than recommendations based on research approved by the legislature, though many of them may soon become law. The law charges the Department with protecting the economic and social well-being of the citizens of the State of Maine:

Title 38 §481 Findings and Purpose:

"The Legislature finds that the economic and social well-being of the citizens of the State of Maine depends upon the location of... industrial developments with respect to the natural environment of the State; that many developments because of their size and nature are capable of causing irreparable damage to the people and the environment on the development sites and in their surroundings... and that discretion must be vested in state authority to regulate the location of developments which may substantially affect the environment and quality of life in Maine."

There are fourteen SRSNS lakes within eight miles of the proposed project. Nine of them would have views of turbines and will be significantly compromised by the BWP such that the development would have an unreasonable adverse effect on the scenic character and existing uses related to scenic character. The adverse effect is unreasonable due to turbine number, extent of turbine visibility, turbine proximity to the resources, the nature of the views as users travel though the SSRNS, the scenic significance of the SRSNS, and the evidence showing the scenic impacts will have an adverse impact on uses related to the SSRNS. While the scope and scale of the BWP varies among the SRSNS, the adverse effect on the views from these SRSNS is unreasonable due to the nature of the views as users travel through the SSRNS water trail.

The Applicant has not carried its legal burden of proof in showing that the criteria of 35-A M.R.S., Ch. 34-A, § 3452 (Determination of Effect on Scenic Character and Related Existing Uses) have been met. The Applicant has failed to demonstrate that the scope and scale of the BWP will not significantly compromise views from the SRSNS such that the BWP would have an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS.

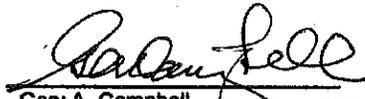
PPDLW therefore, respectfully requests that DEP deny Champlain Wind LLC's application to build a wind energy facility at the head of the Downeast Lakes Watershed.

* * * * *

Commissioner Aho was the keynote speaker at the Maine Congress of Lake Associations Annual meeting held at Colby College on June 23, 2012. Her message deserves repeating here.

"Our lakes are an economic engine and it's very important that we protect them. Our lakes and ponds are jewels in the crown of the State of Maine. They are legacies we enjoy and want to pass along to future generations."

Date: March 15, 2013


Gary A. Campbell President, PPDW
30 Hancock Road
Hingham, MA 02043
gary@ppdlw.org
781-635-6497

STATE OF Massachusetts
County of Plymouth

Date: March 15, 2013

Personally appeared before me the above named Gary A. Campbell, who, being duly sworn, did testify that the foregoing testimony was true and correct to the best of his knowledge and belief.

Before me,

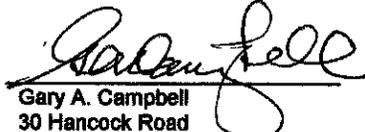

Notary Public
My commission expires: 2/22/2019



HOLLY M. CIRIGNANO
Notary Public
Commonwealth of Massachusetts
My Commission Expires Feb. 22, 2019



Date: March 15, 2013

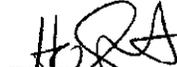

Gary A. Campbell
30 Hancock Road
Hingham, MA 02043
gary@ppdlw.org
781-635-6497

STATE OF Massachusetts
County of Plymouth

Date: March 15, 2013

Personally appeared before me the above named Gary A. Campbell, who, being duly sworn, did testify that the foregoing testimony was true and correct to the best of his knowledge and belief.

Before me,



Notary Public
My commission expires: 2/22/2019



HOLLY M. CIRIGNANO
Notary Public
Commonwealth of Massachusetts
My Commission Expires Feb. 22, 2019



**PPDLW's Direct Testimony Exhibit B: LURC Denial of Development
Permit DP 4889**

EXHIBIT B

STATE OF MAINE
 DEPARTMENT OF CONSERVATION
 MAINE LAND USE REGULATION COMMISSION
 22 STATE HOUSE STATION
 AUGUSTA, MAINE
 04333-0022

PAUL RICHARD LEPAGE
 GOVERNOR

WILLIAM H. BEARDSLEY
 COMMISSIONER

COMMISSION DECISION
 IN THE MATTER OF

Champlain Wind, LLC
 Denial of Development Permit DP 4889
 Bowers Wind Project

Findings of Fact and Decision

The Maine Land Use Regulation Commission, at a meeting of the Commission held on April 20, 2012, at Bangor, Maine, after reviewing the application and supporting documents submitted by Champlain Wind, LLC for Development Permit DP 4889, public and Intervenor comments and testimony, agency review comments, and other related materials on file, pursuant to Titles 12 and 35-A, the Commission's Standards and Rules, and the Commission's 2010 Comprehensive Land Use Plan finds the following facts:

SUMMARY OF PROPOSAL

1. *Applicant:* Champlain Wind, LLC
 129 Middle Street, 3rd Floor
 Portland, ME 04101
2. *Application Accepted as Complete for Processing:* March 14, 2011
 (The Commission's statutory authority directs the Commission, with respect to wind energy development permit applications that are set for public hearing, to return a decision within 270 days from the date the application is accepted as complete for processing unless the Applicant requests an extension of time agreeable to the Commission and the Applicant as was the case with this application (see findings 14, O and 14, Q below.) See 12 M.R.S.A. § 685-B(2-C).
3. *Location of Proposal:* Carroll Plantation, Penobscot County
 (Map 1, Lots #1, 3.1, 3.2)
 (Map 5, Lots #17, 18.4)
 (Map 8, Lots #2, 5, 13)
 (Map 11, Lots #9, 9.1)

Kossuth Township, Washington County
(Map 1, Lots # 4, 7, 9.1, 9.2, 23)

4. *Current Zoning:* (M-GN) General Management Subdistrict
(P-WL) Wetland Protection Subdistrict
(P-SL2) Shoreland Protection Subdistrict
5. *Proposed Project.* The purpose of the proposed Bowers Wind Project (BWP) is to construct a 69.1 megawatt (MW) grid-scale wind energy development on Bowers Mountain, an unnamed ridge to the south referred to as "South Peak" in Carroll Plantation, Penobscot County, and on Dill Hill in Kossuth Township, Washington County. The proposed BWP would consist of up to 27 turbines with associated turbine pads – up to 10 of the turbines would be Siemens 3.0 MW turbines and up to 17 would be Siemens 2.3 MW turbines, with maximum height of 428 feet; existing and new access and crane path roads; 34.5 kV above-ground collector lines; permanent meteorological towers; an operation and maintenance (O&M) building; and a new substation to connect to an existing 115 kV transmission line.

The proposed BWP would be entirely located within the area designated for expedited permitting under the "Act To Implement Recommendations of the Governor's Task Force on Wind Power Development" (the "Task Force Act") (PL 2007, Ch. 661) and as amended through rulemaking by the Commission in accordance with 12 M.R.S.A. § 685-A(13) and 35-A M.R.S.A. § 3453 effective on December 16, 2010.

Following questions raised by the Commission regarding the visual impact on ground observers of required nighttime turbine lighting, the Applicant submitted information on nighttime lighting mitigation technology. The Applicant informed the Commission that it had commenced the process of determining the suitability of the BWP site for the use of a radar-assisted warning system, which would eliminate the current Federal Aviation Authority (FAA) requirement that the turbines be lit at night. In its filings with the Commission, the Applicant stated that if the radar-assisted warning system was approved by the FAA, it would evaluate the feasibility of retrofitting the BWP to incorporate such a system. The Applicant stated its evaluation of feasibility would take into account the following minimal considerations: a site suitability analysis indicating that the site is an appropriate candidate for use of such a technology; a determination by the FAA that the system is approved for use at this site; availability of reasonable and appropriate insurance coverage; a determination that the use of the system does not present an unreasonable risk to aircraft and that the vendor and technology are reliable; a determination that the system is compatible with the turbine manufacturer warranty; and, that the costs of implementing such a system are reasonable and the project is financeable with the use of the technology. The Applicant committed that it would evaluate and implement if feasible the use of this new radar-assisted technology if approved by the FAA.

SUMMARY OF REVIEW CRITERIA

6. *Review Criteria.* The Commission is the primary siting authority for a wind energy development entirely sited within the unorganized townships or plantations of Maine. As

discussed in more detail below, the proposed project is subject to the provisions of Title 12, §§ 685-B(2-B), (4) and (4-B); the applicable provisions within the Commission's standards and rules in Chapter 10; and the Commission's Comprehensive Land Use Plan (CLUP). The proposed project is also subject to the provisions of Title 35-A, Ch. 34-A, §§ 3451 *et seq.* The review of the project is also subject to the provisions of the Commission's rules in Chapter 4 and 5. Central to this decision are the review criteria for assessing scenic impact found in Title 12 § 685-B(4)C and Title 35-A, chapter 34-A, § 3452 – see finding 17 below.

Commission's Comprehensive Land Use Plan (CLUP). The legislative amendments made by the Task Force Act to the Commission's permitting authority with respect to expedited wind energy projects did not remove the Title 12 requirement that the Commission, in reviewing development permit applications, determine whether a proposal is in conformance with certain regulations, standards, and the CLUP. 12 M.R.S.A. § 685-B(4) & (4-B). The Commission's 2010 CLUP, while expressly recognizing the statutory changes made by the Task Force Act with respect to wind energy development in the expedited permitting area, continues to provide for the environmentally sound and socially beneficial utilization of indigenous energy resources where there are not overriding public values that require protection. (2010 CLUP at 13). The CLUP explains that it seeks to accommodate energy generation installations that are consistent with the State's energy policies, are suitable for the proposed locations, and designed to minimize intrusion on natural and cultural resources and values. (2010 CLUP at 13). The CLUP reflects the State's policy of identifying and protecting areas that possess scenic features and values of state or national significance, and it recognizes that sporting camps are recreational and cultural resources, worthy of protection from incompatible development and land uses. (2010 CLUP at 13, 18, 17, 265 – 267)

Each large-scale project proposed in the Commission's jurisdiction calls on the Commission to carefully consider on a case-by-case basis proposed impacts to the human and natural environment. Not all sites are appropriate for grid-scale wind energy development – the Commission must find the appropriate balance between development and protection of natural resources and natural resource uses to achieve conformity with the goals and policies of the CLUP.

REVIEW OF EVIDENCE

7. *Review of Evidence.* The Commission has assembled a large administrative record regarding the BWP. The administrative record contains written and oral testimony and written comments from the Parties, government review agencies, and the public, all of which was gathered through a process conducted in accordance with the Commission's Chapters 4 and 5 Rules. In this matter, the process also included an evidentiary hearing, held at the discretion of the Commission. Thus, it is not possible to list or acknowledge all of the evidence that led the Commission to reach the factual findings and legal conclusions set forth below. Those findings and conclusions, however, are based on the application of the governing review criteria to all the evidence in the record and not only those examples of evidence recited herein.

SUMMARY OF REVIEW PROCESS

8. *Application Submittal.* Champlain Wind, LLC (Applicant) submitted its application for the proposed Bowers Wind Project (BWP), Development Permit DP 4889 on January 24, 2011. The Applicant is a wholly-owned subsidiary of First Wind.

The application was accepted by LURC staff as complete for processing on March 14, 2011. Public notices of "Intent to File" the application were published on January 24, 2011, and on January 27, 2011, respectively, in the Bangor Daily News and the Lincoln News. Public notices of the public evidentiary hearing were given in the Bangor Daily News on May 26, 2011, and June 17, 2011. Notices of the hearing were also given in the Lincoln News on May 26, 2011, and June 16, 2011.

9. *Intervenors and Interested Persons.* On April 6, 2011, within 45 days of accepting the application as complete, the Commission exercised its discretion and set this matter for a public evidentiary hearing, and granted Intervenor status to two Parties: the Conservation Law Foundation (CLF) and the Natural Resources Council of Maine (NRCM). The Partnership for the Preservation of the Downeast Lakes Watershed (PPDLW), David Corrigan and Gordon Mott were granted Intervenor status through the Sixth Procedural Order on June 2, 2011. NRCM withdrew as an Intervenor on June 9, 2011. CLF formally announced its support for the project on June 10, 2011. PPDLW and Corrigan intervened in opposition to the project. Mott intervened in support of the tangible benefits proposed by the Applicant. Fifteen (15) individuals requested status as, and the Commission recognized them as, Interested Persons in accordance with the Commission's rules.
10. *Pre-filed Testimony.* The Applicant and Intervenors PPDLW, CLF, Corrigan, and Mott submitted pre-filed testimony on June 10, 2011. Issues addressed included, but were not limited to: scenic impact, wildlife impact, in particular lynx and birds and bats, and tangible benefits concerns. Written rebuttal testimony to pre-filed testimony was submitted on June 17, 2011.
11. *Public Hearing and Site Visit.* A public evidentiary hearing was held on June 27 and 28, 2011 in Lincoln, Maine and continued on July 6, 2011, in Bangor, Maine. Evening public hearing sessions were held on June 27 and 28, 2011 in Lincoln. A portion of the hearing, structured primarily to serve the purposes of hearing summaries of the pre-filed testimony from the Parties, hearing testimony from review agencies, and for conducting cross examinations, was held during the day on June 28th in Lincoln and continued on July 6th in Bangor, Maine. The Commission's site visit was held on June 27th to observe the project site, road access, and views from several of the lakes which were identified as scenic lakes of state or national significance.
12. *Participating Review Agencies.* The Maine Department of Environmental Protection (MDEP), the State Soil Scientist, and the Maine Department of Inland Fisheries and Wildlife (MDIFW) attended the public hearing in order to answer questions as needed. In addition, the Commission retained additional staff with respect to processing this permit application, namely third party peer reviewers and experts, Dr. James Palmer (scenic) and Warren Brown

(sound). Dr. Palmer was present at the hearing to answer questions on matters of scenic impact as needed. The details of Dr. Palmer's comments and testimony on the proposed BWP can be found in the record and, by way of summary, below.

13. *Public Comments.* Members of the public and several of the Interested Persons submitted written comments and testified at the evening sessions of the public evidentiary hearing. The record closed for public comment on July 18, 2011.
14. *Post-Hearing Briefs.* The Applicant and Intervenor PPDLW filed their final briefs on the deadline of August 22, 2011.
15. *Procedural Matters.* The Presiding Officer issued 16 Procedural Orders throughout the proceeding, addressing administrative and procedural matters.
 - A. *First Procedural Order.* On March 29, 2011, the First Procedural Order was issued, requesting legal argument from the Parties regarding whether, as set forth at 35-A M.R.S.A. § 3452(2), the scenic character impact review of the associated facilities should be conducted according to the provisions of 35-A M.R.S.A. § 3452, or according to the harmonious fit standard for non-expedited projects in 12 M.R.S.A. § 685-B(4) and LURC's Chapter 10 §10.25,E(1) scenic standards (*See Finding of Fact #18 for a discussion of the review criteria for the associated facilities*).
 - B. *Second Procedural Order.* On April 21, 2011, the Second Procedural Order was issued, stating that the scenic character standard to be applied during the review of the associated facilities of the proposed BWP would be 35-A M.R.S.A. § 3452, not 12 M.R.S.A., § 685-B(4) and LURC's Chapter 10 Rules, § 10.25,E(1) (see further discussion in Finding 18 below).
 - C. *Third Procedural Order.* On April 29, 2011, the Third Procedural Order was issued, containing the memorandum of the pre-hearing conference, and containing specifically the schedule for the public evidentiary hearing and procedures, the service list, filing requirements, pre- and post-hearing filings, and other administrative matters pertaining to the public hearing.
 - D. *Fourth Procedural Order.* On May 13, 2011, the Fourth Procedural Order was issued, regarding those individuals seeking status as Interested Persons, Intervenors, and preliminary consolidation of those seeking Intervenor status. Parties were provided an opportunity to comment on the preliminary consolidation of intervenors.
 - E. *Fifth Procedural Order.* On May 23, 2011 the Fifth Procedural Order was issued, clarifying that the standard set forth at 35-A M.R.S.A. § 3453 governs the Commission's finding on the impacts of turbine lighting on scenic character and existing uses related to scenic character.
 - F. *Sixth Procedural Order.* On June 2, 2011, the Sixth Procedural Order was issued regarding extending the deadline for response to scenic review of James Palmer,

amended and reaffirmed scheduling deadlines and final consolidation of Parties (see finding 9 above).

- G. *Seventh Procedural Order.* On June 23, 2011, the Seventh Procedural Order was issued regarding objections to certain pre-filed direct testimony, availability of witnesses at hearing, and objections to portions of the proposed site visit.
- H. *Eighth Procedural Order.* On June 23, 2011, the Eighth Procedural Order was issued with the public hearing schedule, noting continuation of evidentiary hearing to July 6, 2011, and consequent extension of close of record.
- I. *Ninth Procedural Order.* On July 14, 2011, the Ninth Procedural Order was issued regarding a request by the Commission for post-hearing submissions by the Applicant and the MDIFW, official notice of agency records consisting of a staff memo to the Commission regarding issues related to wind power development and a related report by the Appalachian Mountain Club, and an objection to public hearing testimony by an individual who pre-filed testimony as a witness for an Intervenor. The Parties were provided an opportunity to comment on the submittals by the Applicant and MDIFW. The Applicant was also provided an opportunity to provide rebuttal comments to those provided by MDIFW and Intervenors.
- J. *Tenth Procedural Order.* On August 3, 2011, the Tenth Procedural Order was issued regarding reopening the evidentiary record to allow for inclusion of material from the Applicant and staff regarding tangible benefits; staff response to issues raised by the native American tribes in the area; and Secretary of State records regarding the PPDLW; and an order to disregard certain post-hearing rebuttal comment by a witness for the Applicant that was in the nature of legal argument.
- K. *Eleventh Procedural Order.* On August 11, 2011, the Eleventh Procedural Order was issued regarding official notice of agency records consisting of a public access easement for a portion of the project area and decommissioning references from other proceedings to provide context for the decommissioning portion of this proposal. The Parties were provided an opportunity to contest the substance or materiality of these records.
- L. *Twelfth Procedural Order.* On September 16, 2011, the Twelfth Procedural Order was issued regarding Commission staff's request to reopen the evidentiary record to allow for the submission of updated summary tables of the visual impact assessment (to include Pug Lake – a portion of West Grand Lake) by the Applicant's scenic consultant, LandWorks, and the scenic consultant for the Commission, Dr. Palmer. The Parties were provided an opportunity to comment on these updated summary tables to include Pug Lake.
- M. *Thirteenth Procedural Order.* On October 4, 2011, the Thirteenth Procedural Order was issued, indicating the Commission would disregard any comments made by the PPDLW in response to the Twelfth Procedural Order which did not address the addition of Pug Lake to the visual assessment summary tables of LandWorks and Dr. Palmer and to

- reopen the evidentiary record to allow submission of additional information by the Applicant regarding night lighting of the project facilities. [Note: while the order is dated October 4, 2011, due to technical difficulties, the order was not released until 5:30 a.m. on October 5, 2011.]
- N. *Commission Directive to Draft Denial.* On October 19, 2011, following a deliberative session on the visual impacts of this project, the Commission directed staff to draft a denial of the project and bring that draft denial to the December 7, 2011 Commission meeting for a vote by the Commission.
- O. *Request to Withdraw.* On November 8, 2011, the Applicant filed a request to withdraw its application, and agreed to an extension of the Commission's deadline for issuing a final decision through January 2012.
- P. *Fourteenth Procedural Order.* On November 15, 2011, the Fourteenth Procedural Order was issued in response to the Applicant's request to withdraw its application, and it indicated the Commission would act on the request to withdraw at its regularly scheduled meeting on December 7, 2011, with consideration of the denial of the permit application to occur at the Commission's January meeting, as necessary. The Parties were provided an opportunity to comment on the request to withdraw both in writing and orally at the December 7, 2011, Commission meeting.
- Q. *December 7, 2011, Commission action.* On December 7, 2011, the Commission tabled the Applicant's request to withdraw. The Commission further directed the Applicant to submit a written description of its plans for reconfiguring the BWP to address the concerns expressed by the Commission during this proceeding and the Commission's deliberations on the visual impacts of this Project in September and October of 2011. The Applicant agreed to an extension of the Commission's deadline for issuing a final decision through May 15, 2012. The Fifteenth Procedural Order (see below) further specified the process for further consideration of the request to withdraw.
- R. *Fifteenth Procedural Order.* On December 12, 2011, the Fifteenth Procedural Order was issued, directing the Applicant to submit, by Friday, March 9, 2012, a written description of its plans for reconfiguring the BWP as described in subsection Q above. In issuing the order, the Chair noted the purpose of the filing, together with any comments thereon received from the Intervenors and public, was to enable the Commission to decide whether, based upon its Title 12 authority enabling legislation and in keeping with considerations of administrative fair play, a withdrawal was appropriate under the facts and circumstances of this proceeding.
- S. *March 9th filing by Applicant.* On March 9, 2012, the Applicant responded to the Fifteenth Procedure Order by stating it was unable to provide a written description of its plans for moving forward with a reconfigured BWP because of uncertainties regarding the availability of capital due to a pending PUC decision, and also because the Applicant claimed there remained uncertainty regarding the statutory visual impact standard. The Applicant also renewed its request to withdraw its application.

- T. *Sixteenth Procedural Order.* On April 4, 2012, the Sixteenth Procedural Order was issued responding to certain objections by the Parties regarding the March 9th and subsequent filings. This Order also established an oral argument schedule for the Parties for the April 6, 2012, meeting at which time the Commission was to reconsider the Applicant's request to withdraw its application based on its March 9th filing.
- U. *April 6, 2012, Commission action.* On April 6, 2012, the Commission heard oral argument from the Applicant and Intervenor PPDW, Corrigan, and Mott regarding the Applicant's March 9th filing and renewed request to withdraw. The Commission took the request to withdraw off the table (see section Q above), and discussed the merits of the request to withdraw. The Commission has the authority to manage and control its adjudicatory proceedings pursuant to its Title 12 enabling legislation and in keeping with considerations of administrative fair play. At the time of the Applicant's request to withdraw, this matter had already proceeded through a substantial administrative process, as summarized above. The Commission had convened more than one day of a public evidentiary hearing, the Commission had already articulated a basis for denial, and it had directed its staff to prepare a decision document denying the BWP. Under these circumstances, it would not be equitable to allow an applicant to withdraw, and therefore the Commission denied the request to withdraw. The Commission directed staff to bring a denial decision back to the Commission for decision no later than May 15, 2012, the agreed-upon deadline for issuing a decision in accordance with 12 M.R.S.A. § 685-B(2-C).

PROJECT SETTING

16. *Existing Conditions and Uses of the Site.* The proposed 69.1 MW BWP would be located on three ridges: Bowers Mountain and an unnamed ridge to the south (referred to as "South Peak" throughout the application) in Carroll Plantation, Penobscot County, and Dill Hill in Kossuth Township, Washington County. By way of placing the proposed project area in context, according to the application, the project is located in the Eastern Lowlands biophysical region of Maine, which is characterized by extensive lowlands with elevations generally below 600 feet, except for several hills within the Project area. The Bowers Mountain, South Peak and Dill Hill ridgelines have elevations between 750 to 1,120 feet above mean sea level. All of these rolling hills are located directly south of Route 6 and cross the town boundary from Carroll to Kossuth. Together they form a divide between stream drainages to Baskehegan Stream in the north, and to streams flowing to lakes and ponds in the south. The project area is primarily dominated by a regenerating Beech-Birch-Maple forest. The entire project area has been heavily logged in the past, with harvesting activities occurring largely between 10 and 20 years ago.
- A. While, as earlier noted, the project area is within the expedited wind development area, it also sits at the edge of a large "donut hole" excluded from the expedited area. This adjacent excluded area is part of the Downeast lakes region – an area known for its vast lake resources and the recreational opportunities they provide. This is an area recognized by the CLUP as a unique region within the Commission's jurisdiction (2010 CLUP at

54). Of this region, the CLUP notes: *"Today, the forest and fisheries continue to sustain the unique community in and around Grand Lake Stream Plantation. This community has more Registered Maine Guides than any place in Maine. These professionals provide a vital link between visitors and the complex ecosystem of lakes, marshes, woodlands, bogs and their wildlife in an area scientists recognize as one of unmatched biodiversity."*

There is considerable testimony in the record from guides and sporting camp owners working in, and around the area of, Grand Lake Stream. While Grand Lake Stream is located approximately 18 miles from the BWP area, the testimony of the guides and camp owners, among other pieces of evidence in the record, addresses the anticipated adverse scenic impacts the BWP would have on their and their clients' experiences in traveling through the lakes within 8 miles of the project area and the resultant adverse impact that the BWP would have to their livelihood.

- B. Like much of the Commission's jurisdiction, the region is generally undeveloped, is currently forested, and the dominant land use is commercial forestry. An existing network of unimproved logging roads is present throughout the area and the effects of past and current timber harvesting are evident across the entire project area, from large clear-cuts to small selective harvesting areas. Aside from the roads and skidder trails, the area around the project area is mostly undeveloped with sparsely located year-round and seasonal properties. The majority of these properties nearest to the project are located to the south of the South peak turbines and the closest dwelling is a seasonal camp located approximately 2,500 feet to the south of the nearest proposed turbine. There are four year-round residences on Route 6 that are more than 0.5 miles from the nearest proposed turbine. The nearest sporting camp is Maine Wilderness Camps on Pleasant Lake approximately 2.8 miles of the closest proposed turbine. There are several other sporting camps that utilize the lakes within the 8-mile study area that are located as far as 18 miles away whose clients regularly utilize lakes within the 8-mile study area. The 8-mile study area is the area set by statute within which scenic impacts are assessed on certain identified resources of state or national significance (see finding 19 below).
- C. Much of the land in the area is privately owned. There are also a number of publicly and privately conserved lands in the 8-mile study area. Located in the southeastern part of the study area are portions of the Sunrise Conservation Easement held by the New England Forest Foundation, which maintains this undeveloped land forever in its present and historic, and primarily undeveloped condition, to allow its continued operation as a working forest. Under the terms of the Sunrise Conservation Easement, the land is managed to provide the perpetual ability to produce forest products, as well as to conserve and/or enhance forest and wildlife habitats, undeveloped shoreline, and historic public recreation opportunities for present and future generations. Overlaying the Sunrise Conservation Easement is a Public Access Easement acquired by the Bureau of Public Lands. The Public Access Easement grants public access to this area for the purposes of *"hunting, fishing, trapping, picnicking, swimming, cross-country skiing, snowshoeing, hiking, nature observation, and enjoyment of open space in accordance with applicable state rules and regulations."*

- D. Typical recreational uses in the surrounding area include swimming, boating, fishing, hunting, and snowmobiling.

SCENIC IMPACT REVIEW CRITERIA AND ASSESSMENT

17. *Scenic Impact Review Criteria: Evaluation of effects on scenic character [Title 12, § 685-B(4)C and Title 35-A, chapter 34-A, § 3452].* The Commission's criteria for approval for an expedited wind energy development in Title 12, § 685-B(4)(C), pursuant to the Task Force Act states: "In making a determination under this paragraph regarding an expedited wind energy development, as defined in Title 35-A, § 3451, subsection 4, the Commission shall consider the development's effects on scenic character and existing uses related to scenic character in accordance with Title 35-A, § 3452."

A. Title 35-A, chapter 34-A, §3452 states that when "making findings on the effect of an expedited wind energy development on scenic character and existing uses related to scenic character, [the Commission] shall determine"... "whether the development significantly compromises views from a scenic resource of state or national significance such that the development has an unreasonable adverse effect on the scenic character or existing uses related to the scenic character of the scenic resource of state or national significance." The determination by the Commission under this section also includes the associated facilities of the expedited wind energy development, unless otherwise determined by the Commission pursuant to 35 M.R.S.A. § 3452(2) (see Finding 18 below).

B. Title 35-A, chapter 34-A, § 3452(3) further requires that when making a determination on impacts of an expedited wind energy development on scenic character, the Commission shall consider the following:

- (a) *"The significance of the potentially affected [scenic resource];*
- (b) *The existing character of the surrounding area;*
- (c) *The expectations of the typical viewer;*
- (d) *The expedited wind energy development's purpose and the context of the proposed activity;*
- (e) *The extent, nature and duration of the 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 the 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."*

C. Title 35-A, § 3452(3) and (4) also state that "a finding by [the Commission] that the generating facilities are a highly visible feature in the landscape is not a solely sufficient basis for determination that an expedited wind energy development has an unreasonable

adverse effect on the scenic character and existing uses related to scenic character of a scenic resource of state or national significance." The effects of portions of the developments facilities located more than 8 miles from a scenic resource of state or national significance shall be considered to be insignificant. (Title 35-A, § 3452(3)). A visual assessment is not generally required for the portions of the wind energy development located from 3 to 8 miles from scenic resources of state or national significance, but may be required if there is substantial evidence that such an assessment is needed. (Title 35-A, § 3452(4)). Based upon the applicant's submissions, the Commission did not reach the issue of whether an 8-mile assessment was necessary (see Finding 19 below).

18. *Scenic Standard Applicable to Associated Facilities.* After accepting this application complete for processing, the issue of the scenic standard applicable to this project's associated facilities was raised. The Chair provided the Parties an opportunity to submit argument prior to the resolution of this issue, all in advance of the Parties' pre-filing of testimony. See First Procedural Order (March 29, 2011). At its April 6, 2011 regularly scheduled business meeting, the Commission formally delegated to the Chair the authority to determine whether the Title 35-A standard or the Title 12 standard would apply to the associated facilities. And, thereafter, the Second Procedural Order (April 21, 2011) set forth in detail the findings and conclusions regarding the scenic standard applicable to the associated facilities.
- A. *Title 35-A analytical framework.* Pursuant to 35-A M.R.S.A. § 3452(2): "*The [Commission] shall evaluate the effect of associated facilities of a wind energy development in terms of potential effects on scenic character and existing uses related to scenic character in accordance with Title 12, section 685-B, subsection 4, paragraph C. . . in the manner provided for development other than wind energy development, if the [Commission] determines that application of [Title 35-A, subsection 3452, paragraph 1]. . . to the development may result in unreasonable adverse effects due to the scope, scale, location or other characteristics of the associated facilities. An interested party may submit information regarding this determination to the primary siting authority for its consideration. The primary siting authority shall make a determination pursuant to this subsection within 30 days of its acceptance of the application as complete for processing.*" 35-A M.R.S.A. § 3452(2) (emphasis added). Thus, to determine whether to apply Title 35-A or Title 12, this section directs the Commission to first apply the scenic standard provided Title 35-A to the associated facilities, and then compare that to the application of the scenic standard provided by Title 12.
- (a) *Title 35-A standard.* The Title 35-A scenic standard and its associated criteria are found at 35-A M.R.S.A. §§ 3452(1) & (3). In applying that standard, the Commission considers views of the associated facilities only from statutorily designated scenic resources of state or national significance, and based upon the criteria set forth in Title 35-A, it would consider whether the associated facilities significantly compromised those views such that there was an unreasonable adverse effect on scenic character or existing uses related to scenic character. 35-A M.R.S.A. §§ 3451(9), 3452(1) & (3). Upon this review, that is—the scenic impacts of the

associated facilities under the Title 35-A standard—section 3452(2) then directs the Commission to consider whether the application of that standard, as opposed to application of the scenic standard set forth in Title 12, “may result in unreasonable adverse effects due to scope, scale, location or other characteristics of the associated facilities.” 35-A M.R.S.A. § 3452(2). Thus, the Commission must next consider what it would consider with regard to the scenic impacts of associated facilities under the Title 12 standard that it would not consider under the Title 35-A standard.

- (b) *Title 12 scenic standard.* Under the Commission’s traditional scenic standard, 12 M.R.S.A. § 685-B(4)(C) and Commission Standards § 10.25(E)(1), the Commission would consider whether “adequate provision has been made for fitting the [project] harmoniously into the existing natural environment in order to ensure there will be no undue adverse effect on [among other things] existing uses [and] scenic character . . . in the area likely to be affected by the project.” Thus, under Title 12, the standard is the so-called harmonious fit/no undue adverse effect standard, and the Commission’s review of the scenic impacts of associated facilities would not be limited to those views that have been identified by the Legislature as significant under Title 35-A. See 35-A M.R.S.A. § 3451(9) & § 3452(1). Under Title 12 the Commission would consider the impacts the associated facilities would have on views from scenic resources of state or national significance as well as locally significant scenic resources in the area likely to be affected by the project.
- (c) *Contrasting Titles 35-A and 12.* If the Commission were to apply the Title 35-A standard to associated facilities, two factors are relevant for the Commission’s consideration. First, the Commission would not consider the scenic impacts of the associated facilities on locally significant scenic resources. Second, with respect to views of the associated facilities from scenic resources of state or national significance, the Commission would not consider whether the associated facilities fit harmoniously into the natural environment. Thus under the analytical framework provided by 35-A M.R.S.A. § 3452(2), the Commission must ultimately consider: whether (because of their scope, scale, location or other characteristics) the associated facilities may (because the first and second factors stated above would not be taken into consideration) result in unreasonable adverse effects.

B. *Application of Title 35-A to Bowers Wind Project.* As a preliminary matter, to determine which scenic standard applies to the associated facilities in this project, the definition of associated facilities, as compared to generating facilities, must be clear.

- (a) *Definition of associated facilities.* Title 35-A defines associated facilities and generating facilities. In accordance with 35-A M.R.S. §§ 3451(1) & (5):
- (i) *Generating facilities* means wind turbines, including their blades, towers, and concrete foundations, and transmission lines (except generator lead lines).
 - (ii) *Associated facilities* means all other facilities that are not generating facilities, and that includes the turbine pads, which are the cleared, leveled areas of gravel around each turbine, all roads used to access the turbines, the generator lead lines, and the meteorological towers, as well as the operations and maintenance building and the substation.

- (b) *Bowers Wind Project's associated facilities.* The record indicates the following with respect to the scope, scale, location and other characteristics of this project's associated facilities:
- (i) Lakes located to the south of the project area in the Downeast lakes region (other than the lakes in this region that have been designated scenic resources of state or national significance under the Task Force Act) have been identified as locally significant scenic resources, but the views of associated facilities from these resources will be limited for the reasons stated below;
 - (ii) This project does not propose a new generator lead line;
 - (iii) The operations and maintenance building, substation, and express collector line will be located on the north side of the project area, and while the access road to the operations and maintenance building will be visible from an existing road, and the express collector line will be visible where it crosses an existing road, none of those associated facilities will be visible from any identified scenic resources;
 - (iv) This project proposes 9.8 miles of new access roads in a project area that contains existing logging roads, the roads will be located at relatively low elevations, the topography will not require extensive cut and fill, and therefore the visual impact from the roads will primarily be limited to notches in the vegetation canopy;
 - (v) Elevations proximate to the project area are relatively low-lying and elevations that will provide views of the associated facilities will be at a distance that reduces the scenic impact; and
 - (vi) This project's associated facilities may be visible to varying degrees from statutorily designated scenic resources of state or national significance, but they will not be visible from any national natural landmark, federally designated wilderness area, nationally-listed historic property, or national park.

C. *Scenic standard applicable to associated facilities.* As set forth in the Second Procedural Order, the Commission does not conclude that the application of the Title 35-A scenic standard to this project's associated facilities may result in an unreasonable adverse effect. While such application will eliminate consideration of the associated facilities' scenic impact on any locally significant scenic resources, nothing in the record indicates any concern in that regard. Further, in view of the scope, scale, location and other characteristics of the associated facilities, as identified above, the Commission concludes that not requiring them to fit harmoniously into the natural environment with respect to how they will be viewed from scenic resources of state or national significance will not result in an unreasonable adverse effect. For all of these reasons, the Title 35-A scenic standard, not the Title 12 standard, is applicable to the associated facilities of the BWP.¹

¹ Following the issuance of the Second Procedural Order, PPDW asserted that the Chair had failed to properly consider the scenic impacts of the meteorological (MET) towers, and thus argued that the Title 12 scenic standard ought to have been applied to the associated facilities. The record shows, however, that the MET towers of the BWP would only have been visible in a limited way from limited locations, and thus the MET towers do not provide a basis to conclude that the Title 12 standard ought to have been applied to the BWP associated facilities.

19. *Applicant's VIA.* The Applicant submitted a Visual Impact Assessment (VIA) dated January 19, 2011 that was conducted by LandWorks of Middlebury, Vermont. Scenic Resources of State or National Significance (SRSNS) were identified according to the definition in 35-A M.R.S.A. § 3451(9). The VIA analyzed scenic impacts to 8 miles, so the Commission did not reach the visual impact assessment issues described in Title 35-A §3452 (4), namely whether a VIA was necessary and whether the VIA must address impacts located more than 3 miles and up to 8 miles away.

The record shows that the following 9 lakes are SRSNS within 8 miles that have views of the project: Pleasant Lake, Shaw Lake, Duck Lake, and Junior Lake—all of which are within 3 miles of the Project; and Scraggly Lake, Keg Lake, Bottle Lake, Sysladobsis Lake and Pug Lake, which is a subset portion of West Grand Lake—all of which are within 3-8 miles of the Project. (See Applicant's VIA and July 5, 2011, memo from LandWorks to the Applicant) The record also shows that these lakes are connected by water or portages that facilitate recreational use of these lakes as canoe routes by guides and the general public. (See, for example, testimony of NRCM). See Table 1 below for a summary of the findings regarding the 9 lakes by both LandWorks and Dr. Palmer, the Commission's scenic review expert.

Six other SRSNS were identified as having no views of the project within 8 miles: Horseshoe Lake, Lombard Lake, West Musquash Lake, Norway Lake, Upper Sysladobsis Lake, and the Springfield Congregational Church. (See Application Exhibit #17, VIA p. 20)

Applicant's overall scenic impact assessment: *"This region of Maine has very low population, vast woodlands, and plentiful lakes. It is not recognized as a tourism center and there are primitive recreational opportunities. It is a working landscape on which the region's residents have depended for centuries, including the harvesting and processing of forest products, evidence of which can be seen in the hillsides and the network of logging roads throughout the area. Throughout most of the study area, topography, forest cover, and roadside vegetation constrain or block views of the Project, limiting the overall visual impact. There are scenic resources of state or national significance within the viewshed, which include thirteen great ponds and one national historic site. For each of these resources, the assessment examined its significance, character, use, and visibility, as defined by 35-A M.R.S.A. §3452.3. This information was used to make a determination of whether the Project "has an unreasonable adverse effect on the scenic values and existing uses related to scenic character of a scenic resource of state or national significance." This Visual Impact Assessment demonstrates that the Project, as proposed, will not result in an unreasonable adverse effect on the scenic values and existing uses related to scenic character of a scenic resource of state or national significance."* (Exhibit 17 of application, page 2) In the Applicant's pre-filed testimony it is stated that *"this is not a pristine landscape, and has long been a working landscape that has been used and developed for its recreational, timber and water resources."* (LandWorks pre-filed testimony, p. 17)

- A. *Intervenor Comments:* The PPDLW employed Michael Lawrence & Associates (MLA) to prepare their own VIA of the project area (see pre-filed testimony of MLA). MLA rebutted two of the overall conclusions of the Applicant's VIA: (1) that this "region of

Maine ... is not recognized as a tourism center", and (2) that the overall visual impact is limited by topography, forest cover, and roadside vegetation.

As for the region not being recognized as a tourism center, MLA asserted that the project area is part of the Downeast lakes watershed which has served as a recreation area for "travelers ... as early as 1830" when Passamaquoddy guides brought clients into this area. Gary Campbell, a small business owner with an MBA from Harvard Business School, also testified on behalf of PPD LW. Campbell has had a summer residence in Lakeville for the past 28 years, and he explained in his testimony that "in the Downeast Lakes regions [of which the project area is a part], tourism employs hundreds of people directly and many more indirectly. ... Small businesses include sporting camps, lodges and housekeeping cabins, hunting fishing guides, as well as retail and service businesses." Campbell also cited the 2005 Strategic Plan for Implementing the Maine Nature Tourism Initiative, which was prepared for the Maine Department of Economic and Community Development. This Plan describes the Grand Lake Stream and BWP area as "situated within nearly 2 million unbroken acres of northern woodlands" where "Maine Guides can lead their visitors on a number of adventures depending on the season." (see pre-filed testimony of Gary Campbell). Registered Maine Guides, testifying on behalf of Intervenor Corrigan, also testified to the importance of lakes in the project area to their guiding business. (see pre-filed testimony of David Tobey and Dale Tobey).

As for the Applicant's claim regarding limited visual impact, MLA asserted that it is irrelevant that topography or vegetation limits views of the project from viewpoints other than lakes. MLA argues that what must be considered is the chain of lakes within the project area that are the scenic resources of state or national significance, and specifically the 9 of which that would have views of the BWP.

- B. *Public Testimony from the Natural Resources Council of Maine (NRCM)*: NRCM, a Maine nonprofit organized for the purpose of conserving Maine's environment, testified at the public session of the evidentiary hearing. NRCM testified that "most of the North Woods is a working landscape, not pristine wilderness. Limiting a finding of unreasonable adverse impacts to pristine landscapes or unique vistas like Katahdin (as [the Applicant's scenic expert] LandWorks did in its testimony) would be inconsistent with the law and insufficiently protective of the other places in Maine with high scenic and recreational importance."
- C. *Third Party Review*. The Commission's retained scenic expert, Dr. James Palmer of Scenic Quality Consultants, conducted a third party peer review, dated June 3, 2011, of the Applicant's Visual Impact Assessment (VIA). Dr. Palmer has an MLS in landscape architecture and a PhD in forestry/natural resource planning from the University of Massachusetts, Amherst, with over 30 years of experience in consulting and research on environmental perceptions and behavior. He has provided scenic assessment consulting services to the Commission and the Maine Department of Environmental Protection on several other projects, including six wind power project proposals.

As noted in Finding 19 above, the Applicant prepared a VIA with the following results. Nine lakes were identified as SRSNS within 8 miles that have views of the project: Pleasant Lake, Shaw Lake, Duck Lake, and Junior Lake -- which are within 3 miles of the Project-- and Scraggly Lake, Keg Lake, Bottle Lake, Sysladobsis Lake and Pug Lake (portion of West Grand Lake) -- which are within 3-8 miles of the Project. (See Applicant's VIA, Exhibit 17 of application, and July 5, 2011, memo from LandWorks to the Applicant). The Commission's scenic consultant, Dr. Palmer, generally agreed with the results of the Applicant's VIA by LandWorks but found that the potential adverse scenic impact was greater on the SRSNS than that estimated in the Applicant's VIA (see Table 1 below).

Dr. Palmer's overall scenic impact assessment: In his peer review, Dr. Palmer stated *"overall this VIA is accurate and clearly presented."* Dr. Palmer's review, however, concluded that the scenic impacts of the project would be more severe than indicated by the Applicant's VIA. Dr. Palmer's overall conclusion includes the following statement: *"The apparent scenic impact to the state and nationally significant scenic resources is Adverse at some locations and Very Adverse others. It is my judgment that it will be very difficult to decide whether the scenic impact to some of the state or nationally significant scenic resources is Unreasonably Adverse without better information about the "extent, nature and duration" of their use, the "expectations of the typical viewer" and "potential effect...on the public's continued use and enjoyment" of these resources."* (See Palmer review, p.63)

Palmer stated, as to applying the statutory "typical user" criterion above to, for example, Junior Lake, *"there are no existing data to directly address this criterion. An alternative approach is to apply deductive reasoning to respond to this criterion using common knowledge and assumptions. Because it is not empirically grounded, it may not be valid or reliable."* (See Palmer review, p. 45) He commented similarly for each lake having views of the project.

- D. *Summary of impacts; Lake Management Program.* Table 1 summarizes the scenic status of each of the lakes with views of the turbines, distance to the nearest turbine, number of turbines visible within 8 miles, and overall scenic impact as judged by LandWorks (the Applicant's scenic expert) and Dr. Palmer (Commission's scenic expert). The overall scenic impact assessment for each lake takes into account the extent to which turbines would be visible at the hub. As highlighted in Table 1 below, there is agreement as to which 4 lakes have the greatest potential for adverse scenic impact: Pleasant, Shaw, Scraggly, and Junior Lakes.

Table 1. Summary of Resources of State or National Significance Within 8 Miles of Any Visible Project Element – LandWorks and Dr. Palmer
(listed in descending order by distance to nearest turbine)

	Scenic Status [Significant (S), Outstanding (O)]	Distance to Nearest Visible Turbine	# of Turbines Visible within 8 Miles (27 total)	Overall Scenic Impact (LandWorks)	Overall Scenic Impact (Palmer)
GREAT PONDS					
Within 3 miles of the Project					
<i>Pleasant Lake</i>	(O)	2.16 mi.	0-27	<i>Medium</i>	<i>Med-High</i>
<i>Shaw Lake</i>	(S)	2.6 mi.	0-25	<i>Medium</i>	<i>Med-High</i>
Duck Lake	(S)	2.7 mi.	0-18	Low	Low-Med
<i>Junior Lake</i>	(S)	2.99 mi.	0-23	<i>Medium</i>	<i>Medium</i>
Within 3-8 miles of the Project					
<i>Scraggly Lake</i>	(S)	3.3 mi.	0-26	<i>Medium</i>	<i>Med-High</i>
Keg Lake	(S)	3.78 mi.	0-18	Low	Medium
Bottle Lake	(S)	5.1 mi.	0-13	Low	Low
Sysladobsis Lake	(S)	6.34 mi.	0-22	Low	Low-Med
Pug Lake ² (West Grand Lake)	(O)	7.2 mi.	0-6	Low	Low-Med

Column 1 above sets forth the lakes' scenic status, as established by the Commission's *Lake Management Program* of June 1990 (see Appendix C of the CLUP). As shown above, all of the 9 lakes that would be impacted by the BWP received either an outstanding or significant scenic rating based upon the *Program*, which as explained below was an exhaustive process.

The Lake Management Program was the culmination of a 5-year undertaking by the Commission in consultation with the Maine Department of Inland Fisheries and Wildlife, State Planning Office, Natural Areas Program and other agencies. The Program first assessed the land use and natural resource characteristics associated with the approximately 1500 lakes in the Commission's jurisdiction that are over 10 acres in size (representing 98% of the lake surface area located in the Commission's jurisdiction). This preliminary assessment culminated in the *Wildlands Lake Assessment* in 1987.

Then, with the guidance of a Lakes Policy Committee—which included representatives of major landowners, statewide environmental and sportsmen's organizations, the

² While the Applicant's post-hearing brief states there should be no visibility of turbines from Pug Lake (portion of West Grand Lake), LandWorks notes in its July 5, 2011, memo to the Applicant that assuming a tree height of 45 feet, portions of up to 6 turbines could be visible within 8 miles of Pug Lake. The Applicant's VIA assumes a tree height of 45 feet in its visibility analysis of all other lakes (see Exhibit 17 of Application, p. 6).

University of Maine and the Commission —an *Action Program for Management of Lakes in Maine Unorganized Areas* was prepared and accepted by the Commission in January of 1989. The *Action Program* recommended a variety of innovative regulatory and non-regulatory lake management techniques, including policy guidance, special review criteria for lake development, lake concept plans, lake management classifications and other public and private efforts.

Following numerous public meetings and hearings around the state, the recommendations of the *Action Program* culminated in the 1990 adoption of the *Lakes Management Program*, which included an amendment to the Commission's CLUP and regulations governing land use around lakes.

In enacting the Task Force Act, the Legislature adopted the scenic assessment of lakes established in the Commission's *Lake Management Program*. 35-A M.R.S.A. § 3451(9)(D)(2). Of the 1500 lakes only 280 lakes were considered as having either significant or outstanding scenic values. Fourteen of those 280 lakes are within 8 miles of the BWP, and, as shown in Table 1, 9 of those 14 would have views of the BWP turbines.

20. *User data.* The Legislature has directed the Commission, in determining whether a wind energy development Applicant has satisfied the applicable scenic standard, to consider, among other things, the expectations of the typical viewer and the extent, nature, and duration of the potentially affected public uses of the relevant scenic resources. 35-A M.R.S.A. § 3452(3). As explained in paragraph 19 above, in view of the degree of the adverse scenic impact of the BWP, a careful consideration of this criterion is warranted.

On behalf of the Applicant, the Portland Research Group conducted two studies. The first was a January 2011 telephone survey of users of outdoor resources in Maine during the past three years, focusing on those who used the lakes within 8 miles of the BWP. The second study was a February 2011 intercept survey of snowmobilers who attended a ride-in to the Stetson Mountain Wind Project. Although the Applicant's pre-filed testimony asserts that the findings of these studies show the BWP would not have an unreasonable impact on uses related to scenic resources, the Commission's expert questioned the methodology and reliability of the studies in his peer review.

The Applicant also surveyed activity on Pleasant, Scraggly, and Bottle Lakes over Memorial Day weekend (2011) and boat traffic through a stream that provides the only water access point to Junior Lake, during 11 days in July 2011. Both surveys documented low overall use, and the July survey documented little, if any, guiding activity. The Memorial Day weekend survey was conducted by two individuals over a total of approximately 10 hours observing use on these lakes and around their shore areas (See May 31 letter to the Applicant from Randy Seaver). The stream/waterway survey was conducted on 11 days from July 4 through July 15 by an observer who camped on the site. All boats travelling through the stream/waterway to Junior Lake were documented as well as all boats observed travelling in Junior Bay (a portion of West Grand Lake before entering the waterway). (See July 19 letter to the Applicant from Stantec reporting the results of the survey).

Additionally, the Applicant asserts there are a number of existing significant studies and surveys that demonstrate that public use and recreational activity does not decline following the construction of wind turbines. The Applicant submitted to the Commission studies that have been conducted in Prince Edward Island, Scotland, the Czech Republic, Searsburg, VT, and Quebec. The Applicant states that all of these studies indicate that public acceptance of wind turbines is high, and that the existence of wind energy projects in an area has little negative effect on tourism or recreational use.

Furthermore, the Applicant maintains that the results of the Baskahegan Stream Watershed Recreational Use & Resource Analysis ("Baskahegan Study") are compelling evidence that the visibility of turbines, on a lake that receives relatively high recreational use (including by guides), has not had any adverse impact on the public's continued use and enjoyment of that resource following turbine construction. The Baskahegan Study was conducted in the summer of 2010 by faculty and students of the University of Maine on Baskahegan Lake in Brookton Township, Washington County, following the construction of the Stetson Mountain Wind Project in T8 R3 NBPP, Washington County. The purpose of the Study was "to illuminate the characteristics of recreation use patterns and site condition around the Baskahegan watershed area." (see Exhibit D of LandWorks pre-filed testimony). The Stetson Mountain Wind Project had become operational the previous year, but no one interviewed for the study indicated any detrimental impact from the turbines visible from that lake. The interviewees, however, were not asked specifically about the turbines, which are approximately 8.9 miles from the boat launch where most of the interviews were conducted. The Stetson Mountain Wind Project turbines are approximately 5.1 miles from the closest part of Baskahegan Lake, which is not recognized under state law as a SRSNS.

A. Intervenor PPDLW: Witnesses for the PPDLW included several Registered Maine Guides and sporting camp owners from the Grand Lake Stream area, which is about 18 miles from the BWP area, who utilize the lakes within 8 miles of the BWP to guide their clients, primarily for the purpose of recreational fishing. They all expressed the concern that the visual impact of the BWP turbines would reduce the likelihood their clients would want to return to the area and thus adversely impact their businesses.

In its rebuttal comments of July 28, 2011, Intervenor witnesses guides Dave Tobey and Andy Buckman, and sporting camp owner Charles Driza all question the reliability of the Applicant's July 2011 survey of boat traffic through the waterway to Junior Lake. Tobey states "*guiding on these waters are the busiest during May and June... [Grand Lake Stream] is always slow during July. Around the first of August the guiding picks up again with the fall season becoming a popular time.*" Similarly, Buckman states "*most of our canoe groups are off on trips in other areas of Maine and Canada during July.*" And Driza states "*Junior Lake and Junior Stream [which is the waterway stream leading to Junior Lake] are two of our most used destinations in May and June when our fishing season is at its peak.*"

B. Public comment: During the two public sessions of the evidentiary hearing on June 27 and June 28, 2011 several other Registered Maine Guides and sporting camp owners

from the Grand Lake Stream area testified as to the importance of the lakes in the project area to their businesses. They stated concerns similar to those of the PPDLW witnesses about the adverse impact the BWP would have on the segment of their business that relies on guests utilizing the lakes within 8 miles of the project. They explained that their livelihood depends on the natural beauty of this area, and stated that some of their clients had expressed negative reactions to the views of the Stetson Mountain Wind Project turbines from Baskahegan Lake.

- C. *Third party review:* Regarding the Applicant's snowmobile survey, Dr. Palmer explains that it was not an unbiased probability sample³ because the respondents had already declared, by agreeing to attend the ride-in to the Stetson Mountain Wind Project, that they thought they would enjoy recreating in and around a wind power project. Palmer stated that "[b]ecause of this self-selection bias, I do not see what role this survey can play as a responsible decision making tool."

Regarding the telephone survey, Dr. Palmer explains that it used "a nonprobability sampling procedure where the data cannot be generalized beyond the specific 191 respondents in the survey. It begins with a list of self-declared outdoor activity participants. In addition, some people were excluded from the survey, which had a quota to balance gender and limit the number of respondents who rarely or never used the scenic lakes in the study area. A probability sample would be needed to estimate the extent, nature and duration of recreation use. A second problem is that respondents did not see simulations of what the Bowers Wind Project turbines would look like from the study area. It is therefore highly unlikely that they could have an accurate mental image of the 'scope and scale' of the turbines from any particular viewpoint." (Palmer comments on VIA, page 36)

Regarding the Baskahegan Study, Dr. Palmer stated that, like the snowmobile survey, it was affected by a self-selection bias because persons who chose not to visit Baskahegan Lake because the Stetson Mountain Wind Project turbines were visible from the lake were not included in the survey. While Palmer agreed it was significant that no one who did continue to visit the Lake post-construction mentioned the visibility of the turbines, no one in the study was actually asked about the effect of seeing turbines, and thus he did not find the results persuasive in evaluating the potential impacts of the BWP. See paragraphs 19(C) & (D) above regarding BWP's degree of adverse scenic impact. Dr. Palmer also noted that Baskahegan Lake is not a SRSNS, and the boat launch from which most of the survey was completed was over 8 miles from the Stetson Mountain Wind Project, and thus beyond the 8-mile limit for assessing scenic impacts set by the Legislature under the Task Force Act. (Palmer cross-examination, July 6, 2011, page 59 of transcript). See 35-A M.R.S.A. § 3452(3) (providing that the Commission, in

³ The record includes Dr. Palmer's explanation of his use of the term "probability sample." A probability sampling scheme is one in which every unit in the population has a chance (greater than zero) of being selected in the sample, and this probability can be accurately determined. The combination of these traits makes it possible to produce unbiased estimates of population totals, by weighting sampled units according to their probability of selection. Examples of probability sampling include simple random samples, systematic samples, stratified samples and cluster samples. Examples of nonprobability sampling include accidental samples, quota samples, and purposive sampling.

determining a wind energy development's effect on scenic character, "shall consider insignificant the effects" of turbines that are located more than 8 miles away).

As to the existing studies cited by the Applicant regarding how people perceive wind projects, Palmer noted that those studies were not conducted in the context of the specific statutory criteria applicable in Maine pursuant to the Task Force Act. Title 35-A has specific criteria about how to evaluate the scenic impact of a wind power project, including, for example, considering turbines only within 8 miles of specific, identified, significant resources, and considering the impacts only on those who actually use the resources. Dr. Palmer also opined that, in order to be reliable, respondents in a study need to be presented with an accurate visual simulation from real viewpoints toward a proposed project to understand the potential scenic impact. These conditions have rarely been met by previous studies, which are typically about wind energy in general, without reference to particular viewpoints, user activities, or specific projects.

Dr. Palmer explained that the Searsburg, VT study, which he conducted, had many strengths, but the respondents were not engaged in recreational activities and the viewpoints had not been designated by law as significant.

21. **Remote recreational values and evaluating scenic impact under customary VIA's**
The Task Force Act's scenic impact evaluation criterion, directing the Commission to consider the extent, nature, and duration of a project's impact on public uses, *see* 35-A M.R.S.A. § 3452(3)(E), may appear to contradict (under customary visual impact assessment methodologies) the Commission's long-standing policy, embodied in its CLUP and regulatory standards, to value remote recreation and related low levels of public use. This is most evident with regard to certain lakes in the Commission's jurisdiction that, because of long-standing Commission policy, are valued because of their remote characteristic and thus potentially low level of use. The Commission concludes, however, that there is no conflict; rather, this is an issue that requires the Commission to harmoniously apply Titles 35-A and 12, as well as the Commission's regulations and its CLUP.
- A. *Value of remoteness.* The Commission has a long-standing policy on valuing remote recreation, embodied in its districts, standards, and CLUP (2010 CLUP at 5, 17, 258, and 259). Thus, as stated above, while the Commission is directed to consider the extent, nature and duration of a project's impact, the Commission does not interpret that criterion to require it to discount certain resources that receive limited use. For example, some SSRNS are located in areas zoned as P-RR, the Recreation Protection Subdistrict, which is the subdistrict characterized by areas that currently support, or have opportunities for, unusually significant primitive recreation activities (Section 10.23, I of Commission's rules). Additionally, there are areas within the Commission's jurisdiction that, while not zoned as P-RR, share the same characteristics of remoteness and associated low levels of use that are integral to the experience of the typical user. Therefore it would not be consistent with the CLUP for the Commission to discount the significance of such a scenic resource due to its low level of use. *See* 35-A M.R.S.A. § 3452(3)(A). Thus, with respect to SRSNS in the P-RR, or in instances where substantial evidence shows that a SRSNS's low use contributes to the value of the resource, the Commission will consider

a low level of use on equal footing as a high level of use in determining whether an applicant has satisfied the applicable scenic standard. (See staff discussion paper titled "Evaluating Scenic Impacts Under the Wind Energy Act" for September 7, 2011, Commission meeting).

- B. *Shaw Lake*. This record shows that this lake is inaccessible and undeveloped and, in addition to having a significant scenic value, it also has significant fishery value according to the Commission's Wildlands Lake Assessment. As demonstrated by materials submitted by the Applicant, use of the lake is most likely limited to adventurous, inveterate paddles and anglers. It is a favorite of a number of smallmouth anglers.

22. Connectivity of regulated resources

The record for the BWP shows that several of the SRSNS that would be affected by this project form a waterway through the landscape within 8 miles of the proposed project. Staff prepared a discussion paper for the September 7, 2011, Commission meeting titled "Evaluating Scenic Impacts Under Wind Energy Act" which contained a section on evaluating "traveling through the landscape" visual impact where there are multiple SRSNS views from a water or land trail within 8 miles of a proposed wind project. There is testimony in the record about the value of these SRSNS lakes in terms of their connectivity as water trails.

Public testimony and comments on connectivity: NRCM noted two such trails in the AMC Quiet Waters Canoe Guide through the project area lakes -- see the testimony of NRCM including a map showing water trails through the project area. In its July 28, 2011, comments, the PPDLW noted several such water trails through the project lakes: 4 trails advertised by Maine Wilderness Camps all of which include use of Pleasant Lake, the REI website which advertises two water trails which include use of Pleasant, Scraggly and Junior Lakes, and the wilderness travel firm "Wilderness Inquiry" which leads canoe trips through Junior Lake.

There is also extensive testimony from guides and sporting camp owners who utilize the lakes within the project area with their clients. For example, guides explained that they often lead trips through the waterway, taking their clients up and back through several lakes in a day or over several days. See the testimony of witnesses for intervenors Partnership for the Preservation of the Downeast Lakes Watershed (PPDLW) and David Corrigan. There were also several guides and sporting camp owners who testified during the evening public sessions on 6/27 and 6/28 regarding the importance of these lakes to their guiding services.

Applicant's comments on connectivity: In its rebuttal comments of July 25, 2011, the Applicant states "that the potential impacts due to the connectivity of these lakes is overstated. Not all of these lakes are connected, including Sysladobsis Lake, Pleasant Lake and Shaw Lake. For most of the other lakes, the connections are often shallow and rocky, limiting or preventing access to motorboats wishing to travel between lakes due to low water levels, particularly later in the season."

Third-party comments on connectivity: Palmer stated in his July 26, 2011, correspondence that "it appears to me that the affected scenic lakes are part of a connected network."

SCENIC CHARACTER IMPACT CONCLUSIONS

Based on the above, with respect to the Bowers Wind Project proposal, the Commission finds and concludes that:

23. Wind power projects must be evaluated on the basis of the provisions of the Commission's statute, as revised in accordance with provisions of PL 2007, Ch. 661 (the Task Force Act). The Applicant has not carried its legal burden of proof in showing that the criteria of the Commission's statute, 12 M.R.S., § 685-A(4), or the criteria of 35-A M.R.S., Ch. 34-A, § 3452 have been met. The Commission recognizes the BWP's high visibility in the landscape is not a solely sufficient basis for determining that this project would have an unreasonable adverse scenic impact. 35-A M.R.S. § 3452(3). For all of the reasons discussed below, however, the Applicant has failed to demonstrate that the scope and scale of the BWP will *not* significantly compromise views from the SRSNS such that the BWP would have an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the SRSNS.

The Commission notes that the more than 10 million acres under its jurisdiction are characterized not only by natural character and recreational opportunities, but also by maintained forests and farmlands. (2010 CLUP at 2). Thus, much of the jurisdiction is a working landscape, and limiting a finding of unreasonable adverse impacts to only pristine landscapes or unique vistas would be inconsistent with Title 12, the Task Force Act, and the CLUP as it would be insufficiently protective of resources with high scenic value. On this record, the scenic impacts to this Downeast lakes region do not satisfy the applicable criteria.

- A. *Project assessment.* The Applicant conducted a scenic assessment in accordance with Title 35-A, chapter 34-A, § 3452 of scenic resources of state or national significance (Title 35-A, § 3451(9)) within 8 miles of the proposed BWP. Within 8 miles of the proposed turbine locations, the area in which the Applicant must prepare a visual impact assessment, there are 9 scenic resources of state or national significance that will have views of the project. Based upon the Applicant's commitment to retrofit the BWP with nighttime lighting mitigation technology, if feasible and approved by the FAA, the Commission has limited concern about the potential of the BWP to have an unreasonable adverse scenic impact on night skies. Within the Commission's approximately 10.5 million-acre jurisdiction, however, these 9 lakes are among only 280 lakes that have either significant or outstanding scenic ratings, thus resulting in the BWP having a significant impact on the scenic lakes in the Commission's jurisdiction. Importantly, 4 of these lakes are within notable proximity to turbines, that is, within 3 miles of the project.

The BWP significantly compromises views such that it has an unreasonable adverse effect on Pleasant, Shaw, Junior, and Scraggly Lakes due to the number of turbines visible from these lakes and their proximity to the turbines: Pleasant Lake (all 27 turbines visible with the closest being within 2.16 miles), Shaw Lake (up to 25 turbines visible with the closest being within 2.6 miles), Junior Lake (up to 23 turbines visible with the closest being within 2.9 miles), and Scraggly Lake (up to 26 turbines with the closest being within 3.3 miles). Of these 4 lakes the effects to Pleasant Lake are particularly notable as this is a lake that, pursuant to the Commission's comprehensive Lake Management Program assessment, received the highest scenic rating of "outstanding." All 27 turbines of the BWP would be visible from Pleasant Lake.

The effect of the BWP is also particularly adverse as the record shows that the 9 lakes collectively represent water trails that receive significant use as recreational resources by the public, including the clients of guides and sporting camp owners from the Grand Lake Stream area. As users travel through the 9-lake waterway, there would be repeated views of the BWP turbines. The fact that some of the 9 lakes are connected only by a shallow stream or a portage trail (e.g. Scraggly to Shaw Lake), is not compelling since the Commission considers portaging a common practice in following canoe trails. Such evidence includes the testimony of guides and sporting camp owners, the AMC canoe guide, and the testimony of NRCM.

- B. *Evidence regarding impact on uses related to scenic character:* Title 35-A directs the Commission to consider specific criteria in evaluating effects on scenic character and related existing uses, and user survey data may be helpful with regard to some, but not all, of the criteria. User data, which is not limited to user survey data, can assist in the Commission's consideration of the expectations of the typical viewer, the effect on the public's continued use and enjoyment, and the duration of the impact. 35-A M.R.S.A. §§ 3452(3)(C) & (E). The record for the BWP indicates that the scope and scale of the impacts of this project on the typical viewer and on the public's continued use and enjoyment of the SRSNS would be significant.

On this record as a whole, the Commission was not persuaded by the Applicant's submissions for the reasons explained by Dr. Palmer. See Finding 20(C). Given the significant scenic impacts of the BWP, the Commission finds the more credible evidence in the record to be that provided by testimony and comment from the public and by the Grand Lake Stream area guides and sporting camp owners. This evidence shows the likely impact on the recreational uses of these SRSNS, including the impact on the client base of the guides and camp owners, from the extensive scenic impact of the project. Notably, the community in and around the Grand Lake Stream area has more Registered Maine Guides than any place in Maine. Accordingly, the Commission was not convinced by the evidence presented by the Applicant that the expectations of, and the continued use by, those that recreate in this area would not be unreasonably adversely effected by the BWP.

- C. *Remote recreational experiences and low levels of use.* As discussed above, under certain circumstances the Commission has determined that resources which provide remote

recreational opportunities and resultant low levels of use are valuable, and thus in those situations it will consider low levels of public use as contributing to the value of the resource. Without this adjustment to customary VIA's, such VIA's are best suited to more urban areas than to areas such as the Commission's jurisdiction.

As noted in finding 21 above, the Commission concludes that there is substantial evidence in the record that remote recreational values and associated low levels of use are integral to the experience of the typical user of Shaw Lake. Thus the primitive recreational values of Shaw Lake and its resultant low use are judged to contribute to the value of that Lake. Thus the impact to Shaw Lake was greater than that estimated by both the Applicant and the Commission's scenic consultant because both discounted the impact due to low use, contrary to the Commission's long standing policy on remoteness. While on this record, in view of the other significant impacts on the other 8 SSRNS, this conclusion is not essential to a finding of an unreasonable adverse impact, the discussion, findings, and conclusions regarding Shaw Lake reflect a harmonization of the traditional VIA approach and the Task Force Act with the Commission's long-held policy on valuing remote recreational experiences and consequential low levels of public use.

- D. *Summary.* Views from all 9 of the SRSNS will be significantly compromised by the BWP such that the development would have an unreasonable adverse effect on the scenic character and existing uses related to scenic character. The adverse effect is unreasonable due to turbine number, extent of turbine visibility, turbine proximity to the resources, the nature of the views as users travel through the SSRNS, the scenic significance of the SRSNS, and the evidence showing the scenic impacts will have an adverse impact on uses related to the SSRNS. While the scope and scale of the BWP is less visible from Duck, Keg, Bottle, Sysladobsis, and Pug Lakes, see Table 1 above, the adverse effect on the views from the SRSNS is unreasonable due to the nature of the views as users travel through the SSRNS water trail. The Commission therefore concludes the BWP would have an unreasonable adverse effect on the scenic character and existing uses related to scenic character of the SSRNS located within 8 miles of the project.
24. For all the reasons discussed herein, the Commission concludes that at this development location there are overriding scenic and public values, that the BWP has not minimized its intrusion on these existing scenic and public values, and that therefore the BWP is not in conformance with the policies and goals of the Commission's CLUP.

While the 2010 CLUP expressly recognizes the statutory changes made by the Task Force Act with respect to wind energy development in the expedited permitting area, the CLUP provides for the environmentally sound and socially beneficial utilization of indigenous energy resources where there are not overriding public values that require protection, and it clarifies that it seeks to accommodate energy generation installations that are consistent with the State's energy policies, are suitable for the proposed location(s), and minimize intrusion on natural and cultural resources and values. The CLUP specifically recognizes that sporting camps are recreational and cultural resources, worthy of protection from incompatible development and land uses. The CLUP identifies the need to protect the values of the jurisdiction that provide residents and visitors with a unique array of recreational

experiences, especially high-value natural resources and remoteness where they exist. (2010 CLUP at pages 17, 265 – 267). Finally, the CLUP is consistent with the Task Force Act in that, while it recognizes the Act's goal of facilitating the siting of wind power, the CLUP continues to protect the state's quality of place and natural resources (p. 188) and pursues a policy of identifying and protecting areas that possess scenic features and values of state or national significance (p. 18).

For all the reasons stated in these Conclusions and based upon the record before it, the Commission finds the BWP, with respect to scenic and recreational resource impacts would not be in conformance with the above-identified goals and policies of the 2010 CLUP.

FINAL CONCLUSIONS

A number of other issues were raised concerning conformity of the proposed BWP with applicable provisions of Titles 12 and 35-A, the Commission's Standards, and its CLUP. The above conclusions require the Commission to deny the application, and thus the Commission does not make findings and conclusions on those other issues. The Commission noted during its deliberations, however, that this proceeding primarily turned on whether the BWP application met the scenic impact review criteria, and therefore it did not see a need to engage in an extended deliberation on the other applicable criteria.

The Commission appreciates the professional manner in which the Applicant prepared and presented its application for the BWP, as well as the thorough participation by the Intervenor and members of the public. While the proceedings to process expedited wind energy development proposals in the Commission's jurisdiction have proven to be necessarily complex, the Commission's evaluation of such proposals are clearly guided by its statutory permitting authority, as modified by PL 2007, Ch. 661 (codified in part in Title 12 and in part in Title 35-A), the Commission's Chapter 10 standards & rules, and its Comprehensive Land Use Plan (CLUP). Based on the findings set forth above, and in addition to the conclusions set forth above, the Commission concludes that, with respect to the 27-turbine Bowers Wind Project (BWP) proposal, the Applicant has not met its burden of demonstrating that the BWP is in conformance with the applicable statutory and regulatory requirements, and that it is not consistent with the goals and policies of the CLUP. (12 M.R.S. §§ 685-B(2-B), (4) and (4-B); 35-A M.R.S. §§ 3401-3404, 3451-3458; applicable provisions of the Commission's Chapter 10 standards and rules; Comprehensive Land Use Plan (2010 CLUP)).

Therefore, the Commission DENIES Development Permit DP 4889, submitted by Champlain Wind, LLC for the 27-turbine Bowers Wind Project, as proposed.

In accordance with 12 M.R.S.A. section 689, 5 M.R.S.A. section 11002, and Maine Rules of Civil Procedure 80C, this decision by the Commission may be appealed to the Law Court within 30 days after receipt of notice of the decision by a party to this proceeding, or within 40 days from the date of the decision by any other aggrieved person.

DP 4889 Denial, Champlain Wind, LLC
Page 27 of 27

DONE AND DATED AT BANGOR, MAINE THIS 20TH DAY OF APRIL, 2012.



By: _____

Samantha Horn Olsen, Acting Director
Maine Land Use Regulation Commission

PPDLW's Direct Testimony Exhibit F: Maine Wilderness Camps Web Site

Exhibit F**Maine Wilderness Camps Web Site, Pleasant Lake
page 1 of 2**

The owners of Maine Wilderness Camps, the only lodging facility in the vicinity of Carroll/Kossuth, testified in favor of the Bowers project at the LURC hearing in 2011. Shortly after the hearing they modified their website, removing the two pages shown below. These archival images are provided by web.archive.org at <http://web.archive.org/web/20051218025547/http://www.mainerec.com/mwcanoe.shtml>.

Canoeing At Maine Wilderness Camps**COMPLETE CANOE OUTFITTERS**

Canoeists enjoy the local waterways every Spring, Summer and Fall.

Whitewater canoeing at the famous St. Croix, Mattawamkeag Rivers or any river in the area can be arranged for the experienced canoeist.

The less aggressive paddlers can enjoy a two, three, four day or longer wilderness journey. After a short portage from Pleasant Lake into Scraggly Lake the entire Grand Lake chain of lakes opens up for over a forty-mile journey.

Maine Wilderness Camps has specialized in outfitting canoe trips for several years with only the best in canoes, tents, sleeping bags, cooking utensils and all the equipment needed for a successful canoeing adventure.

Maps for either a river or lake trip showing portages and designated campsites are provided. Also fire permits can be obtained at the camp office. Transportation to and from trips is available. Special rates for large groups.

Suggested Canoe Trips From Maine Wilderness Camps**Canoe Trip Transportation**

Below is a partial list of our most popular drop-off and pick up points for a canoe trip. Our camp vehicles and trailers will transport you and all your gear to or from these points. If an additional vehicle is needed, the same rates would apply to the second vehicle.

- Forest City \$50.00
- Fourth Machias \$78.00
- Kellyland \$50.00
- Leon Bay \$50.00
- Machias (Rt 9) \$104.00
- Pocumous & Wabassus \$80.00
- Third Machias Lake \$66.00
- Vanceboro \$45.00
- Princeton \$35.00
- Grand Lake Stream \$45.00
- Sysladobsis \$30.00
- Scraggly Lake \$30.00



Exhibit F (cont'd.)**Maine Wilderness Camps Web Site, Pleasant Lake
Page 2 of 2****Recommended Canoe Trips from
Maine Wilderness Camps.**

1. Pleasant Lake to Third Machias - Through Scraggly Lake, Junior Lake, Junior Bay of West Grand, Pocumcus Lake, Wabassus Lake, Third Machias Lake and return (one week).
2. Machias River - Same as trip #1, continuing through Second Machias Lake, First Machias Lake and the Machias River across Route #9 and into Whitneyville or Machias (one week to Route #9, ten days to Machias).
3. Fourth Machias Lake to Pleasant Lake - Through Fourth Machias Stream to Third Machias Lake, then up through the Getchel Lakes, Wabassus Lake, Pocumcus Lake, Junior Bay of West Grand Lake, Junior Lake Stream, Junior Lake, and Scraggly Lake to portage into Pleasant Lake (four or five days).
4. Pleasant Lake to Princeton - Through Scraggly Lake, Junior Lake, Junior Bay, West Grand Lake to Grand Lake Stream, portage to Big Lake, through Big Lake to Long Lake and Lewey's Lake in Princeton (six to seven days).
5. Pleasant Lake to Sysladobals Lake - Through Scraggly Lake, Junior Lake, Junior Bay of West Grand Lake, Pocumcus Lake, portage over Denison Dam, Sysladobals Lake (perhaps with a side trip to Upper Sysladobals Lake), portage to Bottle Lake, Bottle Lake Stream, back into Junior Lake, Scraggly Lake and back to Pleasant Lake (one week).
6. Baskahegan Lake - Near Maine Wilderness Camps, put in on Baskahegan Stream, cross Baskahegan Lake to Brookton (two to three days).
7. Border Lakes - (East Grand Lake and Spednic Lake) - Put in at Orient, through East Grand Lake, Forest City and through Spednic Lake, to Vanceboro (three to five days).
8. St. Croix River - Put in at Vanceboro, follow border river to Grand Falls Flowage, then to Princeton - or continue down river to Woodland or Calais (two to three days).
9. Mattawamkeag River - Put in at Brookton on Baskahegan Lake, cross Baskahegan Lake to outlet, follow Baskahegan Stream to Crooked Brook Flowage, then follow Baskahegan Stream through Danforth to Mattawamkeag River and Mattawamkeag River to Bancroft, Wytopitlock or Kingman (three to five days). Note: The Mattawamkeag River may be followed further only by experienced whitewater canoeist to Mattawamkeag--and then the Penobscot may be followed into Penobscot Bay.

[Home Page](#)[Return To Maine Wilderness Camps Home Page](#)

**PPDLW's Direct Testimony Exhibit L: Pre-Filed Direct Testimony of Dale
Tobey on behalf of PPDLW**

EXHIBIT L

**STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

CHAMPLAIN WIND LLC	)	PRE-FILED TESTIMONY OF
CARROLL PLT. / KOSSUTH TWP.,	)	DALE TOBEY ON BEHALF OF
PENOBSCOT / WASHINGTON COUNTY	)	THE PARTNERSHIP FOR THE
#L-25800-24-A-N/#L-25800-TE-B-N	)	PRESERVATION OF THE
WATERSHED	)	DOWNEAST LAKES

INTRODUCTION

My name is Dale Tobey. I'm a year round resident of Grand Lake Stream and a Master Maine Guide. My grandfather started guiding hunters and fishermen in the Downeast Lakes back in 1920. My brother David and I are the third generation of the family to guide out of Grand Lake Stream. I also build classic Grand Laker canoes and custom paddles. I was honored to present Governor LePage with one when he visited Grand Lake Stream last August. I'm also a carpenter and a property caretaker. When you decide to live in a remote natural paradise like ours, there are tradeoffs you have to make. Having to do many different things to carve out a living is just one of those tradeoffs. But it's well worth it. Today I'm here to protect my livelihood from the Bowers Wind project.

I'm also Vice President of the Maine Professional Guides Association, The MPGA is Maine's largest association of guides with over 1,000 members, dedicated to promoting a quality, ethical and legal outdoor experience for all. The MPGA already wrote a letter explaining why its members oppose the Bowers wind project.

I'm also a past president and current member of the Board of the Grand Lake Stream Guides Association. I'm speaking for our 45 members who depend on the natural wilderness character of the Downeast Lakes Region.

I'm also authorized to speak for the Township of Grand Lake Stream, where I'm a selectman.

I'm also on the Board of Directors of the Downeast Lakes Land Trust which is prevented by its charter from taking a position on the Bowers Wind project. I therefore am not speaking for the Land Trust.

BOWERS WILL HURT THE LOCAL ECONOMY

I remember sitting through the first Bowers hearing. The applicant kept saying that the people who are opposed to the project just don't get it. We were afraid of something we knew nothing about. We were told we really have nothing to worry about. That is just not true!

First Wind put up 38 windmills at Stetson.

Then they put up 17 more at Stetson 2.

Then they put up 40 at Burlington, Lincoln, Lee and Winn.

Then they put up 19 at Bull Hill.

You can't tell me I don't know what wind projects look like.

And because they always seem to be built near lakes, I know what it's like to fish near them.

And I've listened to my clients say they don't want to fish near them.

If the Bowers project is built I know how my clients will react: I will lose business. And that's a fact.

Most of the people who visit the Downeast Lakes Region are coming to get away from the industrial, commercial world they live in. They are looking for a place where local culture, tradition and the natural resources have remained unspoiled and unchanged. In short, they are not just looking for a fish on the line, they want a total experience. As guides paddle them along the shore they gain a wealth of knowledge about the history of the region, its fish and wildlife and what an intact and healthy natural resource looks like. They may look ahead to see a mink working the shoreline or a moose or deer feeding or drinking at the edge of a lake, a pair of loons guarding their nest, an eagle teaching her young to fend for themselves, or an osprey diving to get a fish. All these natural resources are found in a remote region almost free from human impacts. Even a single wind turbine spinning on the horizon would spoil the remote brand of the area on which our economy relies. Clients come to this area because of the undeveloped character and scenery. Many clients expect and love the dark night sky. Because of the

size of the watershed many fishermen leave in pre-dawn light or return after sunset. Flashing lights from the wind project would totally ruin that experience.

HISTORY OF CONSERVATION

Bowers Mountain lies at the head of the Downeast Lakes, headwaters of the West Branch of the St. Croix Watershed. These lakes are among the very few that hold the original strain of landlocked salmon. In Grand Lake Stream we have one of the first landlocked salmon hatcheries in our state. Today this hatchery provides 80% of the purest strain of landlocked salmon stocked in all of Maine. The land and protected shores around these lakes are all part of an unparalleled Maine conservation effort, one that started in Grand Lake Stream, a village whose existence depends on that chain of lakes that reaches north to the Bowers project.

The Downeast Lakes are the focus of successful conservation projects designed to support our economy. It started 21 years ago when the east shore of Grand Lake Stream was targeted for subdivision. Fly fishermen from all over the world have been traveling to Grand Lake Stream for well over a century to fish for landlocked salmon in a natural setting. We knew that we had something special and had to save it. The residents Guides and Lodge owners of GLS raised several Million dollars and bought the land. We then donated it to the Department of Inland Fisheries and Wildlife. I am proud to say that the stream looks the same now as it did 21 years ago.

More recently, in 2001 a large tract of land west of Grand Lake Stream was sold and there was talk of forest liquidation, shoreline development, and gated access. The status of the land we used for recreation and the back bone of our sporting camp and guiding businesses was very much in question. In December 2001 local residents created the Downeast Lakes Land Trust, dedicated to the long-term economic and environmental well-being of the Downeast Lakes region through the conservation and exemplary management of its woods and waters.

Today the Land Trust owns two and a half townships west of Grand Lake Stream with conservation easements on a total of 374,000 acres around the Downeast Lakes Watershed. Recently the Land Trust partnered with the State to conserve 21,870 acres

on the east shore of West Grand Lake. In that enormous project, a conservation easement held by the Department of Agriculture, Conservation and Forestry will protect more than 17 miles of lake frontage, 3,000 acres of wetlands and working landscapes that support local guides, sporting camps and timber harvesting.

THE VOTE

Since before the first Bowers application, Neil Kiely and other First Wind people have spent a fair bit of time in Grand Lake Stream. They would chat with folks in the Pine Tree Store or at the boat launch. Kiely even met with the Selectboard. The message was always the same. He'd point out that Grand Lake Stream is more than eight miles from the project so he didn't have to be there, but he heard there's some concern and he wanted to address it. He would describe the project, answer questions and tell us that we have nothing to worry about. When it was clear we weren't buying it, he'd ask if the Town wouldn't like a new boat launch and say that First Wind can do that. Or wouldn't we like First Wind to provide a marketing fund to promote the guides and sporting camps? Or wouldn't we like First Wind to provide a fish stocking program? I guess this is what First Wind calls "community outreach". Needless to say we refused his offer of "outreach".

The Selectboard decided we needed a town vote to settle the issue so a Special Town Meeting was held on November 5, 2012. The only item on the agenda was whether the citizens of Grand Lake Stream would support or oppose the Bowers Wind project. The vote was held and the results are clear. The residents of Grand Lake Stream voted **UNANIMOUSLY** to oppose First Wind's plan to build the Bowers Wind project.

CONCLUSION

I feel very lucky to be one of those in this region who makes a living being a responsible steward of these lakes, streams and woods. I feel a responsibility to take care of what we have here in the Downeast Lakes. I only hope the Maine DEP feels the same responsibility.

**PPDLW's Direct Testimony Exhibit M: Pre-Filed Direct Testimony of Dale
Wheaton on behalf of PPDLW**

EXHIBIT M**STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

CHAMPLAIN WIND LLC	)	PRE-FILED TESTIMONY OF
CARROLL PLT. / KOSSUTH TWP.,	)	DALE WHEATON ON BEHALF OF
PENOBSCOT / WASHINGTON COUNTY )	)	THE PARTNERSHIP FOR THE
#L-25800-24-A-N/#L-25800-TE-B-N	)	PRESERVATION OF THE
	)	DOWNEAST LAKES WATERSHED

My name is Dale Wheaton. My wife and I owned and operated Wheaton's Lodge in Forest City, ME for 34 years until selling in January, 2013. I am a third generation Master guide, having guided anglers on the waters of eastern Maine since 1965. I am past-president of the Maine Sporting Camp Association, Maine Congress of Lake Associations, Woodie Wheaton Land Trust (WWLT,) and other organizations, and continue to serve on three Boards of Directors of non-profits. I am a Member of the St. Croix International Waterway Commission, having served nearly fifteen years by appointment of three Maine governors. I was Assoc. Professor of Economics at the University of Maine (Orono,) where I taught economics from 1979 to 2008. I founded WWLT, named for my father, which has protected thousands of acres of wildland and over 100 miles of shore frontage on the lakes and streams of northern Washington County to preserve the scenic, natural character for future generations to enjoy.

Wheaton's Lodge, along with Weatherby's in Grand Lake Stream, were chosen by *Field and Stream* magazine in 2007 among the top ten fishing lodges in North America (#2.) Not counting the proprietors, Wheaton's employs a staff of nine persons and has a regular contingent of 8-10 self-employed guides (peaking to 14 during busy periods.) In short, the lodge sustains about 20 local jobs. Inasmuch as 94% of the revenue is derived from out-of-state, and many purchases are made locally, there are significant employment and income multipliers.

Our sporting camp and guide clientele return to eastern Maine each year, not only for its strong fisheries, but to experience our natural beauty, solace, and tranquility. Here is a rare opportunity to enjoy the unspoiled outdoors far from the rat race. There are many places in America to catch a fish, but fewer and fewer havens from industry, development, and congestion.

Industrial wind is a direct and immediate threat to Maine's outdoor economy. I, and my guide colleagues, view wind turbines as an assault on the cherished values that bring people here. Windmills have demonstrably reduced the quality of Maine's brand by violating the natural landscape, and the guide profession has been injured by it.

For example, Forest City area guides spend far fewer days on undeveloped Baskahegan Lake than in the past. The warmwater fishery remains healthy, but many (not all) guests are offended by the vast Stetson I complex that extends along the western horizon. My sports have said that this is not why they come to the Maine woods, and they willingly catch fewer fish elsewhere. Excursions to Junior, Pleasant, and Scraggly Lakes invariably incite remarks such as, "Why would Maine allow turbines here? This is God's country."

My colleagues and I no longer guide anglers on Upper and Lower Hot Brook Lakes, once a staple. The scenic and audible domination of nearby Stetson II have irrevocably destroyed the outdoor experience on those lakes. For a Maine guide, these lakes constitute an embarrassment—and a surefire way to lose a Maine visitor. Nearly 400 persons have joined Keep It Grand in the past fifteen months, shocked by the idea that wind turbines could be proposed for the spectacular ridgeline overlooking East Grand Lake. Many of the members are lodge guests and guide clients, fearful of the threat to one of their favorite places.

Industrial wind is not appropriate for Bowers Mountain. Wilderness values are violated at very low thresholds of development, destroying the natural integrity of the landscape. A single tower on Bowers Mountain, hardly an egregious change to some persons, would negate the wilderness feel that my sports have come to expect and who have paid generously to experience.

The bold and enduring efforts of two local land trusts, WWLT and DLLT, speak for themselves. These organizations were founded and driven by the passion of local guides, and receive their critical financial core from the outdoor enthusiasts from away. Both we, and they, understand what is at stake here, and have given all we can to protect both the landscape and our way of life.

Approval of Bowers Mountain would cancel out much of our conservation success over the past two decades, chip away at Maine's traditional economies, and impair the investment made by Maine taxpayers via LMF appropriations. Industrial wind towers on Bowers would effectively reduce the available habitat for professional guides in eastern Maine, and weaken one of this region's few economic strengths.

Date: 11 March, 2013

Dale Wheaton
Dale Wheaton

STATE OF Maine

County of Pendscot

Date: March 11, 2013

Personally appeared before me the above named Dale Wheaton, who, being duly sworn, did testify that the foregoing testimony was true and correct to the best of his knowledge and belief.

Before me,

Wanda Libbey
Notary Public
My commission expires: _____

Wanda Libbey
Notary Public - Maine
My Commission expires June 16, 2016



Dale Wheaton
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207-843-5732
e-mail: dale.wheaton@hotmail.com

PPDLW's Direct Testimony Exhibit N: Michael Lawrence & Associates,
Bowers Wind Project, Critique of Project Developer's VIA, March 2013

CHAMPLAIN WIND LLC) PREFILED TESTIMONY OF MICHAEL LAWRENCE
CARROLL PLT. / KOSSUTH TWP.,) ON BEHALF OF THE PARTNERSHIP FOR THE
PENOBSCOT / WASHINGTON COUNTY) PRESERVATION OF THE DOWNEAST LAKES WATERSHED
#L-25800-24-A-N/#L-25800-TE-B-N



Portage, Junior Lake

BOWERS WIND PROJECT
Critique of Project Developer's VIA

Michael Lawrence & Associates
Landscape Architect & Site Planning Consultants
Essex Junction, Vermont
March, 2013



Getchell & Bowers Mountain, Junior Lake

INTRODUCTION

Last October (2012) Michael Lawrence Associates (MLA) received a request from The Partnership for the Preservation of the Downeast Lakes Watershed (PPDLW) to give thought and offer comment on the 2012 Visual Impact Assessment (VIA) prepared by LandWorks (LW) of Middlebury, Vermont for the latest Bowers Wind Project (BWP) proposal by Champlain Wind, LLC of Portland, Maine to be constructed on Bowers Mountain in Carroll Plantation in Penobscot County and Dill Hill in Kossuth Township in Washington County, Maine.

LandWorks' VIA concludes that the BWP "is well sited and designed and would not have an unreasonable adverse effect on the scenic character or existing uses related to the scenic character of any scenic resource of state or national significance (SRSNS)". The scenic resources referred to are nine lakes encompassing approximately 10,000 acres that lie within eight miles of the BWP.

MLA became familiar with the BWP and scenic environment on and around the nine lakes while assembling a VIA that provided evidence that another wind project proposal in the same area would have had an unreasonable adverse effect on the scenic character or existing uses of the nine lakes. Maine's Land Use Regulation Commission came to the same conclusion.



Bowers Mountain, Mack Hill, Junior & Penobscot Bald Mountains over Long Point, Junior Lake

After reviewing the LandWorks' VIA, MLA concludes that the current BWP would also have an unreasonable adverse effect on the scenic character and existing uses related to the scenic character of the scenic resources of state or national significance.

Although the number of towers has been reduced to sixteen, their immense scale and prominent location on the tops of the mountain ridgelines will still be highly visible and erode the sense of scenic beauty, serenity and wilderness of the treasure known as the nine scenic lakes.

We've included a series of photographs in this document that convey the flavor of the ever-changing beauty on and around these nine lakes. However, the photographs are representations, symbols of the mountain water, fresh air and a spectacular reality.

MLA hopes that if you're deciding whether the BWP is appropriate, you'll visit the nine scenic lakes with reports and photosimulations in hand.

This report first states five important facts about the natural resources in the area, then quotes specific statements from the LandWorks VIA and offers explanations in opposition to those statements. Finally MLA includes a diagram that illustrates the BWP's visibility as it relates to the sizes of the nine scenic lakes.



Hasty Cove Landing—Scraggly Lake

FIVE LAKE FACTS

Consider five important facts about this lake/mountain environment in evaluating the BWP relative to Maine's Windpower Development Law;

FACT 1—NINE SRSNS LAKES WOULD HAVE BWP VISIBILITY

Within eight miles of the proposed BWP there are nine lakes that qualify as Scenic Resources with Statewide or National Significance (SRSNS) with a combined area of over 10,000 acres. The SRSNS lakes have acquired that status as a result of in-depth site analysis which resulted in high (significant and outstanding) ratings in their scenic character. This information is recorded in the 1987 Maine Wildlands Lakes Assessment.

FACT 2—THE NINE SRSNS LAKES ARE PART OF A LARGER LAKE CHAIN

The nine SRSNS lakes are part of a contiguous chain of water bodies (more with SRSNS status) that extend 18 miles from the proposed BWP to the village of Grand Lake Stream, home of the greatest concentration of Maine Guides in the state.



Bottle Lake looking Northwest

FACT 3—THE LAKE CHAIN IS SURROUNDED BY TRUST LANDS

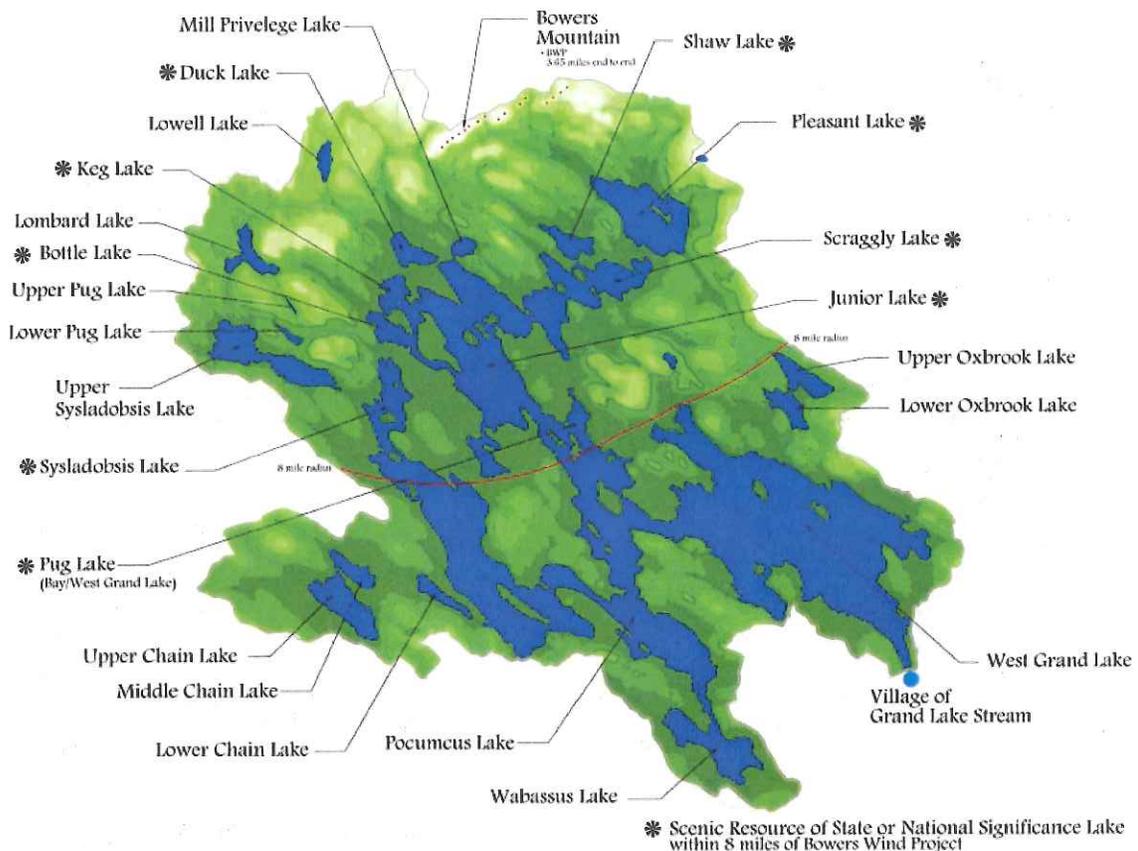
Large land tracts surrounding the lakes have been conserved and put into trust because of their intrinsic quality. Current law placing limits on harvesting trees within 250 feet of a Great Pond and sustainable logging practices insure that most views from the SRSNS chain of lakes maintain a natural forested appearance.

FACT 4—RIDGELINES ARE CRITICAL TO AESTHETICS

Open lake surfaces lacking fore and middleground elements provide expansive vistas. Strong light contrast attracts viewers' attention to the undulating ridgeline horizon where dark landforms meet open sky.

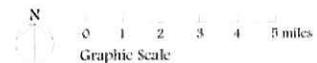
FACT 5—PEOPLE COME HERE FOR WILDERNESS SANCTUARY

Quiet, a sense of wilderness, and a minimal presence of urbanization draw people to these lakes.



The Downeast Lakes Watershed

Hancock, Washington & Penobscot Counties, Maine
 Michael Lawrence & Assoc. - Landscape Architecture - Essex Junction, Vermont



- The LandWorks (LW) VIA attempts to diminish the value of the five facts;
1. LW's VIA makes objections to the scenic value of the nine SRSNS lakes.
 2. LW's VIA infers that the distance between the chain of lakes and Grand Lake Stream from the BWP (beyond eight miles) lessens the impact on uses related to the scenic character of the area including the livelihood of fishing guides and traditional Maine Sporting Camps.
 3. LW's VIA asserts that the visual effect of logging operations makes the BWP more acceptable.
 4. LW's VIA underrates the importance of ridgelines as they relate to scenic quality.
 5. LW's VIA claims that the BWP's negative impact on the area's wilderness character is neutralized because recreational activities distract people from concentrated attention on a single view.

The following section identifies quotations from LandWorks VIA followed with MLA's comments and explanations.



Bowers Mountain, Junior Lake

LandWorks VIA (Page 3) 1. Executive Summary

"Landscapes that are very scenic or outstanding and are more sensitive to visual change usually have prominent distinctions between landforms such as a flat open field in combination with a steeply rising mountain, or have unique focal points and distinct memorable profiles."

MLA The nine SRSNS (scenic) lakes environment exhibits the prominent distinction of a flat open lake (rather than a flat open field) in combination with steeply rising mountains. The ridgeline rim surrounding the lakes displays a series of unique focal points and a distinct memorable profile. The lake environment fulfills the definition of a very scenic, outstanding and sensitive to visual change landscape.



Getchell and Bowers Mountain, Junior Lake

LandWorks VIA (Page 3) 1. Executive Summary

“Those types of features (prominent distinctions in landforms) are not present here and, as a result the landscape in the Project area is generally able to accommodate the presence of turbines without fundamentally changing the scenery or adversely impacting recreational uses of the lake resources.”

MLA The nine SRSNS lakes rated “significant” or “outstanding” in the category of scenic beauty in the Maine Wildlands Lake Assessment merited those ratings due to the types of physical features, including prominent distinctions in landforms, that are present and visible from the lakes, often in sweeping panoramic perspective.



Bowers Mountain between Long Point & Junior Mountain, Junior Lake

LandWorks VIA (Page 6) 2. Introduction

"It is our experience that viewsheds generated from the hub provide a more realistic representation of potential visibility, since the view of a hub and rotor has a greater impact than turbine blades, and the difference in overall percent of visibility between hub and tip of the blade is usually insignificant."

MLA Movement attracts attention especially in a quiet landscape. The continuous motion of even a half wind turbine blade continuously disappearing and reappearing above the treeline draws the eye. Turbine height applied to viewshed mapping needs to be measured from above the rotor. For accuracy, if any part of the turbine including its blade is visible from the lakes, it should be recorded on the viewshed map. Vertical dimensions on the map prepared by the developer need to extend an additional 56 meters or 184 feet.

LandWorks VIA (page 9) 2. Introduction

"Visual simulations provide a photo-realistic perspective view of proposed project elements in the landscape, thereby allowing people to clearly visualize how a project will look from a particular vantage point."

MLA Photosimulations are a gross and imprecise representation of what will be visible to the naked eye if the project is constructed. Photosims mainly convey how a project will relate in scale and form to the existing landscape.

LandWorks VIA (page 9) 2. Introduction

"Turbines in the simulations thus may appear more visible than they would actually appear under certain light and atmospheric conditions."

MLA Actual turbines will always be more visible to eyes perceiving actual objects in the three dimensional real world than turbine images conveyed via flat, two dimensional simulations (given the same light and atmospheric conditions). Human eyes compared to a camera are vastly more color sensitive and able to discern detail where bright light and deep shade co-exist (light conditions often found on ridgelines) . Photographic images are often either over or under exposed in those high contrast conditions. Furthermore, both printed photosimulations and digital screen images lack touch, sound, smell, and movement— real world perceptions that inform and enliven living experience.

LandWorks VIA (page 10) 2.3.4 Research and Publications

"Collectively, the different data sources provide a more comprehensive understanding of the scenic resource to be evaluated and the potential effect the Project may have on users of those resources."

MLA These sources, (The Guide Services, Sporting Camps and Lodging, Guidebooks, and other website resources) describe the area around the BWP as a locality having a sense of wilderness, quiet and an ab-



Sunset, Scraggly Lake

sence of urban development. The sources cited do not contain any information on the BWP's potential visual impact on users of those resources.

LandWorks VIA (page 10) 2.3.4 Research and Publications

"The information assembled from this multitude of resources yielded similar results that we believe directly inform and further substantiate our understanding of the scenic resources in the study area and the Project's impact on those resources."

MLA The Guide Services, Sporting Camps and Lodging, Guidebooks and Other Website Descriptions of the resources contain no information on the BWP's impact on those resources.



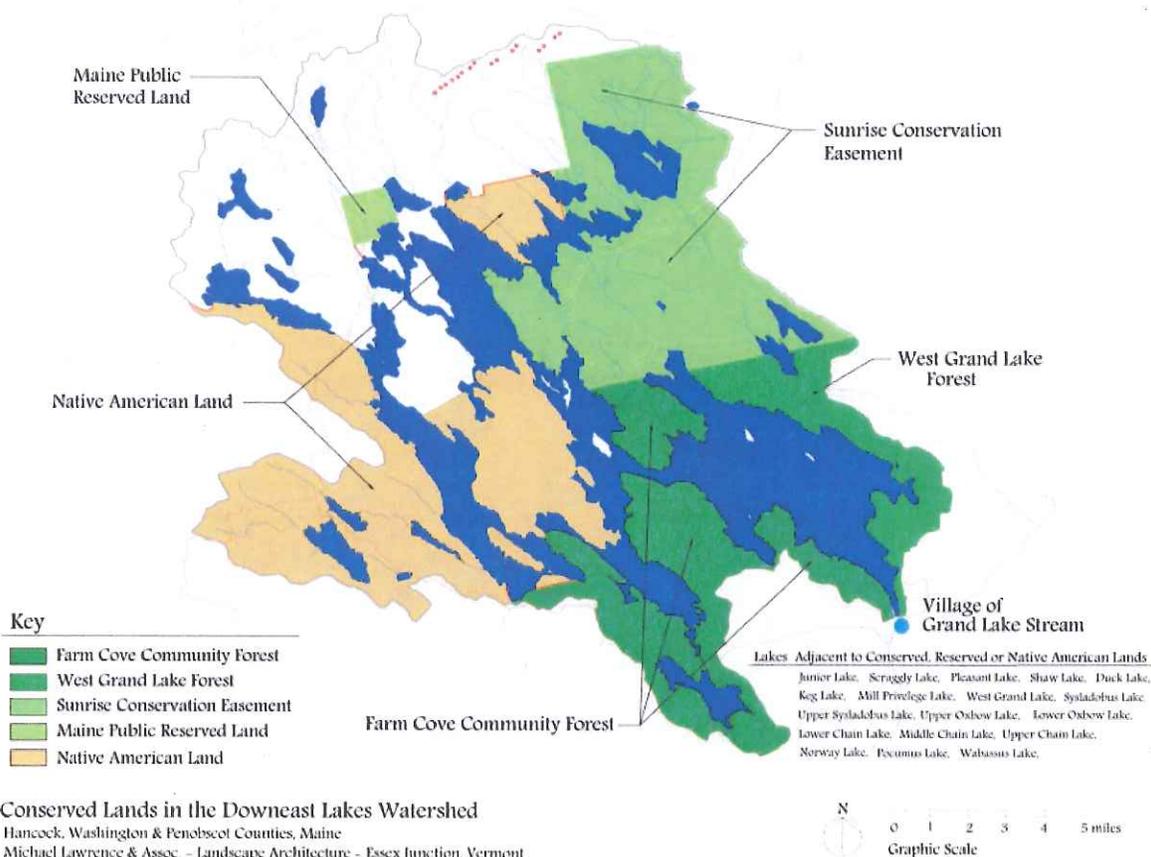
Community Welcome Sign

LandWorks VIA (P 12) 2.D Other Websites

“Although little information was available about specific activities on specific lakes, the information on these websites was consistent with the findings from the guide services, sporting camps and guidebooks referenced above – that fishing and hunting are the primary activities for this area, and that the lakes within the study area were not usually mentioned.”

MLA The intrinsic value of the nine scenic lakes is not lessened by the lack of mention on these websites.

Local websites describe the area as quiet, wilderness-like with an absence of urban commotion. Lack of mention on other websites takes away nothing from the qualities that people who live and recreate here cherish.



LandWorks VIA (page 13) 2. Introduction
Downeast Lakes Water Trail Map

"This map, available on the Downeast Lakes Land Trust website, does not extend to any lakes in the Bowers study area"

MLA The purpose of the Downeast Water Trail Map cited by LandWorks is to promote shoreline and islandss that the Downeast Lakes Land Trust owns and maintains. They don't own or maintain anything outside the boundaries of the map.

However, the nine SRSNS lakes complete the Downeast Lakes Chain beyond the top of that map. The lake chain is illustrated in the map entitled 'Conserved Lands in the Downeast Lakes Watershed (above). The entire system is protected by huge holdings of conserved lands and offers endless water trails for travel and exploration.



Bowers Mountain, Junior Lake

LandWorks VIA (page 19) 3. Project Description 3.7 Project Area

"The relief as viewed from the Lakes in the area is not dramatic or unique."

MLA The enormous open spaces afforded by the lakes offer viewers a myriad of grand vistas that incorporate miles of visible mountains that convey solidity and permanence. Distinctive profiles include recognizable named landforms (Vinegar Hill, Bald Mountain, Trout Lake Ridge, Porcupine Mountain, Bear Mountain, Almanac Mountain, Bowers Mountain).

Being situated in these huge unobstructed spaces inspires both drama and awe. Observers may experience a feeling of humility on these massive lake surfaces open to the weather, the sky and elevated horizons often miles away.

Although ridgeline elevations are moderate, the lakes offer perspectives in dramatic breadth. Views from many locations on the nine SRSNS lakes can be characterized as 'breathtaking'.



Kayaker, Picturesque Shoreline Vegetation, Keg Lake

LandWorks VIA (page 20) 3. Project Description

"Although the Project area is not itself a tourist destination, it is located at the northern edge of the Downeast Lakes Data Region."

MLA tourist - *a person who travels for pleasure, somebody who travels in order to take advantage of a particular service or benefit that is not available at home*

destination - *predetermined end of a trip, the place to which somebody or something is going*

People who travel and end their trips here find pleasure and take advantage of the quiet, wilderness character and minimal presence of urbanization, benefits that are not available at home.

It's a tourist destination.



Dill Hill, Pleasant Lake

Early springtime showing negligible visual impact from logging operations, mixed vegetation and shoreline vegetation softening development

LandWorks VIA (page 24) 3. Project Description -

Diagram 1. Logging Activity Map

"This aerial photo illustrates the extensive logging and associated clearing and access roads seen through the region. Logging activities are clearly visible from Pleasant Lake and several other lakes in the study area."

MLA While logging activities are visible in this aerial photo, the only perspectives that are relevant to the BWP VIA are from the nine scenic lakes to the mountains. 250 foot shoreline harvesting limits, sustainable logging practices and rapid forest regeneration make tree cutting operations hardly noticeable from the nine SRSNS water bodies.

The perception of the mountains from those lakes in the vicinity of the proposed BWP is more accurately described as "wilderness-like" than "a logging operation".



Large Camp, Integrated & Camouflaged from Water by Large Trees, Keg Lake

LandWorks VIA (page 25) 3. Project Description

Diagram 2. Existing Land Use Map

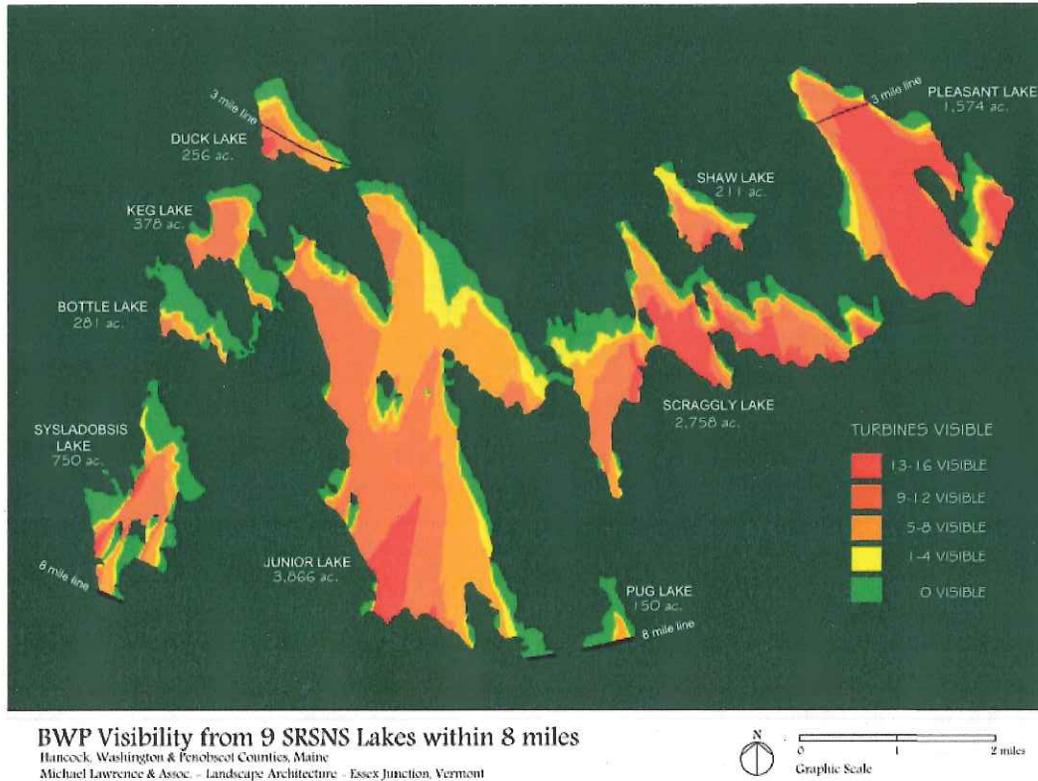
Map Legend:

"Yellow dots represent Camp/House on Scenic Lake within Study Area"

MLA The map cited clearly conveys that most of the Pleasant, Shaw, Scraggly, and Junior Lakes' shorelines are undeveloped.

The size of the yellow dots used on the land use map airphoto misrepresents the scale of camps, outhouses, storage sheds and firewood sheds on the scenic lakes . It gives the false impression of wall to wall development on parts of the Junior, Duck, Keg Bottle and Sysladobsis Lake shorelines. On-site analysis confirms that most of the structures represented by the yellow dots are modest, charming, summer-use residences sited comfortably and blending well among mature trees.

LUPC has rigorous setback and screening requirements for new camp construction.



LandWorks VIA (page 27) 4. The Visual Impact Assessment

"Viewsheds cannot be relied upon to represent what will actually be seen on the ground from a specific location."

MLA Computerized viewsheds rely on contour information that is averaged and estimated and therefore overlooks subtle grade differences that exist at a human scale.

However, large, level open-space viewsheds like those on the nine scenic lake surfaces *are* accurate and reliable in representing what will actually be seen from specific locations. Certainly, if Bowers Mountain is visible, the BWP is visible.

The viewshed map above (LandWorks map recolored) uses colors ranging from cool (fewest turbines visible) to warm (most turbines visible). It concentrates on the nine SRSNS lakes, the only relevant areas for study.



Ridgeline Contrast, West Grand Lake

The LandWorks turbine visibility map is based on vertical measurements to the turbines' hubs. To be accurate, measurements need to be taken to blade tips (an additional 275 ft.). Obviously this would show a dramatic increase in visibility over the nine SRSNS lake surfaces.

*LandWorks VIA (page 30) 4.2.1 Methodology for Evaluating the Statutory Criteria
Factors considered for each of the statutory criteria
A. Significance of the Scenic Resource*

"While these important studies identify which lakes need to be evaluated under the Act, the studies are not the only indicator of significance."

MLA The studies undertaken in analyzing these lakes with the resulting classification status "significant" and "outstanding" to describe scenic character and published in the Maine Wildlands Lake Assessment are the only legal indicator of significance

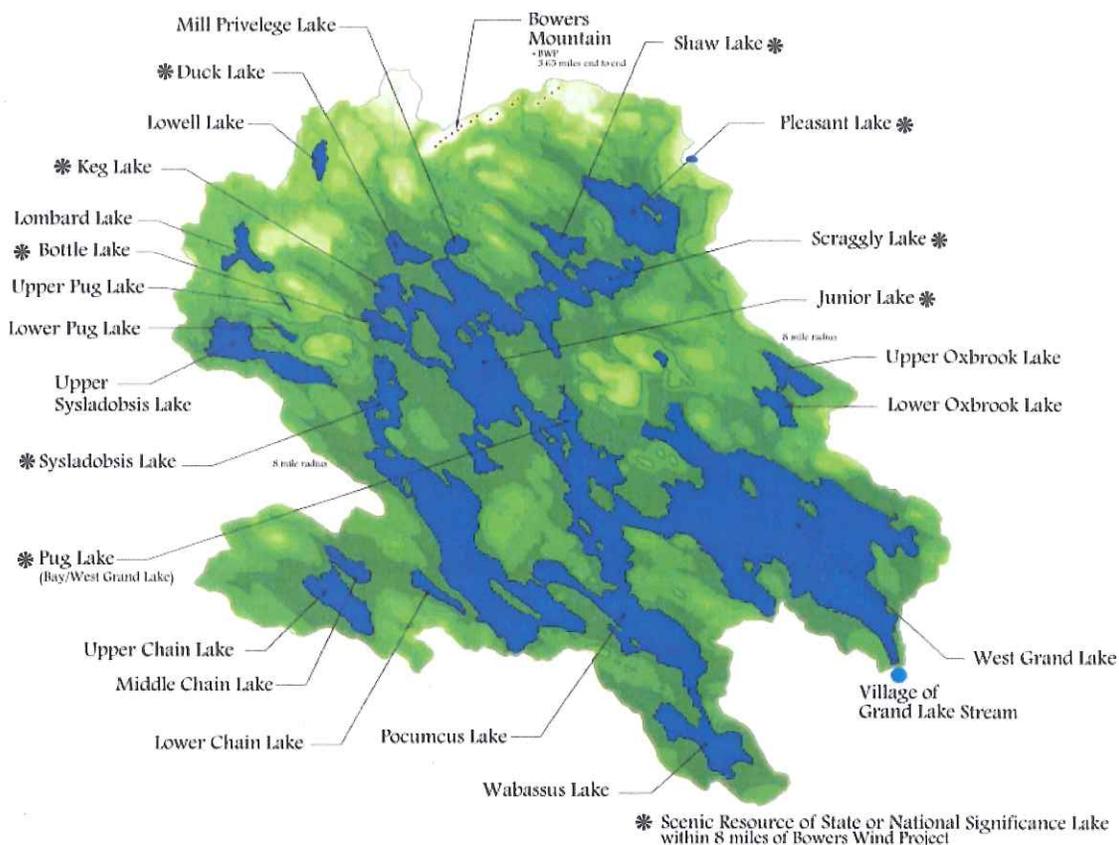


Popular Swimming Beach, Keg Lake

*LandWorks VIA (page 30) 4.2.1 Methodology for Evaluating the Statutory Criteria
Factors considered for each of the statutory criteria
A. Significance of the Scenic Resource*

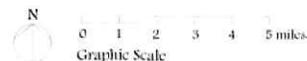
"frequency of use – in some instances but not necessarily all a well-used resource could indicate a higher value or significance ascribed to that resource, if the high use is due to the resource's exceptional or one-of-a-kind feature(s)."

MLA These somewhat isolated, less frequently utilized resources have high value for their serenity and wilderness qualities.



The Downeast Lakes Watershed

Hancock, Washington & Penobscot Counties, Maine
 Michael Lawrence & Assoc - Landscape Architecture - Essex Junction, Vermont



LandWorks VIA (page 30) 4.2.1 Methodology for Evaluating the Statutory Criteria

Factors considered for each of the statutory criteria

A. Significance of the Scenic Resource

“the unique, distinctive or exceptional character of the scenic resource as it exists today - is the resource typical of the region, or does it have special, memorable qualities unlike any other in the area?”

MLA The distinctive character of the nine SRSNS lakes is in part a result of their position within the huge Downeast Lakes Watershed. There are no comparable interconnected systems of this scale in the area. The lakes’ layout, sizes, character, wilderness setting and inter-relationships with other lakes provide opportunities for unforgettable experiences.

LandWorks VIA (page 30) 4.2.1 Methodologies for Evaluating Scenic Impact

A. Significance of the Scenic Resource

Unique Distinctive or Exceptional Character of the Resource as it Exists Today

"The striking view of Mount Katahdin from the Penadumcook Lakes is a good example of a unique and memorable feature as compared to the undifferentiated profile of Bowers Mountain from Pleasant Lake (see photos that follow);"

AND

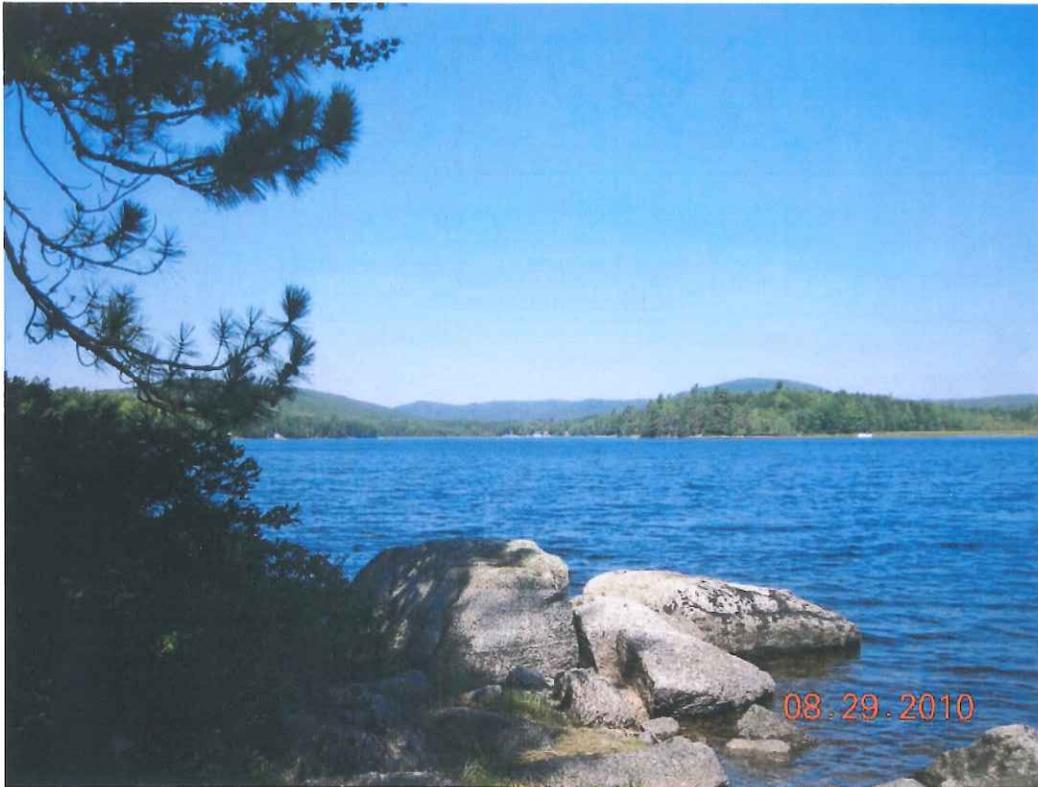
LandWorks VIA (page 31) Photos Comparing Katahdin & Bowers

Photographs comparing View of Mount Katahdin from Penadumcook Lake to View of Bowers Mountain from Pleasant Lake.

MLA These photos contrasting Mt. Katahdin and Bowers Mountain are unfairly matched for the following reasons;

The Mt. Katahdin photo - Vibrant, royal blue Penadumcook Lake reflects a bright blue sky. Sun on left casts distinct shadows creating three dimensional depth. The handsome composition of a rock strewn foreground shoreline is framed on the left by black foliage and shadow. Textured boulders marked by shade and shadow draw the eye into the lake's middleground. On the far shore a thin, horizontal, tan beach line separates lake's dark blue lake from the vegetation's dark green. Those deep tones contrast with Mt. Katahdin's fading pastel blues and purples. A radiant white-sky atmosphere encloses the mountain.

Bowers photo - Dull gray-blue Pleasant Lake reflects a gray cloud filled sky. Sun behind the clouds near the upper left corner of the image creates a blinding effect, overexposing the image and throwing the shoreline vegetation and landforms beyond into a uniform dark silhouette. Absence of shadows creates a flat, two dimensional quality. The photo has neither foreground elements nor side verticals to anchor and frame the composition. The image's fore and middle-ground consist of a simple rectangular shape of lifeless grays and blue grays. The photo illustrates sharp contrasts between lake and



Bottle Lake

shoreline, ridge and skyline, but the uniform tonal range reinforces the two dimensional feel and lack of depth.

While there's no question that Mt. Katahdin *is* a more dramatic landform than Bowers Mountain, the photo above taken from Bottle Lake (one of the nine scenic lakes) illustrates how interesting foreground, shadowed side frame, illumination highlighted by sharp shadows, rich colors and color tones fading with distance create interest, depth and a sense of "scenic". There are thousands of places on the nine scenic lakes where artists can set up an easel or tripod, sketch, paint, or snap a shutter and capture this landscape's inherent significant and outstanding scenic beauty in a two dimensional image.

It's difficult to imagine artists sketching, painting or photographing this scenery and hanging it at home if it included wind turbines.



Bowers Mountain, Junior Lake

LandWorks VIA (page 32) 4.2.1 Methodologies for Evaluating Scenic Impact

A. Significance of the Scenic Resource

Scenic attractiveness

"It assesses "vividness", which relates to the presence of variety and contrast in the landscape and "unity" or "intactness" which implies that the landscape is coherent, lacks intrusive or uncharacteristic elements and thus promotes a sense of order and balance and provides the viewer or user with a memorable experience based on the visual qualities of the landscape alone."

MLA This lake/ mountain landscape fits the definitions of "vivid". It exhibits variety, contrast and unity or intactness. It's coherent because it lacks intrusive or uncharacteristic elements. It promotes a sense of order and balance and provides the viewer or user with a memorable experience based on the visual qualities alone.

Introducing wind turbines would place huge intrusive elements in the landscape, and nullify those qualities that define vividness.



Looking North, Bottle Lake

LandWorks VIA (page 34) 4. The Visual Impact Assessment

C. Typical Viewer Expectations /Typical Viewer

"3. A camp owner or regular camp renter. It should be noted that camp owners may have a vested or financial interest in resisting development or change. Camp owners, as well as those who recreate primarily in the project area, also tend to elevate their sense of the scenic value present, as they may be emotionally attached to the location, and less able to objectively balance the local scenic resource values in comparison to other more highly prized scenic resources found elsewhere."

MLA The same logic applied to wind developers. – It should be noted that wind developers may have a vested or financial interest in promoting development and change. Wind developers as well as their consultants who do not recreate primarily in the project area, also tend to underrate their sense of the scenic value present as they may have little emotional attachment to the location and are less able to objectively balance the local scenic resource values in comparison to spoiled scenic resources found elsewhere.



Fisherman Enjoying Sunset on Junior Lake

LandWorks VIA (page 34) 4. The Visual Impact Assessment

Defining the Typical Viewer - Anglers

“Additionally there is some evidence that scenic quality is less important to people engaged in fishing and motor boating as opposed to hiking and paddling.”

MLA The Maine Wildlands Lake Assessment rates the scenic quality of the nine SRSNS lakes as “significant” and “outstanding”.

The assigned ratings represent inherent, intrinsic values— the very nature of the lakes. How users perceive that inherent beauty is another matter.

The Wildlands Lake Assessment does not consider how different user groups comprehend those innate values.



Canoe Campers on Scraggly Lake

LandWorks VIA (page 35) 4. The Visual Impact Assessment

Defining the Typical Viewer - Paddlers

"That is not to say that paddlers do not enjoy and take in longer distant scenic views - they do. Their focus though is on the breadth of views, not a single object for long periods of time. Each of the lakes in the project area has 360 degree views of hills, shorelines, islands, camps, etc. and these are elements that draw the paddler's eye. In fact, field study has led to a conclusion that once a paddler takes in a wind energy project and acknowledges its presence, other elements and views do draw the eye, and the prominence or presence of the turbines diminish in a focus."

MLA Paddlers are moving slowly. They're there to look. They stop to look. There are many places on the nine SRSNS lakes that view Bowers Mountain and Dill Hill. The vertical turbine forms with a height ratio hugely out of scale with the highest ridgelines will visually dominate the view and subordinate the landscape. The industrial appearance accentuated with moving rotors will starkly contrast with the natural environment. The towers will be visually and virtually unavoidable in their highly prominent position.



Primitive Campsite, Scraggly Lake's South Shore facing Bowers

LandWorks VIA (page

35) 4. The Visual Impact Assessment

Defining the Typical Viewer - Campers

"Most of the tent sites on these lakes are set in wooded locations and will not have full on or extensive views of the project turbines. Campers are typically engaged in food preparation, reading and relaxation, perhaps swimming and fishing once their paddling or boating activity for the day is over. The highlight of many camping adventures is the time spent around the campfire and in the evening hours after a day's adventure.

Given that the tent sites are not directly in the project's viewshed, and that the activities are typically focused around the campsite itself, the camping experience will not be significantly affected by a wind energy project."

MLA There are many primitive tent sites located along the south shore-lines of the nine scenic lakes (see LandWorks map). Most are within a few feet of the water and have full-on views of Bowers Mountain and consequently the BWP turbines. Campers utilize the beaches for campfires and generally center their attention on the lake and mountains. The sensory experience of being immersed in a wild place at these tent sites will be ruined by the visual presence of the

large-scale, man made towers. In addition the constant flashing of red strobe lights will completely alter the campers' experience of the night sky.

LandWorks VIA (page 37) 4. The Visual Impact Assessment

*E2. The Project's Effect on Continued Use and
Enjoyment of the Scenic Resource*

"A number of factors can inform this indicator, including the viewer's association with the resource (e.g. landowner), attitude towards wind, the type of activity the viewer is engaged in, the nature and extent of visibility, and whether there are options for experiencing the resource without viewing the Project if visibility of the Project is considered undesirable by the user.

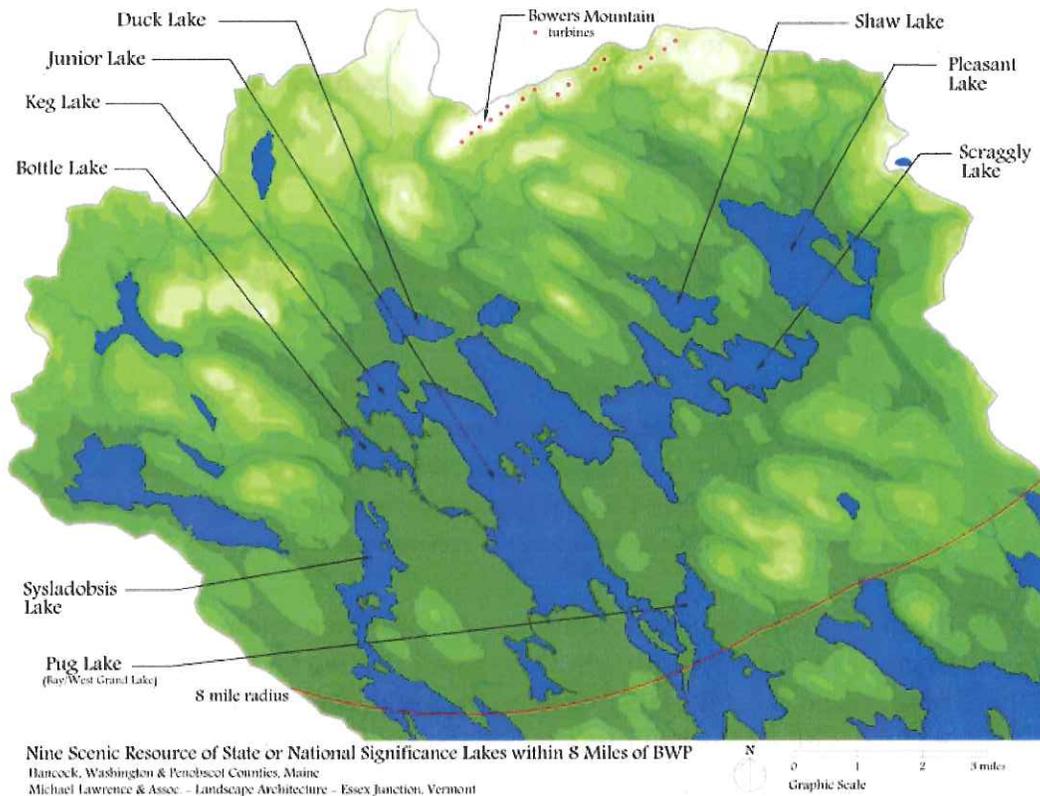
MLA Today users including landowners & non-landowners with differing attitudes towards windturbine installations live and travel to the nine scenic lakes to satisfy a need for quiet, sense of wilderness and a place with a minimal presence of urbanization. This environment satisfies those needs.

Introduce the BWP. Sixteen 459 foot towers that project at least half as high as the hills that are 560–840 feet above the lakes and running over three and a half miles along the mountain ridgeline.

The vertical forms, enormous scale and constant motion introduce a powerful sense of urbanization which destroys the sense of wilderness over wide areas of the nine SRSNS lakes. Users may look away from them or may retreat to places on the lakes where shoreline vegetation or intervening topography hide them, but users can't go long or far before the towers proclaim their presence. Flashing red strobe lights will change the quality of the night wilderness.

If the project is built, potential users of these nine scenic lakes will still have a choice as they examine outdoor environments to satisfy their need for solitude, serenity and a wilderness experience.

Option 1. They may still choose to come to the nine SRSNS Lakes adjacent to the BWP towers. They'll discover that they can satisfy their needs as long as they look in the right direction or remain in coves or along certain shorelines to escape the sense of urbanization that will



pervade great areas over the lakes. They will have to choose their primitive campsites very carefully and may not even realize they are camping in a place spoiled by red strobe lights until evening sets in.

Option 2. They may choose another lake environment, one that feels far from the commotion and bustle of the urban world they're trying to leave behind.

A significant number of people will opt for #2.

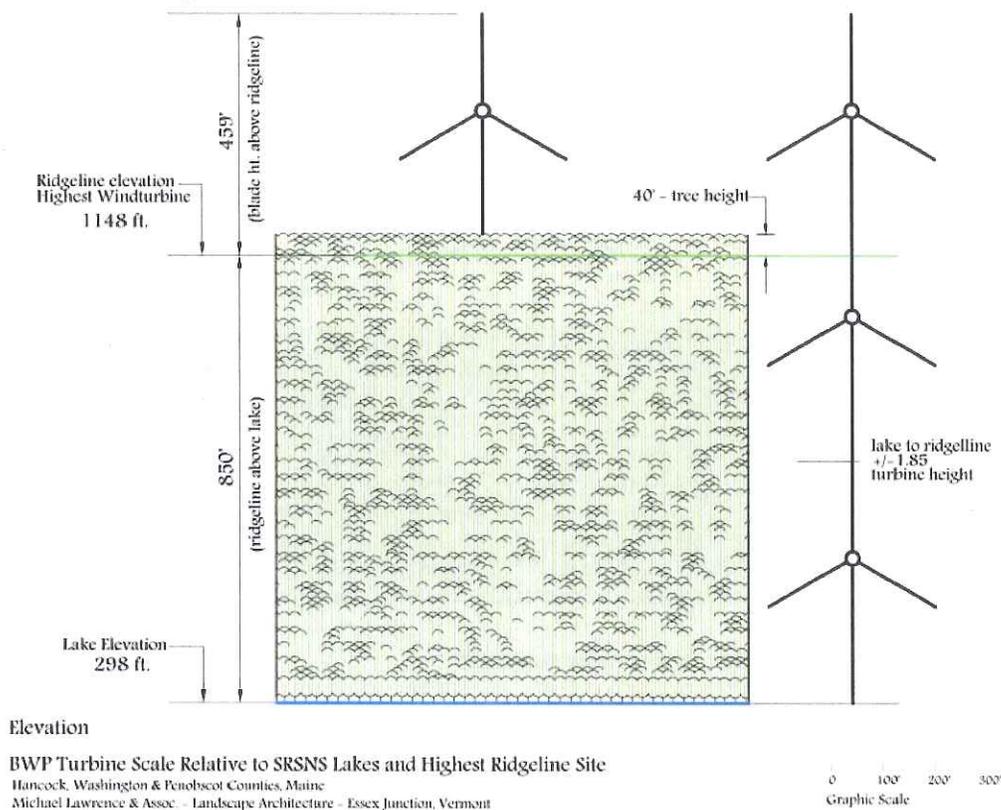
LandWorks VIA (page 37) 4. The Visual Impact Assessment

F. Scope and Scale of Visibility

the number and extent of turbines visible

"Visibility in the landscape does not automatically translate to an adverse or high scenic impact."

MLA Not automatically. However in this case, the high level of visibility of the BMP's elements relative to the open spaces of the nine scenic lakes desecrates their intrinsic character translating to an adverse or high scenic impact.



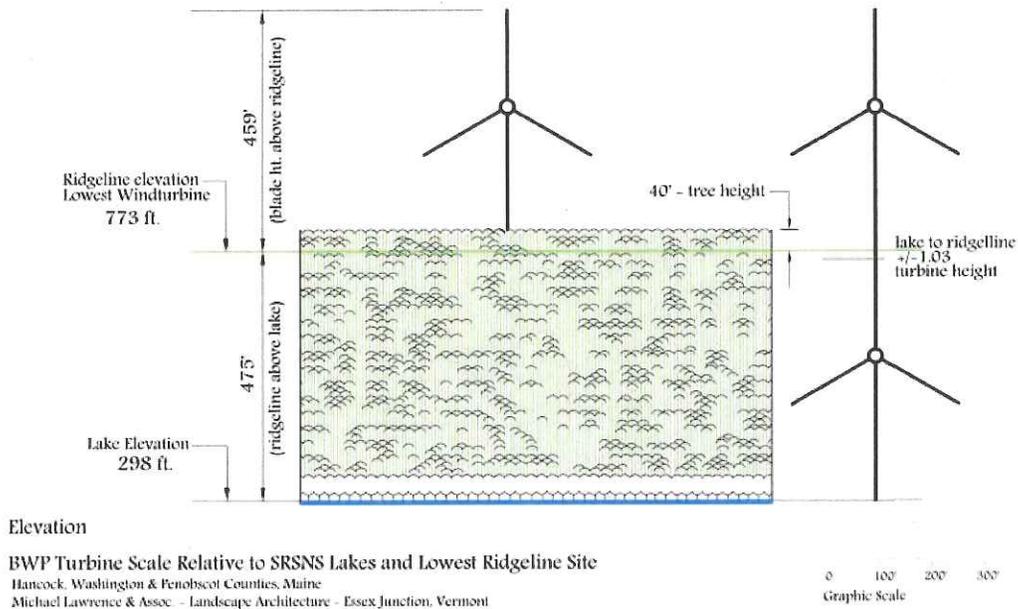
LandWorks (page 37) 4. The Visual Impact Assessment

F. Scope and Scale of Visibility

proximity or distance of turbines

"The National Forest's Handbook on Scenery Management, which is based on years of research and work in the National Forest, and is relied on as a basis for visual assessment by professional and regulatory review bodies, identifies the fact that visual impact is based, in part, on the 'degree of discernible detail' and that the background of a view has less detail insofar as 'texture has disappeared and color has flattened.'"

MLA There are no references to wind projects in the *The National Forest Service's Handbook on Scenery Management*. Photos in the handbook illustrate more modestly scaled construction in the landscape ie; roads, a ski lodge, wooden utility poles, fencing, houses, cabins and bridges. The publication contains no images showing structures projecting above ridgelines.



Landworks VIA (p 37&38) 4. The Visual Impact Assessment

F. Scope and Scale of Visibility

proximity or distance of the turbines

"The Handbook (National Forest Service Handbook on Scenery Management also sets forth the use of distance zones and indicates that with increased distance the "concern" level for visual impact or impacts to overall scenic integrity lessens. As such, the use of distance zones is used in this Visual Impact Assessment as one methodology for helping to determine the impact of the Project's visibility. This analysis uses the following classes, which are derived from the work of the Forest Service, but are refined and based on our own experience with wind projects."

Foreground: 0-2 miles, *Turbines may appear very large and dominate the view*

Middleground: 2-5 miles, *At 5 miles, turbines will be visible, but will not typically dominate the view since they are viewed 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*



Bowers Mountain framed by Junior and Penobscot Bald Mountains, Junior Lake

contributing features.

Background: Beyond 5 miles, Ridgelines and horizon lines are the prevailing visual characteristics. The perceived size of turbines in this zone is greatly reduced.

MLA Neither the Handbook nor LandWorks describes the visual impact of ridgeline siting. The amended distance zones and overall descriptions would be more accurate if applied to a project that was backgrounded by hillside vegetation.

In describing “**Middleground**”, it’s more accurate to say that wind-turbines projecting high above the ridgeline are **not** viewed as part of the overall landscape but as a foreign element.

Because ridgelines and horizon lines are the prevailing characteristics in “**Background(s)**” it’s apparent that turbines placed above those lines will be highly visible and diminish the beauty of the natural profile.



Moose, Scraggly Lake

The following excerpts from the *National Forest Service's Handbook on Scenic Management (NFSHSM)*, chapter 4, Landscape Visibility and Scenic Classes are relevant to the relationship between the BWP and the nine SRSNS lakes;

NFSHSM 4-4 "Sometimes only a small number of people view certain landscapes, but these people have high concern for scenic quality and high expectations for outstanding scenic beauty. When associated with other related experience-opportunities such as spiritual quests, introspection, and so on, these landscapes have even higher scenic importance and value. The importance of these landscapes is even greater if these other related experience-opportunities are available only occasionally."

Other natural resource values, such as wilderness, wildlife, or old-growth, may create needs for natural-appearing landscapes and ultimately may raise the importance of maintaining high levels of scenic quality and landscape settings. These other values relate to viewer context.

MLA Many people who use the nine SRSNS lakes have high concern for scenic quality and high expectations for outstanding scenic beauty. This landscape provides a sense of wilderness, rich wildlife and a sense of old-growth especially in picturesque shoreline vegetation.



Getchell, Bowers & Penobscot Bald Mountains, Junior Lake

NFSHSM 4-4 Many middleground national forest landscapes are evenly textured, and human activities that dominate natural form, line or texture will contrast strongly. This may make some middleground landscapes more sensitive to visual scrutiny than some foreground landscapes.

MLA Great areas of the nine SRSNS lakes fall within this two to five mile middleground range that requires more sensitive visual scrutiny. The human activity (BWP) will dominate natural form and create strong contrast.

NFSHSM 4-5 Scenic values increase as the terrain allows people to have longer views and as clear air allows them to observe crisp detail.

MLA The lake terrain provides incredibly long views. Coupled with the clear air found in this place remote from major pollution sources, the nine SRSNS lakes perfectly fit this description as an environment with increased scenic value.



Popular Swimming and Picnicking Beach, South Shore Junior Lake

NFSHSM 4-7 Portions of landscapes seldom seen from travelways and use areas are also important to constituents for their aesthetic and scenic values. They may be of even greater importance as special recreation settings and as opportunities for people seeking solitude.

MLA There are many places on the nine SRSNS lakes that offer solitude and fit this definition that earns “even greater importance”.

NFSHSM 4-74.8 & 4.9 Concern Levels A measure of the degree of public importance placed on landscapes. Level 1-High Importance, Level 2 – Medium Importance, Level 3 – Low Importance.

Criteria to be analyzed to determine concern level;

- 1. Primary areas of fishing, swimming, boating and other active or passive water recreation.*
- 2. Primary recreation areas (vista points, trail camps, campgrounds)*
- 3. Designated scenic area*
- 4. Area of primary importance for wildlife observation*



Bald Eagle, Scraggly Lake

5. Special area of local or regional importance 6. Area of primitive, semi-primitive non motorized and semi-primitive motorized recreation opportunities identified as important by constituents.

MLA In all these six categories outlined in *The National Forest Service Handbook on Scenic Management*, the nine SRSNS lakes within eight miles and impacted by the BWP earn High Importance ratings.

NFSHSM 4-10 Use both topographic and vegetative screening for project planning. Use the most sensitive situation for the landscape visibility inventory, for example, any leaf-off condition, clear air period or season of high color contrast.

MLA The elevation and scale of the turbines makes it impossible to fulfill this directive. Photosimulations (landscape visibility inventory) prepared by the BWP developer do not use the most sensitive conditions (clear atmosphere, dawn and dusk lighting) or the full height of the turbines.

LandWorks VIA (P 38) 4. The Visual Impact Assessment

*F. Scope and Scale of Visibility
angle of view*

"angle of view – a turbine array that occupies a narrow angle of view typically has less visual impact than one that occupies a wide angle of view."

MLA A turbine array with a vertical scale greatly exceeding the highest trees in the landscape, three and a half miles wide and placed on the highest ridgelines above the lakes will command attention and have strong visual impact. From the nine SRSNS lakes, the BWP turbines are at least half the height of the mountains they sit on.

Viewers glimpsing a single turbine on either end of the BWP out of the corner of the eye will be drawn to the incongruous form and its motion high above the mountain. The BWP's visual influence is much greater than portrayed in the LandWorks angle of view diagrams because of its vertical dimension.

LandWorks (P 39) 4. The Visual Impact Assessment

*F. Scope and Scale of Visibility
duration of view*

"this would compare to a fisherman on a lake who may have continuous views of a project, but those views would be tempered by the activity (i.e. focusing on the water and not the extended view), shifting location and altering context and viewpoint, and access to 360 degree views. In this situation, the potential for impact lessens, because, although views would be present, they would be ever-changing and mitigated by activity."

MLA Fishermen, kayakers, swimmers, campers, canoeists and boaters may be busy at times or facing away from the BWP or in areas where it's hidden by topography or vegetation.

They may also anchor and stare at the scenery. The BWP will be highly visible and impact views and scenic character over vast areas of the nine SNRS lakes.



Kayaker, Keg Lake

*LandWorks VIA (p 40) 4. The Visual Impact Assessment
F. Scope and Scale of Visibility
visual absorption*

“visual absorption capacity (VAC) is a measure of a land’s ability to absorb alteration, yet retain its integrity”

MLA The project environment on its own may have a high Visual Absorption Capacity (VAC) due to variety of landscape pattern, vegetation height and/or heavily patterned diverse vegetative cover. This could ameliorate modest sized development constructed at lower elevations .

The BWP however stands high above the natural elements that create VAC. In other words, fore, middle and background elements in the landscape are nowhere near a scale to be able to create visual screening or provide a camouflage-like backdrop to the BWP as viewed from the vast areas on the nine scenic lakes.



Junior and Penobscot Bald Mountains, Junior Lake

LandWorks VIA (p 41) 4. The Visual Impact Assessment

*F. Scope and Scale of Visibility
visual dominance*

“this indicator considers the scope of the project in relation to the vantage point and the project surroundings. Do the turbines command the attention of the viewer away from all other aspects of the landscape? ... In addition, the height of the turbines in relation to the height and mass of the landforms below them affects visual dominance.”

MLA At a height of 459 ft. the turbines are from half to three quarters the height of the hills on which they are sited which rise 475 to 850 ft. above the surrounding lakes. The BWP’s large awkward vertical forms will often draw viewers’ attention away from the aspects of the soft horizontal landscape forms especially taking into account the incongruous mechanical motion in the natural setting.



Camp, Sysladobsis Lake

*Landworks VIA (p 41) 4. The Visual Impact Assessment
F. Scope and Scale of Visibility
visual clutter*

"Landscape coherence/visual clutter – Turbines spaced in a linear fashion at regular intervals can be more aesthetically pleasing than turbines that overlap each other and appear jumbled."

MLA The definition of *coherence* is to be logically or aesthetically consistent so that all the separate parts fit together and add up to a harmonious or credible whole. The lake/mountain landscape exhibits a strong coherence where all of the elements fit together beautifully creating a harmonious whole.

Coherence in this environment not a matter of how the BWP's parts are arranged, but about the components' scale (much larger than the tallest elements in the landscape) and siting (on ridgeline horizons



Camps Tucked into Shoreline Trees, Junior Lake

highly visible into the sky). In that analysis, the BWP erodes the natural coherence and is inconsistent with the existing landscape aesthetic as viewed from the nine SRSNS lakes.

Existing man-made elements (camps and outbuildings) meet the definition of “coherent” because they are modestly scaled and well sited (below the tree line and screened or visually absorbed among the dominant vegetation).

LandWorks VIA (p 42) 4. The Visual Impact Assessment

4.2.2 Weather and the Effects of Atmospheric Conditions

“This region of Maine has a median daily cloud cover of 68% (partly cloudy) to 87% (mostly cloudy), with May and November being the cloudiest months. Even on sunny blue-sky days, white turbines do not necessarily stand out in a striking way against a blue background when viewed from a distance.”



Sunset, West Grand Lake

MLA This region of Maine has morning dew catching the first rays of sun, sunrise glory breaking over you, approaching rain, thunder and lightning, wrapped in darkness, sunset-splendor, constellation laden quiet, symphonies of song and color, memories of a lifetime.

Landworks VIA (p 42-45) Photographs of existing Windturbine Projects

MLA The narrative does not describe turbine heights, distances, lens settings or pixel resolution. Small images deemphasize turbine visibility and therefore visual impact. Even photosimulations presented on an 11x17 inch format and viewed at the proper distance lack the clarity available only through real world experience. In the photograph on LandWorks VIA page 42, the ratio of turbine height to height of ridge above the lake is $1/5$ whereas the BWP is $1/2$ to $1/3$. Height ratio is closer to the Stetson Wind Project shown on page 44 (distance to turbines not indicated).



Remote Character, North Area, West Grand Lake

Landworks VIA (page 45) 4.2.3 Tourism

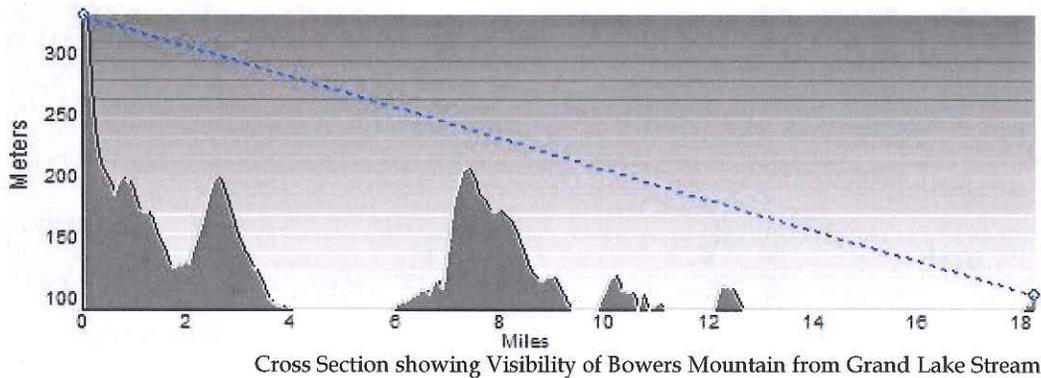
“We do not dispute that West Grand Lake and the village are important tourist areas, but they are located well beyond the 8 mile limit set by the Act for evaluating impacts to scenic and natural resources.”

MLA Tourists from Grand Lake Stream boat to all the lakes in the Down-east Lakes Watershed. Traveling north, boaters have a sense of leaving the village and entering ever more deeply into the wilderness. Negligible development on most of the northern reaches of West Grand, and the nine SRSNS lakes nourishes the experience. Great tracts of land including lake shoreline have been placed in conservation trust in order to protect that scenic wilderness character.

Instead of experiencing a sense of traveling far away from civilization, the 16 wind turbines high above the ridgeline would introduce

an urban presence at the furthest point of the trip. At that journey's end, where travelers delight in the sense that they're most remote and deep in the wilderness, the experience would change to become boating in the shadow of a windpower project.

While Grand Lake Stream is outside the 8-mile limit for analyzing visual impact, the presence of the BWP would impact the ability of the guides based here and tourists who visit to enjoy one of the great rewards for the long trip to the northern limits of the watershed.



This cross section demonstrates the lack of topography (hills) to block views of the BWP from Grand Lake Stream. Although 18 miles away, the FAA mandated red-flashing strobe lights to warn airplanes would be perfectly visible at that distance and will transform the character of the sky, especially on magical nights (an exceptionally dark sky due to its remoteness from light pollution), in the vicinity of the area's population center and from vast areas of the nine SRSNS lakes.

The section uses the base elevation of Bowers Mountain. It does not account for the fact that the red-flashing strobes will be elevated an additional 84 meters or 276 feet higher (on the turbine) than the base.



Fishfry, Scraggly Lake

*LandWorks VIA (page 46–57) 4.2.4 Public Perception of Wind
A. Overview & B. Public Polls*

MLA Important facts from the Kleinschmidt survey;

- 90% of those interviewed engage in viewing scenery.
- 90% of those interviewed expect 'high' or 'very high' quality from their visit to the lakes.
- 90% of those interviewed rate the lakes as scenic to highly scenic.
- 44% said that views of the BWP would have a negative or very negative effect on their enjoyment of the lakes.



Canoeing, Junior Lake

- 1% of those interviewed said that under current conditions they would not return to the area. If the BWP is built, 20% said they would not return.
- 38% of those interviewed gave the lakes in their current state the highest rating for scenic value while only 16% gave the simulated condition that rating.
- 0% of those interviewed gave the lakes any rating below average for scenic value in its current state. Under BWP simulated conditions, 58% said that scenic value would be below average with 39% registering on the lowest scale.



Padding Instructions for Canoe Trips to the Nine SRSNS Lakes, West Grand Lake

*LandWorks VIA (page 57) 4. The Visual Impact Assessment
E. Conclusion*

“Collectively, this literature provides evidence that wind energy development is gaining support and that the consequent visual impacts of wind are not always necessarily negative or adverse.

MLA The results of the Kleinschmidt Survey of public perception on the nine SRSNS lakes show that in this specific location, the visual impacts of this specific project (BWP) are not only negative and adverse, but will have an unreasonable adverse effect on the scenic character or existing uses on several of those SRSNS’s within the eight mile radius.

LandWorks VIA (page 58-105) 4.3. Lake-by-Lake Visual Analysis

MLA In commenting on this section, MLA looks at the nine SRSNS as a networked system.

CRITERION A: SIGNIFICANCE OF THE SCENIC RESOURCE

Site visits to the individual lakes confirm that the ratings assigned in the Maine Wildlands Lake Assessment and Maine's Finest Lakes, The Results of the Maine Lakes Study are conservative.

Most of the lakes fulfill requirements of 1. Relief, 2. Physical Features, 3. Shoreline Configuration, 4. Vegetation Diversity, 5. Special Features and 6. Inharmonious Development that quality them for higher scores than they received. As a single resource made up of nine parts, they surely do.

The LandWorks VIA argues lake-by-lake to reduce their scenic value.

As a whole, the nine SRSNS lakes offer;

1. **RELIEF** – ever-changing perspectives of the surrounding forested hills. **(Medium Value)**
 2. **PHYSICAL FEATURES** – varied shorelines with boulder-strewn coves, sand beaches, numerous inlets, peninsulas and islands. **(Medium Value)**
 3. **SHORELINE CONFIGURATION** – interesting and varied shapes with inlets, bays and mysterious connections. **(High Value)**
 4. **VEGETATION DIVERSITY** – mixed deciduous-coniferous vegetation surrounds all the lakes including wetlands and specimen super-story trees. **(High Value)**
 5. **SPECIAL FEATURES** – Wildlife including eagles, loons, moose, deer, beavers, otters, muskrats, warblers and migrating birds. The water is clear and the lakes are known for great fishing. **(High Value)**
 6. **INHARMONIOUS DEVELOPMENT** – Camps are concentrated on a couple of the smaller lakes. **(No Reduction in Value)**
- CRITERION A:RATING – **MEDIUM HIGH/HIGH**

CRITERION B: EXISTING CHARACTER OF THE SURROUNDING AREA

The character of the area is wilderness-like with a remote feel that is enhanced by being accessible primarily from the water.

CRITERION B:**RATING – HIGH**

CRITERION C: EXPECTATIONS OF THE TYPICAL VIEWER

According to the Kleinschmidt Survey 88% of respondents expect a scenic experience that is high or very high.

CRITERION C:**RATING – HIGH**

CRITERION D; PURPOSE AND CONTEXT OF THE PROPOSED ACTIVITY

This cost/benefit judgment compares the project's long-term impact on scenic resources with its long-term power generating benefit. The BWP would be highly visible over vast areas within eight miles of the nine SRSNS lakes. These large scale man-made objects would spoil the wilderness-like character that people come to enjoy. Much of the area has been placed in public reserve and conservation easements to protect that wilderness character. Approximately 1,560 more turbines need to be operating to meet Maine's 2015 wind energy goal. Sixteen turbines represent an insignificant contribution to that total. This would represent an extremely high price in scenic damage for a token power generating benefit.

CRITERION D:**RATING – HIGH**

CRITERION E.1 EXTENT, NATURE AND DURATION OF PUBLIC USE

The SRSNS lake network's great appeal is their sense of remoteness. They're not crowded. Public boat launches offer access to the other lakes in the system (a few requiring short portages) where users enjoy undisturbed wildlife viewing, quiet year-round fishing and secluded campsites. To users, the lakes are known as a "well kept secret".

CRITERION E1:**RATING – HIGH**

CRITERION E.2: THE PROJECT'S EFFECT ON CONTINUED USE AND ENJOYMENT OF THE SCENIC RESOURCE

The Kleinschmidt Survey shows that under current conditions 93% of those surveyed would be very likely to return in the future. After

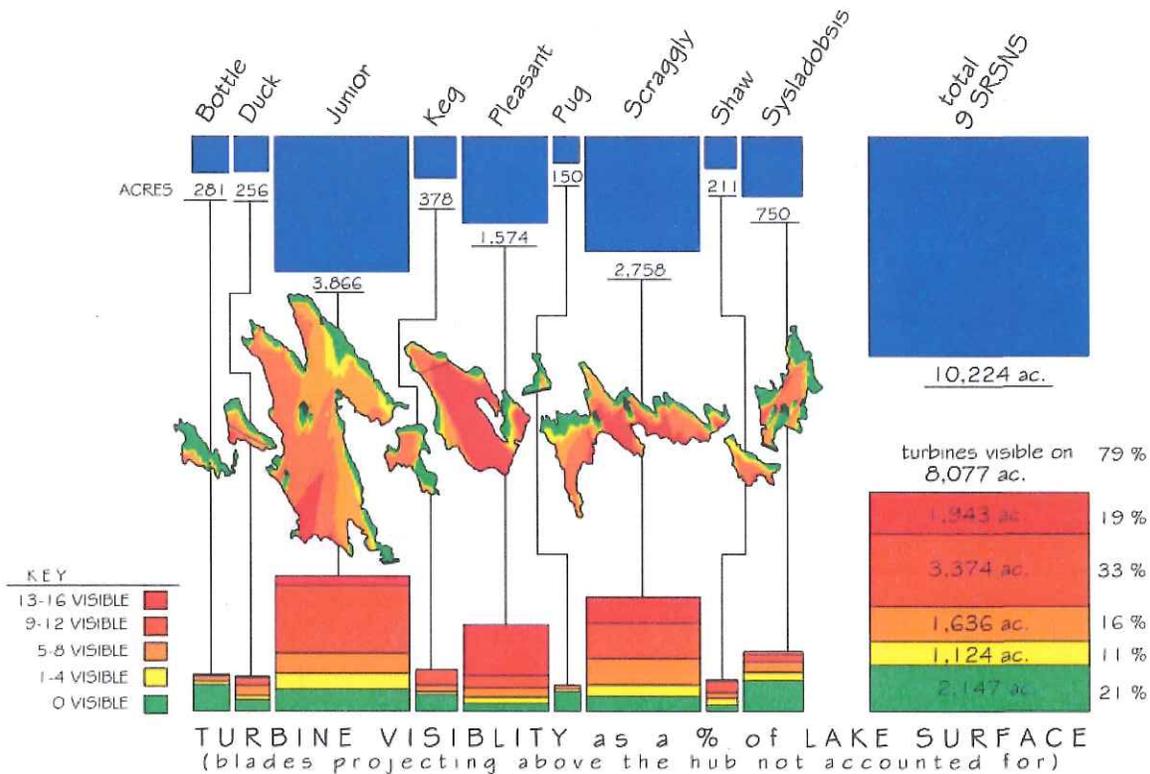


Chart of 9 SRSNS Lake Sizes & Areas of BWP Visibility within 8 miles
Hancock, Washington & Penobscot Counties, Maine
Michael Lawrence & Assoc. - Landscape Architecture - Essex Junction, Vermont

viewing the project simulations, 54% are likely or very likely to visit in the future, a decline in 39% points. The Kleinschmidt survey shows that 35% of respondents say the BWP would have a negative or very negative effect on their enjoyment of the lakes.

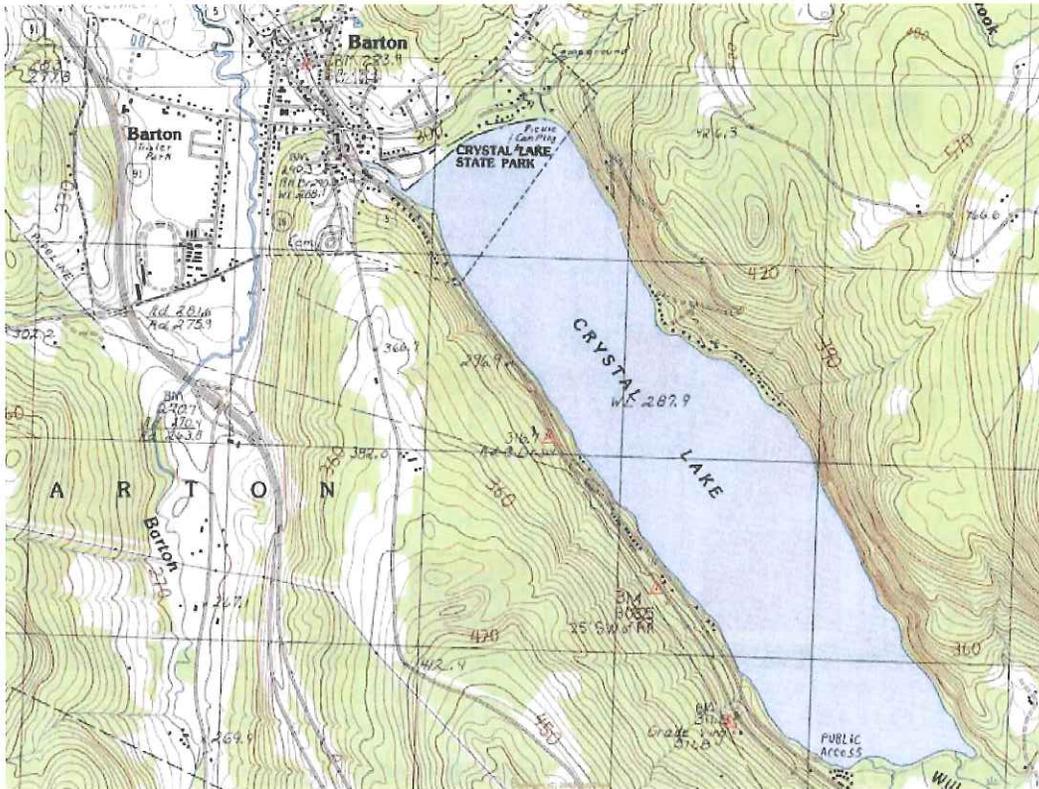
CRITERION E2:**RATING – HIGH**

CRITERION F: SCOPE AND SCALE OF THE PROJECT’S EFFECT ON THE SCENIC RESOURCE

Much of the BWP would be visible over large areas of the Lakes, 28% on Bottle, 68% on Duck, 84% on Junior, 60% on Keg, 91% on Pleasant, 25% on Pug, 87% on Scraggly, 82% on Shaw and 49% on Sysladobsis. It’s important to note that the largest lakes, Junior, Pleasant and Scraggly have high visibility percentages.

The airplane warning red strobe lights would be visible over the same area and well beyond including West Grand Lake diminishing people’s enjoyment of the awesome star-filled skies.

CRITERION F: **RATING – HIGH**



USGS Crystal Lake and Barton Village, Vermont

LandWorks VIA (page 118–119) 4. The Visual Impact Assessment

SHEFFIELD CASE STUDY—A PADDLERS EXPERIENCE

“Due to certain similarities compared to the Bowers Wind Project, the Sheffield Wind Project in northeast Vermont serves as a relevant case study with regard to the effect of a wind energy project on recreational use of scenic resources. In particular, there are similarities between Vermont’s Crystal Lake and Pleasant Lake, one of the scenic resources identified in the Bowers assessment (see Exhibit 22: Sheffield Case Study).”

MLA Crystal Lake lacks wilderness character and would not merit a ‘significant’ or ‘outstanding’ rating for scenic beauty. A busy highway runs the length of its western shore and Barton Village is highly visible at its northwest corner. Users would not expect the sense of solitude or remoteness that exists at Pleasant Lake when they come to Crystal Lake.



Grand Lakers

LandWorks VIA (page 119) 4.6 Overall Conclusion

"These lakes are indeed part of the landscape character of the region but are not unique resources that stand out as one-of-a-kind scenic environments.

The lakes and the experience they provide will not be substantially altered or undermined by a wind energy development visible at a distance of 2 to 8 miles most often as part of the background view."

- *The lake resources and surrounding landscapes do not present unique and highly sensitive qualities that preclude the addition of an array of wind turbines within the viewshed.*
- *While scenic and valued for its recreational qualities, the region is a similar landscape to other nearby areas and lake-region landscapes elsewhere in Maine.*
- *The landscape does not have the prominent distinctions between land-forms, such as a flat open field in combination with a steeply rising mountain, or have unique focal points and distinct, memorable profiles*



Athion Lewey Early Native Guide, Grand Lake Stream

that are characteristic of iconic landscapes that are more sensitive to change in the viewshed."

MLA The nine SRSNS lakes have been declared scenically significant and outstanding in Maine Wildlands Lakes Assessment. The size, location and visibility of the BWP introduce a sense of urban presence that destroys the wilderness character of the scenic lake environment that earned that designation Individual aesthetic principles in reviewing the BWP confirms the following;

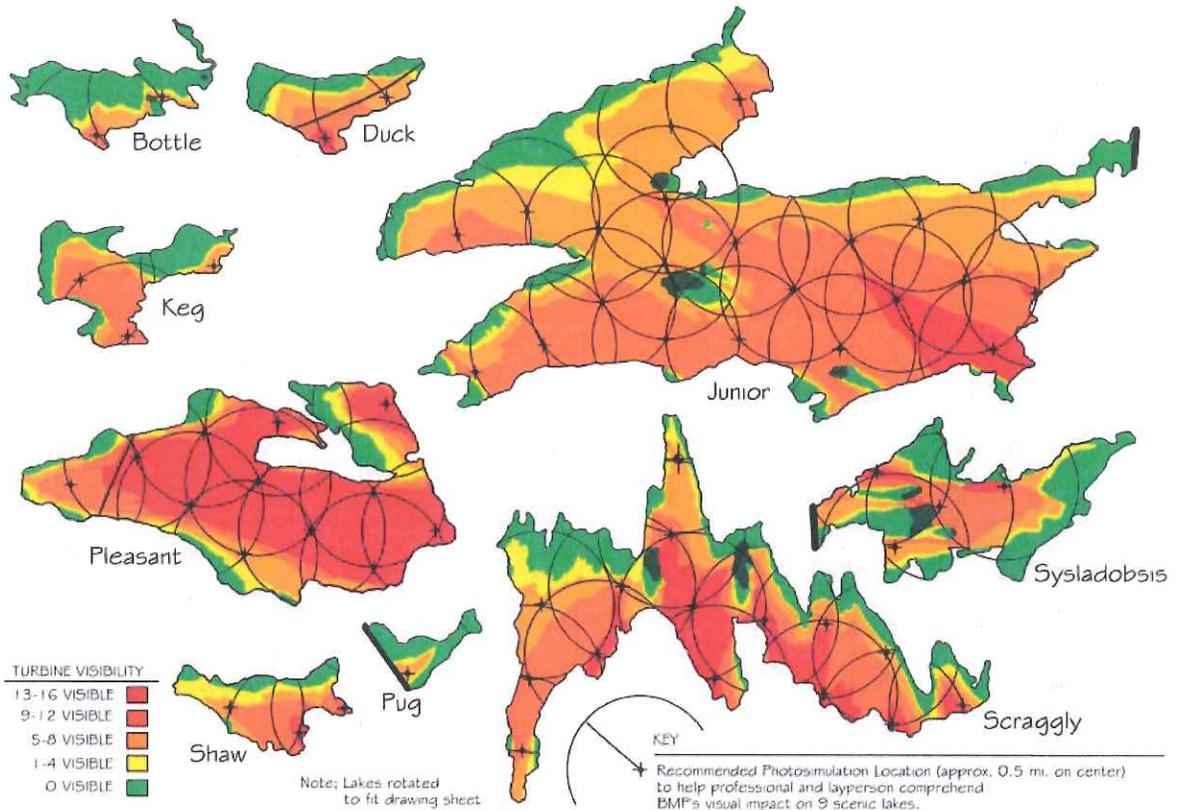
- The area is a tourist destination. (The Native American Passamaquoddy and Penobscot served visitors as the first guides in the Grand Lakes Watershed as early as 1830. The State of Maine established a fish hatchery in Grand Lake stream in 1877. Wilderness recreation has been going on continuously ever since..
- Topographic relief as viewed from the lakes is dramatic and unique.



Nesting Loon, Scraggly Lake

- The landscape has a prominent distinction in landform, a large, flat open lake adjacent to steeply rising mountains with unique focal points, (named mountains and hills) and memorable ridgeline profiles, visible in dynamic breadth from the nine SRSNS lakes.
- Scenic values increase as terrain allows people to have longer views. This terrain allows for those longer views.
- Logging operations here are compatible with wilderness character.
- The low frequency of use is an asset for people desiring a wilderness experience
- The landscape exhibits vividness, unity, intactness and coherence promoting a sense of visual order and balance

- Existing structures on several smaller SRSNS lakes have a lake community feel. Water access exists from these areas to the bigger lakes that have a strong sense and feeling of wilderness.
- Viewshed maps can be relied upon over large open surfaces. That mapping shows that the BWP will be highly visible over enormous areas (over 8,000 acres) of the nine SRSNS lakes.
- The lakes have distinctive memorable qualities.
- Users come here looking for wilderness and a lack of urbanization. The introduction of large, visually prevalent urban elements will cause some users to choose to recreate, to restore, to recharge where these elements are not present.
- For those on spiritual quests where landscapes have a higher value, the return rate will be lower.
- Wind towers will appear in middle and background views and not be seen as part of the landscape, but as foreign elements.
- Narrow angle of view is superseded by height. The scope and scale of view is so broad that the nine SRSNS lakes will become known more for the BWP than the natural landscape.
- Visual Absorption Capacity is irrelevant to the BWP. Its huge components tower over existing vegetation on the hillsides leading up to the ridgelines. Visual Absorption Capacity is meaningful when development is below landscape in the background and at least partially behind landscape elements in the foreground.
- The BWP causes visual clutter and is incoherent with the existing landscape.
- While weather may sometimes soften the visual perception of the BWP, at other times it will emphasize its visual dominance.



9 SRSNS Lakes Showing Recommended Photosimulation Locations

Hancock, Washington & Penobscot Counties, Maine
 Michael Lawrence & Assoc. - Landscape Architecture - Essex Junction, Vermont

- Judging the BWP's visual impact using photosimulations is risky. The BWP developer did not photosimulate the worst-case scenarios. Using the viewshed mapping (where turbines need to be measured at the blade tip) to find the areas on the lakes with greatest visibility, photosims need to be assembled at 1/2 mile intervals (as indicated in the diagram above).
- The lakes are vastly different in size. The developer's photosims do not account for this. Increasing the number of photosim locations would help both layperson and professional alike understand visual impact over individual lakes as well as the entire network. Photosims need also sample different sun angles and weather including clear sky, sunrise, sunset and post sunset (highest visibility/worst case conditions). Those judging the project would be well served to travel to the photos' original lake locations and compare the photosimulations with reality.



Moonrise, Scragly Lake

In conclusion, the five facts about these lakes still stand and provide the foundation for the need to scrutinize the BWP's visual impact very carefully.

1. Nine SRSNS would have visibility of the BWP from within eight miles.
2. The nine lakes are part of a larger lake chain.
3. The lake chain is surrounded by trust and conservation lands.
4. Ridgelines are critical to aesthetics.
5. People come here seeking wilderness sanctuary.

From visiting and studying the site, studying the BWP proposal, reviewing the LandWorks VIA and other documents, MLA concludes that the BWP would have an unreasonable adverse effect on the scenic character and existing uses related to the scenic character of the nine scenic resources of state or national significance.

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