

May 23, 2011

Response by Portland Research Group to the “Review of the Bowers Wind Project Visual Impact Assessment” by James F. Palmer, dated April 28, 2011

Focus: Outdoor Activities Users Research (Telephone Survey and Snowmobiler Survey)

Telephone Survey

Dr. Palmer correctly states on page 10 that “The sample is not random. The original list only includes people who engage in outdoor activities and the actual size of this population is unknown. There are also other restrictions to eligibility. Then a “booster” sample of local residents was merged with the New England group. As a result, the survey cannot be used to estimate the “extent, nature and duration of potential affected public uses” of the area.” Dr. Palmer makes similar points on page 33.

The sample frame was constructed intentionally due to our hypothesis that only a very small portion of the general population would be aware of and regularly use the Study Area. As such, we targeted individuals who participate in the kinds of outdoor activities that one can do in the Study Area. Since many of the users of the outdoor resources in Maine come from outside the State, primarily from other New England States, we felt it prudent to draw sample for each New England State. Then, to make sure we captured the opinions of those who live in fairly close proximity to the Study Area, we garnered a “booster sample” (primary residence located within 50 miles of Study Area) from which we hoped to complete n=50 interviews. We felt the combination of the two samples would give us results, through a greater number of observations, in which we could place greater confidence. Details of the research objectives, sampling plan and screening criteria follow:

- Research Objectives
 - Measure awareness of Study Area
 - Measure frequency of usage of Study Area
 - Understand expectations for views in the Study Area
 - Determine impact of “human-made” structures on users of Study Area in terms of likelihood to return and enjoyment
 - Assess whether and how commercial wind power projects fit within expectations of viewers using the Study Area and other parts of Maine for outdoor activities

- Sampling Plan
 - Identified individuals from infoUSA (a well known, reputable sample provider for the market research industry) panel from New England region who participate in boating/sailing, camping/hiking, fishing, hunting and other outdoor sporting interests.
 - 505,675 matches occurred, of which 5,000 records were pulled. 1,000 records from Maine and 800 from each of the other New England states were randomly selected to form the sample from which calls were made for the research: Maine (1,000 of 80,759), New Hampshire (800 of 71,342), Vermont (800 of 29,750), Massachusetts (800 of 29,696), Rhode Island (800 of 51,256) and Connecticut (800 of 242,782).
 - An additional 1,000 records were taken to identify Maine residents who lived within 50 miles of the Study Area.
 - Encountering disconnected telephone numbers, computer tones, language barriers, etc. is all normal for a typical research project using telephones as the data collection methodology.

- Screening Criteria
 - Eighteen years of age or older (typical for phone study unless parents/guardians are involved to grant permission to speak with youth)
 - Respondent personally participated in outdoor activities in Maine within the last three years
 - Gender to obtain representation of both males and females
 - Specific outdoor activities must mention (unaided), among others, at least one of: ATV Riding, Birding, Boating (Motor), Camping, Canoeing or Kayaking, Fishing, Foraging for Wild Plants or Mushrooms, Hiking or Walking, Hunting, Skiing (Cross Country/Nordic), Snowmobiling, Snowshoeing.

Portland Research Group's hypothesis going into the research proved to be correct. As shown below, just 3.06% of those contacted were aware of and at least sometimes (within the last three years) participate in an outdoor on or beside one of the eight lakes located within the Study Area. Had we conducted a purely random sample using a Random Digit Dial (RDD) sample and achieved the same incidence of 3.06%, we would have interviewed just 12 people from a sample of n=400 and 18 from a sample of n=600 who use the area. Instead, we were able to interview 31 people who were aware and had used the Study Area. This is more than double the quantity for a random sample of n=400 and almost twice as many as we would have interviewed as part of a random sample of n=600. The effect of our approach was to increase information from people who actually are aware of and use the area, which was an important part of the survey's purpose.

- Summation of Sampling and Screening
 - Due to our hypothesis, we did everything we could to target a sample of users of the Study Area. We tried to complete n=50 interviews with people who are aware of and at least sometimes (rating of 4 to 10 on a scale where 1 means, “Never participate in the outdoor activity on or around the lake”, and 10 means, “Regularly participate in the outdoor activity on or around the lake”) use at least one of eight lakes located within the Study Area: Bottle, Duck, Lower Sysladobsis, Keg, Junior, Scraggley, Shaw, and Pleasant (locations defined in survey). We completed 31 of our target of 50.
 - Had we conducted a purely random sample of Mainers (using a RDD – Random Digit Dial and a cell phone number overlay sample), awareness and usage of the Study Area would have been a very small percentage of the total sample and would not have given us enough of the target segment to ask about expectations, impact on enjoyment and impact on likelihood to return. Based on this targeted sample the percent is still small of those who participate in outdoor activities on or beside the lakes in the Study Area:
 - ✓ Not participated in activities in Maine last 3 years: 408
 - ✓ Not engaged in activities around Study Area: 55
 - ✓ Unaware or rarely uses Study Area (Over quota): 360
 - ✓ Interviews among those unaware or rarely use Study Area: 160
 - ✓ Aware and use Study area at least sometimes: 31
 - ✓ $31/(408+55+360+160+31) = 3.06\%$
 - With a targeted sample, only 3.06% are aware of and sometimes use the Study Area. This incidence of awareness and usage would have been substantially lower with a purely random sample.
 - While the outdoor activity usage levels by age do not line-up with SCORP data in terms of Fishing and Hiking or Walking, the statement can be made based on the research that the Study Area garners very low awareness and usage.

Dr. Palmer states on page 10, “The number of people between 18 and 44 years old are significantly under represented compared to those who are 45 years old and older.” Age ranges from the survey are compared to Maine’s SCORP for the two most commonly reported activities from the survey: fishing and hiking or walking.

The comparison correctly demonstrates that the survey is comprised of older respondents than those included in the Maine SCORP data. The data presented in the 2009 SCORP was analyzed based on a national survey of recreational activity conducted between 2002 and 2009. However, as shown in the table at the end of this document, the opinions shared regarding expectations, enjoyment, likelihood to return and disposition on wind power are very consistent with those shared by respondents from other studies independent of this work. Such consistency between independent studies enhances the reliability of the work.

On page 10 Dr. Palmer correctly points out that “Seeing wind turbines would affect the enjoyment of 48% negatively (rating 1-3) and 16% positively (rating 8-10).”

As indicated on page 18 of the Telephone Research report, 36% gave neutral ratings (4-7) indicating that seeing wind farms would have no effect on their enjoyment. Another way to express the findings to this question is 52% (just over half) indicated that seeing wind farms would have a positive impact or no impact on their enjoyment.

Dr. Palmer also points out on page 10 that “Seeing wind turbines would affect the likelihood of their returning for 32% negatively (rating 1-3) and 23% positively (rating 8-10).”

These facts are correct about the effect of seeing wind turbines on likelihood of returning is negative (1-3 rating) for 32% and positive for 23% (8-10). However, referencing page 19 of the Telephone Research Report, 45% indicated seeing wind farms would have no impact (rating of 4-7) on their likelihood of returning. In other words, two-thirds (68%) said seeing wind farms would have either no impact (45%) or a positive impact (23%) on their likelihood of returning to the Study Area for outdoor activities.

On Page 11 of the Review of the Bowers Wind Project Visual Impact Assessment, Dr. Palmer states, “Without a clear understanding of the visual scope and scale of the turbines, it is difficult to see how respondents can accurately determine how the turbines would affect their ‘continued use and enjoyment of the scenic resource.’” On Page 33, Dr. Palmer again notes that without use of photo simulations “It is therefore highly unlikely that [the respondents] could have an accurate mental image of the “scope and sale” of the turbines . . . Without this, how could anyone give an accurate response to questions about how the project’s scenic impact might affect their enjoyment and likelihood to return.”

True, respondents did not see photo simulations from the numerous vantage points to specifically assess the visual impact of the Bowers project. However, on page 20 of the Telephone Research Report, we see that 97% (30 of 31) who are aware and use the Study Area have seen wind turbines in Maine (94%; 29 of 31) and/or outside of Maine (58%; 18 of 31). Therefore, while not an exact idea, one can say that respondents familiar with the Study Area have general understanding of the visual scope – it would be a much different conclusion if just a small percentage of these respondents had previously seen wind turbines.

As stated previously, when compared to the results of several other independent research studies, the results are very consistent. While each Study Area for wind turbines is unique, the results from these other studies show remarkable consistency toward the disposition of commercial wind farm development. Please refer to Table 1 for a summary of these results.

Stetson Snowmobiler Survey

Dr. Palmer states on page 11 of the Bowers VIA Review a statement is made in the second paragraph under the heading "Snowmobiler survey": "Therefore the respondents are primarily a self-selected group that is willing to at least tolerate the presence of grid-scale wind turbines." The paragraph continues by questioning what can be said about how "typical" snowmobilers might experience wind turbines. Dr. Palmer raises similar concerns on page 33 of his report.

While this may be a true statement, one can also make the point that the snowmobilers are more representative of the snowmobiler segment than the paragraph implies:

- Curiosity likely influenced many snowmobilers to attend the gathering – curiosity rather than tolerance.
- On pages 32 and 33 of the Bowers VIA Review, an Associated Press (2011) news release about the gathering has been reprinted. The news release clearly states that there will be a barbecue lunch, which is an incentive to attend. In market research, we offer incentives for two reasons: improve cooperation to broaden the representation of a sample and to increase the speed of receiving results. The offer of a "barbecue lunch reception" likely acted like an incentive to broaden the "types" of snowmobilers who attended.
- Several factors point to the fact that the snowmobiler respondents could in fact represent typical users of the Study Area.
 - Snowmobilers from the research (see page 13 of the Snowmobiler Research Report) reported spending an average of 62 days (median of 30 days) participating in outdoor activities in the Study Area. As a result, they probably know the area well.
 - Fishing (81%) in Maine within the past three years is almost as prevalent among these respondents as snowmobiling (84%). (See page 19 of the Snowmobiler Research Report)
 - The majority of these respondents engage in outdoor activities in the Study Area throughout the year (See page 12 of the Snowmobiler Research Report): Winter (80%), Spring (55%), Summer (91%), and Fall (64%).
 - The demographic profile of respondents shown on page 25 of the Snowmobiler Research Report reveals a group of respondents with a good spread of years living in Maine. In addition, there is good representation of second home ownership in Maine, all age groups except 18 to 24, and gender. Not surprisingly, the sample is skewed towards membership in the Maine Snowmobile Association (66%) and people with their primary residence located in Maine (88%). Both of these facts are not surprising and do not undermine the sample as being comprised of people willing to tolerate wind turbines.

Dr. Palmer comments on page 33 that, "I do not see what role this survey can play as a responsible decision making tool."

The Stetson Snowmobiler Survey produced results consistent with other studies related to wind power development and offers another data point for purposes of comparison, as snowmobiling is a type of recreation use that has not been included in previous user intercept surveys that have focused primarily on hiking or shore-based water activities. When independent surveys show consistency, one can typically place greater confidence in the reliability of the results. Please see the table at the end of this document.

Comparison of Results from Several Independent Studies in Maine

Portland Research Group reviewed the results of seven wind development-related public opinion projects conducted independently of each other in 2010 and 2011 and documented consistency across three important metrics: impact of wind energy facilities on enjoyment, likelihood of returning to area if a wind facility is seen, and disposition toward commercial-scale wind energy development in Maine.

Across each of the studies the majority of respondents was either in the positive/support or neutral/no change ranges. A higher percentage of respondents from the Stetson Snowmobiler Study than the Bowers Outdoor Users Activities Study and Highland Hikers Study indicated an expectation of seeing wind farm facilities within the region addressed in the survey. This is not surprising since the snowmobilers were surveyed at the Stetson wind facility. (Please refer to Table 1 at the end of this document)

Since the results from the two studies referenced in the Bowers Wind Project Visual Assessment corroborate with results from other independent studies, one can feel much more confident that the views shared are representative.

- A few notes on the studies:
 - Portland Research Group used a ten-point scale and Market Decisions used a seven-point scale. In the Market Decisions Reports, a score of 4 represented no effect. For comparison the following breaks were used: 8-10 vs. 5-7; 4-7 vs. 4; 1-3 vs. 1-3.
 - Enjoyment and likelihood to return ratings were facilitated through the use of photo simulations for the intercept studies.
 - Some of the question wording differed slightly, although the content of the questions remained consistent.

Table 1. Comparison of Results of Independent User Surveys at Proposed Wind Projects in Maine							
Study:	Snowmobiler	Outdoor Activities	Bull Hill	Little Bigelow	Hikers Study	Mt. Blue	Spruce Mountain
Wind Project:	Bowers	Bowers	Bull Hill	Highland Wind	Highland Wind	Saddleback Ridge	Spruce Mountain
Sponsor:	Champlain	Champlain	Blue Sky East	Highland Wind	Highland Wind	Patriot Renewables	Spruce Mtn. Wind
Completed by:	Portland Research Group	Portland Research Group	Market Decisions	Portland Research Group	Portland Research Group	Market Decisions	Market Decisions
Location:	Stetson Wind Farm	New England/50 mile radius	Donnell Pond Black Mountain	Bigelow Preserve	Northern New England/E. MA.	Mt. Blue	Bald Mountain
Date:	February 2011	January 2011	October 2010	Summer/Fall 2010	August 2010	September 2010	May 2010
Methodology:	Intercepts	Telephone	Intercepts	Intercepts	Web	Intercepts	Intercepts
Sample Size:	n=69	n=191	n=81	n=58	n=304	n=22	n=15
Expectations of seeing energy facilities such as wind farms							
	n=39	n=31	Not Asked	Not Asked	n=304	Not Asked	Not Asked
Likely	38%	10%			7%		
Neutral	49%	29%			58%		
Unlikely	13%	61%			35%		
Enjoyment – Impact of seeing energy facilities such as wind farms on enjoyment¹							
	n=40	n=31	n=?	n=37	n=304	n=22	n=15
Positive	50%	16%	9%	8%	21%	23%	20%
Neutral	45%	36%	45%	73%	61%	45%	47%
Negative	5%	48%	47%	19%	18%	32%	27%
Refused	0%	0%	0%	0%	0%	0%	7%

¹ Due to fractional rounding, the Bull Hill and Spruce Mountain results total 101%.

Likelihood of returning if respondent saw energy facilities such as wind farms							
	n=40	n=31	n=?	n=37	n=304	n=22	n=15
More Likely	50%	23%	6%	14%	15%	27%	13%
No Change	42%	45%	75%	73%	68%	50%	73%
Less Likely	8%	32%	20%	14%	17%	23%	7%
Refused	0%	0%	0%	0%	0%	0%	7%
Disposition toward commercial-scale wind energy development in Maine							
	n=64	n=191	n=?	n=58	n=304	n=22	n=15
Support	72%	52%	74%	38%	63%	77%	87%
Neutral/ Don't Know	25%	33%	12%	43%	33%	18%	13%
Oppose	0%	13%	14%	17%	4%	5%	0%
Refused	3%	2%	0%	2%	0%	0%	0%