Appendix K

Socio-Economic Assessment

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Socio-Economic Impact Assessment for the Ostrander Point Wind Energy Park (Prince Edward County, Ontario)

Prepared for Gilead Power Corporation

GILEAD POWER CORP.

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EXECUTIVE SUMMARY

Gilead Power Corporation (Gilead) is proposing an up to 24 MW wind energy park to be located at Ostrander Point in the ward of South Marysburgh, Prince Edward County, Ontario.

The key elements of the project include up to 12 turbines (and ancillary facilities), each with a capacity of 1.5 to 2 MW to be located on the Ostrander Point Crown Land Block (OPCLB), approximately 5 km of underground/overhead collector lines, 5 km of access roads, two onsite substations, and interconnection with the provincial grid at the Milford Distribution Station. Turbine blades will be 42 m long, located on towers approximately 80 m tall. The towers will be mounted on in-ground concrete pads round in shape and approximately 15-17 m in diameter to a depth of 4 m.

Gilead has initiated the provincial Environmental Screening Process (ESP) for the project, as required by O. Reg. 116/01 (Electricity Projects Regulation) under the *Environmental Assessment Act*, and as described in the Ministry of the Environment's *Guide to Environmental Assessment Requirements for Electricity Projects* (EA Guide). In accordance with the ESP, Gilead has initiated the work to complete an Environmental Review Report (ERR). This Socio-Economic Impact Assessment (SEIA) is part of the ERR.

The purpose of this Socio-Economic Impact Assessment (SEIA) is to evaluate the effects of the proposed project on the community. It analyzes the potential effects on the standard of living and the quality of life of local residents. Potential effects are related to residents' daily activities, employment, economic impacts, recreation, perceptions and values.

This study includes the following elements:

- Review of technical information related to socio-economic aspects previously prepared by the consulting team in charge of the ESP
- Preparation of a community baseline
- Completion of a planning policy overview regarding wind energy projects in the area
- Door-to-door interviews with residents and businesses located in the Primary Study Area
- Focus group meetings with key stakeholders
- Evaluation of the socio-economic impacts of the proposed project
- Preparation of recommendations

The study looks into changes in the socio-economic attributes of *changes in land use*, *economic change*, *visual change*, *noise change*, and *construction nuisances*. The comparison of existing conditions and likely future socio-economic conditions serves as the basis for the extent to which the Ostrander Point Wind Energy Park produces '*effects*'. These attributes are then related to impacts of the windfarm on Tourism, Local Business Retail/Service, Property Values, Municipal Revenue, Community Character and Aesthetic Quality, and Employment.

Our evaluation concludes that most effects resulting from the Ostrander Point Wind Energy Park Project will be minor, and thus their net impacts. Please see table below.

	Primary Study Area and South Marysburgh Ward	**Prince Edward County**
Change in land use	MINOR	MINOR
Economic changes	MINOR	MINOR
Visual changes	MINOR	NONE
Noise changes	NONE	NONE
Construction nuisances	MINOR	MINOR

Mitigation strategies will suffice to overcome any negative impact previously identified, and the applicant will able to address socio-economic impacts to an acceptable level.

I. INTRODUCTION

1.1 PROJECT DESCRIPTION

Gilead Power Corporation (Gilead) is proposing an up to 24 MW wind energy park to be located at Ostrander Point in the ward of South Marysburgh, Prince Edward County, Ontario. The consistent source of wind in the area makes the site an ideal location for wind development. The Project is planned to connect into the Independent Electricity System Operator (IESO) controlled electricity grid.

Contained within the proposed Project study area is the Ostrander Point Crown Land Block (OPCLB). This 324 ha area has been designated as a Resource Management Area. A portion of the South Bay Coastal Wetland, a Provincially Significant Wetland (PSW), is also located within the Project study area. This 231 ha wetland complex is composed of three individual wetlands (NHIC 2006). The land is currently undeveloped and was last used for agriculture over 50 years ago. Current uses include recreation; hunting, birding and hiking.

Gilead has initiated the provincial Environmental Screening Process (ESP) for the project, as required by O. Reg. 116/01 (Electricity Projects Regulation) under the *Environmental Assessment Act*, and as described in the Ministry of the Environment's *Guide to Environmental Assessment Requirements for Electricity Projects* (EA Guide). In accordance with the ESP, Gilead has initiated the work to complete an Environmental Review Report (ERR). This Socio-Economic Impact Assessment is part of the ERR.

Key Elements of the Project

The key elements of the project include up to 12 turbines (and ancillary facilities), each with a capacity of 1.5 to 2 MW to be located on the OPCLB, approximately 5 km of underground/overhead collector lines, 5 km of access roads, two onsite substations, and interconnection with the provincial grid at the Milford Distribution Station.

Turbine blades will be 42 m long, located on towers approximately 80 m tall. The towers will be mounted on in-ground concrete pads approximately 10 m by 10 m to a depth of 3 m.

The following ancillary facilities are also considered part of the Project:

- Electrical distribution lines (to link the wind turbines to the on-site substations);
- Two on-site substations (to step up the electrical output from 27.6 kV to 44 kV);
- Pole-mounted distribution line (to link the on-site substations to the Milford Distribution Station);
- Temporary and permanent access roads; and,
- Staging areas for the assembly of the wind turbines.

Project Activities

The development of the proposed project will involve several phases namely; site preparation and construction, operations and maintenance, and decommissioning.

Activities during these phases include:

Site Preparation and Construction

- Surveying and site layout
- Clearing
- Topsoil stripping and salvage
- Grading
- Development of access roads
- Ploughing and trenching for underground power lines
- Foundation excavation
- Pouring turbine foundation
- Equipment lay-down
- Tower, generator, and rotor assembly
- Installation of substation equipment
- Distribution line installation
- Road improvements
- Clean-up and reclamation
- Turbine commissioning

For details of specific activities, please refer to Appendix 1.

Operation and Maintenance

Activities associated with the operation and maintenance of the Ostrander Point Wind Energy Park will not be as extensive as during the construction phase. Maintenance inspections are required approximately every 4 to 6 months for routine servicing and lubricant replacement. Light-duty 4x4 trucks, vehicles, and ATVs may be used to access the wind turbines. Larger trucks and cranes may be required infrequently for larger repairs.

Project Decommissioning

- Rotor, generator and tower disassembly
- Removal of access roads
- Removal of concrete foundation to a depth appropriate for local cultivation methods (e.g., 12 inches)
- Removal of distribution lines and associated poles

Wind energy facilities may be operated for decades. Individual wind turbines are expected to perform for up to 25 years without significant repair or replacement. Transformer facilities, underground wiring and substation facilities are designed for at least a 50 year life span. Individual wind turbines may be replaced or repaired as their useful life comes to an end, or if more efficient and cost-effective technology becomes available.

When wind energy facilities are removed from rural lands they usually require minimal remediation as they do not use or produce harmful waste products. Re-seeding or re-vegetating will usually remove any sign of the facility. Where necessary, topsoil replacement and re-grading of access roads will need to occur.

Construction Schedule

Gilead's proposed construction schedule for the Project is presented in the Table 1. Decommissioning activities will last roughly the same amount of time as comparable construction activities.

Table 1: Construction Schedule

Activity	Timing/Duration
Surveying/Site Layout	2 Weeks (July, 2009)
Development of access roads	3 Weeks (August, 2009)
Clearing	2 Weeks (August - September, 2009)
Topsoil stripping and salvage	1 Week (September, 2009)
Grading	3 Weeks (October, 2009)
Trenching for underground distribution lines	3 Weeks (October - November, 2009)
Foundation excavation	2 Weeks (November, 2009)
Pouring turbine foundation	4 Weeks (November - December, 2009)
Construction of 44 kV distribution line	4 Weeks (January, 2010)
Installation of substation equipment	3 Weeks (January, 2010)
Turbine delivery	1 Week (January, 2010)
Equipment lay-down and turbine assembly	6 Weeks (January – February, 2010)
Clean-up and reclamation	2 Weeks (March, 2010)
Turbine commissioning	2 Weeks (April, 2010)

Note:
This schedule was recently adjusted (Fall 2008), the SEIA analysis reflects previous schedule from August 2008.

1.2 PURPOSE AND SCOPE

The purpose of this Socio-Economic Impact Assessment (SEIA) is to evaluate the effects of the proposed project on the community. It analyzes the potential effects on the standard of living and the quality of life of local residents. Potential effects are related to residents' daily activities, employment, economic impacts, recreation, perceptions and values.

This study includes the following elements:

- Review of technical information related to socio-economic aspects previously prepared by the consulting team in charge of the ESP
- Preparation of a community baseline
- Completion of a planning policy overview regarding wind energy projects in the area
- Door-to-door interviews with residents and businesses located in the Primary Study Area
- Focus group meetings with key stakeholders[i]
- Identification of appropriate mitigation measures
- Evaluation of the socio-economic impacts of the proposed project
- Preparation of recommendations

1.3 STUDY AREA

As already mentioned, the proposed facility is located on the north shore of Lake Ontario, encompassing the Ostrander Point Crown Land Block.

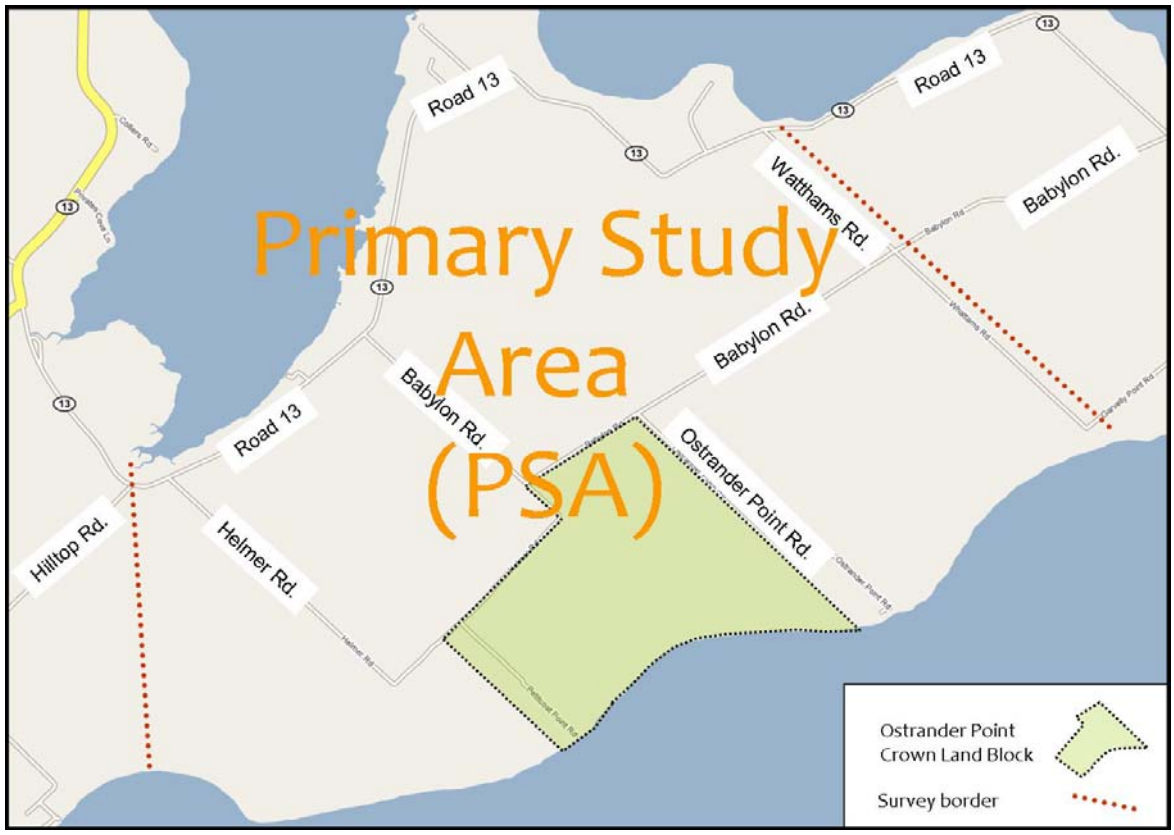
Figure 1
Location of Study Area in its Regional Context

Map Source: Google Maps

Three study areas are used for the SEIA;

- Prince Edward County (to assess County-wide effects);
- South Marysburgh Ward level
- The Primary Study Area (PSA), which includes Ostrander Point Crown Land Block and its surroundings defined as;
    - To the west: from the intersection of Road 13 and Hilltop Road to the point where Brewer's Road meets Lake Ontario
    - To the east up to Whattams Road
    - To the south, up to Lake Ontario. This area includes a section of the originally proposed transmission line route along Helmer Road[ii].

Figure 2:
Primary Study Area (PSA) and Ostrander Point Crown Land Block



Map Source: Google Maps

1.4 METHODOLOGY

Our approach to socio-economic impact assessment focuses on the collection of quantitative and qualitative socio-economic data, such as employment, economic characteristics, recreation, perceptions and values; combined with a review of known data.

Socio-economic impacts of the proposed Ostrander Point Wind Energy Park are measured by contrasting the socio-economic conditions of residents and business within the Ostrander Point area today (called *Baseline*) with those conditions likely to exist in the future with the project proceeding (called *Application Case*).

To determine ***Baseline*** socio-economic characteristics of the area, the following resources were used:

- Site visits and inventory of community characteristics
- Review of documentation related to socio-economic aspects (listed in the Bibliography section)
- Review of record of public consultation documented by Gilead Power Corporation (January and August 2008)
- Door-to-Door interviews with local residents (Appendix 2)
- Focus Groups meetings with Key Stakeholders (Appendix3)
- Discussions with technical consultants

II. APPROACH TO SOCIO-ECONOMIC IMPACT ASSESSMENT

Socio-Economic Impact Assessments (SEIAs) are designed to enhance our understanding of the socio-economic effects and consequences of implementing proposed policies, programs and projects. The social conditions of a community form an important part of the Environmental Assessment (EA) process. In Ontario, the definition of 'environment' under the *Environmental Assessment Act* includes social, economic and cultural conditions that influence the life of humans or a community. As such, SEIAs support the protection, conservation and wise management of the environment.

SEIAs are initiated in the early stages of the planning process to better enable project managers to anticipate possible impacts before significant resources are invested into proposed initiatives. While time and cost-savings are important, the primary objective of a SEIA is to protect and enhance quality of life by ensuring potential negative social impacts are lessened, positive impact are enhanced, and responsible environmental decisions are made.

2.1 DEFINING SOCIAL EFFECTS AND IMPACTS

Social and economic effects are multifaceted, and can be directly or indirectly affected by the construction and operation of a proposed project. They are defined in this report as positive or negative impacts that affect:

a) People's way of life (how people live, work, play and interact with each other on a daily basis);
b) Cultural traditions (shared beliefs, customs and values);
c) Community (its population structure, cohesion, stability, character, aesthetics, facilities, services and values); and
d) The economy of residents business and the local community.

SEIAs contribute to improved decision-making, greater cost-efficiency, community agreement, increased social acceptance, and development of effective monitoring programs.

It is important in the explanation of socio-economic impact assessment to highlight the difference between *effects* and *impacts*. From common discourse on social science, effects are considered changes, and impacts are evaluations of the extent to which those effects are positive or negative. In other words, an impact is an evaluation of the level of change that the effect has caused.

The operation of a windfarm as well as associated construction activities can cause socio-economic effects. Noise, vibration, dust, visual changes, truck traffic, loss of recreational uses and community amenities, and potential impacts on future development are some of the potential effects that have helped us to scope our work in evaluating the impacts.

The specific nature and significance of socio-economic impacts depends to a large extent on the characteristics of the people, the characteristics of the local economy, the areas involved and the activities undertaken in each area. To give a clear example, visual impacts and noise will likely have less of a social impact in industrial areas than they would in residential areas. Projects that employ fewer people and spend less money will have fewer economic effects than long-duration higher expenditure projects. In addition to the importance of land use, sociological characteristics such as population

distribution and structure, social cohesion, community character, residents' daily activities and perceptions of specific technologies will influence the significance of social impacts.

Important Note: The SEIA includes discussions related to visual effects, noise effects, and property values. The inclusion of these topics contributes to a comprehensive understanding and thus assessment of current and future socio-economic conditions in areas where windfarms are being proposed. These effects were also among the most frequently identified by local residents in connection to the proposed windfarm at Ostrander Point. Please note that the SEIA does not intend to replace more detailed technical studies on specific topics such as bird study, noise assessment, visual impact study or analysis of property values whose methodologies and conclusions may differ from the ones presented here.

2.2 MEASURES OF CHANGE SIGNIFICANCE

In order to assess the extent of socio-economic impacts, it is important to set out a series of key decision rules, or benchmarks, that help to quantify and evaluate effects. Based on HSAL's research and past experience with SEIA, the rules listed in Table 2, below, are a summary of what is used to identify social impacts associated with the erection of wind turbines, related ancillary facilities, and transmission lines at Ostrander Point.

Table 2: Measures of Significance of Potential Change due to Windfarm

Attributes	Considerations	Overall Decision Rule
Land Use	• Loss of use significance will depend on whether there is a permanent or temporary loss of use • A loss of public space occurs when project construction methods occupy publicly accessible areas (i.e. cemeteries, trails, sidewalks, etc.)	**High impact** • Land use in the proposed site is changed in a considerable way, and permanently • Surrounding lands are affected as a result of such change and become sterile for some expected uses • Adjacent lands within 1 Km **Moderate impact** • Although there is a change in land use, the essential use of the land will remain the same • Surrounding lands may be affected as a result of the change • Adjacent lands within 1 km – 2km **Minor impact** • Change in land use has minimal impact on surrounding land uses. • Adjacent lands within 2 km – 3 km **No Impact** • Change in land use has no impact on surrounding land uses. • Lands beyond 3km of distance of the project site
Economic	• Measure of how project will influence purchase of products and services, and job creation/job loss	**High economic impact** • Noticeable increase/decrease of money and jobs pertaining to the local economy (3% or more)

	• Amount of money that will be spent on construction activities for the project including labour, equipment and materials • Effect on other sectors of the economy	**Moderate economic impact** • Some increase /decrease of money and jobs pertaining to the local economy (1%-3%) **Minor economic impact** • Minimal increase/decrease of money and jobs pertaining to the local economy (0.1%-1%) **No economic impact** • No increase/decrease of money injected into the local economy
Visual	**Depth of Field** For this analysis ***depth of field*** is defined as the distance of an observed object from a given vantage point. As a general rule the shorter the distance the clearer or more prominent the object becomes to the viewer.	**High visual impact** • Dwellings within 1.0 km: high prominence **Moderate Visual impact** • Dwellings within 1km and 2 km; medium prominence **Minor visual impact** • Dwellings within 2km and 3 km; low prominence **No visual impact** • Although the turbines may be visible over 3-5 km; visual perception of wind turbines on the landscape is notably diminished • It is assumed that none of the proposed structures is prominent enough to be see at over 10 km
Noise	• Increased sound levels will occur during normal operation of the wind energy park • Sound will be produced from the operating wind turbines as a result of the machinery operating within the nacelle at the top of the turbine, and as a result of the turning blade cutting through the air	**High noise impact** • Increases by 10 dB(A) or higher • Ambiance noise exceeds 55 dB(A) **Moderate noise impact** • Ambiance noise increases between 5 dB(A) and 10 dB(A) **Minor noise impact** • Ambiance noise increases less than 5 dB(A) **No noise impact** • No change in ambiance noise (0 dB(A))
Construction Nuisances	• All residences located within 200m of construction have potential for impacts • Significant dust impingement levels are typically 2.5 to 10 microns • Traffic effects occur when the circulation of vehicular traffic is compromised • Lane closures are a significant effect for commuters and local residents • Significance of traffic effects will depend on the extent of road closure and the timing	**High impact** • Noise and disruption for residents within 100 m of proposed transmission line/road • Any permanent road closure or significant alteration of road network • Dust and noise levels exceeding Provincial standards **Moderate impact** • All residents beyond 100 m up to 300 m of proposed transmission line/road • Delays caused by construction • Construction ongoing for extended periods **Minor to No impact** • Effects in relation to all other residences in the ward • Brief delays caused by temporary roadwork

The comparison of existing conditions and likely future socio-economic conditions serves as the basis for the extent to which the Ostrander Point Wind Energy Park produces '*effects*'. Effects are presented in a matrix that considers each of the attributes in relation to:

- Impacts of Windfarm on Tourism
- Impacts of Windfarm on Local Business Retail/Service
- Impacts of Windfarm on Property Values
- Impacts of Windfarm on Municipal Revenue
- Impacts of Windfarm on Community Character and Aesthetic Quality
- Impacts of Windfarm on Employment

Once effects are identified they are evaluated as positive or negative (Section IV). Our analysis also considers actions to either maximize positive effects or minimize potential negative effects on residents, businesses and the community at large. These actions are known as *Mitigative Measures* (Section V). Having identified the net socio-economic impacts, conclusions are then drawn (Section VI).

2.3 IDENTIFYING AND ASSESSING EFFECTS

To assess the potential effects of the proposed project on the community or ***Application Case***, the following matrix presents the criteria and corresponding indicators employed.

Table 3
Matrix of Potential Socio-Economic Effects Examined

Impacts of Wind Farm	Indicator	Data measurement/estimates
Impacts on tourism	Increase/decrease of tourism experience and economy as a result of the project	A) Variation in the number of tourists visiting the local area B) Number of tourists that will have a line of sight C) Proportion of people who consider having a windfarm in their line of sight as a positive or negative experience (in the Primary Study Area) D) Torurism officials who consider that tourism will be impacted by the project
Impacts on local business retail/service	Increase or decrease of sales volumes as a result of the project Change in local and County economy	*During construction:* A) Percentage of windfarm-originated products and services that will be purchased locally in South Marysburgh B) Percentage of products and services that will be purchased locally in PEC C) Number of local businesses that may be affected by construction *D)* Local sales of construction materials *During operations:* 1) Local sales related to project operation (e.g. accomodation, food, gas sales) 2) Sales of local hotel tourist packages
Impacts on property values	Increase/decrease in property values, change in land use	A) Number of buildings that could experience changes to their market value and amounts involved B) Resident self assessment of property value Number of people selling their property
Impacts in municipal revenue	Property tax increase/decrease, Expansion/contraction of tax base	A) Number of people whose property taxes will increase/decrease as a result of the construction of the wind park B) Amount of taxes and one time fees that the county will receive as a result of the construction of the wind park
Impacts in community character and aesthetic quality	Visual impacts, Noise impacts, Nuisance impacts	A) Proportion of residents that will be affected by visual impact or noise B) Visual effects of wind turbines C) Number of residents that lie within 1 km, 1 km to 2 km, and 2 km and more of the windfarm that will be able to see the turbines D) Proportion of residents affected by noise from windfarm
Impacts in Employment	Changes in local employment opportunities	A) Temporary jobs that will be available B) Number of jobs that will be created C) Proportion of jobs that will be local vs. Non-local

** Data for these indicators were obtained from several sources including Statistics Canada, Prince Edward County statistics, PEC Chamber of Tourism and Commerce, interviews, review of reports prepared by technical consultants, field observation and discussions with key informants.

2.4 FACTORS FOR EVALUATION OF EFFECTS

To better assess potential net effects, it is important to use additional factors. These factors help us to more succinctly quantify and qualify the nature and extent of each effect. The factors that we have used for this study in consultation with the decision rules include:

- **Frequency and Duration:** Is effect constant? Is it short term or long term?
- **Location and Magnitude:** What is the scale of effect? How far or strong will it be felt?
- **Timing:** Is effect time-sensitive? Are some times for effect better or worse?
- **Irreversibility:** Is the effect temporary or permanent?
- **Scope and Nature:** Can effects be mitigated?
- **Level of Public Concern:** What concerns have been raised? Is there significant opposition?
- **Risk:** Is there possibility for exposure to contaminants or pollution? Potential for accidents/safety concerns?
- **Cumulative Nature:** Will impacts combine with other impacts from this project or other projects to cause greater disturbance?
- **Mitigation:** How does this balance the impacts created?
- **Overall:** What is the net effect of each impact in the area? What is the net effect of all of the impacts?

Once the baseline conditions are established in the community profile (Section III), these criteria and factors are used to evaluate the potential and net impact of each effect.

III. COMMUNITY PROFILE – EXISTING CONDITIONS

3.1 PRINCE EDWARD COUNTY

The proposed wind project is located in the southern part of Prince Edward County (PEC), 15 km southeast of Picton (Figure 1). In 2006, the County had a population of 25,496 and approximately 10,300 occupied dwellings (Statistics Canada, 2006).

The study area falls within the ward of South Marysburgh; which unlike the Town of Picton (pop. 4,000) and other smaller centres e.g. Bloomfield, Wellington, is predominantly rural. With a population of 868, it is the least populated ward in the County (The Corporation of the County of Prince Edward, 2007).

Prince Edward County has an area of 1,050.14 square km. In terms of land characteristics, it is almost an island surrounded by water. The County has 800 km of shoreline.

3.1.1 Socio-economic Conditions

The County's economic history has been primarily agricultural. Prince Edward County (PEC) has experienced four waves of economic prosperity; the first was related to barley cultivation (1860-1890), the second was as a cheese production hub in which production was oriented to the national and British markets; the third was as 'The Garden of Canada' characterized by a vibrant canning industry that supplied more than 40% of national demand for canned products by the end of the Second World War.

There are no reliable up to date datasets for gross domestic product. Last figures available from 2006 estimated GDP at $500 M. Gross Revenue is estimated at $60M – $90 M (or 15% of the GDP).

Some economic sectors have experienced noticeable change. Agriculture went from $25M in 2006 to a current level of $75 M, and is expected to continue to grow to $100m M by 2009. Other sectors showing remarkable growth are housing, commerce and industry that have increased ten-fold from 1998. This growth has not meant an expansion of the local job market.

PEC is active in economic development and is currently implementing an economic development strategy, a tourism development strategy, a strategic action plan for downtown Picton, and a number of other initiatives.

The rural economy in the County has changed in recent years by the development of new activities, which over the past few years have produced the following results[iii]:

- $45 M in wine industry investment (over 7 years)
- 12 new wineries and 750 acres of grape vines (over 8 years)
- $18 M per annum in wine sales today (from $0, in year 2000)
- Estimated $50-$85 M in wine sales in 5-7 years from present – potentially doubling the Agricultural GDP
- A booming construction industry; increase in building permits by 300% over 7 years. $150 M in incremental investment
- Tourism visits up 74% with spending up 168%. From $25 M spent per annum in 1999 to $65 M in 2004: expected to reach $100 M by 2009. From 225,000 visits to 500,000 visits per year

- Picton downtown revitalization: $20-$30 M in new investment over the last few years. Major condo, commercial and retail developments, major boutique hotel development with culinary and jazz bar, new housing, retail, services, and waterfront development
- Property assessment up $750 M
- $300 M in qualified investment leads

Environmental Conditions

Environmental features are considered socially significant as well as ecologically significant. Prince Edward County lies in a transition zone between the mixed forests of central Ontario and the deciduous forests of south-western Ontario, exhibiting affinities to both zones in its flora. Although pockets of natural habitat are readily found, much of the County has been intensively cleared and farmed over the past two hundred years. Despite the high level of disturbance, significant plant and animal species have been found in the County, indicating it is important to minimize impact on the remaining natural environment.

❖ **Demographic Characteristics (population size, distributions, age profile)**

PEC had a population of 25,496 in 2006 (Table 4). Although the County population experienced a decline from 1996 to 2001, census figures indicate that the population recovered in the following years recording a yearly growth rate of 2.4 to 2006 from 2001. Aboriginal identity population in the County in 2006 was 610 people[iv] and immigrants accounted for 2,365.[v]

Analysis of 2006 census data revealed that in PEC 85.6% of the population in the County is older than 15 years compared to 81.8% in Ontario. New trends indicate that the number of newcomers who choose this area to establish residency will continue to increase.

Table 4 : Population Change in PEC and in Ontario 2001-2006

Area	2001 Population	2006 Population	Populat. Change
Prince Edward County	24,901	25,496	2.4
Ontario	11,410,046	12,160,282	6.6

Source: Statistics Canada, 2008

According to Statistics Canada (2008), the median age of the population in Prince Edward County is 47.7 years, higher than the median age of the population of Ontario is 39.0 years.

Income (median household income)

In terms of income in the County, median income in 2005 – for all census families was $60,792 (before taxes) and $53,205 (after taxes) (Table 5). In terms of livelihood in the South Marysburgh ward, community residents are predominantly either self-employed, semi-retired or retired. The average size of census families and average family incomes were below provincial averages in 2006.

Table 5 : Selected family characteristics

Characteristics	PEC	Ontario
Average number of persons in all census families	2.7	3.0
Median income in 2005 - All census families ($)	60,792	69,156
Median income in 2005 - Married-couple families ($)	64,948	77,243
Median after-tax income in 2005 - All census families ($)	53,205	59,377

Source: Census 2006

Housing (tenure, average property values)

High rates of home ownership are characteristic of mature, stable residential communities. The community is considered stable because 81.1% percent of residents owned the home they live in while 18.8 percent lived in rental units.

The total number of private dwellings occupied by residents is 10,305, most of them being single-detached houses (84.8% compared to 56.1% in Ontario), and owned by their residents (81.1% compared to 71.0% in Ontario). Average value of owned dwellings is $254,565, compared to $297,479 in Ontario.

❖ **Employment in PEC**

Population Employed and Participation Rates

The population 15 years and older in Prince Edward County was 21,315 in 2006, out of which 12,570 participated in the labour force. The participation rate was 59% in PEC compared to 67.1% provincially in Ontario and the unemployment rate according to 2006 census statistics was 6.0% in PEC and 6.4% in Ontario. PEC had a higher level of employment and lower participation rate compared to the province.

Table 6 : Labour Force Activity

Population / Activity	PEC	Ontario
Total population 15 years and over	21,315	9,819,420
In the labour force	12,570	6,587,580
Employed	11,810	6,164,245
Unemployed	760	423,335
Not in the labour force	8,745	3,231,840
Participation rate	59.0	67.1
Employment rate	55.4	62.8
Unemployment rate	6.0	6.4

Source: Census 2006

Employment by Industry

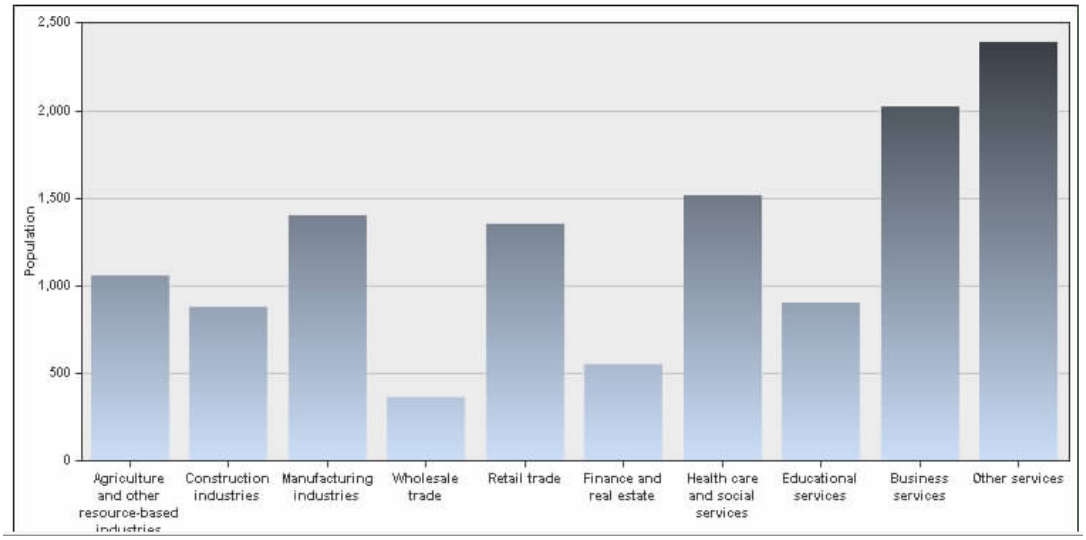
The County economy relies heavily on services. The highest percentage of labour in services is found among the *Other services* category (19.2%), followed by *Business services* (16.3%), and *Health care and social services* (12.2%). Other significant industries include *Manufacturing* (11.2%), *Retail trade* (10.9%), and *Agriculture* (8.5%).

Table 7: Population Employed by Industry

Industry	PEC		Ontario	
	Population employed	%	Population employed	%
Agriculture and other resource-based industries	1,060	8.5	190,000	2.9
Construction	880	7.1	384,775	5.9
Manufacturing	1,400	11.2	899,670	13.9
Wholesale trade	365	2.9	307,465	4.7
Retail trade	1,355	10.9	720,235	11.1
Finance and real estate	550	4.4	442,610	6.8
Health care and social services	1,515	12.2	611,740	9.4
Educational services	905	7.3	433,485	6.7
Business services	2,025	16.3	1,274,345	19.7
Other Services	2,390	19.2	1,209,390	18.7
Total experienced labour force 15 years and over	12,445	**100**	6,473,730	**100**

Source: Census 2006

Figure 3: PEC Experienced Labour 15 Years and Over by Industry



Source: Statistics Canada

3.1.2 Key Economic Activities in PEC

Agriculture and Farming

The agri-food industry of PEC is composed of small independent businesses, a majority of which experience annual sales volumes of less than $250,000 annually. Most businesses have been operating for less than ten years and have experienced healthy increases in their annual revenues over the past

three years; with a majority of them realizing increases greater than 10% on an annualized basis and estimating similar returns over the next five years. Support for local producers is demonstrated in the expenditure practices of local lodging, foodservice and retail businesses since all three sectors typically buy a minimum of 30% of all their food, beverage, plant and health products from County farm gates. The figure for some is much higher, with local farm gate purchases reaching as high as 80% to 90% of total food related needs (Prince Edward County Agri-food Markets Study 2007).

Tourism

Prince Edward County is located in the "Golden Triangle" between Toronto, Ottawa and Montreal, which allows for a sustained source of visiting tourists.

Building on already well-known tourist attractions like Sandbanks Provincial Park and the towns located along the Loyalist Parkway; Prince Edward County has seen a tourism boom in recent years due to the development and expansion of attractions such as wineries, restaurants, artistic and cultural services, historical tours, spas, and personal services, among others. The County also keeps a busy schedule of tourist events, notably food festivals that attract considerable number of visitors from outside the County.

Table 8: Food Festivals in Prince Edward County

Festival	Month
Maple In The Country	March
The Picton Rotary Wine Festival	April
Terroir - Prince Edward County's Wine Celebration	May
Mariner's Park Fish Fry	July
The County Garlic Festival, Harvestin' The County, Celebrate The Caribbean	August
Prince Edward County Pumpkinfest	October

With regards to the type of accommodation that visitors use when in the County, out of 66 people interviewed, the most common answers included; Friends and Family (24.2%), Bed & Breakfast (15.2%), Hotel (13.6%), Tenting (12.1%), Cottage (10.6%), Inn (6.1%), Motel (4.5%) [Source: Survey conducted for the Prince Edward County Agri-food Markets Study 2007].

In terms of length of stay, the same survey (n= 94 visitors) found that most visitors to the PEC are day-trippers (39.4%), while the proportion of people who stay one night was 20.2%, 2-3 nights - 24.5%, 2-5 nights - 13.8%. Longer stays of 6 days or more represented 13.8%.

The primary purpose for travelling to PEC were visiting friends and relatives (18.7%), visiting Sand Banks (12.1%) and exploring local towns/communities (9.9%). Other reasons included visiting wineries, general shopping and fine dining (n= 91 visitors).

Industrial

Main industrial factories in the County include the ESSROC Cement factory, the Midtown Meats Processing Plant, and the Black River Cheese factory. 1,400 of the labour force 15 years and older (11.2%) were employed in industry compared to the provincial average of 13.9% in 2006.

Construction

The construction industry in PEC is healthy with 880 (7.1%) of the labour force participating in this sector. Province-wide, 5.9% of the Ontario labour force was involved in construction activities.

In the past seven years building permits have gone up 300%. Housing starts in the County have fluctuated slightly since 2000 with peaks occurring in 2002, 2004 and 2007. Since 2005 housing starts for homes over $150,000 have remained around 70%. While, 2008 figures (as of August 31, 2008) indicate an increase to 84 out of 102 (82.4%). Some of the house starts are high-end homes.

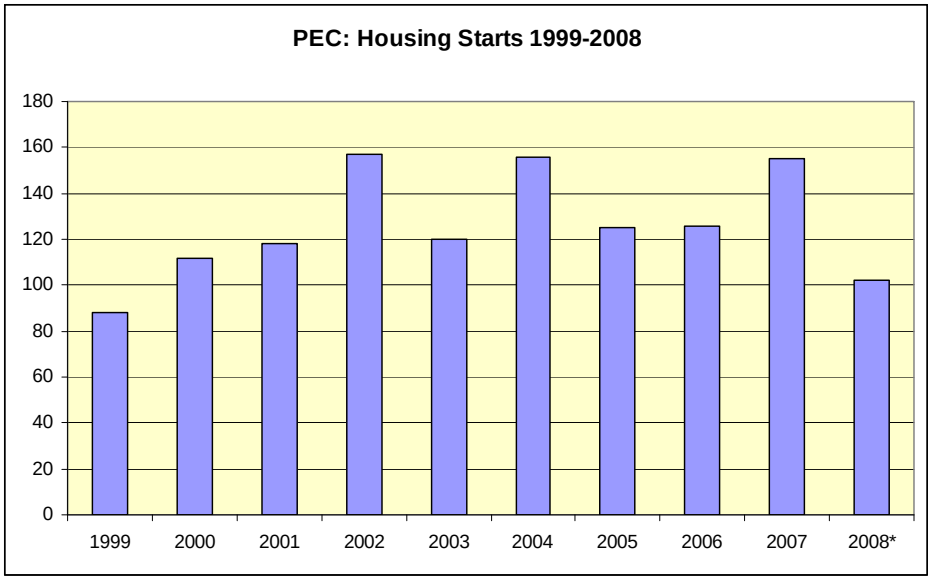
Table 9: Prince Edward County: Housing Starts 1999 to 2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008*
New Homes	**88**	**112**	**118**	**157**	**120**	**156**	**125**	**126**	**155**	**102**
Under $150,000							27	37	42	18
Over $150,000							98	89	113	84

* To August 31, 2008

** Beginning November 2005, new home statistics were broken down by value (only aggregated data is shown for previous years)

Figure 4



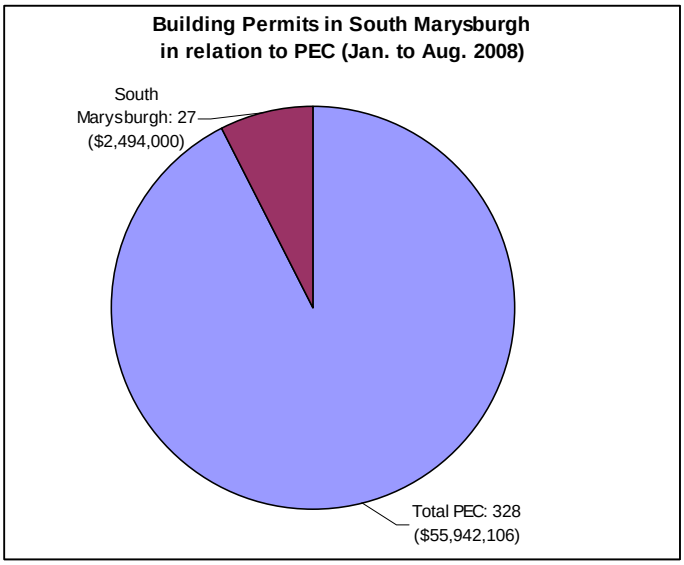
Examples of high-end homes along Loyalist Parkway

Table 10: Building Permits Monthly Reports (January to August 2008)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	TOTAL
Prince Edward County									
Number of Permits	**34**	**49**	**46**	**90**	**3**	**15**	**79**	**12**	**328**
Value	$1,409,300	$8,207,700	$15,777,700	$7,601,150	$6,514,732	$6,318,869	$4,080,080	$6,032,575	$55,942,106
South Marysburgh									
Number of Permits	**0**	**3**	**6**	**6**	**3**	**3**	**1**	**5**	**27**
Value	$0	$241,000	$835,000	$1,253,000	$24,000	$19,000	$8,000	$114,000	$2,494,000

Source: Statistics Canada Monthly Report

Figure 5

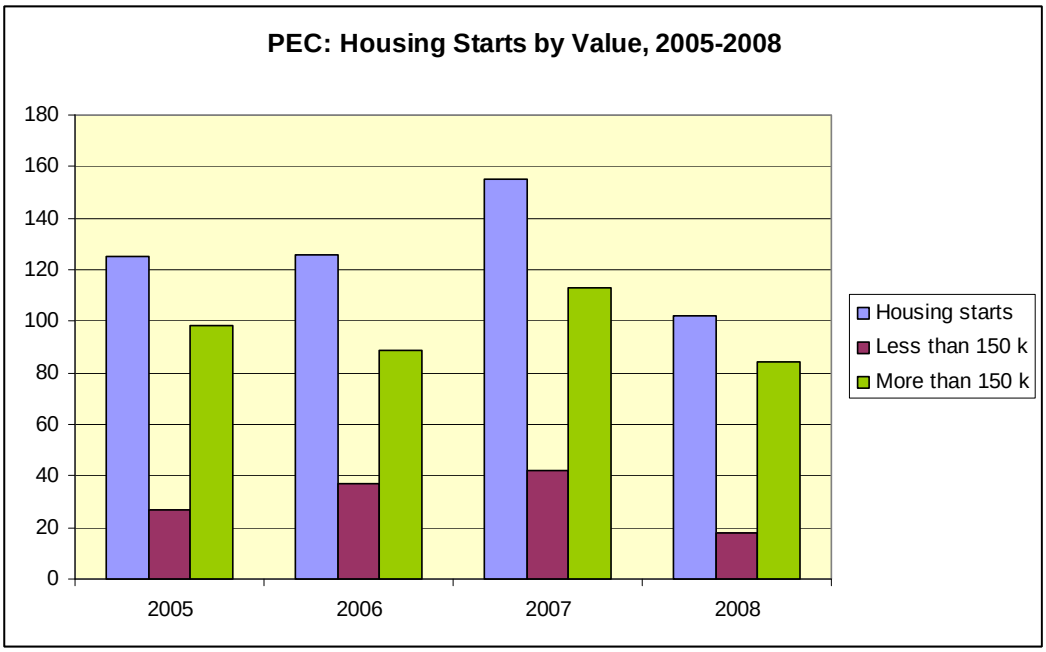


Source: Planning Department, Prince Edward County.
Note: this information is based on best data available at the time of distribution.

Building permits granted in South Marysburgh represent 8.2% of the number of permits in the County. The value of building permits from January to the end of August 2008 represents 4.5% of value of all building permits in the County for the same period of time. This suggests that construction in the South Marysburgh ward is, on average, smaller scale compared to the rest of the County.

There has been fluctuation in the number of housing starts in the last decade. House starts have increased in the overall period at an average of 128.5 new housing starts from 1999 to 2007.

Figure 6



With regards to value, statistics indicate housing starts with values higher than $150,000 have fluctuated in the previous 3 years: 78.4% for 2005; 70.6% for 2006; 72.9% for 2007. A jump is noticed in 2008 as high value housing starts represent 82.4% of the home construction activity (by August 31).

3.2 COMMUNITY PROFILE OF SOUTH MARYSBURGH - EXISTING CONDITIONS

This section provides a detailed overview of existing conditions within the PSA and South Marysburgh ward. This profile has been developed through site visits, door-to-door survey, background research, discussions with the consultant team and comments from the key stakeholder focus groups. It establishes the primary baseline conditions upon which the effects due to the Ostrander Wind Energy Park will be evaluated and assessed for socio-economic impacts.

3.2.1 Land Uses

South Marysburgh is predominantly rural in nature with a small number of historic centres and hamlets located throughout. Of these small communities, Milford is the largest. The ward's agricultural land is used primarily for cattle farming. Residential homes including farm houses, cottages and cabins are found throughout the area. Rural commercial uses such as low-scale resort development are also located throughout the ward.

The topography of the Primary Study Area is flat and open. The only vertical relief within the Primary Study Area is created by cottages and several forested areas. Pole-mounted distribution lines exist along several of the roads within the Primary Study Area and deliver power to the rural lots. The private lands between Point Petre and Prince Edward Point are about 34% vacant, 9% residential, including cottages, and 28% dairy or mixed agricultural, and 29% unspecified (Wilson and Cheskey 2001).

Barn on Hilltop Road

House close to Johnston Road and Bond Road

Smugglers Cove RV Park on Road 13 close to the intersection with Babylon Road

Cabins located along Helmer Road

3.2.2 Residential

Single detached dwellings are the most common type of built form. The 2001 census indicates that there are 476 private dwellings located in the ward, with the majority located in and around Milford. Other areas of higher dwelling concentration include Black River and Highway 13 between Helmer Road and Whattams Road. This section is also characterized by the presence of seasonal trailer sites and campgrounds.

Residential dwellings within the PSA range from year-round use to summer and seasonal use. They also range in size from large farm houses to small cabins. The housing stock is comprised of both historic cottages and newly developed homes. Dwelling styles include simple rustic cabins as well as homes with high-end architecture. Housing stock condition ranges from well-maintained homes to derelict properties; with values ranging from the low-end $100,000 to over $500,000.

There are approximately 115 dwellings, both permanent and seasonal, that were identified in the PSA.

The built form is generally representative of a low density rural community with some recent infill development. 2006 Census data notes that the overall density in the County was 24.3 people per square km (the County has a surface area of 1050 square kilometres). In South Marysburgh, ward population density is expected to be much lower.

Newer homes located along Road 13, and accessing South Bay

In terms of expected future development, there is a residential project known as Port Royal planned on 245 acres at Halfmoon Point, located near Little Bluff Conservation area. The proposal, submitted in cooperation with Cushman-Wakefield-Lepage, is for an upscale $300 M housing development with as many as 500 units. The proposed housing development also includes more than two kilometres of shoreline on Prince Edward Bay, a marina, park, trails, fitness club and a restaurant. The development would also have its own water and sewer systems.

3.2.3 Commercial

For the most part, Commercial uses are concentrated in the community of Milford. Local businesses include bed and breakfasts, antique stores, a restaurant, retail stores, a gas service station, personal services, and handicrafts stores. Other traditional commercial businesses found throughout the ward

include a car dealership located on Road 13, recreational services such as boat launching and weekend resort developments. The newly developed Half-Moon Bay Winery located next to Little Bluff Conservation Area is expected to open soon.

There are also a number of commercial uses associated with an emerging 'creative rural economy'. These small enterprises include a great variety of businesses in the arts (e.g. painting, stained glass, sculpture), crafts (e.g. pottery, wood carving), artisan foods (e.g. specialty cheeses, preserves, jams, dried herbs, honey, baked goods), and personal care products.

Milford Bistro

Gallery art studio on Road 13

3.2.4 Industrial

With the exception of the Black River Cheese Company located close to McMahon Bluff, some organic farm-related operations and machinery repair and servicing, there are no significant industrial uses located within the ward.

3.2.5 Institutional

In addition to 2 local schools, there is a postal office, a library and a theatre (Mount Tabor) located in Milford. A local museum, the Mariner's Memorial Museum is located on Road 13 close to the intersection of Road 10.

Institutional uses in Milford and Mariner's Memorial Museum

3.2.6 Culture and Recreational

The ward has ample shore lands with great recreational appeal. Of particular recreational value is Prince Edward Point National Wildlife Area, which offers several recreational options including diving, and bird watching. Divers use Long Point as a launch point in order to access Main Duck Island and Yorkshire Island both located southeast of the peninsula.

Also located in the PSA is Little Bluff Conservation Area, it features an 18 metre high limestone cliff that allows impressive views of Prince Edward Bay. The beach next to the Little Bluff Conservation Area is frequented by residents and tourists alike. Recreational uses include sightseeing, walking, trail hiking, swimming, boating sail boating, canoeing and kayaking.


Views from the Small Bluff Conservation Area

In addition to the Mount Tabor Theatre, other cultural and recreational activities include Music at Port Milford, which is a series of musical presentations by a chamber music class offered every summer by musician and artistic director Meg Hill. There is a thriving arts and cultural scene comprised of a growing number of high-end restaurants, cafes, shops and festivals.

Bordering South Marysburgh to the West is the Point Petre Provincial Wildlife Area. This area is utilized for recreational activities such as walking, hiking, sightseeing and diving.

Much of the vacant land was formerly farmland, abandoned because of poor soil and poor agricultural production and allowed to go fallow. People currently use these lands within the Important Bird Area (IBA) for camping, hunting, nature enjoyment and study, off-road vehicle use, and snowmobiling.

3.2.7 Transportation

The community of South Marysburgh identifies itself as being a remote location in PEC[vi]. Ostrander Point is among the most remote locations in South Marysburgh. And there is no transit system in the County and Ward. Roads around Ostrander are seasonal and designed to service farm vehicles. For the most part, these have a gravel base and are in relatively good condition. However, many of these roads vary greatly depending on the weather and season and are not recommended for passenger cars. Through direct observation, it was noted that traffic volumes were low on most local roads and moderate along Road 13[vii]. Traffic volumes were; however, higher (though not heavy) on the roads that connect Milford and Picton. No heavy trucks, machinery or construction vehicles were observed on the roads on repeated visits.

Various road types and conditions observed on South Marysburgh Roads

Most internal roads in Milford and Picton are paved, as well as Road 13 and Road 10. Other roads are gravel and only suffice for local traffic. Roads connecting Milford with Picton have a low to moderate traffic volume.

There are no sidewalks in most areas, and in many instances like along Maypullayn Road or Helmer Road, local roads are lined with mature trees and other vegetation.

Road 13, at Helmer Road, constitutes the only point of ingress and egress to the South-eastern part of the ward so any road construction along that section or scheduled transportation of major turbine components will have an effect on the local traffic.

Cattle and nursery tree along Hilltop Road

Farm located near Johnston Road and Bond Road

3.2.8 Agricultural Uses

The area surrounding the PSA can be generally characterized as rural with some agricultural activity. The area also contains open or natural spaces with residential uses and agricultural uses. The PSA itself is sparsely inhabited and largely undeveloped, being last used for agriculture approximately 50 years ago.

The predominant agricultural produce in the area is corn, soy beans, wheat, and hay. New agricultural activities that are gaining importance are winegrowing, and wineries.

Huff Estates Inc. Winegrowers, on Road 13

Hay covered with plastic along Helmer Rd.

Farm along Road 13

Farms along Maypullayn Road

3.2.9 Environmental Conditions

The OPCLB is a Resource Management Area, designated by the OMNR and designated by Prince Edward County as Open Space and Environmental Protection. South Bay Coastal Wetland is a Provincially Significant Wetland (PSW) that is partially located within the Project study area. South Bay Marsh and Big Sand Bay Wetland are also PSWs found within 6 km to the northwest and northeast of the Primary Study Area, respectively (NHIC 2006). Additionally, Little Bluff Conservation Area is located approximately 1 km to the north of the Project.

The NHIC (2006) and Quinte Conservation (2006) have identified five natural areas on or within 5 km of the Primary Study Area; including three wetlands (Big Sand Bay Wetland, South Bay Coastal Wetland Complex, South Bay Marsh), Little Bluff Conservation Area and the OPCLB itself. The western portion of the Primary Study Area includes part of the South Bay Coastal Provincially Significant Wetland. These sites are discussed briefly in Table 11 along with other natural areas identified within southern Prince Edward County.

Table 11: Identified Natural Areas in Southern Prince Edward County.

Natural Area	Description	Distance (km)
Ostrander Point Crown Land Block	A 324 ha Resource Management Area with a diversity of habitats, hosting field, shrubland and marsh communities.	N/A
South Bay Coastal Wetland	A 231 ha Provincially Significant Wetland complex made up of three individual wetlands.	1.5
Little Bluff Conservation Area	A 28 ha site that is located on top of 20 m high limestone bluffs.	2.0
Big Sand Bay Wetland	A 122 ha Provincially Significant coastal wetland composed of marsh and swamp habitat.	2.3
South Bay Marsh	A 62 ha Provincially Significant coastal marsh.	2.4
McMahon Bluff	This site was chosen as a 79.3 ha International Biological Program site and is part of a greater 100 ha Provincial Life Sciences ANSI and Provincial Earth Sciences ANSI. The area contains one of the best examples of limestone alvar and red cedar communities in the region.	5.5
Black Creek Valley Marshes and Forest	A 305 ha Regional Life Sciences ANSI on a large and well developed river valley, Black Creek Wetland (87 ha) is provincially significant. This is one of the only river valley systems in the region with well developed wetland and upland natural communities.	5.6
Prince Edward Point National Wildlife Area	A 567 ha National Wildlife Area by the Canadian Wildlife Service, and a Provincial Life Sciences ANSI, this area is of major importance as a staging area for migrant songbirds. It is also considered important as a staging area for migrating insects, and is designated an International Monarch Butterfly Reserve.	6.6
Black River Swamp	Mainly swamp, this 39 ha wetland is deemed Non-Provincially Significant.	7.9

Natural features in the OPCLB and its immediate surroundings

3.2.10 Community Characteristics

The ward of South Marysburgh is characterized by its residents as being a rural, small, friendly, quiet, close-knit community, with its roots firmly set in agriculture and other primary activities.

The Primary Study Area encompasses a rural community made up of mostly long-term permanent residents (66.2%). The rest of residents (33.8%) are seasonal ranging from people who move-in for several months at a time to people who only come on weekends to enjoy their properties. Many residents are well educated and professional who enjoy a relatively high standard of living. Quality of life is enhanced by close-knit community relationships and active community engagement.

Quality of life within the Primary Study Area is considered high due to the relatively large size of the residential lots and dwellings as well as the abundance of natural areas. Local roads were observed to have low traffic volumes, no construction (other than residential renovations) was observed and there was limited noise, dust, vibrations and/or other urban nuisances. The PSA offers a great variety of recreational opportunities.

The ward is experiencing challenges similar to those in other rural settings such as young people leaving for educational and job opportunities, limited access to facilities and community resources, or timely availability of medical services. But the ward is also facing unique challenges like the gradual population shift occurring in the County. While a significant number of farmers and other are self-employed and have modest incomes, relatively wealthy newcomers are buying out properties and settling throughout PEC creating contrasting conditions among neighbours.

3.2.11 The Economy

The ward depends heavily on the agricultural sector. Main activities include dairy farming, corn, wheat, horses and some viticulture. Other activities include organic agricultural production, fishing (e.g. White fish, perch, pickerel) and horticulture.

There is a series of small home-based businesses including art businesses (e.g. Painting, stained glass, sculpture), crafts (e.g. Pottery, wood carving), communications, artisan foods (e.g. Specialty cheeses, preserves, jams, dried herbs, honey, baked goods), personal care products, personal care services, planters, gift packages, antiques, machinery repair and servicing, child care, casual labour, music teaching, and others. Many are seasonal[viii].

Local retail includes a grocery shop, a service station, automotive repair, and some personal services. Other industries that have some importance in the ward are real estate, construction, contracting, building and landscaping trades sector which appear to be thriving.

Tourism related businesses in the ward include bed and breakfast operations, cycling tourism, and businesses related to active bird watching and naturalist activities.

3.3 PLANNING POLICY OVERVIEW

CROWN LAND

Ostrander Point is Crown land, a term used to describe land owned by the Provincial or Federal governments. Crown land is managed by the Ontario Ministry of Natural Resources (MNR). As such, MNR land use policies apply. The regulations governing the management of Crown land are established under the *Public Lands Act*.

As the government of Ontario made a direct commitment to the generation of renewable electricity by establishing wind power as a part of Ontario's overall electricity supply mix, a special process has been established for private wind energy developers for the placement of generating facilities on Crown Land. On Febraury 1, 2006, Gilead was selected by the MNR as the Applicant of Record for the Ostrander Point Crown Land Block. This allows Gilead to determine the viability of developing wind energy on the lands and to apply for any necessary municipal approvals and proceed through the ESP to construct and operate a wind farm. As the Applicant of Record, Gilead is required to complete all applicable environmental screening requirements prior to any authorizations or approvals being issued by the MNR.

Following completion of the ESP, Gilead will apply to the MNR for a lease which would allow the generation of wind energy on the site for a period of 25 years.

Provincial Policy Statement

The Provincial Policy Statement ("PPS") states that providing for renewable energy is a provincial interest. As such, municipalities must develop an appropriate local policy framework to establish the principle of development and to provide direction for zoning and site planning controls. The current official plans (OPs) are legacy documents which pre-date municipal restructuring. The Plans also pre-date the current version of the Provincial Policy Statement (2005).

The proposed Project is consistent with the policy frameworks outlined in the PPS and the Prince Edward County Official Plan, both of which support renewable energy. As the proposed Project is situated on Crown Land, Section 71 of the *Legislation Act, 2006* applies; it states that no Act or regulation binds Her Majesty or affects Her Majesty's rights or prerogatives unless an intention to do so is expressly stated (2006, c.21, Schedule. F, s.71). Furthermore, the *Ontario Planning Act* does not bind the Crown in right of Canada. Accordingly, the requirements of the *Ontario Planning Act* do not apply to the installation of the wind turbines as part of the Project and thus Official Plan, zoning by-law amendments and site plan approval are not required. The preceeding was confirmed by the MNR in a letter dated October 15, 2007 to the Corporation of the County of Prince Edward.

COUNTY OF PRINCE EDWARD POLICY

The site is publically-owned Crown land and municipal policy is not technically binding. Similarly, the County's comprehensive Zoning By-Law does not apply. However, considering the local high-level policies in the Region of Prince Edward County's Official Plan is helpful in understanding the social context and municipal direction for the site and the surrounding area.

Ostrander Point and Surrounds

Ostrander Point is bound by roads designated 'Rural Service' under the Official Plan in the north, east and west and by the Lake Ontario shoreline in the south. Schedule E, the Land Use plan for the Official Plan, indicates the northern portion of the site is designated in part as 'Outdoor Recreation Land'. Generally, this designation is meant to provide a range of recreational and open space opportunities to residents and tourists. The southern portion of the site in proximity to Lake Ontario is designated as 'Environmental Protection' under the Official Plan. Generally, this designation is meant to provide protection to wetlands identified as provincially or locally significant or other wetland areas identified through air photos or field visits.

There are no provincially significant wetlands on the site. Schedule A indicates there is an Environmentally Sensitive Area designated 'Other Sensitive Site or Area' adjacent to the south eastern corner of the site. This implies the presence of a representative example of the County's biological or geological history and diversity. There are no identified 'Environmental constraints' or 'Tourism or Recreation' features on the site as per Schedules B and D respectively. There is however, a designated 'Tourism Corridor' north of the site, surrounding South Bay. In addition, Highway 13, which is located north of the site, is designated as a 'Scenic Route / Bicycle Trail'.

Wind Policy

The General Development Strategies (Part III) of the Official Plan include provisions for the development of Electric Power Facilities (Section 2.10.1). These indicate that the County will allow development of these facilities in any designation as long as the planning for these facilities has regard to the other Official Plan policies. The Plan indicates that proponents (public or private) shall consult with the County on the location of such facilities. Currently, there are no further policies regarding power facilities or wind turbines. However, a recent wind turbine proposal approved by the County in 2002 for Royal Road is under review at the Ontario Municipal Board (OMB). County policy is expected to be confirmed following the OMB decision.

No zoning provisions within the Study Area are specifically designed to control the establishment of large wind energy projects.

INTERIM CONTROL BY-LAW

In the summer of 2008, Prince Edward County planning staff brought forward an Interim Control By-Law under the *Planning Act* regarding the establishment and operation of windmills in the County. This Interim By-Law would prohibit the development of wind turbines larger than 300 kw throughout the County while planning staff and consultants produce a land use policy study to inform new Official Plan policies and Zoning By-Laws. The Interim Control By-Law was defeated by one vote at Council on July 28, 2008.

WIND ENERGY AMENITIES AGREEMENT POLICY

The County of Prince Edward is currently considering the development of a wind energy amenities agreement policy. A staff Status Report regarding wind turbine development in the County dated February 5, 2008 indicates that direction to prepare an agreement to be used by staff and Council when approached by wind energy proponents. At this point the agreement is still being developed and reviewed by the City Solicitor. The Status Report also indicates staff are investigating the application of these Municipal agreements to wind projects on Crown lands.

PRINCE EDWARD COUNTY NUISANCE NOISE BY-LAW

The County of Prince Edward By-Law 900-2002 regulates nuisance noise. Generally, it indicates that noise or vibrations associated with manufacturing and trades be limited to the property they are occurring on, and not extend to nearby properties. It also limits the use of strong lights or moving and twinkling lights associated with manufacturing or trades, so that there are no unusual type or quantity of light creating nuisance to others. Lastly, there is a general provision that limits the creation of unusual noises or noises likely to disturb the residents of Prince Edward County. These provisions do not apply to parades approved by Council; outdoor concerts or concerts approved by Council; construction or construction equipment occurring during the hours of 7:00 am and 6:00 pm; and the siren of emergency vehicles.

This by-law is not applicable to Crown Lands (as per Section 71 of the *Legislation Act, 2006)*. However, it is good planning that the intent and purpose of the by-law be adhered to. Based on the evaluation that follows, the intent of By-Law is 900-2002 is maintained by the Applicant.

3.4 EMPIRICAL DATA SOURCES

3.4.1. Focus Groups with Key Stakeholders

3.4.1.1 Approach

In order to better understand the existing community context and identify potential socio-economic effects in relation to the proposed Ostrander Point Wind Energy Park, a series of facilitated focus groups were held with community organizations from across PEC. Six two-hour sessions were held on September 3 and 4, 2008 on the following topics: business and tourism; farming; environment; citizen interests; local government and recreation. Representatives from thirty-five (35) organizations were invited to specific focus groups based on their areas of interest. To insure a broad range of views were heard, an array of different interest groups and organizations were invited. The following fourteen (14) organizations, groups and County departments were represented at the focus groups or if unavailable, participated through the submission of comments:

- Ontario Federation of Agriculture – Prince Edward Region
- Prince Edward County Winegrowers Association (Vineyard Liaison Committee)
- County Sustainability Group
- Prince Edward County Environmental Advisory Group
- Prince Edward County Field Naturalists
- Alliance to Protect Prince Edward County
- Concerned Citizens of Prince Edward County
- Prince Edward County Chamber of Tourism and Commerce
- Accommodation Association of Prince Edward County
- Ontario Parks (Sandbanks, Lake on the Mountain, Timber Island, North Beach)
- ESSROC Cement
- Recreation, Parks and Culture Department, Corporation of the County of Prince Edward
- Planning Services Department, Corporation of the County of Prince Edward
- Economic Development Department, Corporation of the County of Prince Edward

Each focus group discussed the existing character of PEC (i.e. tourism, industry, community, people, etc); foreseeable changes (both positive and negative) to the community as a result of the proposed project; the nature and impact of the community changes; and potential mitigation measures for the proposed project if approved.

The following summary describes the major effects, impacts and mitigation strategies discussed during the focus group sessions. Although not all organizations were able to attend, the summary below represents a diverse set of interests both in support of the proposed project as well as in opposition and indifference. Specific views of organizations have not been identified in this summary, but rather a focus has been put on the content of the discussion and potential implications of the proposed project. Detailed documentation of session discussions can be found in Appendix 4.

Please note that comments summarized in this section reflect the perception of the focus groups participants and should not be necessarily considered as factual statements about actual "effects" or 'impacts".

3.4.1.2 Summary of Focus Group Findings

OSTRANDER POINT EFFECTS AND IMPACTS

Visual – Visual changes were one of the most frequently discussed effects. Participants suggested that the visual obtrusiveness of wind turbines and transmission lines would have a negative impact on the community, both in the immediate vicinity and within the larger viewshed. Some participants considered that the visual effects would be worse at night given that they are used to regular dark skies in the County. Others were of the opinion that the existing rural landscape aesthetic would be greatly altered by wind turbine structures. However, there were also participants that believed that some members of the community would also view the visual changes as positive. Note: See appendices for graphic renditions of how wind turbines will look from several distances and vantage points.

Property values – Perceived changes to surrounding property values was also one of the most frequently discussed impacts. Many participants expressed their belief that a wind farm would make residential properties very difficult to sell and ultimately decrease their market value. Some noted that both; homes in close proximity and within the viewshed, would experience some level of property depreciation – the closer the property, the higher the level of depreciation. There was also a suggestion that wind turbines do not add any value to surrounding properties.

Land uses – Many participants described the site and surrounding area as remote, with little value for agriculture or viticulture (grape growing). There were suggestions that plans of subdivision would not be permitted in that area in the future and as such, the proposed project would not affect these types of uses in the future. Yet, a number of participants expressed their concerns that the presence of wind turbines could affect allowable land uses in the immediate surrounding area. On a number of occasions, similarities were made to minimum distance separation (MDS) policies for agriculture. Participants explained there are a number of homes within the immediate vicinity and also a number of cottages on the site that are used on a seasonal basis. Many participants view these properties as sensitive and susceptible to higher construction and operational impacts. Recreation was not identified as a significant activity in the immediate vicinity. One Participant described the roads around the site as "tractor roads" and not well-travelled.

Tax base – A number of participants expressed interest in the potential economic effects including benefits to the County's tax base due to increased land assessment value. However, as others noted, the proposed project is on Crown land and thus there may not be direct tax contributions to the County. There were suggestions from participants that there could be some flow of funds from the Provincial government or project proponent in lieu of tax (i.e. on a production basis or other). This was seen as a positive impact to the community.

Economic development – Many participants held the opinion that the proposed project would not bring a large number of new jobs to the community. However some noted the opportunity for local labour, materials and companies to be used during construction. Many felt there would be some level of economic spin-off into the community due to increased employment, requirements for temporary accommodation, permanent housing or contract connections.

Tourism – The majority of participants did not believe that tourism would be significantly affected by the Ostrander Point Wind Energy Park project. Some felt that there would be curiosity and some level of increased visitation to the site, and that there would be opportunities for education and interpretation.

Many participants noted that wind turbines would pose a threat to the high levels of tourism although in isolation this particular project might not have a large overall effect on tourism.

Income – A number of participants noted the additional revenue stream associated with the leasing of land for a wind turbine as a positive effect. Given that the area is comprised of marginal farm land and that local farmers face economic challenges in the industry, additional income was seen as positive effect. One participant noted that "farmers feed cities" and similar to agriculture, wind turbines are another form of harvesting local resources.

Natural environment – Participants reflected on the remote character of the Ostrander site and the disturbance to the existing natural environment as a potential impact. Types of disturbances discussed include bird kills, landscape changes due to windfarm development, tree and vegetation removal, wildlife disturbance (coyote and deer populations). There were also concerns for disturbance of the natural environment along transmission corridors. Participants noted that they were aware of a number of studies illustrating the impacts on the natural environment and migratory birds in particular. Participants noted that studies showed both negative effects and inconclusive findings. Although specific references or studies were not provided by the participants, a reference to the APPEC website as a source of bibliographic information was mentioned.

Health – Many participants considered risks to health as a potential effect. In their opinion, human and animal health could be impacted as a result of shadow flicker effects, high voltage in proximity to populations, and ongoing noise and manifest in the form of insomnia, headaches, etc. Participants mentioned that there were various US and UK studies exploring health impacts in detail.

Construction – Participants had concerns regarding effects during construction of the windfarm and associated transmission lines in an existing rural setting including truck traffic, dust, road widening, and impacts of movement of large turbine components on bridges and roads. There were concerns that new visitors to the area would take away negative experiences if construction occurred during peak tourism seasons of July and August.

Transportation infrastructure – Potential for local road upgrades in the Ostrander Point area was discussed as a potential benefit, however some participants expressed concerns regarding who would be responsible for the increased costs. There was also concern for road widening effects such as vegetation and tree removal, erosion, flooding, and bridge washouts. Another concern discussed included upgrading of roads to an urban standard in a rural setting, and the potential for disturbing the area's existing character.

Other effects – There were a number of other perceived effects that were discussed by individual participants including: ongoing ground vibrations during construction and operation; removal of cultural heritage landscapes and historic vegetation along transmission corridors; increased security threat around the wind park; marketing of the County as "green" and highlighting innovative technology; interference with communication utilities and airports in or near the County; limitations on existing recreational uses on Crown land; and disruption of emergency services like helicopters. Experiences of other municipalities were often discussed including Wolfe Island in Kingston, Shelburne, Buffalo, Exodus County, Grey County, Altamont Pass, and numerous communities in Maritime Canada and Alberta. Participants were informed by research studies out of Europe and the United States as well.

CUMULATIVE IMPACTS

Although the focus group discussions were targeted toward the socio-economic effects and impacts of the proposed Ostrander Point project, there was a significant amount of discussion regarding peoples' perception of the "big picture" impacts of wind turbine developments in the County. The following provides a brief summary of the key discussion points.

Quality of Life and Lifestyle – Many participants noted the significant value placed on the lifestyle offered by the County. This lifestyle was described by participants as "rural", "pastoral" "quaint", "tranquil" and "scenic". Participants expressed concern for the cumulative impact of hundreds of wind turbines on this existing lifestyle. A number of participants mentioned that they believed that wind power projects pose a threat to the highly-valued heritage character of the community. Two participants referred to the proposed projects as the "*industrialization of the County*". Participants questioned the impact of these cumulative changes on future developments in the County. A number of participants expressed the opinion that projects such as these create tension among neighbours who support or oppose the project, tend to split the community and affect social cohesion.

Branding and Tourism – Currently, the County is marketed as a "creative rural economy" that builds on the pastoral history and attracts wineries, markets, artisans, retirees, high-end restaurants, cafes, and galleries. A number of participants were of the opinion that the recent Council decision to defeat a moratorium on wind turbine developments conflicts with existing municipal policy direction and branding of the County. The approval of wind turbines throughout the County was seen by many participants as a shift in another direction. However, a number of participants also noted the opportunity for marketing the County with a "green" / environmentally responsible image. There were suggestions that wind turbines would impact the three-season tourism industry in a negative way as they would detract from the County's "pastoral" or "scenic" image, however some participants noted that examples from other communities show an increase in tourism.

Policy and Future Direction – Many participants expressed concern regarding the level of uncertainty about the location, quantity and size of future wind turbines proposed for the County. Many suggested that if approved, Ostrander Point would be the stepping stone to hundreds of additional turbines. A number of participants expressed their opinion on the need for a county-wide policy to address large scale wind turbine developments – including Official Plan and Zoning policies. There was a suggestion that after the ongoing Royal Road OMB proceedings provide direction the County will move to confirm their policies. A number of participants also suggested that Provincial Ministries should set stricter regulations and guidelines around wind turbine developments and they should play a more active role in siting of the turbines.

3.4.2 Door-to-Door Survey

The door-to-door interview gathered direct empirical data about characteristics of the community members in the Primary Study Area (PSA) adjacent the proposed project.

Selection of the Primary Study Area

The following criteria were applied for the delimitation of the Primary Study Area:

1. ***Visual presence;*** wind turbines can be seen by residents as more predominant or less predominant features of the landscape depending on factors such as terrain characteristics, time of day, weather conditions and more importantly, distance from a given vantage point. Following a revision of the visual simulations prepared by Gilead (Appendix 5), a distance of 2 km to 2.5 km was taken as a reference. At said distance while turbines are still a noticeable feature on the landscape they were deemed not to be a predominant one
2. ***Water barriers;*** existing water bodies to the south (Lake Ontario) and to the north (South Bay / Prince Edward Bay) of the Primary Study Area range from 0.2 km to 3.5 km
3. ***Clusters of dwellings;*** 'natural breaks' of clustered dwellings were identified. All dwellings located along roads bordering the proposed project site (i.e. Helmer Road, Ostrander Point Road, Babylon Road), and in the immediate vicinity of up to 3 km were included
4. ***Accessibility;*** dwellings in the vicinity that are located in areas that are accessible by vehicle or through a walking path up to 3 km were included

Based on all these considerations, the PSA was delimited as the area surrounding the Ostrander Point Crown Land Block up a distance of **2.5 km to 3.0 km.**

Survey Topics:

Topics asked about included:
- Type of dwelling (residential / business)
- Type of occupancy (permanent / seasonal)
- Type of ownership (owned /rented)
- Demographic profile
- Length of residency
- Community assets
- Work outside the home
- Regular activities while at home
- Recreational activities
- Perception of the local quality of life
- Effects that will occur as a result of the project
- Support to wind energy programs and infrastructure in the Province / community
- Suggestions on how to mitigate possible negative effects

Interview process

A team of five people administered a door-to-door survey. The survey was applied to distinguishable addresses as opposed to all parcels of registered lands and properties. Distinguishable refers to <u>all</u> properties that could be identified by address plates located at the front of their property, typically along the roadside.

The total number of *distinguishable* addresses located within the survey area up to 2.5 km (or beyond at some points) is 133 and include those with or without structures, those with or without people in them, and those in both habitable and uninhabitable conditions.

All properties were visited in person by the surveying team between August 20 and 23 2008. There were 15 addresses where the survey was deemed "Not Applicable", which refers to vacant lots/uninhabitable (ruined) structures (10 cases), and vacation properties, i.e. weekly renters (5 cases).

Excluding these addresses, there were **118 properties where the survey was applicable** (Table 12)

Out of these 118; a total of **95 addresses** were surveyed and interviews were deemed "completed". Completed interviews among **surveyed property dwellers include:**

Table 12: Summary of properties were Survey was applicable

Completed surveys	
Acceptances	77
Refusals	10
Multiple property owners	8
TOTAL	95
Incomplete surveys	
No responses	23
TOTAL	23

Multiple property owners refer to people who own more than one property in the PSA. To avoid "double or multiple" representation of the same opinions, only one survey (referred to as the "main" survey) was conducted with each of the owners. Those 'main' surveys are included within the 87 completed surveys (i.e. as acceptances or refusals).

Survey Results

Through direct observation, it was noted that most people within the PSA live 2 km or more from the project site:

- Residents located within 1 km: **8** (6% of dwellers in PSA)
- Residents located between 1 km and 2 km: **4** (3% of dwellers in PSA)
- Residents located beyond 2 km: **121** (91% of dwellers in PSA)

(Percentages calculated over total *distinguishable* addresses located within the survey area up to 2.5 km, N=133)

Survey results (N=77) indicate that in the PSA, the majority of residents are permanent (66.2%), are home dwellers (87.0%) and rent their residence (90.9%). The majority of residents have 2 adults staying at their residence (68.8%, average number per household = 2.22) and no children at the residences (75.3%, average number per household ≈ 1.00). The majority of residents have lived in the PSA for more than 10 years (59.7%).

The majority of respondents (76.6%) believe their property values increased over the last 3 years. Of all of the respondents, 51.9% believe that property values will increase in the next 3 years, while 13.0% believe property values will decrease; 11.7% believe they will stay the same; and 23.4% don't know or would not answer. Of all responses, 6 (10.7%) respondents indicated that the presence of the wind farm would change their property value. Of these six respondents, two believe their property value will decrease, one believes it will increase, and one believes it will stay the same. Two respondents state that the value of their property will change depending on the specifications on this project, i.e. location. When compared with their favour for the wind farm, 50% (3) were in support and 50% (3) were opposed to the proposed project.

Although, 46.8% believe that the wind farm will have an effect on how people live in the *community*, the majority (57.1%) state that the wind farm will not have an effect on their *household*. The majority of homes (53.7%) and home-business combinations (80.0%) do not believe the wind farm will affect them. The majority of permanent residents (64.7%), which comprise the majority of respondents, believe the wind farm will not have an effect on their household.

Of all possible effects, "visual appearance" and "noise" from wind turbines are the largest concerns with 16.3% and 12.5% of respondents listing it, respectively. "Public health and safety" and "change in property value" are tied as the third highest concern, with 11.3% of responses, respectively. In terms of order of importance, respondents listed "visual" as the most common answer, "public health and safety" as the second most common, and "noise", "disruption for migratory birds", "lifestyle change" and "household economic impact" as third.

The majority of residents (57.1%) express some concern about construction activities at the site. The majority of seasonal residents (79.1%) express concern, while almost an equal number of permanent residents do and do not express concern (49.0%). Therefore, permanent residents have fewer issues with construction than seasonal residents, particularly because they comprise the majority of respondents. It is important to note that construction will occur when most seasonal residents are not visiting in the winter, as well as when decreasing numbers visit in fall. The most commonly cited construction concerns include traffic (29.3%), noise (22.0%) and road damage (20.7%). Some concerns are also expressed about the ecosystem impacts in general (7.3%) and soil and well impacts (6.1%).

Of all respondents, 63.6% are in favour of wind energy programs in their community (i.e. in the PSA); 21.3% are not in favour of wind energy in their community, while 15.6% do not know or will not say. There are 62.3% of respondents who are in favour of wind energy programs and infrastructure both in Ontario and in their community.

Of home dwellers, 65.7% are in favour of wind energy programs in their community. Of all business and home-business combinations 50.0% are in favour of wind energy in their community. It is important to note support by home dwellers because they comprise the majority of respondents (87.0%). Of respondents who have resided in the PSA for more than 10 years, 63.0% are in favour of wind energy programs and infrastructure being installed in their community. This population also represent a majority for length of residence.

Overall, the majority of respondents are in favour of wind energy programs and infrastructure being installed in their community. That is, the majority long-term residents (more than 10 years), males, females and home dwellers are in favour; a high number of business and home-business combinations are also in favour.

Residents provided suggestions to reduce effects in: "noise", "visual appearance", "public health and safety", and the "environment", to name a few. Many respondents also indicated the need for adequate, frequent and convenient public consultation. It is suggested that public consultation continue to occur regularly so that residents can ask questions or file complaints. It is best to ensure that consultation is undertaken with residents when it is most convenient for them so as to ensure attendance and active participation.

IV. SOCIO-ECONOMIC IMPACT ANALYSIS

As indicated in the Methodology section, the *baseline* socio-economic characteristics of the area were determined by employing the following resources:

- Site visits and inventory of community characteristics;
- Review of documentation related to socio-economic aspects (listed in the Bibliography section);
- Review of record of public consultation documented by Gilead Power Corporation (January and August 2008);
- Door-to-Door interviews with local residents (Appendix 2);
- Focus Groups meetings with Key Stakeholders (Appendix3).

While the analysis of the Focus Groups meetings with Key Stakeholders provided broad information for the identification of effects, the results of the processing and interpretation of the Door-to-Door interviews provided a statistical basis for conclusions about the magnitude of such effects.

The following analysis considers key socio-economic changes or 'effects' that the windfarm will generate. The identified project-specific effects are:

1. Changes in Land Use
2. Visual Changes [ix]
3. Noise Changes
4. Economic Changes
5. Construction Nuisances

Each of these five effects are analyzed against socio-economic impact criteria discussed in Section II. The criteria utilized to measure these impacts include:

a) Impacts on Tourism
b) Impacts on Local Business (retail/service)
c) Impacts on Property Values
d) Impacts on Municipal Revenue
e) Impact on Community Character and Aesthetic Quality
f) Impacts on Employment

For each effect there is a key question that guides the analysis as well as a summary description of the main elements or component being considered.

Note: All crossing between effects and components are shown on matrices of socio-economic effects for both levels; first for the County-level and second for the Ward level. Please see Appendix 4.

4.1. SOCIO-ECONOMIC IMPACTS AT THE COUNTY LEVEL

4.1.1 Effects during windfarm OPERATIONS

CHANGES IN LAND USE -- County Level

Key Question:
Will changes in land use due to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in Prince Edward County?

- ❖ The Ostrander Point Crown Land Block (OPCLB) is a 324 ha area designated as a Resource Management Area
- ❖ Its current land use will shift from Undeveloped/Open Space to a mixed use of Open Space and Utility

TOURISM
IMPACT: MINOR

- Tourist activities in the ward are minimal in comparison with other areas in the County such as Sand Banks Provincial Park, or the Loyalist Parkway/circuit or Picton. For example 500,000 people visit Sand Banks per year, while in comparison 5,000 people (or 1%) visit Prince Edward Point to do birding
- Although the wind farm may not be in itself a primary reason to visit the County from other areas, there will be an increase in tourism to the PSA once the turbines are set, and possibly during construction
- The windfarm will bring some economic spin-off effects at the County level but these will be only marginal
- Effects of the Project on tourism will be minimal as the OPLCB and the PSA are not tourist destinations
- Although access to Prince Edward Point through Road 13 will be affected by the Project transportation route, it is not expected that access to local tourist destinations will be impacted (access will be maintained to local residents, and thus tourists)

LOCAL BUSINESS – (retail/service)
IMPACT: MINOR

- There is a potential for new businesses in the County to develop in connection to the windfarm; such an information kiosk that could sell educational material, postcards, souvenirs, etc.
- A minor positive impact on local businesses, retail or services will occur at the County level

PROPERTY VALUES
IMPACT: NONE

- Given the small scale of the project in comparison with larger wind developments and the remoteness of South Marysburgh in relation to the rest of the County, no impact affecting property values will occur at the County level as a result of the change in land use of the OPCLB

MUNICIPAL REVENUE
IMPACT: MINOR
- The applicant will have to pay municipal taxes (amount yet to be determined)
- In addition there will be one time building permit fees that will be paid to the County
- Currently there is no pressure for any other use

COMMUNITY CHARACTER AND AESTHETIC QUALITY
IMPACT: MINOR
- Changes in rural landscape of this South Marysburgh location due to the presence of 12 turbines
- Change will not affect or be meaningful at the County level
- There are concerns about the "*industrialization of the County*" in reference to the up to 270 turbines that according to the PEC Planning Committee are being currently proposed to be built in the County[x]. This should be addressed through cumulative impact studies of all windfarms and not the Ostrander Point windfarm independently
- Ostrander Point is a small project in comparison to the other proposals. Its impact is minimal at the County level (less than 3% of proposed wind turbines)

EMPLOYMENT
IMPACT: NONE
- No impact affecting County level employment will occur as a result of changes in land use of the OPCLB

VISUAL CHANGES -- County Level

Key Question:
Will visual changes due to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in Prince Edward County?

- The windfarm will operate up to 12 wind turbines, 80 m tall towers plus 42 m blades
- Based on the visual simulations prepared by Gilead, at 2-3 kilometres of distance from the wind farm visual prominence of wind turbines is minor
- Wind turbines may be still visible over 3-5 km however visual perception of wind turbines on the landscape is notably diminished
- Two onsite Substations will be built. 27.6 kV collector lines will carry the electricity from the turbines to the on-site substations
- From the on-site substations, the above ground 44 kV distribution lines will be constructed that will lead from the Project area to the Milford DS[xi]

TOURISM
IMPACT: MINOR
- Tourists en route to Prince Edward Point via Road 13 will be able to see, from certain points, the Ostrander Point windfarm when looking south
- Distances from any vantage point along Road 13 to the closest wind turbine will range from 1940 m to 2770 m
- Tourism at the County level will not be affected by visual effect of wind turbines

- The wind farm project will not make visitors cancel their plans to visit the County

LOCAL BUSINESS – (retail/service)
IMPACT: NONE
- No impact affecting local businesses retailing and services will occur at the county level as a result of the visual change created by the project
- There is a potential for new businesses to develop in connection to the windfarm; such as an information kiosk that could sell educational material, postcards, souvenirs, etc.

PROPERTY VALUES
IMPACT: NONE
- Wind turbines will only be seen from within South Marysburgh
- No impact affecting property values will occur at the County level as a result of the visual change created by the project

MUNICIPAL REVENUE
IMPACT: NONE
- No impact affecting municipal revenue will occur at the County level as a result of the visual change created by the project

COMMUNITY CHARACTER AND AESTHETIC QUALITY
IMPACT: MINOR
- No impact affecting community character and aesthetic quality will occur at the County level as a result of the visual change created by the project

EMPLOYMENT
IMPACT: NONE
- No impact affecting employment will occur at the County level as a result of the visual change created by the project

ECONOMIC CHANGES -- County Level

Key Question:
Will economic changes due to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in Prince Edward County?

- ❖ Approximately $38 million will be spent on construction activities including labour, equipment and materials
- ❖ Products and services that will be required include; construction of concrete pad for the wind towers, road construction, transmission line erection and mechanical installations, electrical installations, site security and fencing during construction
- ❖ Skilled trades/profiles that will be required include; engineers, concrete contractors, skilled construction workers, electricians, security guards, road workers and contractors

TOURISM

IMPACT: MINOR

- 20-30 workers will be onsite during construction eating at local restaurants during both "on" and "off" seasons (construction is scheduled to last 8 months; however actual time onsite would equate to approximately 4 months). Some of these workers will be staying at local tourism establishments and provide benefits to the local economy
- Assuming an average expense of $30 dollars in meals during 85 working days, that would represent $2,550 per worker for a total of $51,000 to $76,500 dollars added to the local tourism economy
- Assuming 20% of those workers staying at tourism accommodations (4 to 6 people), at an average rate of $80 dollars a night for 85 nights, it will yield a total of $27,200 to 40,800 dollars
- Both combined will mean a contribution to local tourism of $78,200 to $117,300
- When an expenditure multiplier of 3 is applied, these amount yield a maximum of $351,900 added to the local economy
- Depending on where these expenses take place they will be considered as a moderate contribution to the ward's tourism industry or a minor contribution to the County's tourism industry

LOCAL BUSINESS – (retail/service)

IMPACT: MODERATE

- 14% or 5.3 million in construction expenditures accrues to persons and businesses in the local area
- 80% of construction expenditures or $4.24 million will be spent for construction material and equipment, and the remaining 20% or $1,060,000 will account for labour costs
- When an expenditure multiplier of 3 is applied, these amounts yield $12.72 M for expenditures and 3.18 M for labour costs all contributed to the local economy
- The majority of the jobs will be temporary skilled trade jobs. There will be two full-time positions to operate the wind farm once it is operational
- The project will have moderate positive impact on the local businesses

PROPERTY VALUES

IMPACT: NONE

- No impact on property values will occur as a result of the economic changes that the windfarm will produce (investment, labour, services, etc)

MUNICIPAL REVENUE

IMPACT: MINOR

- Gilead, as the Applicant, will have to pay municipal taxes (amount to be determined), in addition there will be a one time building permit fee that will be paid to the County

COMMUNITY CHARACTER AND AESTHETIC QUALITY

IMPACT: NONE

- No impact on the community character or aesthetic quality will occur as a result of the economic changes that the windfarm will produce (investment, labour, services, etc)

EMPLOYMENT

IMPACT: MINOR

- $1,060,000 will be spent in local labour costs

- At least 80% of these expenses will occur across the County mainly in the Picton area
- The majority of the jobs will be temporary skilled trade jobs
- 2 full-time positions will be created to operate the wind farm once it is operational

NOISE CHANGES -- County Level

Key Question:
Will noise changes due to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in Prince Edward County?

- The windfarm will operate up to 12 wind turbines
- Increased sound levels will occur during normal operation of the wind energy park
- Sound will be produced from the operating wind turbines as a result of the machinery operating within the nacelle at the top of the turbine, and as a result of the turning blade cutting through the air
- The level of noise produced by wind turbines will need to comply with current regulations from the Ministry of the Environment. Any change in ambient noise levels resulting from windfarm operations will be either imperceptible to local residents or will fall below the 40 dB(A) MOE guideline (see Appendix 6 depicting Noise Isocontours)

TOURISM
IMPACT: NONE
- Distances from any point along Road 13 to the closest wind turbine will range from 1940 m to 2770 m. At that distance noise change resulting from the operation of the windfarm will be imperceptible
- Tourists en route to Prince Edward Point will not be affected by changes in noise levels

LOCAL BUSINESS – (retail/service)
IMPACT: NONE
- Noise change is imperceptible beyond the Primary Study Area
- No impact affecting local businesses retail and services will occur at the County level as a result of the change in ambient noise levels created by the project

PROPERTY VALUES
IMPACT: NONE
- Noise change is imperceptible beyond the Primary Study Area
- No impact affecting property values will occur at the County level as a result of the noise change created by the project

MUNICIPAL REVENUE
IMPACT: NONE
- Noise change is imperceptible beyond the Primary Study Area
- No impact affecting municipal revenues will occur at the County level as a result of the noise change created by the project

COMMUNITY CHARACTER AND AESTHETIC QUALITY
IMPACT: NONE

- Noise change is imperceptible beyond the Primary Study Area
- No impact affecting community character and aesthetic quality will occur at the County level as a result of the noise change created by the project

EMPLOYMENT
IMPACT: NONE

- Noise change is imperceptible beyond the Primary Study Area
- No impact affecting employment will occur at the County level as a result of the noise change created by the project

4.1.2 Effects during windfarm CONSTRUCTION

CONSTRUCTION -- County Level

Key Question:
Will construction activities related to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in Prince Edward County?

- ❖ During construction period there will be from 5 to 20 trucks per day along the proposed transportation route and approximately 20-30 construction workers on site.
- ❖ The transportation route to bring in the turbine components will follow some seasonal roads and some intersections would need to be widened.
- ❖ Approximately 5 km of single track access roads will be constructed onsite. Tracks will be approximately 12 m wide for construction, but 7 m of this width will be reclaimed following construction. Some local roads may be upgraded or widened to allow transportation of the turbines and cranes to the site.[xii]
- ❖ The turbine towers will be mounted on in-ground concrete pads approximately 10 m by 10 m to a depth of 3 m.
- ❖ Dust resulting from construction activities may have a localized impact along some construction routes and in the PSA. Dust suppression will be used to minimize this.

TOURISM
IMPACT: MINOR

- Both the OPCLB and the proposed transmission line route are locations that are not included as part of any tourist circuit or regular route used by visitors
- Construction from May to December is expected to overlap with at least 3 signature local events; Harvestin' the County; Terroir - Prince Edward County's wine celebration and The County Garlic Festival
- These events are well-know by tourists and it is unlikely that visitors will stop coming to the County because of construction related to the windfarm. Given the nature and scale of construction, although tourists may be bothered by construction activities, they will not stop coming to visit the County
- In summary, impact will be minor

LOCAL BUSINESS – (retail/service)
IMPACT: MINOR

- Disruptions will occur during transportation of turbine components, or during certain construction phases (road closures, detours, etc) that may temporarily affect economic activities in the towns located along the transportation route

PROPERTY VALUES
IMPACT: NONE

- Localized disruptions that will occur around the project site and along the transportation route will have no impact in county-wide property values

MUNICIPAL REVENUE
IMPACT: NONE

- Construction activities will have no impact on county-wide property values

COMMUNITY CHARACTER AND AESTHETIC QUALITY
IMPACT: MINOR

- Construction that will take place around the project area will have no impact on the community character and aesthetic quality of the County

EMPLOYMENT
IMPACT: NONE

- $1,060,000 will be spent in the County in local labour costs
- The majority of the jobs will be temporary skilled trade jobs
- 2 full-time positions will be created to operate the wind farm once it is operational

4. 2. SOCIO-ECONOMIC IMPACTS IN THE PRIMARY STUDY AREA (PSA) AND SOUTH MARYSBURGH WARD

4.2.1 Effects during windfarm OPERATIONS

CHANGES IN LAND USE – PSA and Ward Level

Key Question:
Will changes in land use due to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in the PSA and South Marysburgh Ward?

- The Ostrander Point Crown Land Block (OPCLB) is a 324 Ha area designated as a Resource Management Area
- The land use will shift from Undeveloped / Open Space to a mixed use of Open Space and Utility
- Other land uses in the vicinity will not change

TOURISM

IMPACT: MINOR

- Tourist and recreational activities include diving and fishing (Lake Trout and perch). There is a public boat launching ramp. Main users are sport fishermen, and 2 commercial fishermen. 6 to 12 people in total day use
- Other tourist attractions include South Bay (the Mariner's Memorial Museum located on Road 13 and Road 10.), McMahon Bluff area (Black River Cheese Factory), Smith Bay (cottages and lodges) and Point Traverse / Prince Edward Point. Surrounding areas are also used for recreation purposes; parks, (e.g. Point Petre Provincial Wildlife Area, Prince Edward Point National Wildlife Area, Timber Island Provincial Natural Reserve, Swetman Island); trails, etc.
- The PSA is currently used for recreational purposes including hiking, hunting and birding. These uses would continue to be available to the public once the windfarm becomes operational
- There are no tourist activities in the OPCLB
- Besides tourists visiting Little Bluff Conservation Area (on Road 13), there are currently no other tourist activities and the Primary Study area (PSA) is away from regular county tourist circuits
- Tourism destinations in the ward include Prince Edward Point National Wildlife Area (about 560 Has) which is a popular area for visitors. Tourism and recreational activities include bird watching, butterflies appreciation (mainly Monarch butterflies), picnics and notably diving. Divers visit Prince Edward Point from as far as Michigan, or upper New York State to access ship wrecks. The harbour is used for commercial fishing vessels, however there are no facilities and there is no docking for visiting vessels. There are also diving activities south of OPCLB
- Changes in land use will not have any impact on the noted destinations and activities

LOCAL BUSINESS – (retail/service)
Local businesses are characterized in Section 3.2.3, 3.2.4 and 3.2.11

IMPACT: MINOR

- There is a potential for new local businesses to develop in connection to the windfarm; e.g. information kiosk that could sell educational material, postcards, souvenirs, etc.
- There will be a minor positive impact affecting local businesses, retail or services as a result of the change in land use of the OPCLB

PROPERTY VALUES

IMPACT: MINOR

- Some of the most comprehensive studies done to date (ECONorthWest, 2002, and REPP 2003) both conclude that windfarms do not affect property values
- In terms of perception of local residents; of all the door-to-door survey respondents, 51.9% believe that property values will increase in the next 3 years, while 13.0% believe property values will decrease; 11.7% believe they will stay the same; and 23.4% don't know or would not answer
- Interviewees identified as reasons for property value change in the next 3 years: market forces (32.1%), appeal of waterfront properties (18%) and population increase due to new residents (14.3%). Of the 6 people (11.7%) who did mention wind farm as a reason for change, 4 people indicated that their properties value would increase and 2 people (2.6%) indicated that the values would decrease. In so far as the perception of residents influence how they will price their homes, the data indicates that residents do not see the windfarm as a cause of lower property values
- Property values in dwellings that are closest to the wind turbines may experience some minor temporary adjustments in their values[xiii], either positively, as has been documented in studies such as the REPP Report[xiv], or negatively as reported in the study prepared in the Town of Lincoln (Wisconsin)[xv], in both cases as a reaction to the presence of wind turbines. For example, some of the properties and lands adjacent to the Ostrander Crown Land Block will see an increase in their values due to road improvements and better access.[xvi]

MUNICIPAL REVENUE

Municipal revenue characteristics are discussed in Section 3.1

IMPACT: NONE

- No impact on municipal revenue as municipal taxes are dealt at the County level (please see Section 4.1)

COMMUNITY CHARACTER AND AESTHETIC QUALITY

Community character is discussed in Section 3.2.10.

IMPACT: MODERATE

- Local residents value quality of living in their community, and although they are aware that changes will occur, most of them do not see wind energy as a threat to community character and aesthetic quality
- Community rural character within the PSA is highly valued. When asked about what it is that they liked about living in the community; 18% of interviewees responded quietness, 15.6% nature and natural beauty, 12.9% the rural appeal, 11.9% water features and the lake and 10.5% the neighbours.
- Changes in rural landscape will occur due to the presence of 12 turbines
- Change will occur within a land extension of up to 3.24 sq km out, or less, of the 108.29 sq km of ward surface (less than 3.0% of ward surface)

- No change in the local demographic profile will occur as a result of the project
- During operation wind turbines will not be a source of extra dust in the atmosphere
- 64% of the interviewees in the PSA support wind energy programs and infrastructure in the community

EMPLOYMENT
Employment and economic impacts are characterized in Section 3.1.1, 3.1.2, and 3.2.11

IMPACT: MINOR
- There are approximately 485 people employed in South Marysburgh (3.9% of the 12,445 total labour in PEC for 2006)
- If new business in connection to the windfarm develops, such as an information kiosk, 1 or 2 local jobs would be created

ECONOMIC CHANGES – PSA and Ward Level

Key Question:
Will economic changes due to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in the PSA and South Marysburgh Ward?

- ❖ Approximately $38 million will be spent on construction activities including labour, equipment and materials
- ❖ Products and services that will be required include; construction of concrete pad for the wind towers, road construction, transmission line erection and mechanical installations, electrical installations, site security and fencing during construction
- ❖ Skilled trades/profiles that will be required include; engineers, concrete contractors, skilled construction workers, electricians, security guards, road workers and contractors

TOURISM
Tourism characteristics are discussed in Sections 3.1.1 and 3.1.2

IMPACT: MODERATE
- The wind farm will contribute to local tourism $44,200 to $61,300 (more details provided at the County level), depending on where these expenses take place
- These amounts could be considered as a moderate positive impact if most of the expenses occur at the ward level (mainly in Milford)

LOCAL BUSINESS – (retail/service)
Local business characteristics are discussed in various points throughout Section 3.2

IMPACT: MINOR
- South Marysburgh will not benefit directly from demand of construction products and machinery as these products as well as specialized services are not offered locally

PROPERTY VALUES
Property values are discussed in various points throughout Section 3.1.1

IMPACT: NONE

- No impact on property values will occur as a result of the economic changes that the windfarm will produce (investment, labour, services, etc)

MUNICIPAL REVENUE
Municipal revenue characteristics are discussed in Section 3.1

IMPACT: NONE

- No impact on municipal revenue as municipal taxes are dealt at the County level

COMMUNITY CHARACTER AND AESTHETIC QUALITY
Community character is discussed in Section 3.2.10.

IMPACT: NONE

- Local residents value quality of living in their community, and although they are aware that changes will occur, most of them do not see wind energy as a threat to community character and aesthetic quality
- No impact on the community character or aesthetic quality will occur as a result of the economic changes that the windfarm will produce (investment, labour, services, etc)

EMPLOYMENT

IMPACT: MINOR

- Local businesses and residents in the Ward (mainly Milford) can benefit though from unskilled construction jobs that will become available locally, and from spin-off jobs (e.g. accommodation, restaurants)

VISUAL CHANGES – PSA and Ward Level

Key Question:
Will visual changes due to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in the PSA and South Marysburgh Ward?

- The windfarm will operate up to 12 wind turbines, 80 m tall plus 42 m blades
- Based on the visual simulations prepared by Gilead, at 2-3 kilometres of distance from the wind farm visual prominence of wind turbines is minor
- Wind turbines may be still visible over 3-5 km however visual perception of wind turbines on the landscape is notably diminished
- Two onsite Substations will be built. Transmission will be via above-ground, three phase, pole mounted 27.6.kV distribution line will be constructed to carry the electricity from the turbines to the on-site substations. These lines are a socially accepted feature throughout North America
- From the on-site substations, above ground 44 kV distribution lines will be constructed that will lead from the Project area to the Milford DS[xvii]
- Trees and bushes on roads along the transmission route will need to be removed and replanted in some instances

TOURISM
Tourism characteristics are discussed in Sections 3.1.1 and 3.1.2

IMPACT: MINOR

- Divers use Road 13 as the only point of ingress to Prince Edward Point from where they access Main Duck Island and Yorkshire Island. Divers en route to these destinations will be able to see the wind turbines
- With the exception of a segment of 170 m, any point located along Road 13 from Hilltop Rd to Whattams Road (a stretch of about 6.5 km) is at least 2 km away to the closest proposed wind turbine
- The wind turbines may become a possible local attraction for people who may be interested in learning more about this technology

LOCAL BUSINESS – (retail/service)

IMPACT: MINOR

- Bed and breakfast businesses in the ward are located in excess of 6.5 km to the closest wind turbine; Jackson Falls (6.7 Km), Coleen Cottage and B&B (7.2 Km), and The Miller's House (7.9 Km). Also in the area along Smiths Bay are Bailey`s Place Cottage, By-The-Way Cottages, Accommodating Bay Trailer Park and Vagabond Cove Cottage; all are located in excess of 8 Km from the windfarm
- There is one business (Huff Estate Inc. Winery) in the PSA area, and nine dwellings identified as both a home and a business. All are located along Road 13. All of these properties are located beyond the 2 km; thus the presence of the turbines will have minor to no impacts on these businesses
- Given the distances of all listed accommodations to the nearest wind turbine, in excess of 6.5 Km, there will be no impact on local businesses as a result of visual changes

PROPERTY VALUES
IMPACT: MINOR

- The closer the turbines are erected in relation to a dwelling, the more visually predominant they become for current and future residents of said dwelling, and thus the more likely that property values may be influenced. For the purpose of this analysis and based on the review of the Visual Simulations of the Ostrander Point Wind Energy Park prepared by Gilead (Appendix 5), a distance of 2 km was taken as a reference, below which the wind turbine may be considered visually intrusive
- As explained in the section of Changes in Land Use; property values in dwellings that are closest to the wind turbines may experience some minor temporary adjustments in their values, either positively or negatively, as a reaction to the presence of wind turbines. For example, based on the preferences of prospective buyers, visual changes may initially become a deterrent or a very appealing feature and thus have an impact on property values. If dwellings located up to 2km of the closest wind turbines were to see their property values affected temporarily; 12 properties (less than 3% of dwellings in the Ward) would fall in this category (8 within 1 km and 4 within 1km and 2 km). These adjustments will bear no meaningful impact on property values in the long term.
- Although the wind turbines could be seen from the rest of dwellings in the PSA (about 106 dwellings or 89.8% of properties); given that they are located beyond 2 km from the closest wind turbine, the windfarm will not be visually obtrusive and thus have no impact on property values

- Given the low percentage of residents living within 2 km of the closest turbine (less than 3% of ward dwellings) the overall impact will be minor

MUNICIPAL REVENUE
IMPACT: NONE
- No impact on municipal revenue as municipal taxes are dealt at the County level

COMMUNITY CHARACTER AND AESTHETIC QUALITY
Community character is discussed in Section 3.2.10.

IMPACT: MINOR
- Local residents value quality of living in their community, and although they are aware that changes will occur, most of them do not see wind energy as a threat to community character and aesthetic quality
- Visual impact was identified as the most common concern among residents of the PSA (16. 3%) in terms of change in rural character
- About 6.8% of residents of the PSA (8 households) are located within 1Km from the closest wind turbine. Given that the closest property is located approximately at 720 m said impact will be moderate
- 3.4% (4 households) are located within 2 km and will have a minor visual impact
- Although the wind turbines could be seen from the rest of dwellings in the PSA (about 106 dwellings or 89.8% of properties) given their minimum distance of 2 km from the closest wind turbine, they will not be visually obtrusive and thus have no impact on the aesthetic quality of the ward
- With one exception no residents surveyed mentioned that the community character would change to the point they would consider moving
- Most people in the PSA are aware of the visual change that will occur (i.e. erecting 12 wind turbines), however only a reduced percentage (16.3%) expressed a concern about it, and 90% of residents live beyond 2 km of closest wind turbine, which makes the overall impact of this change minor

EMPLOYMENT
IMPACT: NONE
- There will be no impact affecting employment as a result of the visual changes that the windfarm will produce

NOISE CHANGES – PSA and Ward Level

Key Question:
Will noise changes due to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in the PSA and South Marysburgh Ward?

- ❖ Increased sound levels will occur during normal operation of the wind energy park
- ❖ Sound will be produced from the operating wind turbines as a result of the machinery operating within the nacelle (the casing that houses the electrical generator gearbox and blade control) at the top of the turbine, and as a result of the turning blade cutting through the air

- ❖ Noise at the base of each turbine is above 50dB(A), and will be below 40 dB(A) at the nearest point of reception
- ❖ The project will meet the most stringent MOE environmental noise criteria of 40 dB(A) at sensitive receptors (see Appendix 6 depicting Noise Isocontours)

TOURISM

IMPACT: NONE

- Tourist destinations in the ward include Prince Edward Point National Wildlife Area, Little Bluff Conservation Area, and Point Petre Provincial Wildlife Area (small portion of the East section of the PSA)
- All these areas are located in excess of 2 km from closest wind turbine
- Road 13 is used by tourists to access Prince Edward Point. Distances from any point along Road 13 to the closest wind turbine will range from 1940 m to 2770 m, so that no noise emanating from the windfarm will be heard
- There are currently no tourist activities in the OPCLB, then no impact due to noise

LOCAL BUSINESS – (retail/service)

IMPACT: NONE

- There is one business (Huff Estate Inc. winery) in the PSA area, and nine dwellings identified as both a home and a business. All are located along Road 13. All of these properties are located beyond the 2 km mark. Based on a review of the Proposed Turbine Layout and Noise Contour prepared by Gilead, noise changes will not have any impacts on these businesses
- Bed and breakfast businesses in the ward are located in excess of 6.5 km, and businesses operating in Prince Edward Point are beyond the 7.5 km mark
- There will be no impact affecting local businesses and services as a result of the noise changes that the windfarm will produce

PROPERTY VALUES

IMPACT: NONE

- The closer the turbines are erected in relation to a dwelling, the more likely the noise produced by the turbines may be heard
- Measuring distances from closest turbines; there are 12 dwellings (10.2% of total dwellings in the PSA area) located within 2 Km of the closest wind turbine. Following the Ministry of the Environment guideline, residents of these dwellings will have no impact as in all cases noise exposure will be below 40 dB(A).
- The rest of dwellings in the PSA, about 106, (89.8% of total), are located beyond 2 km of closest wind turbine, and will have no impact. In conclusion, residents the PSA and South Marysburgh, at large, will not be affected by changes in noise levels as a result of the wind farm
- Having into consideration all these observations, noise will not affect property values

MUNICIPAL REVENUE

IMPACT: NONE

- No impact on municipal revenue as municipal taxes are dealt at the County level

COMMUNITY CHARACTER AND AESTHETIC QUALITY
IMPACT: NONE

- Increase in noise levels will occur adjacent to wind turbines
- No resident living in the PSA will be exposed to noise from the windfarm exceeding 40 dB(A)
- Once the project is commissioned, the OPCLB will remain open to the public for sporadic visits. Individuals in the project site have the potential to hear some noise associated with wind turbines
- Given the localized nature of the noise increase it will not constitute a change that will impact the rural character and peace and tranquility that residents in the PSA and in the ward enjoy
- No impact affecting community character and aesthetic quality will occur as a result of changes in noise levels that the windfarm will produce

EMPLOYMENT
IMPACT: NONE

- No impact affecting employment will occur as a result of changes in noise levels that the windfarm will produce

4.2.2 Effects during windfarm CONSTRUCTION

CONSTRUCTION – PSA and Ward Level

Key Question:
Will construction activities related to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in the PSA and South Marysburgh Ward?

- During construction period there will be from 5 to 20 trucks per day along the proposed transportation route and approximately 20-30 construction workers on site
- The transportation route to bring in the turbine components will follow some seasonal roads and some intersections would need to be widened
- Approximately 5 km of single track access roads will be constructed onsite. Tracks will be approximately 12 m wide for construction, but 7 m of this width will be reclaimed following construction. Some local roads may be upgraded or widened to allow transportation of the turbines and cranes to the site[xviii]
- The turbine towers will be mounted on in-ground concrete pads approximately 10 m by 10 m to a depth of 3 m
- Trees and bushes along roads along the transmission route may need to be removed and replanted in some instances
- Dust resulting from construction activities may have a localized impact along some construction routes and in the PSA. Dust suppression will be used to minimize this

TOURISM
IMPACT: MINOR

- Both the OPCLB and the proposed transmission route are locations that are not included as part of any tourist circuit or regular route used by visitors

- People using Road 13 to access their residences or to visit Prince Edward Point will be affected by construction activities
- Given the temporary nature of disturbances and specific location, this impact is consider minor

LOCAL BUSINESS – (retail/service)

IMPACT: MINOR

- Localized and temporary disruptions will occur during transportation of turbine components, or during certain construction phases (road closures, detours, etc) that may temporarily affect economic activities in the towns located along the transportation route
- As there are not many businesses located within the PSA, minor impact could be felt by two local businesses: Huff Estates Inc. a vineyard , and a car dealer. Both are located on Road 13; however they are not expected to be significantly affected by traffic conditions resulting from construction activities
- Local business in areas that depend on access via Road 13 may experience short term increases in traffic volumes, such as Ducks Dive Charters & Cottages, located at Point Traverse. They offer Scuba diving charters and accommodation on 4 cottages able to house 4 to 20 people in total (income of $2300 a week at full capacity). However, there will be no disruption to normal business operations
- Bird sighting businesses located at Prince Edward Point receive 5000 visitors during birding season, mainly in the months of Spring and Fall
- In consideration of the distance from construction, there will be no impact on business located in the remainder of the ward
- Construction impacts on local business is considered to be minor

PROPERTY VALUES

IMPACT: NONE

- Disruptions due to construction at the project site and along the transportation route will be temporary and will have no impact on property values

MUNICIPAL REVENUE

IMPACT: NONE

- No impact on municipal revenue as municipal taxes are dealt at the County level

COMMUNITY CHARACTER AND AESTHETIC QUALITY

Disruptions during transportation of turbine components and during certain construction phases (road closures, detours, etc) will have no permanent effect on aesthetics.

IMPACT: MINOR

- Certain roads may require upgrades to allow the transportation of turbine components, and construction of ancillary equipment, this could temporarily disturb the peace and tranquility of neighbours and businesses located close to the Project site and along the transportation route
- The local transportation network will be temporarily affected as a result of the windfarm
- Overall impacts on the community character and aesthetic quality as a result of construction activities for the windfarm will be minor

EMPLOYMENT
IMPACT: MINOR

- $1,060,000 will be spent in local labour costs
- The majority of the jobs will be temporary skilled trade jobs
- Is not possible to determine at this point what percentage of these products and services will come from South Marysburgh
- Thus employment resulting from construction will have a minor positive effect

V. MITIGATION STRATEGY

Mitigative measures contribute to enhance the expected positive impacts and reduce the expected negative impacts of a given project. A key question to address is: *Can Negative Social and Economic Changes Attributed to the Effects of Wind Farming Operations be Mitigated?* Recommended mitigation measures are based on conclusions drawn about socio-economic impacts identified in the effect matrices, the results of the door-to-door survey, and the focus groups discussion.

5.1 NET EFFECTS

The consolidated table of Net Effects shown below indicates that effects resulting from the construction and operation of the windfarm will mainly cause MINOR impacts at both the PSA-Ward level and the County Level; therefore it is our opinion that Gilead, the Applicant, will be in full ability to address impacts and to mitigate or reduce effects to acceptable levels for local residents.

Table 13:
Consolidated Table of Net Effects

	Primary Study Area and South Marysburgh Ward	Prince Edward County
Change in land use	MINOR	MINOR
Economic changes	MINOR	MINOR
Visual changes	MINOR	NONE
Noise changes	NONE	NONE
Construction nuisances	MINOR	MINOR

5.2 MITIGATION STRATEGIES

Given that the expected impacts resulting from the Ostrander Point Wind Energy Park are minor, the following provides a brief summary of recommended mitigation strategies that will help reduce those impacts further and enhance positive impacts for local residents.

Education, communication and community involvement:

- Gilead could play a positive role of corporate citizen by facilitating community involvement, attending to community concerns when they arise, and working with the community in solving them

Community Character:

- Limit disturbances to the minimum possible (e.g. be aware of local community calendar and activities that could be affected by project construction or operations)
- Upon decommissioning; restore access roads to the windfarm to their original state, or better

Construction Nuisances:

- ❖ Operate heavy equipment only during the proposed 8:00am to 5:00 pm schedule and avoid holidays and Sundays
- ❖ Employ construction equipment that have sound proofing capabilities (e.g. mufflers)

VI. CONCLUSIONS

Tourism:

Although there are no tourist activities in the Ostrander Point Crown Land Block, there are some tourist activities in the Project Study Area. Tourists often use Road 13 to access tourist destinations such as: diving, bird watching, butterfly appreciation and picnics. In the PSA, the Ostrander Point Wind Energy Park will only have minor impact on any tourist activities. All major tourism destinations in the ward are beyond two km of the closest wind turbine, and as such they should have very little impact on tourism.
Divers using Road 13 to access tourist activities may have sight of the wind turbines. An off-shoot of this is that some people may be interested in coming to see the turbines as a point of interest. Noise will not have any impact on tourism in the area.
At a county-wide level, there will be some minor benefits to tourism. Project spinoffs for tourism could amount $703,000.
During construction, impacts on tourism will be limited to people using Road 13 to access their residences or to visit Prince Edward Point, however, this is temporary and should be minimal. There will be an increased tourist dollars spent at the local tourism businesses due to construction workers eating at the restaurants, using local accommodations and using other local vendors. Because construction occurs over three seasons, construction will overlap with a few major tourist events. It is unlikely that tourists will stop coming to these events due to construction nuisances, thus the impact will be minimal.

Local Business

Minor positive impacts are anticipated to local businesses in the PSA, the Ward and at the County level. There is the potential for new businesses to open up as a result, including information kiosks, employment opportunities during construction of unskilled trade workers and growth in existing businesses because of interest in the turbines.
Within the PSA, there is only one business, and nine dwellings which serve as a home and business. The closest bed and breakfast to the windfarm is over six and a half kilometres away. Because all the identified businesses in the project study area are more than two kilometres away, none of them will be impacted by the noise or other operation effects.
During construction, local businesses will benefit from the increase of out-of-town construction workers working on the site, and using local accommodations, restaurants and other vendors. Two local businesses located on Road 13 will be temporarily affected due to traffic conditions resulting from construction activities.
Expenses in products and services in a community entail multiplier effects. Based on the amount that will be spent locally, the amount of spinoffs could be $12.72 M for local expenditures and $3.18 M for local labour costs.

Property Values

Comprehensive studies to date show that no major long-term negative impacts on property values occur due to wind farms.
Property values in dwellings that are closest to the wind turbines may experience some minor temporary adjustments in their values, either positively or negatively as a reaction to the presence of wind turbines. These adjustments will bear no meaningful impact on property values in the long term.

Residents were not overly concerned with property values decreasing in the area, and less so about the wind farm impacting it. No impacts will occur at the County level.
Adjacent lands, located along the roads, will see an increase in their property values due to road improvements and better access.
No changes to property values will occur due to the construction, as it is a not a long-term construction project.

Municipal Revenue

Gilead will have to pay municipal taxes (not property taxes), along with a one-time building permit fee. Gilead will also pay a lease to the provincial government.

Community Character and Aesthetic Quality

Visual impacts were the most common concern of residents on the aesthetics and character of the community (16 percent). The presence of 12 wind turbines will change the rural landscape. Community rural character within the PSA is highly valued by those surveyed. However, 64 percent of surveyed residents in the project study area support wind energy programs and infrastructure in the community. Most are aware that changes will occur, but do not see wind energy as a threat to their community. Any impacts will only be felt at the local level, and will not be noticeable at the county-wide level.
With one exception no residents surveyed mentioned that the community character would change to the point they would consider moving.
Disruption during construction may have minor impacts on the community and to the transportation network. However, because certain roads will require upgrades, there will be net long term positive impacts.

Employment

If new businesses are developed in connection to the wind farm, such as an information kiosk, one or two new jobs could be created.
Residents will also benefit from the skilled and unskilled construction jobs that will become available during construction of the turbines, as $1,060,000 will be spent on local labour costs. There will also be secondary jobs created during the time of construction to ensure that workers have access to all the amenities (restaurants, shelter or entertainment, for example).
Two full time positions will be created once the wind farm is operational.

Net Effects and Mitigation Strategy

Given that the expected net impacts resulting from the Ostrander Point Wind Energy Park are minor, mitigation strategies will suffice to overcome any negative impact previously identified. Gilead will able to address socio-economic impacts to an acceptable level.

VII. BIBLIOGRAPHY AND DOCUMENTS REVIEWED

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2. Socio-Economic Features (four-page Word document)
3. PEC Population Report by Wards (one-page Excel bar graph)
4. Prince Edward County Labour Force, 2001 (one-page Word document)
5. Bibliography (half-page Word document)
6. Ostrander Point EA – Jacques Whitford (139 page Word document + appendices)
7. Socio-Economic Summary Feb. 12 (three-page Word document)
8. Public Comment Summary Table - Stantec Version: contains a summary of the outstanding comments received by Jacques Whitford, summary of open house comments, and a summary of all comments sent directly to Stantec
9. Agency Comments Summary Table - Stantec Version
10. Open House (Non-Agency): stakeholder contact list
11. NOC to Agencies: Agency contact list
12. Stakeholder Comment Tracking Sheet (agency and public comment tracking table).
13. Progress Report: Identifying Attitudinal Barriers to Continued Growth of Wind Power in Atlantic Canada (17 pages)
14. Workplan: Study to identify attitudinal barriers to continued growth of wind power in Atlantic Canada 25 January 2008 (22 pages)
15. Proposal: Study to identify attitudinal barriers to continued growth of wind power in Atlantic Canada, September 11, 2007 (13 pages)
16. Newspaper Articles from the Picton Gazette, 6 Aug. 2008 (5 pages)
17. Report: Preferences for Wind Power in Atlantic Canada. Natural Resources Canada, Report No. 1032472 (168 pp)
18. Email- Industrial Wind Energy Proposals in Prince Edward County and the conflict of By law 900-2002
19. Document - July 28 Interim Control By-law Regarding the Establishment and Operation of Windmills in the County of Prince Edward - Presented to Council on July 28, 2008 (motion defeated) (4 pp)
20. Document – Wind Turbine Development in Prince Edward County: Status Report - County Planning Committee, February 5, 2008 (3 pp)
21. Document – The Corporation of Prince Edward County, By-Law Number 1924-2007 (3 pp)
22. Submission to HSAL Environmental Assessment Focus Group on Ostrander Point Wind Project, Henri Garand, Prince Edward County Field Naturalists (2 pp)
23. Submission to HSAL, Bird deaths from human activity, Don Chisholm, Waupoos, North Marysburgh (1 p)
24. Growing the Creative-Rural Economy in Prince Edward County, April 2008 (69 pp)

25. Email from - Industrial Wind Energy Proposals in Prince Edward County and the conflict of By Law 900-2002 (2 pp)
26. Economic Restructuring through Culture in Small Towns and Rural Areas: Building Creative Rural Economies - A Case Study of Prince Edward County, Ontario. Prepared by Dan Taylor (Prince Edward County) and Dr. Greg Baeker (AuthentiCity), The International Forum on the Creative Economy. March 17th, 2008. (11 pp)
27. Assessment of Potential Impact of Proposed Wind Farm on Tourism in Prince Edward County, Ontario. Prepared for Vision Quest Windelectric Inc.2004 (11 pp)
28. Prince Edward County Agri-food Markets 2007, Ted Rogers School of Hospitality and Tourism Management, Ryerson University, Richard I. Wade - Principal Investigator, (167 pp)
29. South Marysburgh Action Agenda, Toward an Economic Development Action Agenda. The Community's Foundational Values (2 pp)
30. South Marysburgh Action Agenda; Toward An Economic Development Action Agenda. Full version.
31. Renewable Energy Policy Project (REPP) George Sterzinger, Fredric Beck, and Damian Kostiuk;The Effect of Wind Development on Local Property Values, May 2003 (81 pp).
32. Final Report of the Wind Turbine Moratorium Committee, Township of Lincoln, Wisconsin (2000 to 2002). (177 pp)
33. The Edmonton Transportation Effect: The Impact of Transportation Improvements on Housing Values in Greater Edmonton, Don R. Campbell, Ray Reuter and Melanie Tennant. Cutting Edge Research Inc. (22 pp).
34. Economic impact of wind in Kittitas County: Report for the Economic Development Group by ECONorthwest. October 2002 (20 pp).

ENDNOTES:

[i] Stakeholders included among others; PEC Economic Development, PEC Chamber of Commerce, Winery Operations, ESSROC, Alliance to Protect Prince Edward County (APPEC), Concerned Citizens of Prince, Edward County (CCPEC). For a complete list see the appendix on Focus Groups participants and comments.

[ii] The proposed transmission line route (under review) from the project site to the Milford Sub-Station goes along Helmer Road, County Road 13, Hilltop Road, Maypullayn Road, Bond Road and County Road 10.

[iii] Economic Restructuring through Culture in Small Towns and Rural Areas: Building Creative Rural Economies - A Case Study of Prince Edward County, Ontario. Prepared by Dan Taylor (Prince Edward County) and Dr. Greg Baeker (AuthentiCity), The International Forum on the Creative Economy. March 17th, 2008.

[iv] Included in the Aboriginal identity population are those persons who reported identifying with at least one Aboriginal group, that is, North American Indian, Métis or Inuit, and/or those who reported being a Treaty Indian or a Registered Indian, as defined by the *Indian Act* of Canada, and/or those who reported they were members of an Indian band or First Nation (Source: Statistics Canada).

[v] Immigrants are persons who are, or have ever been, landed immigrants in Canada. A landed immigrant is a person who has been granted the right to live in Canada permanently by immigration authorities. Some immigrants have resided in Canada for a number of years, while others are more recent arrivals. Most immigrants are born outside Canada, but a small number were born in Canada. Includes immigrants who landed in Canada prior to Census Day, May 16, 2006 (Source: Statistics Canada).

[vi] South Marysburgh Action Agenda.

[vii] HSAL staff were on-site on several occasions during the months of August and September 2008.

[viii] South Marysburgh Action Agenda, Toward An Economic Development Action Agenda.

[ix] The applicant is conducting a viewshed analysis which will provide a visual representation of the wind park from various vantage points throughout the County and will be provided in the Draft ERR.

[x] Wind Turbine Development in Prince Edward County: Status Report, County Planning Committee, February 5, 2008.

[xi] Currently under review. Initial route proposal was along Helmer Road, Hilltop Road, Dainard Road, Maypullayn Road, Bond Road and a 500 m section on Road 10.

[xii] A detailed transportation study will be undertaken before transportation of the turbine components takes place. To ensure local requirements are met, consultation with the County and MTO will be conducted.

[xiii] These observations do not consider the effect of overall market conditions.

[xiv] The study concludes that in the great majority of projects the property values actually rose more quickly in the view-shed than they did in the comparable community. Renewable Energy Policy Project (REPP) George Sterzinger, Fredric Beck, and Damian Kostiuk; The Effect of Wind Development on Local Property Values, May 2003, 81 pp.

[xv] The document Final Report of the Wind Turbine Moratorium Committee, Township of Lincoln, Wisconsin (2000 to 2002). Includes in Tab 11, p.161 the following conclusions of an analysis conducted by an Assessor from the Town; sales within 1 mile of the windmill prior to their construction were 104 percent of the assessed value, and properties selling in the same area after construction were at 78 percent, a decrease of 26 points. Also, sales more than a mile away prior to construction were 105 percent of the assessed values, and sales of properties 1 mile or more after the construction of the turbines declined to 87 percent of the assessed value, an 18 percent decline.

[xvi] A study commissioned in 2007 by the Real Estate Investment Network concluded that some property owners will see a 15 -20% Increase in their property values as a result of road improvements. *The Edmonton Transportation Effect: The Impact of Transportation Improvements on Housing Values in Greater Edmonton*, Don R. Campbell, Ray Reuter and Melanie Tennant. Cutting Edge Research Inc., 22 pp.

[xvii] Initial proposal route was along Helmer Road, Hilltop Road, Dainard Road, Maypullayn Road, Bond Road and a 500 m section on Road 10).

[xviii] A detailed transportation study will be undertaken before transportation of the turbine components take place. To ensure local requirements are met, consultation with the County and MTO will be conducted.

HARDY STEVENSON AND ASSOCIATES

Socio-Economic Impact Assessment for the Ostrander Point Wind Energy Park (Prince Edward County, Ontario)

APPENDICES

APPENDIX 1:

Table of Project Activities

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Table of Project Activities

Typical Project Activities

Site Preparation and Construction	
Surveying and Site Layout	Activities include staking the boundaries of the construction area, temporary workspace, substation site, and the 13.5 kV electrical collection system, as well as identifying existing underground pipelines and cables. Areas to be avoided, such as woodlots and watercourses, will be temporarily fenced and/or flagged.
Clearing	If present, vegetation will be cleared from the construction area. Non-woody vegetation will be mowed. Clearing may occur for the development of access driveways, the creation of lay down areas at each turbine location, and the installation of power lines and the on-site substation.
Topsoil stripping and salvage	Graders, bulldozers, and backhoes will be used to strip and stockpile topsoil. Topsoil will be stockpiled for replacement during clean-up and reclamation.
Grading	Following topsoil stripping and salvage, grading is conducted on irregular ground surfaces to provide a safe and clean work surface.
Development of access driveways	Approximately 5 km of access driveways will be developed on-site. Access driveways will be surveyed and staked/flagged. Driveways will be approximately 10 m wide during the construction stage to accommodate construction vehicles. The surfaces of the driveways will consist of compacted gravel.
Ploughing and trenching for underground power lines	Underground 13.5 kV power lines will be installed from each turbine row to the nearest road allowance, following existing fence lines to the extent possible. A combination of ploughing and trenching techniques may be used. Most of the underground cabling installation will be completed using open cut trenching. Typically, a wheel-like or elongated, bar-like armature with teeth will be used to cut a narrow trench in which the cable is to be placed. The trencher teeth will act like small scoops to open the trench. The equipment is usually mounted on a small backhoe. The spoil pile from the trench will be situated immediately adjacent to the trench, extending approximately 2 m to the side. If drainage tile is damaged during the excavation process it will be repaired before backfilling of the trench. A blade mounted on a backhoe or other small piece of earth-moving equipment will be subsequently used to push the spoil pile back into the trench and to smooth and pack the berm. Ploughing will be accomplished in a manner similar to trenching and may be used where no drainage tile is present. Typically, a caterpillar-mounted plough mechanism, which essentially cuts a narrow furrow behind the caterpillar, may be used to install the underground power lines. A plough seam will be excavated to a depth of approximately 1 m and to a width of approximately 0.5 m. The power lines will be lowered-in and the plough seam will be backfilled immediately to prevent soil loss and erosion.

Typical Project Activities

Site Preparation and Construction	
	Where the underground cable must be spliced (e.g., at the end of a reel or to pass underneath another utility cable), a splice pit is likely required. These pits are about 1 m deep, 1 m wide, and up to 5 m long (but usually closer to 1 to 2 m long). At these locations, the topsoil will be stripped and salvaged in a pile immediately adjacent to the excavation, so that no mixing of the subsoil occurs. After the procedure is complete, subsoil will be back-filled and smoothed over. The topsoil will be replaced as the final procedure during reclamation. Where the underground power lines cross existing gravel roads, a trench will be excavated across the road. Each road where this will occur will be closed temporarily (for the duration of a day (8 hours)). A backhoe will dig a trench, in accordance with municipal building requirements, with the material excavated piled nearby for backfill. Concrete encased conduit, either pre-cast or cast-in-place, will be put in the trench to allow the underground cabling to be run under the road. During the backfill of the trench, a warning tape will be placed approximately 500 mm below grade to warn of underground electrical cabling.
Foundation excavation	The excavation for each turbine tower will be approximately 10 m by 10 m, to a depth of approximately 3 m. A tracked excavator will be used. Generally, the excavation hole has no side slope. Excavation for components within the substations will be completed using a similar process and the substation will be constructed based on standard utility practice. Topsoil excavated from the substation site will be generally re-distributed to adjacent land.
Pouring turbine foundation	Approximately 200 m^3 of concrete will be poured around a steel rebar frame in wooden forms. Forms will be removed after 24 hours and the excavated area will be back-filled and compacted so that only the tower base portion of the foundation is above ground.
Equipment lay-down	To create a safe and level work area for storing and assembling the wind turbine generators and towers, an area of approximately 100 m x 100 m may be used, depending on the local conditions. Each of the turbines and generators will be trucked on a flat-deck trailer to the site and assembled within the laydown area located at each turbine site.
Tower, generator, and rotor assembly	The tower will be transported in sections that will be assembled on-site. The blade system will be assembled on-site, and attached to the generator once the generator is in place at the top of the tower.
Installation of substation equipment	Substation equipment is installed within a fence that is surfaced with gravel based on standard utility practice. The substation equipment consisting of transformers, switches, control systems and other infrastructure are placed on concrete foundations that are put in place after the excavation.
Distribution line installation	In areas that are difficult and costly to connect via underground cables, an above-ground, three-phase, pole mounted, 13.5 kV distribution line will be constructed to carry the electricity from the turbines to the on-site substation. These above-ground lines will be constructed in accordance with standard utility practice. From the on-site substation, the above-ground 44 kV distribution line will be constructed that will lead from the Project area to the Milford DS.

Typical Project Activities

Site Preparation and Construction	
Road improvements	Some road improvements will be undertaken in order to ensure safe transportation of the turbine components to the installation locations. Some of the roads that currently access the site are seasonal in nature (i.e. Ostrander Point Road) and will require improvement for construction and maintenance access. Typical road improvements might include widening of intersections to accommodate turning circles required by truck transports, new approaches may be constructed, upgrade of culverts may be required due to heavy loads, and grading of the gravel roads will be undertaken to ensure smooth and safe surfaces. A detailed transportation study will be undertaken before transportation of the turbine components is undertaken. To ensure local requirements are met, consultation with the Municipality, County and Ontario Ministry of Transportation will be conducted.
Clean-up and reclamation	Garbage and debris will be removed and deposited at an approved location. All equipment and vehicles will be removed from the construction area. The temporary laydown areas and disturbed areas around the foundation of each turbine and at each substation will be graded and the stockpiled topsoil replaced. All disturbed areas (including trenches/plough seams) will be re-seeded or revegetated where appropriate. High voltage signage will be installed at the substation and elsewhere, as necessary. Access driveways will be reclaimed where appropriate. Approximately 7 m of the width of the remaining driveways will be reclaimed, leaving approximately 5 km of 3 m-wide driveways on-site for access during operations and maintenance.
Turbine commissioning	Turbine commissioning will occur after the wind turbines are installed and when the Project can be connected to the Hydro One electrical grid. Commissioning involves testing and inspection of electrical, mechanical, and communications operability. A detailed set of operating instructions is followed in order to connect with the electrical grid. Turbines will be painted and lit in accordance with Navigation Canada, Transport Canada, and Municipal/County guidelines.

APPENDIX 2:

Results of the Door-To-Door Socio-Economic Survey

APPENDIX 2:
OSTRANDER POINT WIND ENERGY PARK
Results of the Door-to-Door Socio-Economic Survey

1.0 Methodology

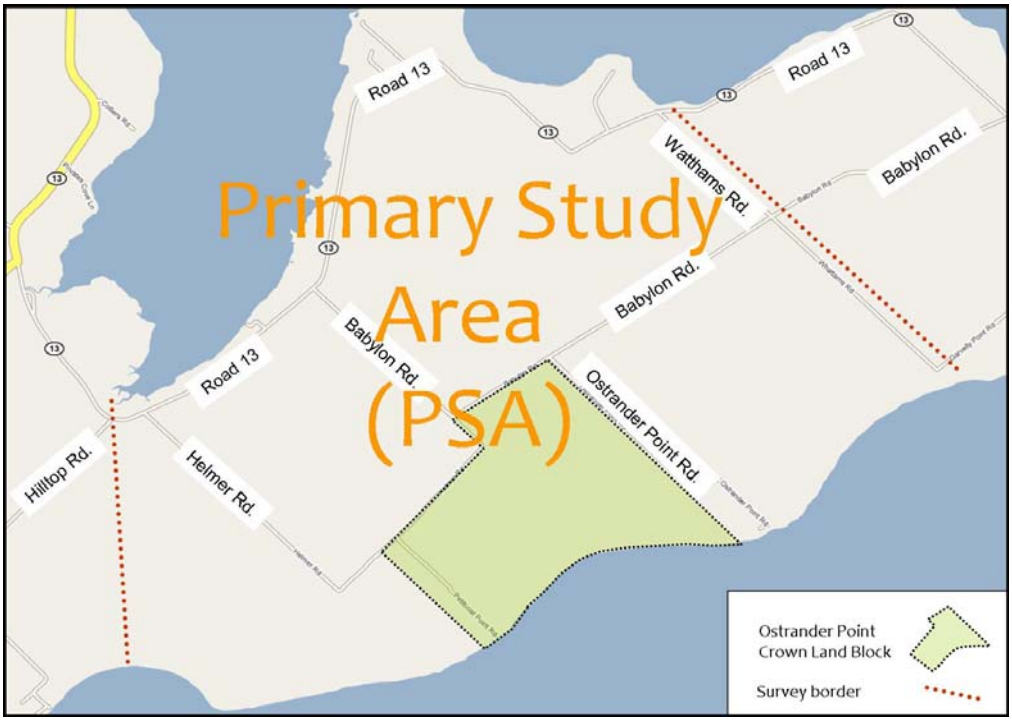
1.1 Survey instrument

A door-to-door SEIA survey was administered to gather information about the socio-economic characteristics of residents in the Ostrander Point Primary Study Area (PSA). The survey also gathered residents' opinions and perceptions about the wind farm proposal and its potential effects.

To gather this information, a comprehensive five-page survey instrument was created and administered by survey researchers. Interviewees were asked questions on a series of topics to delineate demographic characteristics so as to create a community profile. They were also asked about their daily and weekly activities so as to understand their lifestyle and provide a glimpse into their quality of life. Subsequently they were asked about the general effects the wind farm may have and the concerns regarding construction. They were asked to rank the importance of their concerns on a scale of 1 to 10 and were provided the opportunity to provide suggestions for mitigation of the potential effects. Interviewees were also queried about the value of their properties the last three years and asked to project the value in the next five years. Finally, they were queried about their support for wind energy programs and infrastructure and provided the opportunity to give additional feedback and commentary.

The PSA or surveyed area is shown in Figure 1,bordered by the red dotted lines to the east and west, and Lake Ontario to the north and south. The Ostrander Point survey area is bordered by Helmer Road to the west, Whattams Road to the east, County Road 13 to the north and Lake Ontario to the south.

Figure 1: Primary Study Area (PSA)

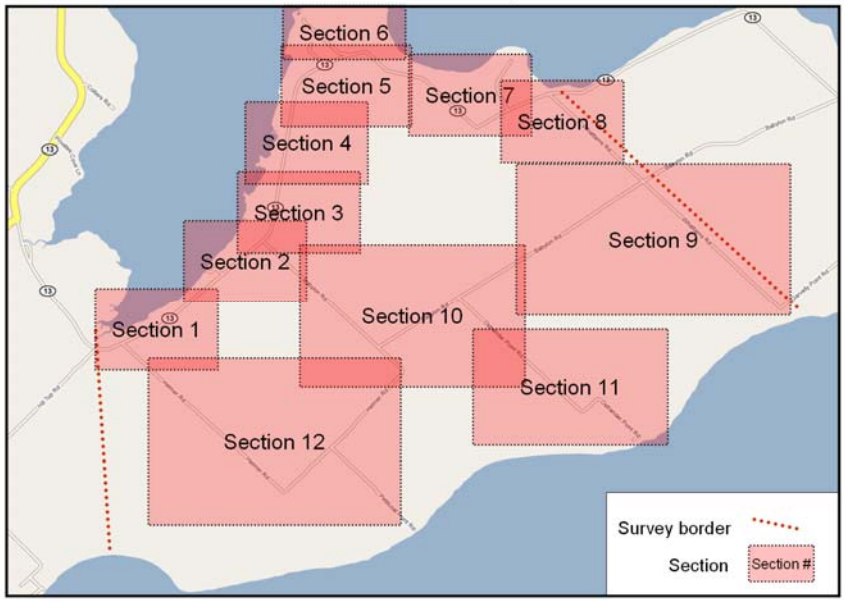


Map Source: Google Maps

Surveying began of residents located on County Road 13 began at the intersection of Hill Top Road and County Road 13 and ended 100m past Whattams Road and County Road 13. The roads surveyed for the study also included all of Babylon Road, all of Helmer Road, Petticoat Point Road, Ostrander Point Road and Whattams Road. It is important to note that residents located 100m past the intersection of Babylon Road and Whattams Road, along Babylon Road, were surveyed.

The survey area was segmented into 12 sections, each with varying numbers of structures located within that area. The aim of segmenting the PSA into sections was to organize fieldwork and to keep track of the residences that were visited so as to ensure that all properties were identified and visited a minimum of 3 occasions (if there was a no response on earlier attempts). Figure 2 provides a graphical representation of survey area as it was divided into sections. Note: areas not shaded within the survey boundaries are rural lands where the survey was not applicable (there are buildings or structures present).

Figure 2. Survey Area division



A temporary code was assigned to each survey based on the section the dwelling was located in, the side of the street it was situated (odd or even) and its house number. This code was used only in fieldwork during data collection and not in survey analysis or discussion.

1.2 Survey population

The survey was applied to distinguishable addresses as opposed to all parcels of registered lands and properties. Distinguishable refers to <u>all</u> properties that could be identified by address plates located at the front of their property, typically along the roadside. These addresses include those with or without structures, those with or without people in them, and those in both habitable and uninhabitable conditions.

Therefore, excluding these addresses, there were 118 properties where the survey was applicable (Table 1).[1]

[1] The total number of *distinguishable* addresses located within the survey area up to 2.5 km was 133. All properties were visited in person by the surveying team between August 20 and 23 2008. There were 15 addresses where the survey was deemed **"<u>Not</u> Applicable",** which refers to vacant lots/uninhabitable (ruined) structures (10 cases), and vacation properties, i.e. weekly renters (5 cases).

Table 1. Status of Primary Study Area Socio Economic Survey

Status	#
Acceptances	77
Refusals	10
No responses	23
Multiple property owners	8
TOTAL	118

Out of these 118; a total of **95 addresses** were surveyed and interviews were deemed "completed". Completed interviews among **surveyed property dwellers include:**

Completed surveys	
Acceptances	77
Refusals	10
Multiple property owners	8
sub-Total	**95**
Incomplete surveys	
No responses	23
Sub-Total	*23*
==========	==========
TOTAL	**118**

Multiple property owners refer to people who own more than one property in the PSA. To avoid "double or multiple" representation of the same opinions, only one survey (referred to as the "main" survey) was conducted with each of the owners. Those 'main' surveys are included within the **87 completed surveys** (i.e. as acceptances or refusals).

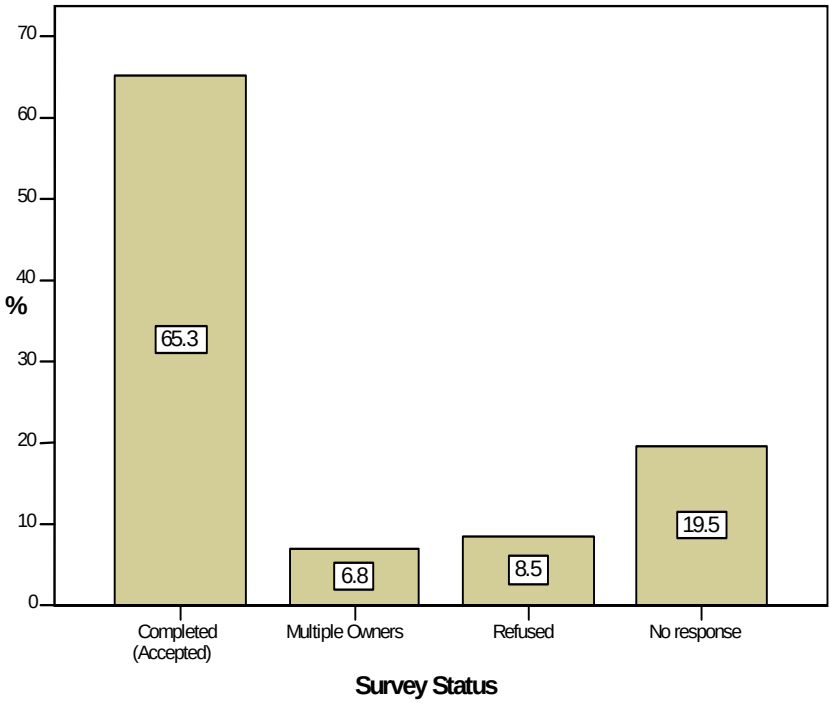
In the cases where no resident was found, the survey team left behind a "Sorry We Missed You" card after each visit. The card provided an e-mail and phone number to call to arrange for an alternative interview time. After a minimum of 3 attempts whereby the survey team was unable to located an interviewee (including at least one attempt on the weekend), the residence was defined as a **"No Response"**. There were 23 such cases in total. It is assumed that there could also be 'multiple owners' among the 23 property owners that were not reached.

It is important to note that 5 residents contacted the survey team through the information provided on the "Sorry We Missed You" card. Residents were allowed 2 complete weeks after the survey date to be interviewed by phone.

1.3 Response rate

In summary, we registered the opinion of 81% of residents in the PSA. **The statistical analysis presented in this report is based on all surveys that were completed with respondents who accepted to be interviewed (i.e. n = 77)**. The analysis uses the completed accepted surveys to represents 100% of the surveyed population. The overall survey status, i.e. the response rate, is summarized in Figure 3.

Figure 3. Survey response rate based on all identifiable cases, n=118 (Percent)



1.4 Data limitations

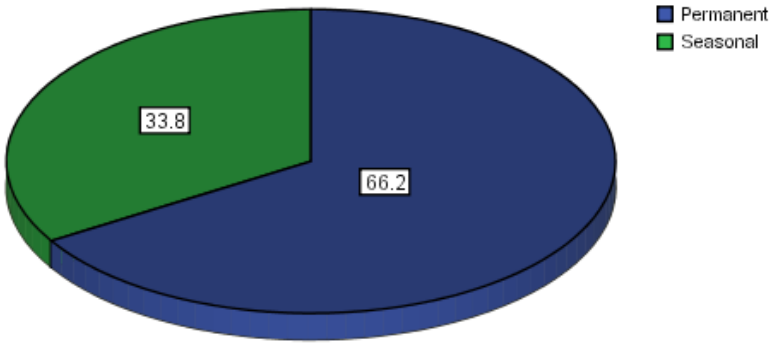
The survey was conducted on properties taken from all municipal records that displayed structures built on them and were identifiable by address plates. Only these properties were deemed eligible for surveying.

2.0 Results

2.1 Community profile: Types of residences

Of the 77 survey respondents, 87.0% (67) identified their properties as homes, 1.3% (1) as solely a business and 11.7% (9) as both a home and a business. Of the businesses, there are 5 farm or cattle ranches, 0 industrial business and 5 service businesses (e.g. artists, used car dealer). Because there is only one sole business and 9 home-business combinations, they will be combined for evaluation purposes. From the total population surveyed, 51 are permanent residents (66.2%) where as the remaining 26 are seasonal (33.8%) (Figure 4).

Figure 4. Is this your permanent or seasonal residence? (Percent)



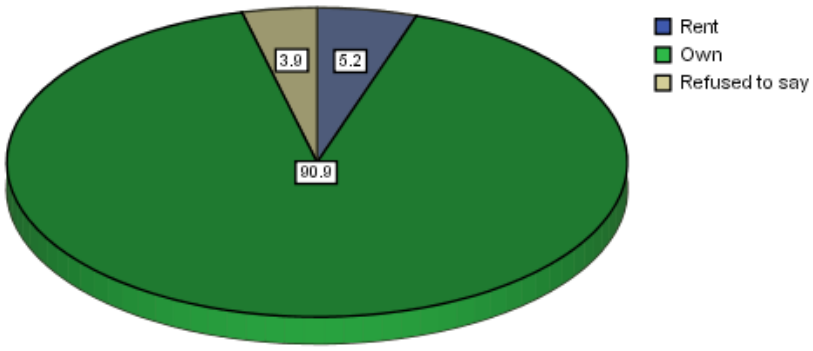
Of the 26 seasonal residents, the average length of time spent in a year by respondents at their residence in the PSA is 6.0 months. Respondents state summer as the most commonly visited season (100%), spring is second most visited (65.2%), fall is third most visited (56.5%) and winter the least commonly visited season (30.4%) (Table 2).

Table 2. During which seasons do you stay here?

Season	Count	% of Responses
Summer	26	100%
Spring	15	65.2
Fall	13	56.5
Winter	7	30.4

Of all 77 respondents, a majority own their property (90.9%), while only 5.2% rent the property they dwell in; 3.9% would not divulge the status of ownership (Figure 5).

Figure 5. Do you rent or own this residence? (Percent)

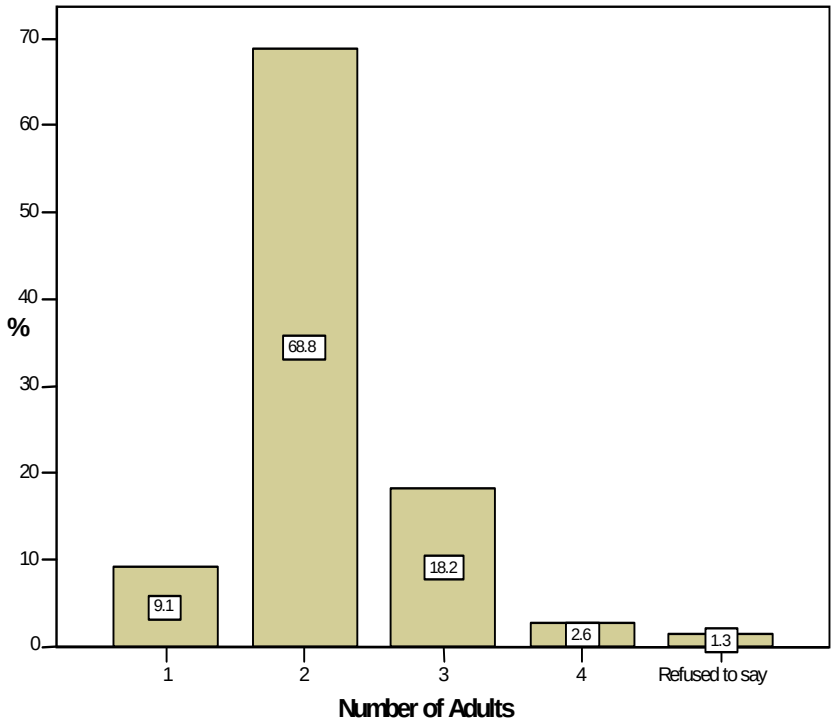


Clustered properties included two trailer parks located in the PSA, located along Lake Ontario, west of South Bay: Smuggler's Cove Resort and Family Campground (located at 3187 County Road 13) and the Johnsons RV Park, Marina & Cottages (located at 3235 County Road). Of the two trailer parks, the owner of the Johnson Trailer and RV Park granted permission to survey trailer park residents.

2.2 Community profile: demographics

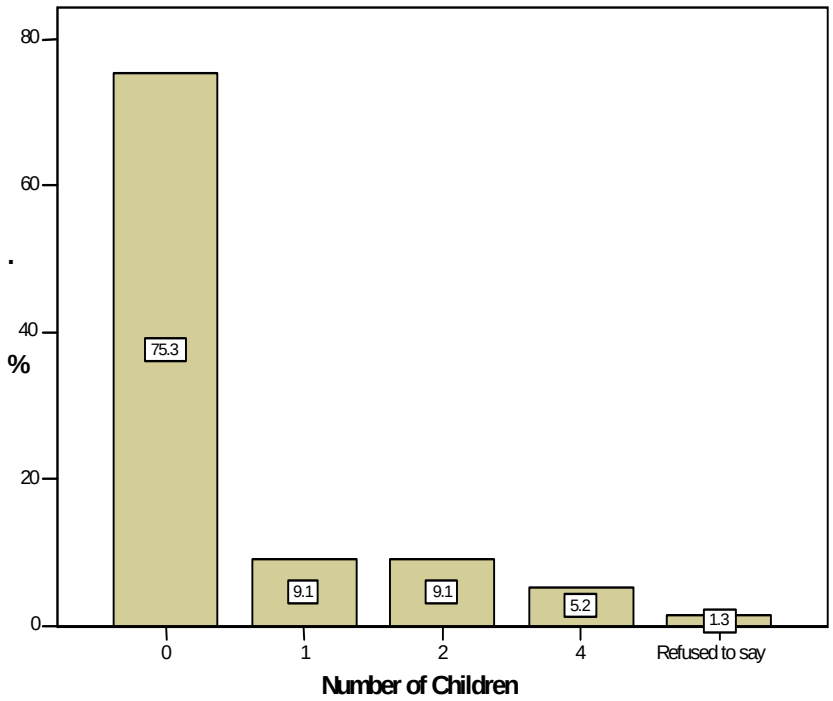
Considering that each respondent represents the opinion of one household, then the 77 respondents represent 171 adults and 42 children living in surveyed households in the PSA. From the total surveyed population, 62.3% are male and 37.7% are female. The majority of properties (68.8%) have 2 adults (over 18) staying at the property; 9.1% of respondents indicate only 1 adult, while 3.9% specified 4 or more adults over 18 stay at the property (Figure 6). The average number of adults per household is 2.22.

Figure 6. How many adults over 18 live here? (Percent)



75.3% indicated that no children under the age of 18 stay at the property, while 23.4% respondents indicate anywhere from 1 to 4 children stay at their property (Figure 7). As there are 42 children recorded in the area, the average number of children per property is less than 1 (0.55).

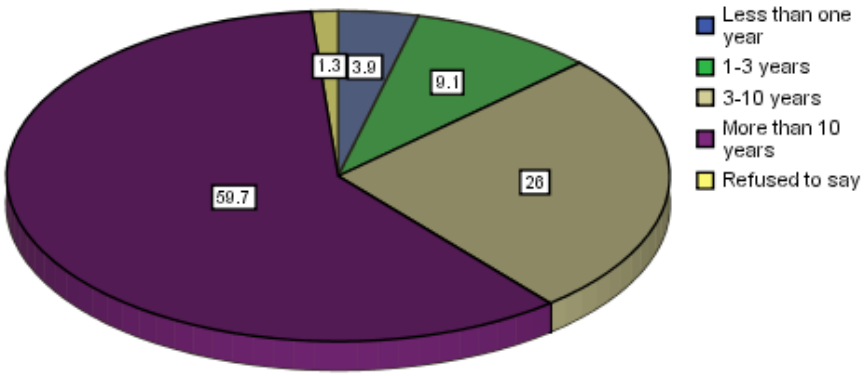
Figure 7. How many children under 18 live here? (Percent)



Length of residency

The majority of residents were long-term, having lived at their residence for more than 10 years (59.7%) (Figure 8); the team found several cases of people living all of their lives at their location, including people in the 60 to late 70 age range.

Figure 8. How long have you lived in this residence? (Percent)



Time spent at home

Of the respondents, 42.1% of people work outside the home. During weekdays from Monday to Friday respondents indicate they typically spend 18.3 hours at home, on average. During weekends, on Saturdays and Sundays, they indicate that they spend 21.0 hours at home, on average. It is important to note that these values take sleeping hours into account and also represent a common pattern for seasonal home use. On average, the majority of respondents indicate they drive 1-2 times

or less per weekday to and from their property (70.1%), while 20.8% say they drive 3-4 times per weekday, and 9.1% drive more than 5 times to and from the home (Note each way is counted as a separate event).

Community assets

Respondents were also asked what they consider community assets, that is what they like and value about living in their community. They were told they could provide multiple responses for this inquiry. The top three responses considered community assets include quietness (18.0%), nature/natural beauty of the area (15.6%), and rural appeal (12.9%). Water features/lake, neighbours and distance from the city are also notable community assets (Table 3).

Table 3. What is it that you like about living in this community?

Community Assets	Count	% of Responses
Quietness	53	18.0
Nature / natural beauty	46	15.6
Rural appeal	38	12.9
Water features / lake	35	11.9
Neighbours	31	10.5
Far from city	28	9.5
Community Cohesiveness	21	7.1
Recreational activities close by	15	5.1
Family heritage	7	2.4
Proximity to work	5	1.7
Other	15	5.1
TOTAL	294	100.0

2.3 Quality of life

Activities engaged in around the home

While at their properties respondents engage most frequently in gardening, yard work and maintenance, as well as "other" activities. Many residents also commonly engage in cleaning, reading, relaxing and sports and outdoor games. Other activities include watching TV, playing with their pet, art, using the computer, listening to music, praying and watching movies, to name only a few. (Table 4).

Table 4. What activities do you engage in while you are at the home (this location)?

Activity	Count	% of Responses
Gardening	45	16.0
Yard Work and Maintenance	44	15.7
Reading	29	10.3
Cleaning	28	10.0
Relaxing	24	8.5
Sports or outdoor games	24	8.5
Barbequing	15	5.3
Entertaining outdoors	14	5.0
Children's outdoor activities	9	3.2
Childcare	5	1.8
Other	44	15.7
TOTAL	281	100.0

*****Note respondents were asked to provide multiple responses for this inquiry.

Activities engaged in within 3km of the home

The most commonly cited activities which respondents engage in, within 3 km of the home, include swimming (14.1%), walking along roads (13.7%), bicycling (11.1%), boating (9.8%), birdwatching (7.3%) and fishing (7.3%) (Table 5).

Table 5. What recreation activities do you or other members of this household engage in within a 3 *km radius* of your house?

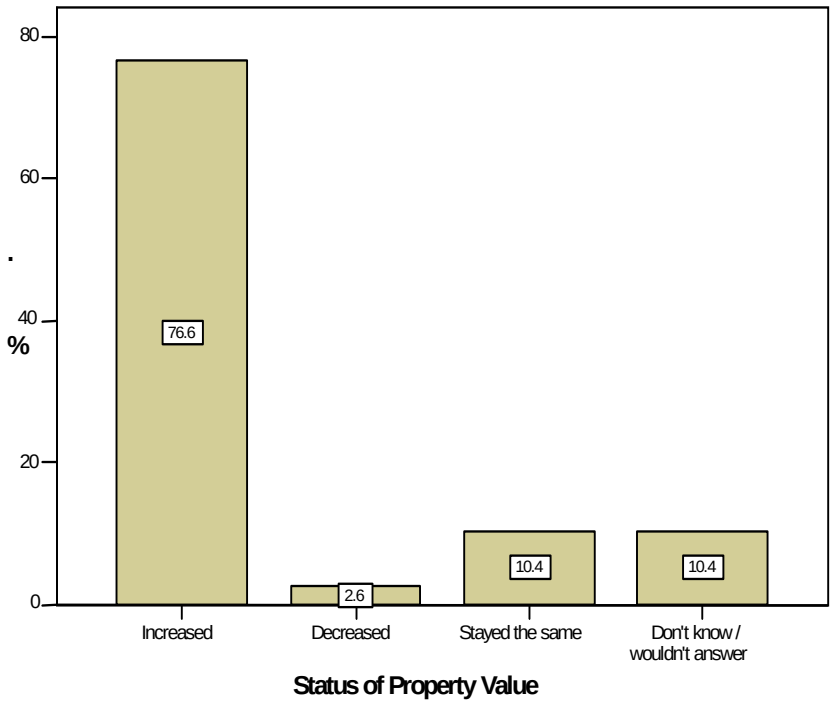
Activity	Count	% of Responses
Swimming	33	14.1
Walking (along roads)	32	13.7
Bicycling	26	11.1
Boating (water activities)	23	9.8
Bird watching	17	7.3
Fishing	17	7.3
Hiking (off roads)	10	4.3
Soccer	9	3.8
ATVing	7	3.0
Hunting	6	2.6
Jogging/running	6	2.6
RVing (Recreational Vehicle)	5	2.1
Camping	5	2.21
Community Gardening	5	2.1
Cross-country skiing	5	2.1
Kite flying	2	0.9
Snowmobiling	2	0.9
Other	24	10.3
TOTAL	224	100.0

*****Note respondents were asked to provide multiple responses for this inquiry.

Property value characteristics: past and future

The majority of respondents (76.6%) believe their property values increased over the last 3 years (Figure 9). Respondents who answered this question (45 cases) indicate that property values have increased by approximately 29.2%. Although 2.6% of respondents claimed their property value decreased, only 1 respondent provided an estimate as to how much the value decreased; they indicate that it has decreased approximately 5%. 10.4% respondents did not know or would not say how much their property value changed in the past 3 years.

Figure 9. Can you tell me if the property value for this residence has increased, decreased or stayed the same in the last 3 years? (Percent)



When asked about why property values have changed respondents cite market forces e.g. the economy, real estate market, taxes, etc., as the most common reason (29.3%). Market forces are cited as a reason why property values have both increased and decreased in the last 3 years. Respondents also cite the demand for waterfront property (21.7%), particularly by seasonal residents, as a reason for the increase in their property value. Other notable responses for the increase in the property value include the population increase in the area (13.0%) and the area's desirability (12.0%) e.g. lifestyle, natural beauty and location (Table 6).

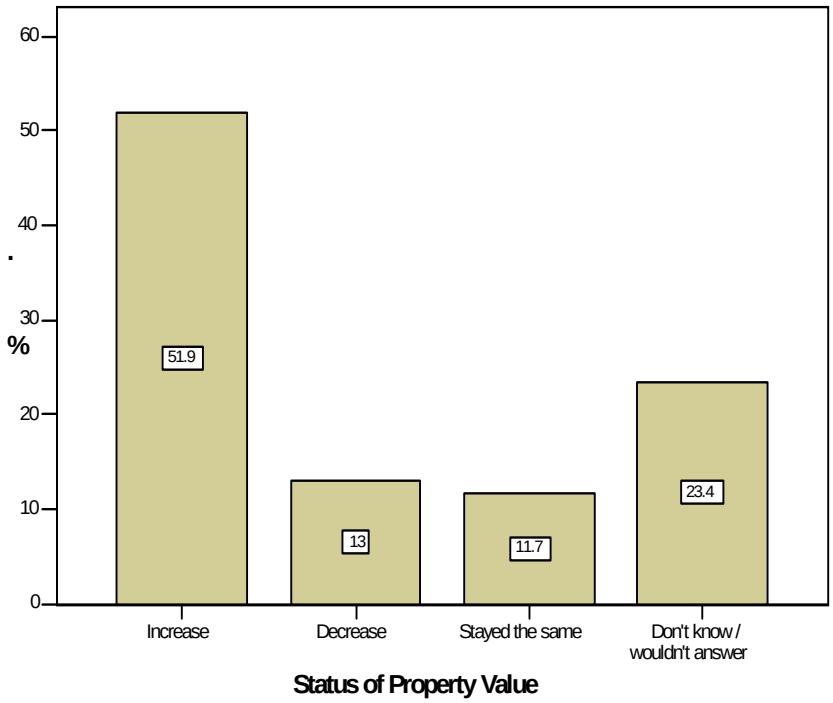
Table 6. Why have they increased/decreased or stayed the same in the last 3 years?

Reason	Count	% of Responses
Market forces	27	29.3
Waterfront property appeal	20	21.7
Desirability	15	12.0
Population increase (city people moving in)	12	13.0
Business opportunities	7	7.6
Recreational area (tourism)	5	5.4
Retirement demand	3	3.3
Renovation	2	2.2
Development (housing)	2	2.2
Wouldn't say/don't know	2	2.2
Other	1	1.1
TOTAL	89	100.0

*Note respondents were asked to provide multiple responses for this inquiry.

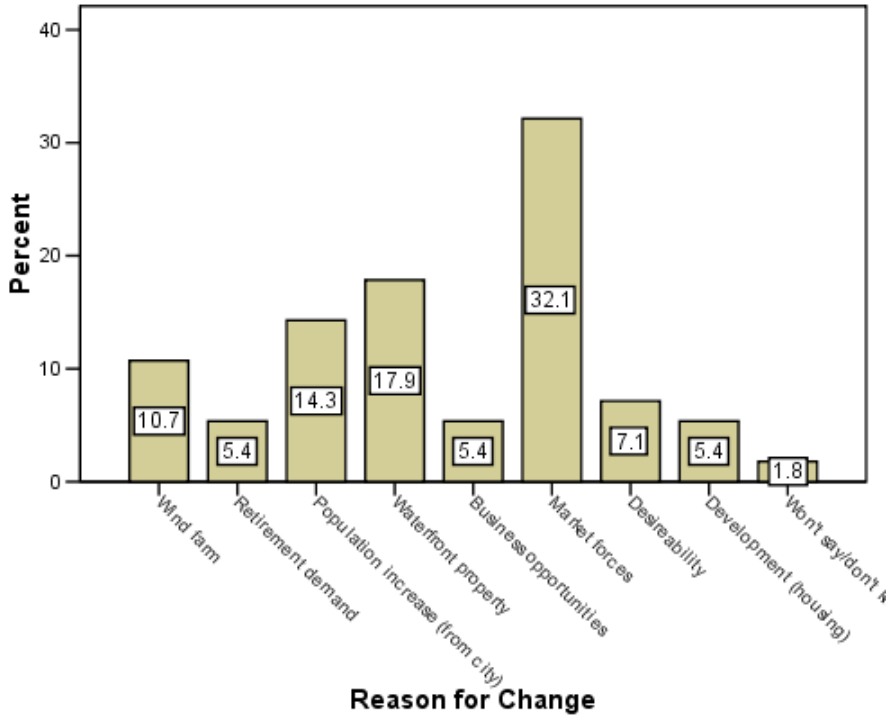
Of all of the respondents, 51.9% believe that property values will increase in the next 3 years, while 13.0% believe property values will decrease; 11.7% believe they will stay the same; and 23.4% don't know or would not answer (Figure 10). The results show that the almost 1 in every 4 respondents cannot estimate or would not answer this question.

Figure 10. Given what you know about how the community is changing, do you think property values will increase, decrease or stay the same over the next 3 years? (Percent)



The majority of respondents list market forces (32.1%) as the reason property values will change in the next three years. Respondents indicate this as both a reason why property values will increase and decrease. The rise in value of waterfront property (17.9%) is listed as a significant reason why property values will also increase (Figure 11).

Figure 11. Why will they increase/decrease or stay the same in the next 3 years? (Percent)



Of all responses, 6 (10.7%) respondents indicated that the presence of the wind farm would change their property value (Figure 11 above). Of these six respondents, 2 believe that the presence of the wind farm would bring their property value down. They also suggest that the property value will decrease due to the construction of the new housing development and the roads in the PSA will be used a lot by trucks to construct the wind farm. 1 respondent believes the wind farm would increase the value; and 1 believes their property value will stay the same because there are not many wind farms in the area. Two respondents purport that the value of their property will change depending on the specifications on this project, i.e. location. When compared with their favour for the wind farm, 50% (3) were in support and 50% (3) were opposed to the proposed project.

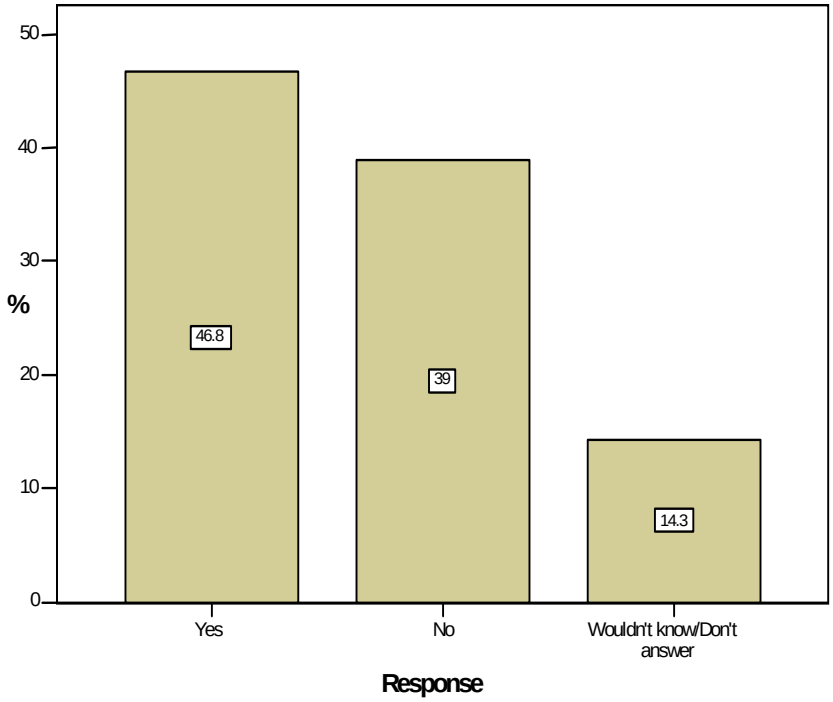
Of the 77 respondents, those who identified their properties as being businesses and home-business combinations maintain that their property values have increased in the last 3 years (9.1%) (Appendix I). Business and home & business combinations maintain that their property values will increase in the next 3 years (9.1%) (Appendix I).

2.4 Effects and impacts of wind farm

Opinion on perceived effects on community

Of all 77 respondents, 46.8% believe that the wind farm will have an effect on how people live in the *community*[2]; while 39.0% believe the wind farm will not effect how people live in the community; 14.3% respondents don't know or would not provide an answer (Figure 12).

Figure 12. Do you think the wind farm will have an effect on how people live in this community? (Percent)

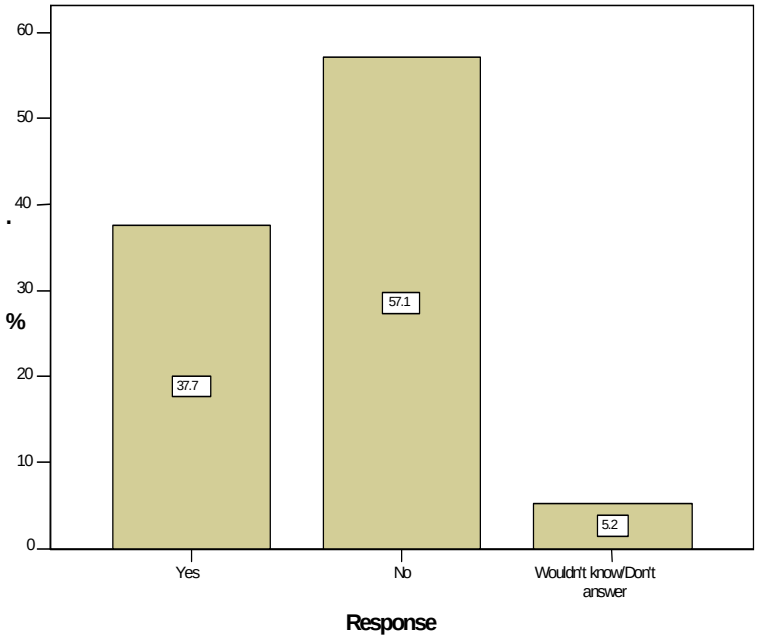


Opinion on perceived effects on household

Of all 77 respondents, 57.1% respondents state that the wind farm will not have an effect on their household, 37.7% indicate that the wind farm will have an effect on their household and 5.2% respondents wouldn't know or did not answer (Figure 13).

[2] Community: Given the various characteristics by resident, stages of life, and level of use of local assets, the question employs the term community to refer to a flexible geographical unit as opposed to county or neighbourhood because asking about the 'community' level allows residents to connect with those spaces that are meaningful to them and which are conditioned by their degree of exposure and spatial mobility, e.g. frequently used community features, kind of social activities a person engages in, distance to workplaces, etc. In the sense it is left to the respondent to identify the extent of such a social defined pace.

Figure 13. Do you think the wind farm will have an effect on <u>you and your household</u>? (Percent)



Relationship between perceived community and household effects

If both questions are examined together, of all respondents 31.2% believe that the wind farm will have an effect on both their community and their household; while 35.1% believe that their will be neither an effect on the community nor to their household. Of all respondents, 13.0% believe that it would not produce an effect their household but it would effect their community; and 3.9% believe it will not affect the community but it will affect their household (Table 7).

Table 7. Do you think the wind farm will have an effect on how people live in this community? * Do you think the wind farm will have an effect on you and your household? Cross tabulation

		Do you think the wind farm will have an effect on you and your household?			Total
		Yes	No	Wouldn't know/ Don't answer	
Do you think the wind farm will have an effect on how people live in this community?	Yes	24 31.2%	10 13.0%	2 2.6%	36 46.8%
	No	3 3.9%	27 35.1%	0 0.0%	30 39.0%
	Wouldn't know/Don't answer	2 2.6%	7 9.1%	2 2.6%	11 14.3%
Total		29 37.7%	44 57.1%	4 5.2%	77 100.0%

Relationship between demographics and perceived community and household effects

As mentioned earlier, of all respondents, 46.8% believe the wind farm will have an effect on how people live in the community, while 37.7% believe the wind farm will have an effect on their household. This section serves to provide more detail on the demographic characteristics of the populations that feel their will and will not experience an effect. The majority of homes (47.8%) believe the wind farm will have an effect on the community, while the majority of business and home-business combinations (50.0%) believe it will not have an effect on the community (Appendix I). The majority of businesses and home-business combinations (80.0%) do not believe that the wind far will have an effect on their household (Table 8).

Table 8. Is this a home or a business, or both? * Do you think the wind farm will have an effect on you and your household? Cross tabulation

	Do you think the wind farm will have an effect on you and your household?			Total
	Yes	No	Wouldn't know / Don't answer	
Home	27 **40.3%**	36 **53.7%**	4 **6.0%**	67 **100.0%**
Business & Home-Business combinations	2 **20.0%**	8 **80.0%**	0 **0.0%**	10 **100.0%**
Total	29 **37.7%**	44 **57.1%**	4 **5.2%**	77 **100.0%**

Based on the type of occupancy, 65.4% of seasonal residents and 37.3% of permanent residents believe the wind farm will have an effect on the community. (Table 9).

Table 9. Is this your permanent residence or a seasonal residence? * Do you think the wind farm will have an effect on how people live *in this community*? Cross tabulation

	Do you think the wind farm will have an effect on how people live in this community?			Total
	Yes	No	Wouldn't know/Don't answer	
Permanent	19 **37.3%**	22 **43.1%**	10 **19.6%**	51 **100.0%**
Seasonal	17 **65.4%**	8 **30.8%**	1 **3.8%**	26 **100.0%**
Total	36 **46.8%**	30 **39.0%**	11 **14.3%**	77 **100.0%**

Table 10 provides an overview of the type of occupancy and the effect at the household level. The data shows that 46.2% of seasonal residents believe the wind farm will have an effect on their household, while 64.7% of permanent residents believe the wind farm will not have an effect on their household (Table 10).

Table 10. Is this your permanent residence or a seasonal residence? * Do you think the wind farm will have an effect on *you and your household*? Cross tabulation

	Do you think the wind farm will have an effect on you and your household?			Total
	Yes	No	Wouldn't know / Don't answer	
Permanent	17 **33.3%**	33 **64.7%**	1 **2.0%**	51 **100.0%**
Seasonal	12 **46.2%**	11 **42.3%**	3 **11.5%**	26 **100.0%**
Total	29 **37.7%**	44 **57.1%**	4 **5.2%**	77 **100.0%**

Possible effects of wind farm at Ostrander Point

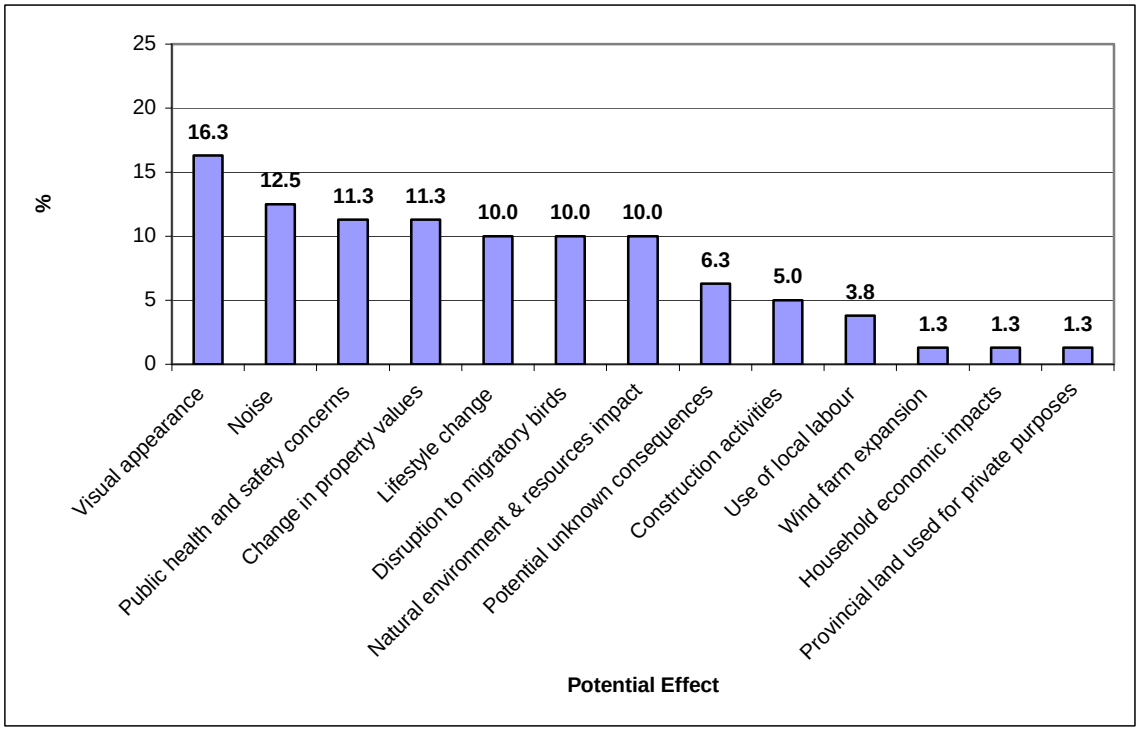
Of all possible effects, the "visual appearance" and "noise" from wind turbines are the largest concerns with 16.3% and 12.5% of respondents listing it, respectively. "Public health and safety" and "change in property values" are tied as the third highest concern, with 11.3% of responses, respectively (Table 11 and Figure 14).

Table 11. Possible effects of wind farm to the community during operation as perceived by respondents

Potential effect	Count	% of Responses
Visual appearance	13	16.3
Noise	10	12.5
Public health and safety concerns	9	11.3
Change in property values	9	11.3
Lifestyle change	8	10.0
Disruption to migratory birds	8	10.0
Natural environment & resources impact	8	10.0
Project may have unknown consequences	5	6.3
Construction activities	4	5.0
Use of local labour	3	3.8
Wind farm expansion	1	1.3
Household economic impacts	1	1.3
Provincial land used for private purposes	1	1.3
TOTAL	80	100.0

*****Note respondents were permitted to provide multiple responses for this inquiry.

Figure 14. Possible effects of wind farm to the community during operation as perceived by respondents



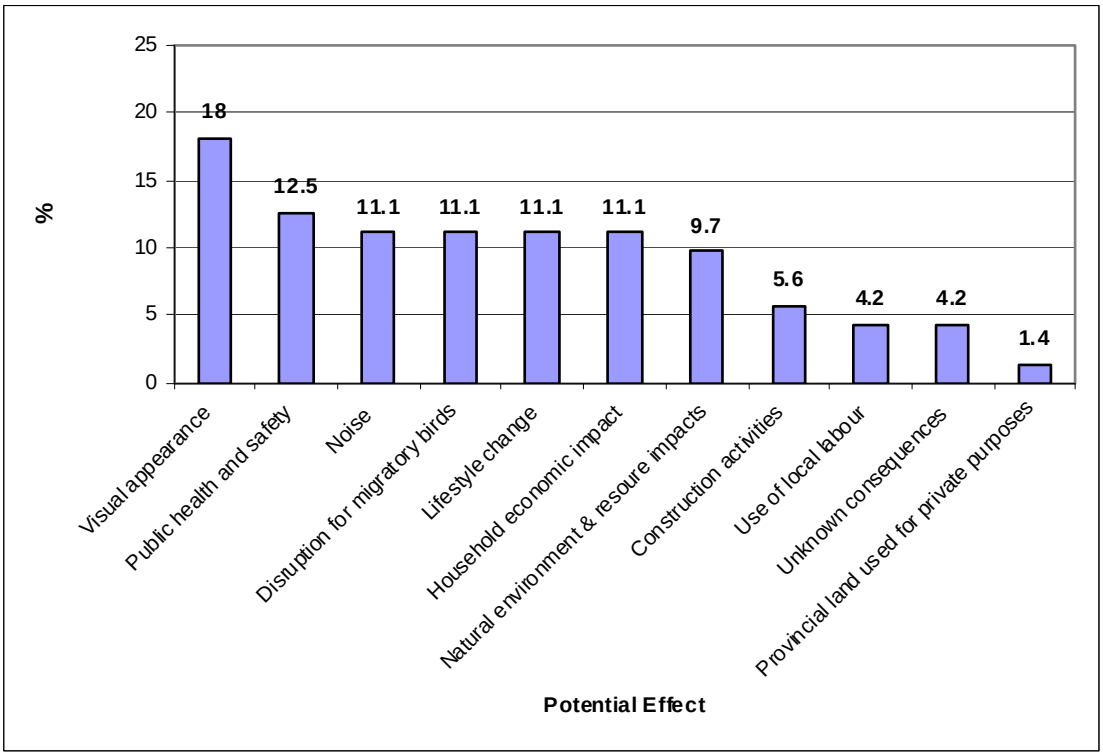
Ranking of importance of concerns during wind farm operation

Respondents were asked to indicate the three most important effects to them and their households regarding the wind farm operation. Table 12 provides an overview of each effect identified by each respondent. The effects are then connected with the degree of importance that was as perceived by the respondents. The table demonstrates that most respondents (13) listed "visual" as the most common answer, and the majority of these respondents placed the highest level of importance to this effect (10 cases for *most important*). The second most common effect is "public health and safety" with 6 respondents listing it as *most important* and 2 respondents ranking it *important*; "noise", "disruption for migratory birds", "lifestyle change" and "household economic impact" rank third; with the majority of respondents ranking it *most important*. Figure 15 provides a graphical overview of the number of respondents for each specific potential effect.

Table 12. Perceived importance of potential effects

Concern	Perceived Importance				Total	Average Importance (1-10)
	Least Important (1-2)	Important (3-5)	Very Important (6-8)	Most Important (9-10)		
1.Visual appearance	0 **0.0%**	0 **0.0%**	3 **23.1%**	10 **76.9%**	13 **100.0%**	**9.4**
2. Public health and safety	1 **11.1%**	2 **22.2%**	0 **0.0%**	6 **77.8%**	9 **100.0%**	**8.0**
3. Noise	0 **0.0%**	1 **12.5%**	1 **12.5%**	6 **75.0%**	8 **100.0%**	**9.1**
4. Disruption for migratory birds	1 **12.5%**	0 **0.0%**	2 **25.0%**	5 **62.5%**	8 **100.0%**	**8.1**
5. Lifestyle change	0 **0.0%**	0 **0.0%**	2 **25.0%**	6 **75.0%**	8 **100.0%**	**9.1**
6. Household economic impact	0 **0.0%**	0 **0.0%**	2 **25.0%**	6 **75.0%**	8 **100.0%**	**95**
7. Natural environment & resources impact	0 **0.0%**	1 **14.3%**	1 **14.3%**	5 **71.4%**	7 **100.0%**	**8.6**
8. Construction activities	1 **25.0%**	1 **25.0%**	1 **25.0%**	1 **25.0%**	4 **100.0%**	**7.5**
9. Use of local labour	0 **0.0%**	1 **33.3%**	1 **33.3%**	1 **33.3%**	3 **100.0%**	**7.3**
10. Project may have unknown consequences	0 **0.0%**	0 **0.0%**	0 **0.0%**	3 **100.0%**	3 **100.0%**	**9.7**
11. Provincial land used for private industry	0 **0.0%**	0 **0.0%**	1 **100.0%**	0 **0.0%**	1 **100.0%**	**7**
				Total	**72** **100.0%**	

Figure 15. Potential effects stated with some level of importance (Percent)



Mitigation of effects

In light of the potential effects perceived and expressed by the respondents, they were also asked to provide their ideas on how the effects on their community or household (or business) can be reduced or minimized. A summary of their suggestions is provided in Appendix II.

Overall respondents offered suggestions to address the visual appearance, noise disturbances, transmission lines, health concerns, environmental impacts, economic affects, transportation concerns, social affects and public consultation concerns. For visual appearance, respondents suggest the wind farm be placed in a different location, either offshore, west or 2km from the current proposed site. Tree cover to hide the turbines or reducing the height of wind turbines is also suggested.

To address possible noise disturbances, respondents suggest that the noise level be regularly monitored to ensure that site is keeping noise level to a minimum. If noise levels increase, they can be reduced. One suggestion was to broadcast the future noise level wind turbines produce with speakers for people to hear and understand its volume.

Respondents suggested that transmission lines either be moved to another location or placed solely underground. To ensure health and safety are maintained respondents suggested towers be lowered to reduce the strobe effect and undertake research to ensure optimal health and safety standards are met.

Environmental impacts can be reduced using smaller-size wind turbines, placing lights on turbines so birds can see them, and fencing in the farm to protect from both wildlife and birds.

To respond to residents concerned regarding potential economic impacts, respondents state that property taxes should be lowered, ensure the wind turbine is no closer than 2 km from any property, compensation for a decrease in property values, ensure local labour is used, and create economic incentives to ensure owner buy-in.

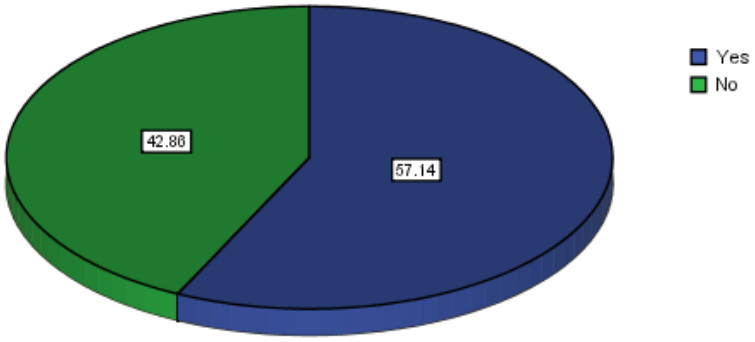
Transportation issues have been a prior concern of residents. To address this reasonable speed limits should be put in place and enforced, roads should be improved (reconstructed, repaved), the number of lanes along the roads should be expanded and seasonal roads should be fixed.

To safeguard their social environment, respondents purport that the wind farm should be moved to the western part of the island and only local traffic should use County Road 13. Many respondents also indicated the need for adequate, frequent and convenient public consultation.

2.5 Effects of construction

Of all respondents, 57.1% are concerned about construction activities at the site and 42.9% are not concerned (Figure 16).

Figure 16. Do you have any concerns related to construction activities at this site?



Construction effects and demographics

Of all respondents, 58.2% are home dwellers who have construction related concerns; 41.8% are home dwellers with no concerns related to construction activities. From business and home-business combinations 50.0% express concerns regarding construction and 50.0% do not have construction related activities at the site (Appendix I).

Of female respondents, 62.1% have concerns related to construction activities at the site; 37.9% have no concerns. Of male respondents, 54.2% have concerns related to construction activities, and 49.8%% do not have any concerns related to these activities (Appendix I).

Of all respondents, there are 73.1% of seasonal residents who have concerns related to construction activities at the Ostrander Point wind farm site; and 26.9% are seasonal residents who express no concerns. Of permanent residents 49.0% have concerns related to construction activities; and 51.0% are permanent residents who have no concerns related to construction activities at the Ostrander Point wind farm site (Table 13).

Table 13. Is this your permanent residence or a seasonal residence? * Do you have any concerns related to construction activities at this site? Cross tabulation

	Do you have any concerns related to construction activities at this site?		Total
	Yes	No	
Permanent	25 **49.0%**	26 **51.0%**	51 **100.0%**
Seasonal	19 **73.1%**	7 **26.9%**	26 **100.0%**
Total	44 **57.1%**	33 **42.9%**	77 **100.0%**

Perceived effects from construction activities

The most commonly cited construction concerns include traffic (29.3%), noise (22.0%) and road damage (20.7%). Some concerns are also expressed about the ecosystem impacts in general (7.3%) and soil and well impacts (6.1%) (Table 14).

Table 14. What construction activities may potentially affect you?

Effect	Count	% of Responses
Traffic (volume, speed, safety)	24	29.3
Road damage	18	22.0
Noise	17	20.7
Ecosystem impacts	6	7.3
Soil and water well impacts	5	6.1
Construction (waste and litter)	3	3.7
Dust	3	3.7
Landscape changes	2	2.4
Labour (local hire)	1	1.2
Loss of privacy	1	1.2
Property values and taxes	1	1.2
Other	1	1.2
TOTAL	82	100.0

*****Note respondents were asked to provide multiple responses for this inquiry.

At the household level, similar concerns are expressed with noise and traffic, both representing 23.8% of responses; road damage and leisure activities tied for the second most important concern at the household level, totalling 9.5%, in both cases. Respondents were asked to provide multiple responses for this inquiry as well (Appendix I).

Mitigation of construction effects

In light of the potential effects perceived and expressed by the respondents, they were also asked to provide their ideas on how the effects of construction activities can be reduced or minimized for their community or household (or business). A summary of their suggestions is provided in Appendix III.

Overall, to reduce noise disturbances caused by construction respondents suggest that construction not occur during summer, and the construction be done during only specific times (e.g. 8:00 AM-4:30 PM, not after 5PM).

To safeguard the environment, survey participants stated the windfarm construction should not occur near the wetland. To ensure transportation issues are addressed, respondents suggest the choice of roads used for construction be planned carefully. They also suggest that roads be widened, speed limits be enforced (particularly for trucks), calcium be placed on roads to reduce dust, roads be improved and widened and have a policeman monitor road traffic.

The participants also stated that garbage should also be collected and brought back with the company and its workers; components for the turbines should be brought in my boat or plane; and residents should be provided an opportunity to file complaints and these complaints should be addressed in a timely manner.

2.6 Support for wind energy programs and infrastructure

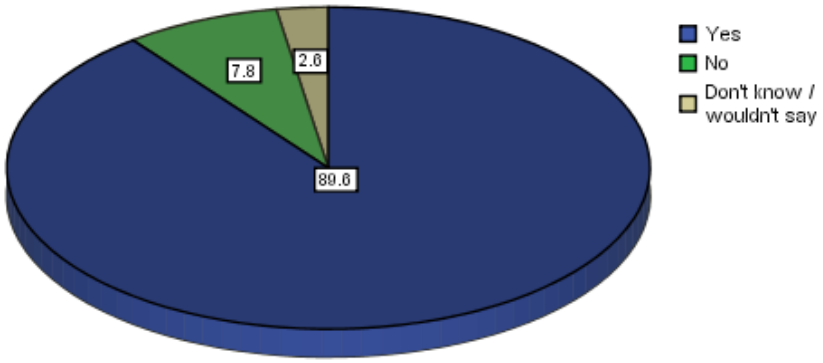
When asked about their position in support of wind energy programs and infrastructure, 89.6%[3] are in favour and 7.8% are *not* in favour in Ontario; 2.6% of respondents did not know or would not state their opinion on favourability (Table 15 and Figure 17).

Table 15. Are you in favour of wind energy programs and infrastructure being installed in Ontario?

	Frequency	Percent
Yes	69	89.6
No	6	7.8
Don't know / wouldn't say	2	2.6
Total	77	100.0

[3] This compares to similar results found in Atlantic Canada where support for the use of wind power reaches 95%. Source: Preferences for Wind Power oin Atlantic Canada. Report prepared by Jacques Whitford August 2008.

Figure 17. Are you in favour of wind energy programs and infrastructure being installed in Ontario? (Percent)

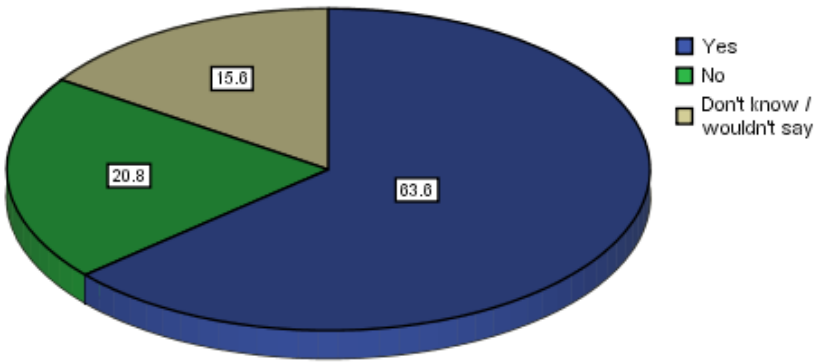


Of all respondents, 63.6% are in favour of wind energy programs in their community (i.e. in the PSA); 21.3% are not in favour of wind energy in their community, while 15.6% do not know or will not say (Table 16 and Figure 18).

Table 16. Are you in favour of wind energy programs and infrastructure being installed in your community? (Percent)

	Frequency	Percent	Cumulative Percent
Yes	49	63.6	64.6
No	16	20.8	84.4
Don't know / wouldn't say	12	15.6	100.0
Total	77	100.0	

Figure 18. Are you in favour of wind energy programs and infrastructure being installed in your community? (Percent).



Favour in Ontario vs. Favour in Community

There are 62.3% of respondents who are in favour of wind energy programs and infrastructure both in Ontario and in their community and 5.5% who are opposed to both. There are 14.3% who are in favour in Ontario but opposed in their community (Table 17).

Table 17. Are you in favour of wind energy programs and infrastructure being installed in Ontario? * Are you in favour of wind energy programs and infrastructure being installed in your community? Cross tabulation

		Are you in favour of wind energy programs and infrastructure being installed in your community?			Total
		Yes	No	Don't know / wouldn't say	
Are you in favour of wind energy programs and infrastructure being installed in Ontario?	Yes	48 62.3%	11 14.3%	10 13.0%	69 89.6%
	No	1 1.3%	5 6.5%	0 0.0%	6 7.8%
	Don't know / wouldn't say	0 0.0%	0 0.0%	2 2.6%	2 2.6%
Total		49 63.6%	16 20.8%	12 15.6%	77 100.0%

Favourability and demographic information

Of all females, 48.3% are in favour of wind energy programs and infrastructure being installed in their community; 27.6% are not in favour; and 24.1% don't know or wouldn't say. Of all males, 72.9% are in favour of wind energy in their community; 16.7% are not in favour in their community; and 10.4% don't know or would not say (Table 18).

Table 18. Gender * Are you in favour of wind energy programs and infrastructure being installed in your community? Cross tabulation

	Are you in favour of wind energy programs and infrastructure being installed in your community?			Total
	Yes	No	Don't know / wouldn't say	
Female	14 48.3%	8 27.6%	7 24.1%	29 100.0%
Male	35 72.9%	8 16.7%	5 10.4%	48 100.0%
Total	49 63.6%	16 20.8%	12 15.6%	77 100.0%

Of home dwellers, 91.0% are in favour of wind energy in Ontario; 7.5% are not in favour. Of business and home-business combinations, 80.0% are in favour of wind energy in Ontario; 10.0%% are not in favour and 10.0% did not know or would not say (Appendix I).

Of home dwellers, 65.7% are in favour of wind energy programs in their community and 19.4% that are not in favour; 14.9% are home residents and don't know or would not express their opinions. Of all business and home-business combinations 50.0% are in favour of wind energy in their community; 30.0% are not in favour in their community; and 20.0% did not know or would not say if they were in favour (Appendix I).

Length of residence and support for wind energy programs

Of all respondents who have resided in the PSA for less than 3 years 66.0% are in favour of wind energy programs and infrastructure being installed in their community, 30.0% do not know or would not say (Table 19). Of respondents who have resided in the PSA for more than 10 years, 63.0% are in favour of wind energy programs and infrastructure being installed in their community, 24.0% are not in favour and 13.0% do not know or would not say.

Table 19. How long have you lived in this residence? * Are you in favour of wind energy programs and infrastructure being installed in your community? Cross tabulation

	Are you in favour of wind energy programs and infrastructure being installed in your community?			
	Yes	No	Don't know / wouldn't say	Total
Less than 3 years	6 **66.0**	1 **10.0%**	3 **30.0%**	10 **100.0%**
3-10 years	13 **65.0%**	4 **20.0%**	3 **15.0%**	20 **100.0%**
More than 10 years	29 **63.0%**	11 **24.0%**	6 **13.0%**	46 **100.0%**
Refused to say	1 **100.0%**	0 **0.0%**	0 **0.0%**	1 **100.0%**
Total	49 **89.6%**	16 **7.8%**	12 **2.6%**	77 **100.0%**

In examining Table 19 above in more detail, calculations show that the majority respondents who are in favour of wind energy programs and infrastructure being install in their community have resided in the community for more than 10 years (59.2%), while 38.8% have been residents for 0 to 10 years. Of those respondents who are not in favour, 68.8% have resided in the community for more than 10 years, while 12.2% have resided for less than 10 years.

2.7 Interviewees comments

Interviewees expressed concerns about the changes, impacts and improvements to the environmental, economic and social environment of Ostrander Point as a result of the wind farm. These commentaries are listed and categorized in Appendix IV. Environmental concerns range from ecosystem and natural resource impacts to, more specifically, the impact on the migratory bird route. Commentary was made about the environmentally friendly nature of wind energy and its appropriateness in the community as an environmental solution.

Comments regarding economics ranged from queries about changes in property values and taxes to the cost of energy after the construction of the project. Respondents generally inquire about the transparency of the project and its financial benefits to PEC.

Social commentary was numerous and ranged from concerns regarding the visual, noise, construction and health concerns already stated in previous sections to concerns regarding industry and population encroachment. People remain committed to participating in community consultation and state that they expect efforts from the companies themselves to communicate with the residents.

Respondents also noted their preference for solar energy, and a few respondents noted their partiality toward nuclear. Many respondents however made final notes in strong support of the construction of a wind farm.

(*) 5 interviewees enquired about Gilead's contact number to request further information.

Appendix I

Is this a home or a business, or both? * Can you tell me if the property value for this residence has increased, decreased or stayed the same in the last 3 years? Cross tabulation

	Can you tell me if the property value for this residence has increased, decreased or stayed the same in the last 3 years?				Total
	Increased	Decreased	Stayed the same	Don't know / wouldn't answer	
Home	52 67.5%	2 2.6%	7 9.1%	6 7.8%	67 87.0%
Business & Home-Business combinations	7 9.1%	0 0.0%	1 1.3%	2 2.6%	10 13.0%
Total	59 76.6%	2 2.6%	8 10.4%	8 10.4%	77 100.0%

Is this a home or a business, or both? * Given what you know about how the community is changing, do you think property values will increase, decrease or stay the same over the next 3 years? Cross tabulation

		Given what you know about how the community is changing, do you think property values will increase, decrease or stay the same over the next 3 years?				Total
		Increased	Decreased	Stayed the same	Don't know / wouldn't answer	
Is this a home or a business, or both?	Home	33 42.9%	10 13.0%	8 10.4%	16 20.8%	67 87.0%
	Business & Home-Business combinations	7 9.1%	0 0.0%	1 1.3%	2 2.6%	10 13.0%
Total		40 51.9%	10 13.0%	9 11.7%	18 23.4%	77 100.0%

Is this a home or a business, or both? * Do you think the wind farm will have an effect on how people live in this community? Cross tabulation

	Do you think the wind farm will have an effect on how people live in this community?			Total
	Yes	No	Wouldn't know / Don't answer	
Home	32 **47.8%**	25 **37.3%**	10 **14.9%**	67 **100.0%**
Business & Home-Business combinations	4 **40.0%**	5 **50.0%**	1 **10.0%**	10 **100.0%**
Total	36 **46.8%**	30 **39.0%**	11 **14.3%**	77 **100.0%**

Is this a home or a business, or both? * Do you have any concerns related to construction activities at this site? Cross tabulation

	Do you have any concerns related to construction activities at this site?		Total
	Yes	No	
Home	39 **58.2%**	28 **41.8%**	67 **100.0%**
Business & Home-Business combinations	5 **50.0 %**	5 **50.0%**	10 **100.0%**
Total	44 **57.1%**	33 **42.9%**	77 **100.0%**

Gender * Do you have any concerns related to construction activities at this site? Cross tabulation

	Do you have any concerns related to construction activities at this site?		Total
	Yes	No	
Female	18 **62.1%**	11 **37.9%**	29 **100.0%**
Male	26 **54.2%**	22 **45.8%**	48 **100.0%**
Total	44 **57.1%**	33 **42.9%**	77 **100.0%**

Effects of Construction Perceived at the Household Level

Effect	Count	% of Responses
Noise	10	23.8
Traffic (volume, speed, safety)	10	23.8
Road damage	4	9.5
Leisure activities	4	9.5
Property values and taxes	3	7.1
Landscape changes	2	4.8
Loss of privacy	2	4.8
Construction	2	4.8
Dust	2	4.8
Ecosystem impacts	2	4.8
Tourism impact	1	2.4
Total	42	100.0

Is this a home or a business, or both? * Are you in favour of wind energy programs and infrastructure being installed in Ontario? Cross tabulation

	Are you in favour of wind energy programs and infrastructure being installed in Ontario?			Total
	Yes	No	Don't know / wouldn't say	
Home	61 91.0%	5 7.5%	1 1.5%	67 100.0%
Business & Home-Business combinations	8 80.0%	1 10.0%	1 10.0%	10 100.0%
Total	69 89.6%	6 7.8%	2 2.6%	77 100.0%

Is this a home or a business, or both? * Are you in favour of wind energy programs and infrastructure being installed in your community? Cross tabulation

	Are you in favour of wind energy programs and infrastructure being installed in your community?			Total
	Yes	No	Don't know / wouldn't say	
Home	44 65.7%	13 19.4%	10 14.9%	67 100.0%
Business & Home-Business combinations	5 50.0%	3 30.0%	2 20.0%	10 100.0%
Total	49 63.6%	16 20.8%	12 15.6%	77 100.0%

Appendix II

26. Can you share any ideas on how these effects to your community or to your household can be reduced or minimized?

Visual

1. Locate wind turbines away from sight, possibly far offshore, locate away from houses
2. Tree cover
3. Setback from road
4. Reduce the height of turbines
5. Funnel light from the top of wind turbines upward to remove from view
6. Mitigate by getting used to them
7. Refrain from putting them close to properties
8. Place the wind farm offshore
9. Place the project in the lake, but further than the shipping line

Noise

10. Not sure, provide more information to the community (conflicting reports)
11. Place traffic policeman to ensure that site is keeping noise level to a minimum
12. Monitor noise level so that if noise increases it can be reduced
13. Test noise with speakers for people to hear

Transmission lines

14. Build them in Toronto
15. Put transmission lines underground
16. Place transmission lines underground
17. Put large (hydro, voltage) poles through another section of the road
18. Information lacking regarding the size of transmission towers, as well as layout of transmission lines

Health

19. Increase setback distance
20. Clear least amount of land possible
21. Lower towers to reduce strobe light effect
22. Provincial government should do independent studies and research, look at current research that exists

Environmental

23. Consider different models that would affect less
24. Fence area around wind farm to protect wildlife and birds
25. Don't put them on Ostrander Point where birds cross (no EA has been completed for this)
26. Put lights on wind turbines for birds
27. Place transmission lines underground
28. Construct smaller wind turbines

29. Find another location where they may be a lower environmental impact
30. Ensure environment is return back to "normal" to safeguard wilderness

Economic

31. Change location to not affect property values
32. Property value is beyond anyone's control
33. Property taxes should be reduced significantly
34. Compensate monetarily for any decrease in property value
35. Hire local workers for construction
36. To not deter tourists put transmission lines underground
37. To maintain property values place transmission lines underground
38. Place wind turbines no closer than 2 km from all properties
39. Ensure environment is return back to "normal" to ensure property values don't change
40. Ensure environment is return back to "normal" to ensure tourism remains
41. Increase economic incentives for homeowners

Transportation

42. Build more roads to ease congestion
43. Fix road infrastructure by upgrading road quality and increasing the number of lanes
44. Fix seasonal roads
45. Control speed limit
46. Make road improvements to reduce traffic
47. Pave roads to do something for the community to get their favour
48. If there are road improvements, then project good for community

Social

49. Avoid driving along County Road 13 in front of homes to maintain rural appeal
50. To ensure privacy, move the wind farm to the west side of the area
51. Demonstrate how wind farm will help the individual

Public Consultation

52. Maintain communication with residents
53. Proposal seems good, but more details are required
54. Need to have community meetings
55. Ask the residents who are closer and will experience direct effects about their opinion and integrate those concerns into the planning process

Appendix III

30. Can you share any ideas on how the effects of construction activities can be reduced or minimized?

Noise

1. Restrict tractor trailer (trucks) from using Ostrander Point Road
2. Relocate project further by 2 miles
3. No construction during summer months
4. Adjust hours of operation so they do not disturb residents
5. To reduce noise ensure trucks are in good working condition
6. No construction after 5pm

Environmental

7. Construction of the wind farm should maintain a distance from the wetland area
8. Coordinate with people involved in decision making

Transportation (Roads)

9. Use Helmer Road instead of Ostrander Point Road
10. Restrict tractor trailer (trucks) from using Ostrander Point Road
11. No construction along summer months to reduce congestion and usage
12. Undertake road improvements (pave) on main and seasonal roads
13. During construction take the route where transmission lines are being built
14. If road is damaged make company liable to repair the damage
15. Enforce speed limits
16. Build a road along a secluded area where there would be little traffic
17. Do not use roads frequented by residents and tourists
18. Widen the roads
19. Inform residents which roads will be frequented by construction vehicles
20. Don't use Helmer Road
21. Build more roads to ease congestion
22. Increase the number of lanes on the road
23. Allow only local traffic on County Road 13
24. Place time limitations on when trucks can pass through roads
25. Place traffic policeman to ensure drivers adhere to speed limit (especially for truck drivers)
26. Province should expropriate properties near the proposed construction area to widen roads so as to reduce possibility of congestion
27. The route outlined is the best route currently available, so no alternate options to mitigate
28. Put calcium on roads to reduce the dust generated during construction
29. Use the major roads more frequently to reduce traffic
30. Make road improvements to reduce dirt and dust
31. Only undertake construction between 8am and 4pm
32. Do not use County Road 13, use Helmer Road because there are few houses there

Safety

33. Educate local people of safety concerns

Litter

34. Ensure garbage is collected frequently on site
35. Take the garbage that is generated by construction workers at the site with them

Dust

36. Pave roads to minimize lifting of dust

Social

37. Do not construct road along fence line for construction trucks so as to ensure privacy
38. Do not construct more roads just for construction, so to ensure remoteness of area
39. Provide residents an opportunity to complain if a problem arises; subsequently ensure that the company make adjustments where needed

General

40. To bring components in use water or air transport

Appendix IV

33. Do you have any further comments?

Environmental

General

1. Unsure as to wind energy is the right "environmental" solution
2. Will there be emissions from transmission lines?
3. Wind energy is a clean energy and it is better than nuclear
4. What is the environmental footprint of project?
5. Wind energy is environment-friendly
6. Other environmentally friendly and clean energy options exist besides wind energy
7. Developing carbon type energy will cause damage to the environment
8. Wind energy helps to reduce pollution
9. Concern expressed about the ecosystem as a result of the wind farm
10. Wrong development for PEC and for such an environmentally sensitive area (i.e. from Point Petre to Prince Edward Point)
11. Area should be kept as wildlife refuge as originally planned by the Government of Ontario
12. Support for the project as long as it is undertaken in an environmentally responsible way with proper monitoring and evaluation
13. More legislation is required to encourage conservation

Migratory Birds

14. An EA is yet to be conducted for the migratory birds
15. As bird lovers there is concern; however, unable to foresee worse affect than already caused by existing hydro-electric power lines
16. Important to consider level of disruption for the migration of the birds
17. Preference is for wind farm to be located away from the migratory bird path
18. How many maintenance workers will be stationed at wind farm during operation? – so as to clean out the birds caught in the machinery
19. Hope is that there is a minimal impact on birds

Social

Encroachment

20. Does the current project set precedent for other corporations to develop in OP
21. Not in support of wind farm being built in PSA
22. Prefer that wind farm is located away from residences
23. Concern regarding further expansion by this company at a later date
24. Reduces the remoteness of area (i.e. affects the rural appeal)
25. Concerns surrounding high population density
26. More people will move to the PSA and infringe on current level of privacy
27. Concerns regarding future wind farm development

Community consultation

28. Community consultation times were cited to be inconvenient
29. Lack of public consultation in general; the information presented at the meetings was dense and it seemed to be contradictory
30. Do not think the company has been truthful with public (few opportunities for consultation and limited details about the project)
31. Details about the project unclear or transparent to the community

Visual appearance

32. Adds beauty to the county
33. Prefer another location located away from residential area
34. Wind farm is not unattractive
35. Don't want PSA to resemble Wolfe Island

Noise

36. Noise

Health

37. Some health concerns
38. Concerned about strobe effects ability to cause seizures and nausea
39. Unsure if the flash from blades is a possible effect
40. Concerns regarding health effects caused by large-scale electricity lines

Construction, Roads

41. Concerned regarding additional construction (in addition to the housing development)
42. Are other energy corporations going to use the same transmission lines/infrastructure?
43. Wants roads to be maintained during construction
44. County should be responsible for road maintenance
45. Concerns regarding additional traffic
46. The roads requires maintenance
47. Will Babylon Rd and Ostrander Pt Road be fenced or will it be accessible?
48. Concerns regarding the additional wind being blown from the wind farm because they are essentially like big fans.

Social Policy and Practice

49. The decision for the wind farm should not be made at the municipal level but rather the provincial government
50. Should not be built on provincial land
51. It is better to build the wind farm at a smaller scale
52. Should have happened 5 years ago
53. Why is it taking so long?
54. Make the project happen
55. I hope construction of the wind farm will happen

General

56. Entire area may change

57. Moved away from Toronto to live in PSA
58. Life would change in PSA
59. Bought property because it was unspoiled by development
60. May consider moving if there are great negative effects
61. Developers of project don't live here
62. Hope there is minimal impact on residents
63. Cannot speak about the consequences for people who live in the area where the wind farm will be built
64. Wondering if there are any affects on radio frequencies
65. Good area to build the wind farm because it is sparsely populated

Economic

66. Would they be able to sell the property after construction?
67. Not particularly against wind energy but concerned about how this will affect property values
68. Hope it will reduce hydro bill
69. Green credits are the real interest behind wind farm projects
70. Concerned about whether county will benefit financially from the wind farm
71. Not a cost-effective or efficient way of producing energy
72. Concerned if there will be employment opportunities for local people after construction
73. Concerned if it is just a money making scheme
74. Ontario does not have hydro because they are selling it all to the U.S.
75. Do not know if it will affect tourism based economy in OP
76. It will decrease price of hydro
77. How will they compensate owners (property tax inquiry)?
78. Who is going to pay for the construction and maintenance of the wind farm?
79. Must prove that money spent on the wind farm will pay off
80. Desire hydro to be free

Energy

Preference

81. What is the efficiency of wind energy in comparison with solar energy?
82. Wind energy is better than nuclear
83. Solar energy is more preferred
84. I would like a wind farm – put it in my backyard
85. Would prefer a wind farm over a nuclear plant
86. In favour of wind farm if it is effective
87. In favour of domestic wind farms and energy
88. In support of solar power
89. In favour of local personal wind energy generation on domestic community basis that is small scale, rather than industrial scale
90. Favour of wind energy in general
91. I like solar energy
92. Go solar
93. We need to harness different sources of power

General

94. I need more understanding of wind projects
95. Naysayers do not now what they are talking about
96. Do not think the wind farm is a major development that has major impacts
97. Good to conduct a survey to assess the impacts
98. Would prefer if the wind farm were larger
99. There is a better destination than the PSA for the wind farm
100. What is the process to develop the project?
101. This is a good project as long as managed professionally using professional workers that will construct the project well
102. Don't see how the wind farm is harmful
103. Hope all regulations will be met throughout the entire project (environmental, construction, etc)
104. Impact of wind farm must be low
105. In favour to construct a wind farm in the county, but not sure if the Ostrander Point location is the best location
106. There are not any major impacts
107. 100% in favour of the wind farm development
108. The wind farm has to be developed
109. We need these types of projects as long as they are well thought out
110. There has been success with wind energy in Europe
111. Constructing a wind farm is not a big deal
112. Any type of clean energy is of benefit
113. What is lifespan of wind turbines?
114. How does adding new nuclear reactors (at Darlington) integrate with wind energy projects (i.e. what would happen if wind turbines are not efficient)
115. Wind energy will add electricity to the grid

Other – Wind Farm Related

116. Roads are not labeled properly on the maps (e.g. CR13 not Hwy 13)
117. Pictures of the wind turbines shown in the map during the study are not to scale, it is an underestimate of the size – especially photo of Ostrander & Babylon (A1)

Other – General

118. Do not want too many more houses being built in the PSA
119. New residential area proposed (450 homes) will be more destructive to way of life, environment and birds here in the PSA
120. Subdivision is a concern
121. Not pleased when people leaving flyers left their door open which got damaged (i.e. flew off)
122. Lots of wrecks in the lake, which are apart of the area's heritage and should be preserved

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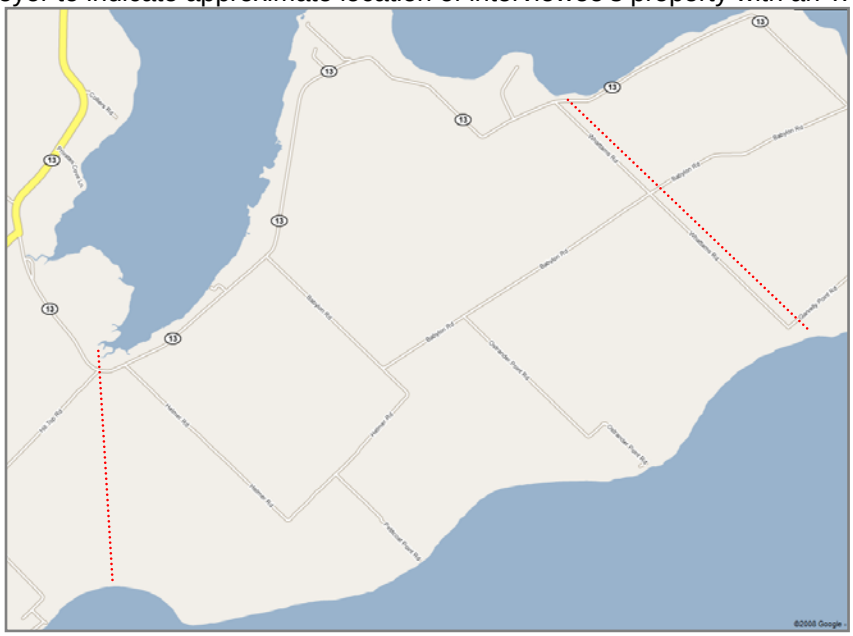
Door-to-Door Socio-Economic Impact Assessment Survey
Ostrander Point Wind Energy Park

Date: _____ Interviewer Initials: _____ Survey Code: ☐

Address:_____

Refused Survey ☐ If nobody at home, indicate attempts: 1st ☐ 2nd ☐ 3rd ☐

Surveyor to indicate approximate location of interviewee's property with an 'x'



SAY: ***"Hello, my name is _____ I work for Hardy Stevenson and Associates Limited. We are a firm of social scientists who have been retained by Stantec, a firm of engineers, to complete an independent socio-economic impact study of the community in the vicinity of the proposed Ostrander Point Wind Farm. Part of our work involves completing a community survey. Might I have a few minutes of your time?"***

(If Yes continue, if No, ask if there would be a better time to return, if No again, check Refused Survey/No Response)

SAY: ***"Thank you. The information we gather here today is confidential and will not be made public. It will be used to ensure that the study includes information about the quality of life of local residents.***

ASK: ***Are you an adult over 18*** *(skip if evident)* ***who is responsible for either the property taxes or rent on this household?"*** *If Yes, continue.*

If No, ask to speak with a member of the household who is.

If no one is home, ask if there is a better time to return. Indicate time in box below:

Suggested Date:	Suggested Time:

If interviewee is not willing to be interviewed any other time, thank them and check the Refused Survey box).

If person asks about the project, SAY: **"At the end of the interview I will be glad to provide you a website with more information on the Ostrander Point Wind Farm project".**

PROFILE

Interviewer writes **Gender** without asking: Male___ Female ___

1. **Is this a home or a business, or both?**

   Home_____ Business_____ Both_____

If Home → Go to Question 3

2. If business or both, what kind of business?

   Farm /cattle_____ Industrial_____ Retail_____ Service_____

3. **Is this your permanent residence or a seasonal residence?:**

   Permanent ___ Seasonal_____ Refused to say___

If Permanent → Go to Question 6

4. If seasonal, how many months of the year do you stay here?

   _____ Months

5. During which seasons?

   Winter ___ Spring___ Summer___ Fall_____

6. **Do you rent or own this residence?**
   Rent ___ Own___ Refuse to say___

7. **How many adults over 18 live here?** _____

8. **How many children under 18 live here?** _____

9. **How long have you lived in this residence?**

   Less than a year_____ 1-3 yrs_____ 3-10 years____ more than 10 yrs_____

10. **What is it that you like about living in this community?**

(Interviewer don't prompt. Check all that apply):

Community cohesiveness ___
Far from city ___
Nature / natural beauty ___
Neighbours ___
Proximity to work ___
Quietness ___
Recreational activities close by ___
Rural appeal ___
Water features / lake ___

Other? (write down key words)

_____
_____
_____

11. Do you work outside the home?

Yes___ No___

12. On average, how many hours a day during weekdays from <u>Monday to Friday</u> do you typically spend at home (including sleeping)?

_____ Hours

13. On average, how many hours a day during weekends, <u>Saturday and Sunday</u>, do you typically spend at home (including sleeping)?

_____ Hours

14. On average, how many times do you drive per weekday to and from your house (count each way as a separate event)

1-2 times___ 3-4 times___ 5-6 times___ 7 or more times___

QUALITY OF LIFE

15. What activities do you engage in while you are at home? (this location)

Refused to answer ( ) *(interviewer: don't prompt, check all that apply):*

Barbequing ___
Childcare ___
Children's outdoor activities ___
Cleaning ___
Entertaining outdoors ___
Gardening ___
Reading ___
Relaxing ___
Sports or outdoor games ___
Yard Work and Maintenance ___
Other: _____
_____
_____

16. What recreation activities do you or other members of this household engage in within a <u>*3 km radius*</u> of your house?

Refused to answer ( ) *(interviewer: don't prompt, check all that apply):*

ATVing (All Terrain Vehicle) ___
Bird watching ___
Bicycling ___
Camping ___
Community Gardening ___
Cross-country skiing ___
Fishing ___
Hiking (off roads) ___
Hunting ___
Jogging/running ___
Kite flying ___
RVing (Recreational Vehicle) ___
Small aircraft flying ___
Snowmobiling ___
Snowshoeing ___
Soccer ___
Swimming ___
Walking (along roads) ___
Other: _____
_____
_____

17. **Can you tell me if the property value for this residence has increased, decreased or stayed the same in the last 3 years?**

Increased ___
Decreased ___
Stayed the Same ___
Don't Know/Won't Answer ___

If Don't Know/Won't Answer → Go to Question 20

18. Why have they increased/decreased or stayed the same in the last 3 years?

_____
_____

19. By how much do you think your property value has changed in percentage in the last 3 years?

(Indicate +/-) ___ %

Don't know/Refused to answer ___

20. **Given what you know about how the community is changing, do you think property values will increase, decrease or stay the same over the next 3 years?**

Increase___ Decrease___ Stay the Same___ Don't Know/Won't Answer___

If Don't Know/Won't Answer → **Go to Question 22**

21. Why? _____
_____

EFFECTS AND IMPACTS

READ:

"Now, I will read you information that briefly describes the proposed project [4].

The wind farm is a project to produce 20 MW of wind energy. The overall cost of this private investment project is estimated at $45 million dollars. The wind park would have up to 12 wind turbines, each with a capacity of 1.5 to 2 MW. Turbine blades will be 42 m long, located on towers approximately 80 m tall. It is expected that it would look like this from the intersection of Babylon Rd. and Ostrander Point Road (show appendix 1); and like this from Babylon Rd. west of Whattams Rd. (show appendix 2).

The towers will be mounted on in-ground cement pads approximately 10 m by 10 m to a depth of 3 m. The level of noise produced by wind turbines will need to comply with current regulations from the Ministry of the Environment.

During construction it is expected that daily operations will be from 8:00 am to 5:00 pm, Monday to Friday, and will have approximately 20-30 people on site.

The transportation route to bring in the turbine components will follow some seasonal roads and some intersections would need to be widened. A detailed transportation study will be undertaken before transportation of the turbine components takes place. To ensure local requirements are met, consultation with PEC and MTO will be conducted. Also a transmission line will need to be built within the road right of ways along the following route (show appendix 3)."

[4] PS. Wind Park is expected to produce up to 24 MW, and towers will be mounted on in-ground concrete pads round in shape and approximately 15-17 m in diameter to a depth of 4 m. Technical information updated in January 2009.

Given this information:

22. Do you think the wind farm will have an effect on how <u>people live in this community</u>?

Yes ___ No ___ Wouldn't Answer/Don't know ___

23. Do you think the wind farm will have an effect on <u>you and your household</u>?

Yes ___ No___ Wouldn't Answer/Don't know___

If <u>No</u> or <u>Don't Know/Won't Answer</u> in BOTH questions → Go to Question 27

24. What do you think will be the biggest potential effects to **your community and your household (or business)** as a result of this wind farm during operation? *(Interviewer: Do not prompt, write down key words)*

……
……
……
……
……

25. Of the potential effects you identified above on a scale of 1 to 10, where 1 is least important and 10 is most important, how important are the effects?

** NOTE: If more than 3 effects were mentioned, ask to identify the 3 effects that are top of mind **

A) Potential Effect 1 (write down key word(s)):……..

LEAST IMPORTANT→ 1 2 3 4 5 6 7 8 9 10 ← MOST IMPORTANT

B) Potential Effect 2 (write down key word(s)):……..

LEAST IMPORTANT→ 1 2 3 4 5 6 7 8 9 10 ← MOST IMPORTANT

C) Potential Effect 3 (write down key word(s)):……..

LEAST IMPORTANT→ 1 2 3 4 5 6 7 8 9 10 ← MOST IMPORTANT

26. Can you share any ideas on how these effects to **your community or your household (or business)** can be reduced or minimize? *(interviewer, go over each effect and ask them to respond)*

A) Potential Effect 1 (write down key word(s)):……..
Possible mitigation……..
……..

B) Potential Effect 2 (write down key word(s)):……..
Possible mitigation……..
……..

C) Potential Effect 3 (write down key word(s)):……..
Possible mitigation……..
……..

READ: *"Construction would begin after the studies have been completed, and is expected to last from May to December 2009. During the construction period there could be from 5 to 20 trucks per day along the proposed transportation route and approximately 20-30 construction workers on site. Now, talking specifically about the construction phase:"*

27. Do you have any concerns related to construction activities at this site?

Yes ___ No___ Don't know/Won't Say___

If No or Don't Know/Won't Answer → Go to Question 31

28. What construction activities may potentially affect **your community**? *(Interviewer: Do not prompt, write down key words)* ……
……
……
……
……

29. What do you think will be the biggest potential effects of construction **to you**? *(Interviewer: Do not prompt, write down key words)* ……
……
……
……

30. Can you share any ideas on how these effects can be reduced or minimized? *(interviewer, go over each effect they indicated and ask them to respond)*

** NOTE: If more than 3 effects were mentioned, ask to identify the 3 effects that are top of mind **

A) Potential Effect 1 (write down key word(s)):……..
Possible mitigation……..
……..

B) Potential Effect 2 (write down key word(s)):……..
Possible mitigation……..
……..

C) Potential Effect 3 (write down key word(s)):……..
Possible mitigation……..
……..

31. Are you in favour of wind energy programs and infrastructure being installed in Ontario?

Yes___ No___ Don't Know/Wouldn't Say___

32. Are you in favour of wind energy programs and infrastructure being installed in your community?

Yes___ No___ Don't Know/Wouldn't Say___

33. Do you have any further comments? (Use back page is space is not enough)

_____
_____
_____
_____

Would you like to provide your name?: __

Thank you very much for your time! For more information on the Ostrander Point Project, please visit http://www.gileadpower.com/projects_ostrander_point.asp or contact directly Gilead Power Corporation at: 150 King Street, East, Suite 5E, Peterborough, Ontario, K9J 2R9, Toll Free: 1-877-750-1023, Phone: (705) 750-1023, Fax: (705) 750-1430.

GILEAD POWER CORP.

OSTRANDER POINT: A PHOTO MONTAGE

View of the Ostrander Point Wind Energy Park from the intersection of Babylon Road and Ostrander Point Road looking south at the turbines.

Visual simulation 1: View from the intersection of Babylon Rd. and Ostrander Point Road (Appendix 1 of the Survey)

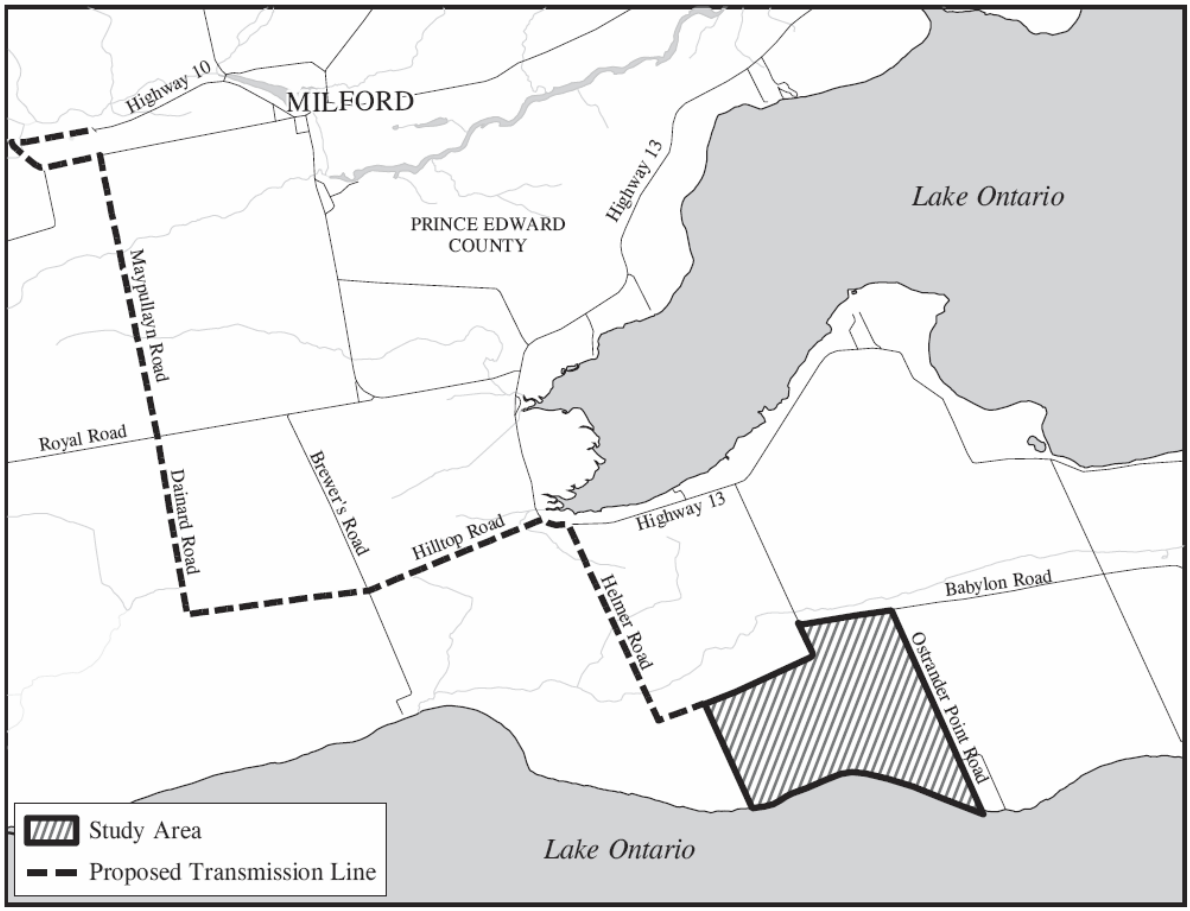
GILEAD POWER CORP.

OSTRANDER POINT: A PHOTO MONTAGE

View of the Ostrander Point Wind Energy Park along Babylon Road (west of Whattams Road) looking southwest at the turbines.

Visual Simulation 2: View from Babylon Rd. west of Whattams Rd.
(Appendix 2 of the Survey)

Proposed Transmission Line
Ostrander Point Wind Energy Park



Map Source: Notice of Modification, Ostrander Point.

(Appendix 3 of the Survey)

APPENDIX 3:

Summary of Focus Group Sessions

APPENDIX 3:

FOCUS GROUP SESSIONS

Proposed Ostrander Wind Energy Farm – Socio-economic Impact Assessment

Olav Sibille and Shannon Logan
Hardy Stevenson and Associates Ltd

Session #1 – Farming

Date: Wednesday September 3, 2008
Time: 12:30 pm to 2:30 pm
Location: Wellington Branch – PEC Library
Address: 261 Main Street, Wellington

Q1 – Tell us about your organization and what it does in PEC

- Ontario Federation of Agriculture – Prince Edward Region (OFA)
    - Over 400 members
    - Advocate for agriculture and farming interests and act as a lobbying group, communicating with government
    - Provide scholarships for students
    - Promote agriculture in the County
- Prince Edward County Winegrowers Association (PECWA)
    - Represent winegrowers and wineries
    - A new and emerging industry in the County
    - There is no consensus on wind turbines in the County – each member has it's own opinion
    - Draw business from tourism

Q2 – Tell us about PEC

- Not a lot of rain in the County – 240 mm average per year – this is the lowest in Ontario
- There is a strong agricultural community in PEC
- There are 4th and 5th generations of families farming here
- Agriculture is diverse – cash crops, markets, wine, fruit, vegetables, organics, etc.
- There is a changing economy – shifting from traditional dairy farming and agriculture to more of a diversity
- Fishing also used to be prominent in the area
- It is difficult to farm in this area given the dry climate
- Some of the smaller wineries typically distribute directly to restaurants, while some of the larger wineries (i.e. the Grange) distribute across Ontario through the LCBO
- Wineries need to be big players to get to the LCBO
- PEC designated as Ontario's 4th Designated Viticultural Area (DVA)
- Many wineries operate on a 'farm gate' basis – directly to the consumer
- Consumers can be anywhere from Kingston to Toronto – some are upper end restaurants
- Restaurants are big in PEC
- A number of well known chefs are coming to the area
- Number of visitors coming to the area is increasing
- Tourism is a growing industry and has excellent marketing such as that put on by 'Taste the County'
- The community is a mix of long time residents plus 'implants' from away
- Winegrowers are new to the County – they have made lifestyle changes to come here, and value the rural quaintness here in PE C

- Wheat, corn, and soybeans are big business in PEC
- Many farms operate on 'forward marketing' contracts where they supply larger companies with produce
- Large contracts are often global in scale (i.e. Trenton Grain elevators, John Anderson in Picton, Prescott Grain elevators operates ocean shipping)
- Primary mode of shipment of goods and produce is via roads
- Blackberry cheese is marketed as being made of "locally produced milk"
- Production costs for local goods are high
- Grape production costs are high
- Winegrowers must burry vines to protect root stock
- Local products are sold at a premium prices – these prices are justified by the required growing practices
- One challenge that effects growers all over is the issue of labels – if the product has 10% local ingredients it can be called local
- Local winegrowers looking into the labelling issue
- Another emerging challenge is the Maple Leaf issue – The company is just waiting to find out which farmer they can blame for the outbreak
- Accommodations are limited in PEC
- The average stay is 2 nights – tourists coming from Toronto, Ottawa, Montreal
- Winegrowers are currently focusing marketing efforts onto Quebec – winegrowers association is offering French course to their members
- PEC voted one of the ten best place in Ontario
- The wine industry is getting a lot of attention
- Products are going well outside the County
- Taste the County has been very active in pushing tourism
- Fine dining as well as the B&B industry is growing
- Tourism economic development symposium with Dan Taylor
- One large resort exists within the County – Isaiah Tubbs on the lake
- One challenge in the county is the amount of shoreline development – there is too much
- People come to see the water are there are many houses and housing development along the shoreline
- Relationship between farmers and winegrowing community – sometimes there are issues related to spraying of chemicals (herbicides for farming) between neighbouring properties; winegrowers tend to spray fungicide frequently
- Generally the vineyards are more concentrated around Hillier and less in South Marysburgh
- Vineyards tend to use land that is not farmable
- The wine industry tends to increase the value of land as well creating growth in the community
- PEC has a rural / off-the-beaten-path character
- The community wants to keep the County as rural in nature
- Some small-scale wind machines are used to increase the microclimate temperatures by as much at 5 degrees Celsius – these help moderate the cold

Q3 – Exploring positive and negative changes – Do you think a wind energy farm would change agriculture in PEC? Will farming and farm operations change?

- Job creation –there will be more operational jobs created
- Transmission lines will have impacts – some farmers don't want the line (i.e. the one proposed for Maple Lane)
- Transmission lines may not be aesthetically pleasing
- There may be different locations available for the transmission line route (i.e. Elm Brook)
- The best wind is on the south side of PEC
- Visual effects will be negative

- High voltage and humming sounds could be an effect
- A study from England showed that wind farms resulted in decreased property value and health effects
- Turbines are fine from a distance
- Need to be far enough from houses
- The study area is located on marginal lands not significant for farming
- There will be no tax benefits to the community on these lands – crown lands
- The project would open up the roads and result in better infrastructure, but at what / who's cost?
- The wildlife in the area will be affected (i.e. birds, undisturbed naturally remote area)
- There is strong support for the environment and this project would raise levels of public concern
- Not a lot of people go to the proposed site, it is a remote area
- There are deer and coyotes in the area
- The land is not productive so there may not be impacts on farming – it's not highly productive land
- Not aware of any sensitive species at the site
- There are no winegrowers close to the site – might not have an effect of grapes
- This would be the first area to be developed
- Other areas with wind turbines have had positive experiences – they utilized wind as a resource (i.e. just like quarrying is a resource) – it also provides additional income to the farmer
- Ontario Federation of Agriculture (OFA) is generally supportive of wind farms
- Prince Edward County Winegrowers Association (PECWA) members are split on the subject and there in no formal opinion in support or against
- Farming is cost intensive
- It has been very difficult to get wind turbines developed in PEC – developers have been declining to build turbines in the area
- Ted McCowan is an OFA wind expert from a farming perspective
- Lots of people are in favour of wind turbines in principle, but not in their own backyard
- Farmers income depends on land
- Wind turbines are getting bigger

Q4 – Mitigation measures – How might things be made better? How can the project best benefit the community?

- Substation upgrade in south area would eliminate the expenses with the transmission line
- 500 unit housing development proposed near the proposed site
- The lake should be used for off-shore development
- Construction period will have effects – truck traffic is a concern
- Need to consider benefits of the development – will bring tourism to the area – this means economic benefits for all
- People will be curious and will drive down to see them
- By adding energy we could potentially save on hydro costs
- Could be seen as environmentally responsible / "green"
- "Farmers feed cities" – both in terms of agriculture and energy
- "Winegrowers feed the spirit"
- There may be increased tourism – perhaps not in the form of 'kiosks' but in the number of people
- There may be security risks – needs to be fences, gates, etc to ensure there are no threats
- OFA representative has visited Buffalo Jump FN Reserve in Alberta and the concern there is that American firms own the distribution
- Need to consider where the power goes – is it going back into the grid? – this is similar water resources where there is a common pool
- Impact is that government money is going into the wind energy and municipality is not getting any money

- Some municipalities are collecting property taxes
- Some companies are required to pay property taxes or pay the municipality
- Farmers would pay tax and receive the lease dollars from the company

Q5 – Are there any issues we haven't talked about?

- This issue as split the community
- Need to add to Ontario's wealth
- The Province has set out provincial policy which include wind energy – PEC has ample wind resources and should go ahead with implementing provincial policy
- Coops have also served as an option in other areas – a group of farmers get together so that they all benefit although the actual turbine may be only on one property – this spreads the wealth a bit
- There are lots of wind turbines and corridors are proposed – If all were to be developed this would have a large negative effect
- Many of the remaining undeveloped areas in the county are natural areas so turbine development across the county would have significant effects on natural environment
- There needs to be limits on wind turbines – people would feel more satisfied knowing the expected scale
- Resources are available for learning about wind potential – these are easily accessible
- Council is having a difficult time making decisions
- Moratorium on wind turbines was shut-down by Council – they are supportive
- They need to pick spots on where to have them
- Provincial government needs to define setbacks
- Ministry of Environment needs to be involved in location for turbines given the liability they present
- If we see it developed, we would like to see it done right

Session #2 – Environment

Date: Wednesday September 3, 2008
Time: 3:00 pm to 5:00 pm
Location: Wellington Branch – PEC Library
Address: 261 Main Street, Wellington

Q1 – Tell us about your organization and what it does in PEC

- **Environmental Advisory Group (EAG)**
    - Ken Wright is retired and has a background in economics – was a dairy farmer for 50 years
    - The EAG reports to County Council
    - They focus on advising Council on environmental issues - prior to Provincial legislation they worked on pesticide by-law, worked on waste management and sludge, and are now focusing on the windmills and their effects on the County
    - They are looking into existing rules and regulations, processes that other municipalities have gone through, and have held 2 or 3 public meetings to get information to the public
- **County Sustainability Group (CSG)**
    - Don Chisholm was involved in a number of environmental organizations prior to CSG and his current position with the bird observatory (Creek, Save-the-willow-trees on Lake of the Mountain, etc)
    - CSG is concerned with issues that relate to our future (i.e. exponential growth, oil usage and energy) – they have 15 to 20 members

    - A sustainable future is a key focus of the group and wind turbines and energy fit within that
    - They see Germany as forging ahead in this area
- **PEC Field Naturalists (PECFN)**
    - Henri Garand has been president of the PECFN for over 2 years
    - There are over 60 members although many of the County's population associate with the interests of the group
    - The group has a general interest in the natural environment
    - They have a close connection with Terry Sprague and his bird count
    - People here are concerned with natural environment and wind turbine impacts

Q2 – Tell us about PEC

- Local history consists of changing economies: Logging > Farming (dairy and cash crop) > Garden (fruit and vegetable) > wheat, oats and barley (to the US) > war effort (labour, resources) > Orchard (apples) > Diversification in crops (soy bean, wheat) > wine industry and tourism (adaption)
- Historically there has been a large population of dairy farmers
- Question whether people are supportive of change in the community – change is inevitable in the community
- There are many turbines in other places (i.e. Alberta, Maritimes, Buffalo)
- research coming from Terry Sprague has helped inform the discussion of birds impacts – birds don't like stationary objects with lights
- Concerns regarding the project proponent – what's the benefit for the company
- Provincial parks are a key tourism attractor
- Tourism is an important aspect of the community and road usage is important
- The environment is comprised of many red cedars and rock
- Lilacs are prevalent in the local environment
- Opposition can get carried away with studies – numerous studies indicate bird kills due to various industries / causes
- What makes PEC different – great views and scenery, the area is enchanting, the people, enjoyable community
- Birding is very popular – a big part of the community enjoys birding – Birding festival occurs annually
- Harvesting supper is also a popular event in PEC
- There is a "throw-back to the past" charm in PEC – community values the 1950s character – the area reminds people of another time
- People have concerns regarding land being allowed to go undisturbed (i.e. don;t see it as economically viable, see it as weeds) – others enjoy these natural features
- See wind-turbines as stopping future land uses
- Supportive of change however, not without question or a framework
- Changes have been occurring all over the county (i.e. Wineries)
- Not a lot of land is available for agriculture or renting
- It's getting expensive to farm – small farms experience challenges in areas well beyond PEC as well
- Farmer's wonder if it's easier to put land in the market

Q3 – Exploring positive and negative changes – Do you think a wind energy farm would change agriculture in PEC? Will farming and farm operations change?

- Wolf Island can be used as an example of effects
- Roads will be upgraded which is a benefit to the community, but who will pay for these?
- The project wouldn't require further transport lines
- Concerns regarding the transportation of turbines and blades in particular (i.e. weight, bridge crossing, etc)

- It will be a massive construction process – these are very large
- Shelburne can also be used as an example of effects of wind turbines
- Ostrander Point project alone may not have large impacts although many others might
- Servicing and road infrastructure will be impacted – other examples show us that road widening results in clear-cut, erosion, flooding, and bridge washout
- The character of the road will change if there are no trees on it – this will be experienced by cyclists
- Will the public be able to access the property that is currently crown land?
- Roads should be returned to their original condition
- Vegetation will be impacted – it will be removed
- Route goes through less developed roads
- New transmission lines will be required
- Developments have been slow coming in this area
- Property values may decrease – questions as to whether this will happen or not
- Some people may enjoy the wind turbines
- Other examples from elsewhere indicate there may be an increase in tourism
- Shelburne some people like the sound of the turbines, while some do not
- Reflections of the blades could have an impact
- Noise is regulated, however Government of Ontario does not regulate setbacks
- French Academy of Medicine provided advise to the French government – 1.5 KM setback required for turbines
- Other countries are also recognizing the impacts that turbines may have – In Britain setbacks are 1.6 KM away
- The turbines may have an impact on future land development
- Hwy 401 is an example of how residential is close to noisy area – these houses are also impacted
- Turbines give off twice the level of natural sounds – this is not desirable in a rural setting
- There will be noise whenever the wind blows – this will drown out other rural noises
- Property values – people do not expect property values to decrease as a result of surrounding uses
- Population growth is one on the only ways to limit growth and noise in the countryside
- Positive impact would be an additional revenue stream on marginal farmland
- Negative impact would be the effects on property values
- Noise might compromise the rights of future landowners
- We want to get it right
- Private landowners are not benefiting

Q4 – Mitigation measures – How might things be made better? How can the project best benefit the community?

- There should be options given on moving or transporting the required materials
- Provincial government needs stricter rules on noise
- Road improvements will be a benefit
- Not interested in mitigation
- Wolf Island as an example – the company gave money to the municipality
- There should be something in it for the County
- The tax base should be increased – this project will not increase the tax base
- Costs could be given to the municipality on a per windmill basis
- The economic benefits are limited
- Will more be permitted after these 12?
- Road development – ESSROCS will benefit
- Local trucks could be available to take advantage of contracts

- The number of turbines could be reduced
- Noise should be limited on private property – levels on private land should be less than 10 dB
- Dust during construction will be an effect
- The roads should be brought up to existing farmland elevation to allow easy assess to fields – this has been a benefit elsewhere
- 1 KM setbacks are required – CANWea reports that complaints with 1 KM setbacks are rare
- Increased development reduces quality of life here

Q5 – Are there any issues we haven't talked about?

- Other effects – built structures will kill birds – with an increase in the number of built windmills, there will be an increase in the number of birds
- This is a bird migration path and there is an increased vulnerability here
- Natural habitat will be disrupted
- Migration practices will be effected – birds will be seeking shelter and food and this will be impacted
- All activities can kill birds, it's just to what extent
- Altamont Pass as an example of areas where bird kills are common – the technology might be different and improved
- Uncertainty as to the extent of damage – who knows?
- Domestic sizes are preferable
- Wind power and other energy developments – span new development
- New emerging forms of energy use – developing the infrastructure comes first
- Northern island as an example of areas were other alternative energy is being implemented
- Participant questioned the objectivity of the focus group process and the EA process in general
- Need renewable sources of energy – we have obligations for the future
- This is not a good technology and it's happening at the wrong place, wrong time

Session #3 Citizen Interests

Date: Wednesday September 3, 2008
Time: 7:00 pm to 9:00 pm
Location: Wellington Branch – PEC Library
Address: 261 Main Street, Wellington

Q1 – Tell us about your organization and what it does in PEC

- **Concerned Citizens of Prince Edward County (CCPEC)**
    - Concerned with preserving the quality of life in Prince Edward County and the affordability of local government
    - Information on the group can be found on their website (http://ccpec.camp7.org/)
    - Initially came together around the issue of the waste water treatment plant but expanded their scope to include other issues as well
- **Alliance to Protect Prince Edward County (APPEC)**
    - The group focuses on the potential effects of wind turbines across Prince Edward County
    - Information is available on their (www.appec.ca/)

Q2 – Tell us about PEC

- 2008 study from Queen's University captures the character of the County
- PEC is rural and agricultural in nature
- Desirable given the commuting distance and proximity to major cities – these are sources of wealthy buyers with respect to tourism
- The local economy is diversifying – small businesses, cafes, etc – these are investments in the area and bring money
- The County is "rich in culture" and has many "place factors" – Lake Ontario, organic farming, cafes, etc. – new residents value these "place factors"
- There is an emerging "creative economy" in the County
- The area is comprised of beautiful landscapes, peace and tranquility
- The profile of the people is generally 45+ in age
- Wind turbines may effect the things they value here
- There has not been a lot of population growth
- Commuters go to nearby cities
- The values are different here
- There is two sets of people here – there are "old timers" (related to the agricultural base and loyalist history) and "newcomers" (coming as a result of the recent changes)
- Some say you need to be born here to be considered local
- Some say old timers are the ones supporting the new developments and the community changes (i.e. big box)
- Newcomers are attracted by the rural lifestyle
- This is an attractive place to come back and retire in
- Don't see wind turbines as adding to that sense of place
- Some people come due to proximity to services and recreation; and ended up staying because of the tranquil and pastoral nature of the community

Q3 – Exploring positive and negative changes – Do you think a wind energy farm would change agriculture in PEC? Will farming and farm operations change?

- Property redevelopment attracts some to the area
- What to know the implications of the transmission line
- There is a keen interest in heritage and culture in the community
- There are numerous historic homes, roads and surroundings here
- There are 5 museums and a County Heritage Advisory Committee
- Wind turbines may decrease property values and values associated with heritage
- People are buying into the PEC brand
- People are investing in their homes and want to be able to sell
- The geographic delineation of the County (i.e. an island) leads to a strong community feeling
- This place offers an "exclusive package" and is considered a "hot spot"
- There is a clear sense of community in the County
- Annual Harvest Dinner brings thousands and it keeps on growing
- Taste the County is very active in selling the brand
- Other popular events include the Milford Fair
- PEC identified as the gastronomic capital of Ontario by the Globe and Mail
- There is tremendous pride in the local food and wine
- There is no need to go over the bridge for entertainment and dining
- There are two things happening here (1) wind turbine development and (2) two major real estate developments – Wind turbines will do very little for the County
- There is opposition to both of the above developments – some say there is opposition to everything

- There is a feeling the population will increase with these developments
- Risk factor is high with wind turbines as compared to residential developments
- Marketing power negatively impacted
- Royal Road project – all appellants sold their properties and moved out after all was said and done
- Some of the local people were cohersed into leasing their land
- PEC is growing - there where 23% more houses built this year
- There may be an impact on property values and real estate
- Restaurants, visitors, galleries, B&Bs, wineries, etc are struggling – impacts on the economy will have a domino effect
- People have the ability to adjust
- Impact will be felt on homes directly
- This project will pave the way for other wind turbine projects – this puts a lingering uncertainty in people's minds that will last for the next 3 to 5 years
- CCPEC and APPEC pushed for the County to establish policy on wind turbines
- Council refused to develop policy, and decided to take on an ad-hoc approach
- Meeting minutes indicate that staff were prepared to develop policy but never did
- Groups requested a development strategy, increased public input, and policy across the County
- Other jurisdictions can be used as an example (i.e. Grey County, Exodus County) although many are still under debate and discussion
- Wind farms would result in a reduction in the property values and a reduction in the tax base
- Visual effects came be expected – wind turbines can be a feature in other areas but in PEC they will be completely out of scale
- There is a big difference between something that is 40 storeys and existing buildings which are 2 storeys
- The images capturing the visual effect do not capture the movement effect
- Implementation of provincial policy may not work here – the direction is to develop near infrastructure – this is not near new infrastructure
- Minimum Distance Separation (MDS) farming policy was implemented here – farming sometimes conflicts with why people come here
- Some don't agree that wind can be justified
- There will be economic and real estate impact, as well as impacts on the birds, bats and environment
- There are numerous companies proposing wind developments – Gilead, SkyPower, Independent Power, etc
- This is an area of natural significance with respect to birds – provincial regulations to protect this area are not working
- Wind turbines are prohibited in areas of natural significance in Grey County
- OPA study (Halmax 2006) recommends no wind turbines in areas of significant bird areas
- There have been many bird and bat studies completed – so many are not definitive as a result of companies withholding information and results – some studies are well developed
- There will be impacts on the roads and the vegetation that lines them – in particular the narrow roads
- Transmission lines will impact the roads
- Maple Lane is historically significant and the transmission line proposed will impact the Maple trees that line it – this trees are culturally significant
- Some feel farmers could benefit from the expansion of the roads, and some feel there will be no benefit
- Other benefits include sporadic power input into the grid
- The transmission lines pose a disadvantage
- Some say the costs of this project come down to taxes, and some say that the developer should pay, not the tax payers
- Noise will be an impact – some studies show wind turbines within 1 to 2 miles away will have health impacts (insomnia, headaches, etc.) and people have relocated as a result of this
- There are many different views on noise – frustrating there is nothing scientifically definitive

- Ontario has relaxed regulations on noise – current 40 dB is acceptable as compared to 30 dB acceptable elsewhere
- There is currently a low level of existing noise in PEC – approximately 20 dB
- The measure of annoyance should be included in any analysis – whether there is a chopping or humming sound
- UK studies point toward quality of life being impacted by wind turbines
- There are many scientific questions left unanswered
- These are worse at night
- Gilead could ensure their noise is limited to 30 dB
- Ground vibrations over time could have an impact – the limestone rock base with aquifers below could be impacted and this would result in impacts on water sources
- Cracking on the limestone over time and also due to blasting and long-term ground vibrations (impacts during construction and operation)
- APPEC impressed that Gilead has done their homework – Council should also do their homework
- Shadow flicker will be an impact
- Setbacks from the non-participating properties should be increased
- Noise and setbacks have impact on future land potential
- Setbacks from the road are required
- Ice throws and structural failure are a risk – the existing rules defy the service standard
- 400 m setback is loosely based on the MOE guidelines for noise
- In other areas, some are getting turbines on their land and some are not – in another example, 80 people were approached, and 30 were left out
- It can split the community – gives people something to fight about
- Will have impacts on TV, FM radio, radar, etc in the area
- May have an impact on the two airports in the area (i.e. in PEC and Trenton) – other areas have established a 10 KM setback from airports
- Will have impacts on hunting and ATVing on the existing crown land
- Will interfere with rescue helicopters in the area
- Positive impact could be revenue generation – maybe not Gilead, but perhaps others
- Additional revenue stream is appealing to landowners
- The development of wind turbines represents the "wholesale industrialization of the County"
- Infrastructural costs – County Bills will go up, not down
- There will be health effects on animals and people
- Concerns for decommissioning – potentially 30 years from now, what will the policy be on land acquisition and clean-up agreements

Q4 – Mitigation measures – How might things be made better? How can the project best benefit the community?

- Letter of credit or some sort of agreement could be made
- Turbines have a 10 year lifespan and then maintenance and labour costs get too expensive
- Each turbine would need to be a legal entity for an agreement
- Larger setbacks from schools, heritage features, roads, houses, etc – although this may kill the project
- More stringent noise levels – these should be at a level where it would be possible to sleep (i.e. 25 dB)
- No offset for background noise
- Property value guarantees to protect against decreases in value based on individual assessments
- Developers could be required to buy if the house is unsellable, or to compensate if value decreases
- Need to be demonstrated that property values will decrease
- Mostly confidential so not much is known

- Gilead's information needs to be backed up and sources of information referenced – some information given to the public is misleading
- There is currently no County zoning for large turbines – only small turbines to a maximum height 100 feet, plate power
- Some think large scale zoning would benefit
- There should be a larger ring for the noise limits from the MOE
- Official Plan and zoning policy for turbines is desirable in the County
- No wind turbine developments should be allowed if the neighbours so not approve
- Payment / compensation for loss of development potential
- There may be limitations on future development and subdivision if there is already noise occurring on the property
- Termination and decommissioning clauses need to be integrated into agreements so that promises are kept
- Some feel this might be unrealistic
- Payment and dollars is not always the solution – it's often the start of the problem
- Benefits could be experienced by landowners – 100 might benefit so it's not balanced with public benefit
- Farming and the emerging "creative economy" are threatened by economic loss
- Liability – property owners and developers will be liable
- People will fight the projects
- Public attitudes and opinion can be changed
- Europe can act as an example – the research is well advanced and we can't ignore this
- Use the best research to avoid making mistakes that others have made
- APPEC has a research database on their website
- The current approach to public consultation through the use of open houses needs to change – Not truly allowing for good question and answer – comes across as trying to divide and conquer the public
- They would like to see more open discussion with question/answer and debate
- Asking lots of detailed questions is the only way that they have been able to get answers
- Bonding turtle will be impacted

Q5 – Are there any issues we haven't talked about?

- Concerns regarding the Jacques Whitford Study – can consultants be hired and not approve their clients?
- When projects get developed is an issues
- Reliability – there needs to be energy storage (i.e. Denmark sells to Sweden and Norway)
- Do not THS for the project engineering

Session #4 Local Government

Date: Thursday September 4, 2008
Time: 12:30 pm to 2:30 pm
Location: Picton Town Hall
Address: 2 Ross Street, Picton

Q1 – Tell us about your organization and what it does in PEC / Q2 – Tell us about PEC

Planning Services:
- The Planning Department is comprised of 3 Planners, a Manager, and a vacant Commissioner position – currently understaffed and looking for more resources

- They process applications, give building permits, real estate letters, respond to public inquires, conduct fish pond amendments, etc
- They are looking for policy staff to conduct OP updates and SPs
- The County does not currently have a wind turbine policy – only a general provision for electricity power facilities proposed by public or private proponents
- Part 3 of the Official Plan (2.10.1) – Electric Power Facilities – all future would require OPAs
- The 2002 experience with the Vision Quest proposal provides a useful example of wind turbines in the County - they heard issues related to chilling of the air, etc.
    - Vision Quest's experience in Alberta was much different than here – in Alberta the community was supportive of wind turbine development which was not the case here
    - They had an open / transparent process but there were a number of negative studies coming out at the time coming out of the UK and US – the silent majority did not speak up
    - The County crafted a by-law with setbacks as they had none at the time – there approach was to develop OP policy so no OPA would be required and to regulate development through setbacks
    - 'CORE' was a community group that was involved
    - There is a large silent majority in support of wind farms in the County
    - The wind policy was defeated on a tie vote
- The Royal Road experience in 2002 is currently under OMB review
    - The number of turbines has been reduced from 32 to 12
    - OPA and rezoning have been submitted and were approved by the County
    - They had photomontages at public meetings, they followed the EA process, and there is a holding for site plan on the property
    - They had a prehearing for the OMB and there was a number of organizations that were opposing (i.e. Ducks Unlimited)
    - Property values were a big concern
    - Studies have been conducted
    - Now it's being presented to the Board
    - There were seven requests for bump ups to Individual EAs but they were denied
    - The County policy will come after Royal Road OMB decision is made
- There have been a number of large cottage developments in the County
- Minimum Distance Separation (MDS) policies are being implemented
- There are a number of vacant lots along the waters edge
- There are many people that support wind
- The County needs to determine their threshold for wind turbines and what the carrying capacity for the County is
- The County has many characteristics – beautiful landscapes, strong maritime and agricultural history, a unique and special place, the land that time forgot
- People want to preserve the way of life
- There are many families struggling

Recreation, Parks and Culture:

- There changes happening across the County – these are migration related with people coming from Toronto, Ottawa, Montreal, etc
- The community is very volunteer driven – many of the newcomers volunteer once they spend a bit of time here
- Many newcomers bring with them a different level of expectation in terms of services and amenities – sometimes these pose a challenge (i.e. parks, buildings, services, facilities, arenas, etc)
- The sophistication is building for recreation and leisure services
- The budget has doubled over the past 10 years

- There is currently a renewal program for the Wellington arena
- The community is beginning to urbanize although it's rural in nature
- The County residents tend to be a silent majority – however when they do speak up, other long time County residents rally around them
- The County is small although it is getting more sophisticated in it's developments (i.e. more kinds)
- People want the rural lifestyle with services

General:

- The local economy is very tourism driven – wineries, artisans, etc.
- New wineries are being proposed monthly – thee are already over 15 in operation
- Birding is big in the community
- Picton is picking up it's tourism, Bloomfield is a tourist spot
- Redevelopment is happening
- Rents are going up
- There are few vacant properties
- Heritage and culture is very important in the community – has become a mecca for artisans – this is cultural heritage driven
- Heritage is also very important to the locals – people can see it in so many places
- There are 5 museums in the County – these are very socially-valued to residents, and also attracts visitors
- Genealogy has recently become very popular – people are tracing their roots
- Cemeteries have become very busy – there are 112 cemeteries
- There is a Heritage Advisory Committee
- There are 55 designated properties in the County
- "Settler's Dream" by Tom Crookshank is an excellent book on the pictorial history of the County
- Native history and archaeology is gaining importance
- Big Island – there are remnants of an entire woodland village – this was an area of native fishing and hunting and was well occupied
- There is a tremendous amount of expertise in the community – there are retired CEOs of fortune 500 companies here
- There is always a lot of public input into County processes – Committees are always required to put things together or to make change – Streetsmart Committee is an example
- In terms of wind policy on Ostrander, no OPA or rezoning would be required as it is on Crown land – the County may be able to ask for site plan and building permit
- Council will not have the opportunity to approve this development
- The County relies on 3rd party expertise
- Approximately 25% seasonal and 75% permanent residents
- SandBanks brings in 500,000 people per year
- County is changing – agriculture is struggling, tourism is growing
- Dairy farming is disappearing
- The family farm is a thing of the past
- Half Moon point – these homes went for $500,000 each – there are poor farmers close by
- Increasing property values – difficult for people to maintain their homes
- Council struggles with the amount of development – how much is too much?
- Economic Development Officer was brought on to look at this issue
- When does the community change from what people came to it for?
- Property values have gone up in the last 3 years – waterfront has increased the most – potentially 7 to 15% in general and at the waterfront potentially 30% to 40%
- Property assessments will continue to increase in value
- Market value assessment does not necessarily jive with market value

- There has been a general improvement in the level of maintenance in homes
- The economy is good here – tourism, SMEs (small to medium sized enterprises), home-based businesses

(Follow-up interview with Dan Taylor, Economic Development Officer)

Economic Development:

- The County represents Canada's first "creative rural economy" – this is a new growth curve
- There are artists, winemakers, professors, new and classic media artists here
- There are numerous small businesses and entrepreneurs here
- The creative economy is the investment strategy
- The County has a split personality – both Council and the community – there are newcomers and there are people that have lived here for generations
- The 2004 strategic plan indicates that there is no way to measure the GDP of the County in detail
- A ballpark number would be $5 billion with a $100,000,000 swing either way
    - Agriculture represents approximately 15% of the gross revenue – approximately $75 million
    - Tourism represents $25 to $65 million and they expect that to grow to $100 million by 2009
- Statistics Canada have numbers but these may not be truly representative
- There are 1200 to 1500 companies here
- Construction and building has increased 300% - Housing, commercial and industrial construction is up
- Documents directing economic development and cultural policy in the County (www.buildanewlife.ca)
    - 2004 Market Readiness Study & Strategic Economic Development Plan
    - 2005 Strategic Municipal Cultural Plan
    - 2006 PEC Tourism Strategy: Sustaining & Managing Growth

Q3 – Exploring positive and negative changes – Do you think a wind energy farm would change agriculture in PEC? Will farming and farm operations change?

- Concerns about how it would change the road character – would it be urban standards be applied to the rural road?
- There is a local connection to the vegetation along the roads in the Ostrander area
- Would want to know what the transmission lines were going to look like – the pole height, etc.
- Would want to know what will change at the Milford substation
- People will be threatened by the landscape change
- If this happens and is approved, how many more will come?
- Council is currently asking for a crown land inventory so they can anticipate where these things will go
- Nearby properties might be directly impacted
- There is a group of cottages in the immediate area that might be impacted
- There are not many houses nearby
- Plan of subdivision is not permitted in this area so future development potential will not be limited
- Generally they are encouraging large farm lots in that area
- If this were on public lands they would be looking at impacts – development would be frozen
- Traffic effects will occur
- Tourism may increase – this could be a tourist stop
- What will the impacts be when they are everywhere?
- Perceptions might be negative about this project – it's going to be noisy, bad from homes, visually displeasing, there will be no requirement for approval from the municipality – could be a rallying point for the public
- Effects such as shadow flicker and turbine explosions were shown at a public meeting
- The public meetings so far have not been successful

(Follow-up interview with Dan Taylor, Economic Development Officer)

- Considering this project in isolation, expects there will be marginal effects on the local economy

- Jobs will most likely require specialized skills and not local labour
- Some materials could be bought locally
- In isolation, this will probably not effect the County's character, however the immediate area will change
- This is not an unobtrusive project, there will be strong visual, noise and environmental impacts
- Some people will like it and some will not
- It's hard to discuss the individual project's impact in isolation – the Ostrander Point project will probably be economic development neutral
- The Ostrander project will not create a lot of jobs, there will be no financial impact on the County, it's not really a tourism destination
- The large picture is different – this goes against the marketing of PEC as a "beautiful island"
- These are large towers and perception is subjective
- Dotting the County with turbines will have a huge impact – visually, aesthetically
- These are not a natural part of the landscape, they are not subtle, and they do not add value
- In general, they are a government subsidized business – the business model is not sound or sustainable – wind is purchased by the government at $0.42 per kilowatt hour and sold at $0.05
- Philosophical issues with the business model
- If there was a critical mass, there could be a marketing strategy based on a "green" platform
- Ostrander won't have much impact on existing or proposed developments
- The larger picture – these are large infrastructural towers and they will make it difficult to sell rural Ontario – there is a conflict here
- Don't see it as adding value to properties in the immediate vicinity
- Not sure if all of the proposed turbines will come – if they do, there will be an impact of the aesthetics across the County, in particular where there are areas of population
- Not seeing the benefits in wind turbines

Q4 – Mitigation measures – How might things be made better? How can the project best benefit the community?

- Education – people will need to be aware of what mitigation will occur
- Replacement plantings and additional plantings
- Funds in lieu of tax on crown land
- Information kiosks at the site or interpretive panels
- Open houses in diverse locations
- Newspapers have a big impact on the community
- It will be important to bring in the community from the beginning
- There should be potential benefit for the people around the project
- Need to get buy-in from the 4 or 5 houses surrounding and this will go a long way
- Need to show respect for the land
- Maintain a record of pre-existing conditions and what is being changed – insure an arbourist is on board
- There is currently no tree-bylaw so respect for large trees should be taken
- Council will soon catch-up
- Tourism effects – July and August are busy months
- May to Dec construction period – could be options for movement of materials – potentially by water – this would be recommended

(Follow-up interview with Dan Taylor, Economic Development Officer)

- Mitigation could go on at the site
- Impacts will be minimal – construction costs are the costs of doing business
- The area is pristine

- Notice will need to be given
- There may be some opportunity to leverage the project
- The art community could be involved somehow
- A Public Utility Company (PUC) could benefit the community and keep the power local
- This could be leveraged as a green strategy
- There will need to be community support in the pre / during / and post construction phases
- Ongoing updates on impacts will need to be understood – monitoring
- The company should get actively involved in the community
- Concerned about the big picture – the County has no plan, the turbines are not financially viable, and quality of life is what we are trying to sell
- There has been 225 years of cultural development here

Business and tourism groups

Date: Thursday September 4, 2008
Time: 3:00 pm to 5:00 pm
Location: Picton Town Hall
Address: 2 Ross Street, Picton

Q1 – Tell us about your organization and what it does in PEC

- Prince Edward County Chamber of Tourism & Commerce (PECCTC)
    - Represents over 300 businesses
    - There is a volunteer Board of Directors, full-time General Manager, Office Manager, President and students
    - It is an apolitical organization – their role includes getting information out to the public so that they can make decisions
    - They hold 1 monthly meeting
    - There has been presentations made by wind companies, cottage developers, etc.
    - They send emails to their members regarding events
    - Hold a meet and greet each month – showcase different businesses
- Accommodation Association of Prince Edward County (AAPEC)
    - Represents over 55 members
    - Maintain an online booking site for members – "web-revations"
- ESSROC Cement
    - Employs 160 people and has contacts for 20 to 30 people
    - One of the largest employers in the County

Q2 – Tell us about PEC

- People come to PEC for the lifestyle
- It's a getaway from the "big city"
- It's really "another life" in Ontario
- Wineries are afraid this will turn into another Niagara-on-the-Lake
- Main industries would be tourism, cement and retirement living
- There is a relaxed lifestyle here – one that is similar to Prince Edward Island
- The community cares, and this is a great place to live
- There are numerous farms with produce, and SandBanks Provincial Park has one of the top beached in Ontario

- There are approximately 500,000 visitors per year coming to the county
- There are approximately 15 wineries in operation – they have changed the face of the County and have diversified it
- There are many baby boomers here as well as folks from Toronto and elsewhere
- There are numerous spas, etc.
- Real estate is reasonable in PEC, even for place on the waterfront and heritage homes
- The Chamber of Commerce serves Tourists – this year they printed 75,000 maps and ran out
- The County population is small – 25,000
- They are assessment rich, but employment poor
- Assessment is actually going up – the local economy is suffering due to the increase in tax assessment
- Tourists may want to see wind turbines – people are already asking about them
- The County attracts a diverse set of people – they come for everything from camping to high end B&Bs – there is a price point for every preference
- For a small town, it has big city amenities
- The trick is to manage the growth – want to control growth and manage it the way they want it
- There is a Tourism Destination group which represents 14 different organizations
- Do not want to be another Niagara-on-the-Lake
- Taste the County is bringing in the business, the Chamber manages them once they get here
- Tourism is based on a three-season model
- Some companies like ESSROC offer year-round employment
- Employers spend dollars in the County
- Generations of families still live here – some feel it is these people that oppose change and are not supportive of projects
- There is 200 years of history here
- Taxes are going up
- Real Estate and ESSROC – these are the biggest employers
- People enjoy the lifestyle that is offered today
- People are coming to retire here – they will bring investment dollars and their pension to spend in local restaurants and shops
- There is a blog on the Chamber's website – would be interesting to hear about people's thoughts on Ostrander vs. some of the other projects
- The municipality is not saying no to wind turbine development
- Traffic is quite busy coming into the County on the weekends – people are coming to weekend here from the cities nearby
- Vacancy rates are very low – Accommodation is limited in the County
- There are a number of things going on in the shoulder season as well – there is a County marathon in October and the Arts & Crafts Festival in September, and the Fall Fair (174 years) – there is also an annual RCMP ride
- They must be doing something right to attract all the attention

Q3 – Exploring positive and negative changes – Do you think a wind energy farm would change agriculture in PEC? Will farming and farm operations change?

- Windmills are an inefficient technology
- Visual impacts
- Bedrock will limit the amount of underground transmission lines
- There will be a drop in real estate demand and value
- Realtors are now forced to disclose the fact that wind turbines may be located in the county
- Royal Road as an example – it's impossible to sell houses in that area

- County should compensate for the loss in tax value
- There are independent studies that indicate birds and trees will be impacted
- There is potential for on-shore and off-shore turbine development
- This is a bird migratory area and there may be cumulative impacts related to all of the proposed turbines
- The County has the longest stretch of undeveloped shoreline
- Real estate impacts
- Noise concerns
- The bird watching event might be affected
- Bird migration in Pre'squile in late August may also have be affected
- People are being engaged door-to-door by project proponents if they have property of over 100 acres or more
- People don't know where they are going to go – they could go anywhere
- Construction and transportation effects – road widening could lead to disruptions – people living here may be oaky but visitors may not come back if they have a negative experience
- This project needs to be taken in a larger context – there will be bigger roads
- Concrete trucks travelling the roads – there will be impacts
- Questions – will Gilead build for additional development or will they build what is required of them – the nature of the roads will change – will gravel roads be turned to paved roads?
- Potentially the people or workers might settle there
- Encroachments onto private land will occur with road widening
- Environmental impacts
- There is a lot of political will in support of wind turbines – the MNR has policy documents on how to built turbines on sunken ships
- Regulations and guidelines will change as a result of development
- May impact scuba diving in Lake Ontario
- This is the "industrialization of PEC" bringing up to 200 industries to the area
- Questions – where will the jobs be coming from? These could be local jobs
- Concerns regarding project failure – driving force is renewable energy – what would happen if they leave – presumably others would take the project over
- Ontario Power Generation – guarantees a 25 year agreement at an indexed price
- There may be impacts on fishing – tourism and commercial
- Brown trout are being restocked in the area

Q4 – Mitigation measures – How might things be made better? How can the project best benefit the community?

- Financial impacts may be positive – there may be kick-backs to the County
- Agreement – there could be a yearly sum for road maintenance
- Other examples - $7,500
- $40,000 to $50,000 offered to landowner as part of a 20 year contract – this is positive
- The County could be promoted as "green" / renewable
- Would bring tourism to the area
- There would be physical disruption – trees will be impacted – the landscape needs to be resorted under the turbines – after road widening things should be returned to their previous state
- Concerns that the provincial government is pushing the municipality
- The political will is there
- There could be training sessions locally
- Jobs related to the project could be offered to local County residents
- In other examples, contracts and jobs are being kept local (i.e. East Lake housing development)

- Concerned about pirating labour from existing employers
- Limit more developments after this one
- Crown land is probably more appealing to the project proponent
- Spin-offs from construction will have positive impact (i.e. workers will need accommodation)
- Gilead will be the first to use the labour pool for these types of projects
- Gilead is a pioneer – the County will keep them in check
- Economic development impacts and spin-offs
- Provincial buy-out as a mitigation measure
- No great mitigation technique
- NIMBY – not okay
- Nearby residents will be impacted
- Public is unaware of what is coming
- Decisions need to come from Council – needs to be controlled by policy – put some limitations
- Companies are currently controlling the numbers and not the County
- Local Council will be interested in dollars
- Payment needs to come back to the community to fix other things – through tax base or a % of profits
- Those using the infrastructure need to help maintain it

Q5 – Are there any issues we haven't talked about?

- Real estate is going up in other areas
- Within direct proximity, there will be a decrease in property value by 30% and in the outlining areas where they are visible there also will be a decrease by 20%
- These will eventually impact the County
- There are other setbacks in Europe at 1 KM – in Ontario it's 400 m
- There is also off-shore interest – the economic feasibility decreases in the water
- Studies from the US indicate there are impacts on property
- Real estate impacts – there is already a pre-windmill effect happening
- Baby boomers are coming and not necessarily young people
- Property has increased in value by 50% over the last 15 years
- Business is primarily seasonal here – 3 months
- Businesses are also coming from Quebec
- Not sure tourism will be affected
- There are no large scale accommodations here
- Gas prices have taken their toll on tourism – although people are still doing local trips by car

APPENDIX 4:

Matrix of Socio-Economic Effects of the Ostrander Point Wind Energy Park

APPENDIX 4:

MATRIX OF SOCIO-ECONOMIC EFFECTS OF THE OSTRANDER POINT WIND ENERGY PARK

Table 1 – Socio-economic Impacts at the County Level – Effects during windfarm OPERATIONS

Project Summary: *A windfarm of up to 12 turbines is to be established in Southern Prince Edward County primarily in Crown Lands known as the Ostrander Point Crown Land Block (OPCLB).*		**IMPACTS**					
		TOURISM	**LOCAL BUSINESS – (retail/service)**	**PROPERTY VALUES**	**MUNICIPAL REVENUE**	**COMMUNITY CHARACTER AND AESTHETIC QUALITY**	**EMPLOYMENT**
OPERATIONAL EFFECTS	**CHANGES IN LAND USE** **Key Question:** *Will changes in land use due to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in Prince Edward County?* • The Ostrander Point Crown Land Block (OPCLB) is a 324 Ha area designated as a Resource Management Area. • Its current land use will shift from Undeveloped / Open Space to a mixed use of Open Space and Utility	**IMPACT: MINOR** - Windfarm will bring economic spin-off effects but these will be marginal - Effects of the Project on tourism will be minimal as the OPLCB and the Primary Study Area (PSA) are not tourist destinations - Tourist activities in the ward are minimal in comparison with other areas in the County - Only 1% of volume that visit Sand Banks visit Prince Edward Point to do birding - Increase in tourism to the PSA once the turbines are set	**IMPACT: MINOR** - There is a potential for new businesses in the County to develop in connection to the windfarm; such an information kiosk that could sell educational material, postcards, souvenirs, etc.	**IMPACT: NONE** - Concerns among realtors and some residents about temporary adjustment in property values in County - However, given the small scale of the project in comparison with larger wind projects proposed in the County and remoteness of South Marysburgh in relation to the rest of the County no impact affecting property values will occur at the County level	**IMPACT: MINOR** - Gilead, the Applicant, will have to pay municipal taxes (amount yet to be determined) - In addition, there will be one time building permit fees that will be paid to the County - Currently there is no pressure for any other use in adjacent lands	**IMPACT: MINOR** - Changes in rural landscape will occur, but will not be meaningful at the county level - There are concerns about a so-called *industrialization* of the county; up to 270 commercial quality wind turbines are being proposed to be built in the county. - The assessment of the cumulative impact of all those potential windfarms is beyond the scope of this study - Ostrander Point is a small project in comparison to the other proposals. Its impact is minimal at the county level (about 4% of proposed wind turbines)	**IMPACT: NONE** - No impact affecting County level employment will occur as a result of changes in land use of the OPCLB

Project Summary:
A windfarm of up to 12 turbines is to be established in Southern Prince Edward County primarily in Crown Lands known as the Ostrander Point Crown Land Block (OPCLB).

	IMPACTS					
	TOURISM	**LOCAL BUSINESS – (retail/service)**	**PROPERTY VALUES**	**MUNICIPAL REVENUE**	**COMMUNITY CHARACTER AND AESTHETIC QUALITY**	**EMPLOYMENT**
ECONOMIC CHANGES **Key Question:** *Will economic changes due to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in Prince Edward County?* • Approximately $38 million will be spent on construction activities including labour, equipment and materials. • Products and services that will be required include; construction of concrete pad for the wind towers, road construction, transmission line erection and mechanical installations, electrical installations, site security and fencing during construction • Skilled trades/profiles that will be required include; engineers, concrete contractors, skilled construction workers, electricians, security guards, road workers and contractors.	**IMPACT: MINOR** - 20-30 workers will be onsite during construction eating at local restaurants during both "on" and "off" seasons - a maximum of $351,900 added to the local economy - Depending on where these expenses take place they are considered either as a moderate contribution to the ward's tourism industry or a minor contribution on the county's tourism industry	**IMPACT: MODERATE** - 14% or 5.3 million in construction expenditures accrues to person and businesses in the local area. - 80% of construction expenditures or $4.24 million will be spent for construction material and equipment, and the remaining 20% or $1,060,000 will account for labour costs. - Expenditure multiplier on these amounts yield $12.72 M for local expenditures and 3.18 M for local labour costs -Most jobs will be temporary skilled trade jobs. There will be two full-time positions to operate the wind farm once it is operational	**IMPACT: NONE** - No impact on property values will occur as a result of the economic changes that the windfarm will produce (investment, labour, services, etc)	**IMPACT: MINOR** - Applicant will have to pay municipal taxes - Paying a lease payment to the MNR for the land. The amount of the lease payment still needs to be determined	**IMPACT: NONE** - No impact on the community character or aesthetic quality will occur as a result of the economic changes that the windfarm will produce (investment, labour, services, etc)	**IMPACT: MINOR** - $1,060,000 will be spent in local labour costs. - At least 80% of these expenses will occur across the county mainly in Picton - The majority of the jobs will be temporary skilled trade jobs - 2 full-time positions will be created to operate the wind farm
VISUAL CHANGES **Key Question:** *Will visual changes due to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in Prince Edward County?* **Key Question:** • The windfarm will operate up to 12 wind turbines towers, 80 m tall plus 42 m blades • Based on the visual simulations prepared by Gilead, at 2-3 kilometres of distance from the wind farm visual prominence of wind turbines is minor • Wind turbines may be still visible over 3-5 km however; visual perception of wind turbines on the landscape is notably diminished • Two onsite Substations will be built. 27.6 kV collector lines will carry the electricity from the turbines to the on-site substations • From the on-site substations, the above ground 44 kV distribution lines will be constructed that will lead from the Project area to the Milford DS	**IMPACT: MINOR** - Tourists en route to Prince Edward Point via Road 13 will be able to see the windfarm - Distances from any vantage point along Road 13 to the closest wind turbine will range from 1940 m to 2770 m - Tourism at the County level will not be affected by visual effect of wind turbines	**IMPACT: NONE** - No impact affecting local businesses retailing and services will occur at the county level as a result of the visual change created by the project	**IMPACT NONE** - Wind turbines will only be seen from within South Marysburgh - No impact affecting property values will occur at the County level as a result of the visual change created by the project	**IMPACT: NONE** - No impact affecting municipal revenue will occur at the county level as a result of the visual change created by the project	**IMPACT: MINOR** - Visual change is arguably one of the most controversial effects of the proposed project - No impact affecting community character and aesthetic quality will occur at the County level - Potential changes created at a County-wide level are subject to cumulative assessments at a County and Provincial level	**IMPACT: NONE** - No impact affecting employment will occur at the County level as a result of the visual change created by the project

Project Summary: *A windfarm of up to 12 turbines is to be established in Southern Prince Edward County primarily in Crown Lands known as the Ostrander Point Crown Land Block (OPCLB).*		**IMPACTS**					
		TOURISM	**LOCAL BUSINESS – (retail/service)**	**PROPERTY VALUES**	**MUNICIPAL REVENUE**	**COMMUNITY CHARACTER AND AESTHETIC QUALITY**	**EMPLOYMENT**
	NOISE CHANGES **Key Question:** *Will noise changes due to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in Prince Edward County?* • The windfarm will operate up to 12 wind turbines towers • Increased sound levels will occur during normal operation of the wind energy park • Sound will be produced from the operating wind turbines as a result of the machinery operating within the nacelle at the top of the turbine, and as a result of the turning blade cutting through the air • The level of noise produced by wind turbines will comply with current regulations from the Ministry of the Environment. Noise level resulting from windfarm operations will be below 40 dB(A) at closest point of receptions	**IMPACT: _NONE_** - Distances from any point along Road 13 to the closest wind turbine will range from 1940 m to 2770 m. At that distance noise change resulting from the operation of the windfarm will be imperceptible - Tourists en route to Prince Edward Point will not be affected by changes in noise levels	**IMPACT: _NONE_** - Noise change is imperceptible beyond the Primary Study Area, thus, no impact	**IMPACT: _NONE_** - Noise change is imperceptible beyond the Primary Study Area thus, no impact	**IMPACT: _NONE_** - Noise change is imperceptible beyond the Primary Study Area.	**IMPACT: _NONE_** - Noise change is imperceptible beyond the Primary Study Area, thus, no impact	**IMPACT: _NONE_** - Noise change is imperceptible beyond the Primary Study Area, thus no impact

Table 1A – Socio-economic Impacts at the County Level – Effects during windfarm CONSTRUCTION

Project Summary: *A windfarm of up to 12 turbines is to be established in Southern Prince Edward County primarily in Crown Lands known as the Ostrander Point Crown Land Block (OPCLB).*			**IMPACTS**					
			TOURISM	**LOCAL BUSINESS – (retail/service)**	**PROPERTY VALUES**	**MUNICIPAL REVENUE**	**COMMUNITY CHARACTER AND AESTHETIC QUALITY**	**EMPLOYMENT**
EFFECTS:	**CONSTRUCTION**	**CONSTRUCTION NUISANCES** **Key Question:** *Will construction activities related to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in Prince Edward County?* • Construction will occur from May to December 2009 [1]. Daily operations will be from 8:00 am to 5:00 pm, Monday to Friday • During construction period there will be from 5 to 20 trucks per day along the proposed transportation route and approximately 20-30 construction workers on site. • The transportation route to bring in the turbine components will follow some seasonal roads and some intersections would need to be widened. • Approximately 5 km of single track access driveways will be constructed onsite. Tracks will be approximately 10 m wide for construction, but 7 m of this width will be reclaimed following construction. Some local roads may be upgraded or widened to allow transportation of the turbines and cranes to the site [2] • The turbine towers will be mounted on in-ground cement pads approximately 10 m by 10 m to a depth of 3 m. • Dust resulting from construction activities may have a localized impact along construction routes and in the PSA. Dust suppression will be used to minimize this.	**IMPACT: _MINOR_** - Both the OPCLB and the proposed transmission line route are not part of any tourist circuit or regular route used by visitors - Tourists may be bothered by construction activities but they will not stop coming to visit the county	**IMPACT: _MINOR_** - Disruptions may occur during transportation of turbine components, or during certain construction phases (road closures, detours, etc) that could temporarily affect economic activities in the towns located along the transportation route	**IMPACT: _NONE_** - Localized disruptions that may occur around project site and along the transportation route will have no impact in county-wide property values	**IMPACT: _NONE_** - Construction activities will have no impact on county-wide property taxes	**IMPACT: _MINOR_** - Construction that will take place around the project area will have no impact on the community character and aesthetic quality of the county	**IMPACT: _NONE_** - $1,060,000 will be spent in the County in local labour costs. - The majority of the jobs will be temporary skilled trade jobs. - 2 full-time positions will be created to operate the wind farm once it is operational

[1] Note that construction schedule was updated and will take place from July 2009 to April 2010.

[2] A detailed transportation study will be undertaken before transportation of the turbine components takes place. To ensure local requirements are met, consultation with the County and MTO will be conducted.

Table 2 – Socio-economic Impacts in the Primary Study Area (PSA) and South Marysburgh Ward – Effects during windfarm OPERATIONS

Project Summary: *A windfarm of up to 12 turbines is to be established in Southern Prince Edward County primarily in Crown Lands known as the Ostrander Point Crown Land Block (OPCLB).*			**IMPACTS**					
			TOURISM	**LOCAL BUSINESS – (retail/service)**	**PROPERTY VALUES**	**MUNICIPAL REVENUE**	**COMMUNITY CHARACTER AND AESTHETIC QUALITY**	**EMPLOYMENT**
EFFECTS	**OPERATIONAL**	**CHANGES IN LAND USE** **Key Question:** *Will changes in land use due to wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in the PSA and South Marysburgh Ward?* • The Ostrander Point Crown Land Block (OPCLB) is a 324 Ha area designated as a Resource Management Area. • It current land use will shift from Undeveloped / Open Space to a mixed use of Open Space and Utility	**IMPACT: MINOR** - No tourist activities in the OPCLB - Besides tourists visiting Little Bluff Conservation Area (on Road 13), there are currently no other tourist activities and the Primary Study area (PSA) is away from regular County tourist circuits. - Changes in land use will not have any impact on tourist destinations in the Ward - Current recreational uses in OPLCB will continue to be available to the public once the windfarm becomes operational	**IMPACT: MINOR** - Potential for new local businesses to develop in connection to the windfarm - Minor positive impact affecting local businesses, retail or services as a result of the change in land use of the OPCLB	**IMPACT: MINOR** - Property values in dwellings that are closest to the wind turbines may experience minor temporary adjustments in their values, either positively or negatively, as a reaction to the presence of wind turbines. These adjustments will bear no meaningful impact on property values in the long term - 51.9% of local residents believe that property values will increase in the next 3 years;13.0% believe property values will decrease; - 2 people (2.6%) indicated that the values would decrease due to the presence of the windfarm - If property values in the dwellings located up to 2km of the closest wind turbines were to see their values affected temporarily; 12 properties would fall in this category (8 within 1 km and 4 within 1km and 2 km) - This indicates that changes in land use is not a significant property value issue for residents in the PSA	**IMPACT: NONE** - No impact on municipal revenue as municipal taxes are dealt at the County level	**IMPACT: MODERATE** - Changes in rural landscape will occur due to the presence of 12 turbines - Change will occur within a land extension of up to 3.24 sq km out of the 108.29 sq km of ward surface (less than 3.0% of Ward surface) - 64% of the interviewees in the PSA support wind energy programs and infrastructure in the community - Community rural character within the PSA is highly valued. - Local residents value quality of living in their community, and although they are aware that changes will occur, most of them do not see wind energy as a threat to community character and aesthetic quality	**IMPACT: MINOR** - No jobs will be created in the ward as a result of the change in land use in the OPCLB - If new business in connection to the windfarm develop; such as an information kiosk, 1 or 2 local jobs would be created

Project Summary:
A windfarm of up to 12 turbines is to be established in Southern Prince Edward County primarily in Crown Lands known as the Ostrander Point Crown Land Block (OPCLB).

	IMPACTS					
	TOURISM	**LOCAL BUSINESS – (retail/service)**	**PROPERTY VALUES**	**MUNICIPAL REVENUE**	**COMMUNITY CHARACTER AND AESTHETIC QUALITY**	**EMPLOYMENT**
ECONOMIC CHANGES **Key Question:** *Will economic changes due to wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in the PSA and South Marysburgh Ward?* • Approximately $38 million will be spent on construction activities including labour, equipment and materials. • Products and services that will be required include; construction of concrete pad for the wind towers, road construction, transmission line erection and mechanical installations, electrical installations, site security and fencing during construction • Skilled trades/profiles that will be required include; engineers, concrete contractors, skilled construction workers, electricians, security guards, road workers and contractors.	**IMPACT: MODERATE** - The wind farm will contribute to local tourism $44,200 to $61,300 (more details provided at the County level) - These amounts are a moderate impact if most of the expenses occur at the Ward level (mainly in Milford)	**IMPACT: MINOR** - Local business / residents in the Ward (mainly Milford) will benefit from unskilled construction jobs that will become available locally, and from spin-offs jobs (e.g. accommodation, restaurants).	**IMPACT: NONE** - No impact on property values will occur as a result of the economic changes that the windfarm will produce (investment, labour, services, etc)	**IMPACT: NONE** - No impact on municipal revenue as municipal taxes are dealt at the County level	**IMPACT: NONE** - No impact on the community character or aesthetic quality will occur as a result of the economic changes that the windfarm will produce (investment, labour, services, etc)	**IMPACT: MINOR** - Residents in the ward (mainly Milford) can benefit though from unskilled construction jobs that will become available locally, and from spinoff jobs (e.g. accommodation, restaurants)
VISUAL CHANGES **Key Question:** *Will visual changes due to wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in the PSA and South Marysburgh Ward?* • The windfarm will operate up to 12 wind turbines towers, 80 m tall plus 42 m blades. • Based on the visual simulations prepared by Gilead, at 2-3 kilometres of distance from the wind farm visual prominence of wind turbines is minor. • Wind turbines may be still visible over 3-5 km however visual perception of wind turbines on the landscape is notably diminished • Two onsite Substations will be built. Transmission will be via above-ground, three phase, pole mounted 27.6.kV distribution line will be constructed to carry the electricity from the turbines to the on-site substations. These lines are a socially accepted feature throughout North America • From the on-site substations, above ground 44 kV distribution lines will be constructed that will lead from the Project area to the Milford DS • Trees and bushes on roads along the transmission route will need to be removed and replanted in some instances	**IMPACT: MINOR** - Divers and tourists en route to Prince Edward Point will see the wind turbines at a distance of 2 km or more to closest wind turbine -16.3 percent of PSA residents listed visual effects as a concern - The wind turbines may become a local attraction	**IMPACT: MINOR** - All local businesses are located beyond 2 km; visual changes will have minor to no impacts on these businesses - Accommodation businesses located in the ward are located in excess of 6.5 km to the closest wind turbine; no impact	**IMPACT: MINOR** - Property values in dwellings that are closest to the wind turbines may experience some minor temporary adjustments in their values, either positively or negatively, as a reaction to the presence of wind turbines. -12 properties fall in this category (8 within 1 km and 4 within 1km and 2 km). - Given the reduced percentage of residents living in within 2 km of the closest turbine (less than 3% of ward dwellings) the overall impact will be minor	**IMPACT: NONE** - No impact on municipal revenue as municipal taxes are dealt at the County level	**IMPACT: MINOR** - Visual impact is most common concern among residents of the PSA (16. 3%) - 89.8% of properties in PSA are 2 km away, or more, from the closest wind turbine - With one exception no residents surveyed mentioned that the community character would change to the point they would consider moving.	**IMPACT: NONE** - There will be no impact affecting employment as a result of the visual changes that the windfarm will produce

Project Summary: *A windfarm of up to 12 turbines is to be established in Southern Prince Edward County primarily in Crown Lands known as the Ostrander Point Crown Land Block (OPCLB).*	**IMPACTS**					
	TOURISM	**LOCAL BUSINESS – (retail/service)**	**PROPERTY VALUES**	**MUNICIPAL REVENUE**	**COMMUNITY CHARACTER AND AESTHETIC QUALITY**	**EMPLOYMENT**
NOISE CHANGES **Key Question:** *Will noise changes due to wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in the PSA and South Marysburgh Ward?* • The windfarm will operate up to 12 wind turbines towers • Increased sound levels will occur during normal operation of the wind energy park • Sound will be produced from the operating wind turbines as a result of the machinery operating within the *nacelle* (the casing that houses the electrical generator gearbox and blade control on a wind turbine) at the top of the turbine, and as a result of the turning blade cutting through the air • The level of noise produced by wind turbines will comply with current regulations from the Ministry of the Environment. Noise level resulting from windfarm operations will be below 40 dB(A) at closest point of receptions	**IMPACT: _NONE_** - There are currently no tourist activities in the OPCLB. - There are some tourist destinations in the ward all of which as are located in excess of 2 km away from closest wind turbine - Noise emanating from the wind turbines will dissipate and fall below ambiance noise of 40 dB(A) - noise changes will bear no impact on local tourism	**IMPACT: _NONE_** - All of these properties are located beyond 2 km; thus noise changes will not have any impacts on these businesses. - There will be no impact affecting local businesses and services as a result of the noise changes that the windfarm will produce	**IMPACT: _NONE_** - 12 dwellings (10.2% of total dwellings in the PSA area) located within 2 km of closest wind turbine; in all cases noise exposure will be below 40 dB(A) - Rest of residents of PSA and Ward will have no impact	**IMPACT: _NONE_** - No impact on municipal revenue as municipal taxes are dealt at the County level	**IMPACT: _NONE_** - Although increase in noise levels will occur; no resident living in the PSA will be exposed to noise resulting from the windfarm in excess of 40 dB(A)	**IMPACT: _NONE_** - No impact affecting employment will occur as a result of changes in noise levels that the windfarm will produce

Table 2A – Socio-economic Impacts in the Primary Study Area (PSA) and South Marysburgh Ward – Effects during windfarm CONSTRUCTION

Project Summary: *A windfarm of up to 12 turbines is to be established in Southern Prince Edward County primarily in Crown Lands known as the Ostrander Point Crown Land Block (OPCLB).*			**IMPACTS**					
			TOURISM	**LOCAL BUSINESS – (retail/service)**	**PROPERTY VALUES**	**MUNICIPAL REVENUE**	**COMMUNITY CHARACTER AND AESTHETIC QUALITY**	**EMPLOYMENT**
EFFECTS:	**CONSTRUCTION**	**CONSTRUCTION NUISANCES** **Key Question:** *Will construction activities related to the wind farm have effects on tourism, local business, property values, municipal revenue, community character and aesthetic quality, and employment in the PSA and South Marysburgh Ward?* • Construction will occur from May to December 2009. [3] Daily operations will be from 8:00 am to 5:00 pm, Monday to Friday • During construction period there will be from 5 to 20 trucks per day along the proposed transportation route and approximately 20-30 construction workers on site. • The transportation route to bring in the turbine components will follow some seasonal roads and some intersections would need to be widened. • Approximately 5 km of single track access driveways will be constructed onsite. Tracks will be approximately 10 m wide for construction, but 7 m of this width will be reclaimed following construction. Some local roads may be upgraded or widened to allow transportation of the turbines and cranes to the site [4] • The turbine towers will be mounted on in-ground cement pads approximately 10 m by 10 m to a depth of 3 m. • Dust resulting from construction activities will have a localized impact along construction routes and in the PSA. Dust up is expected to affect properties up to 100 m away.	**IMPACT: MINOR** . Both the OPCLB and the proposed transmission line route (being currently revised) are locations that are not included as part of any tourist circuit or regular route used by visitors - People using Road 13 to access their residences or to visit Prince Edward Point will be affected by construction activities. - Minor impact given the specific location and temporary nature of disturbances	**IMPACT: MINOR** - Disruptions during transportation of turbine components and certain construction phases - There are not many businesses present within the PSA. Vineyard and car dealer, both located on Road 13 will be temporarily affected due to traffic disruptions - Local business in areas that depend on access via Road 13 will be temporarily affected, but not to a degree that will affect normal business operations - No impact on business located in the rest of the ward based on distance to project site	**IMPACT: NONE** - Disruptions that will occur around project site and along the transportation route will be temporary and will have no impact on property values	**IMPACT: NONE** - No impact on municipal revenue as municipal taxes are dealt at the County level	**IMPACT: MINOR** - Certain roads will require upgrades to allow the transportation of turbine components, and construction of and ancillary equipment -Disruptions will have no permanent effect on aesthetics	**IMPACT: MINOR** - $1,060,000 will be spent in local labour costs - Most jobs will be temporary skilled trade jobs - Not possible to determine yet what percentage of these products and services will come from Ward

[3] Construction Schedule was recently updated and will take place from July 2009 to April 2010.

[4] A detailed transportation study will be undertaken before transportation of the turbine components takes place. To ensure local requirements are met, consultation with the County and MTO will be conducted.

Table 3 – Summary of Net socio-economic impacts at the County level

		Socio-economic Impacts in Prince Edward County						
		TOURISM	LOCAL BUSINESS	PROPERTY VALUE	MUNICIPAL REVENUE	COMMUNITY CHARACTER & AESTHETIC QUALITY	EMPLOYMENT	NET IMPACTS
EFFECTS	Change in land use							
	Economic Changes							
	Visual changes							
	Noise Changes							
	Construction Nuisances							

Definition of Net Impacts (based on the table of decision rules criteria)

No impact – level of effects have no change or impact

Minor impact – some level of impact, positive or negative, however direct changes are not considered significant based and there are few indirect impacts

Moderate impact – higher level of positive or negative impact with direct changes considered significant as well as other indirect impacts

High impact – highest degree of positive or negative impact with changes resulting in impacts such as community displacement, physical harm and damage, etc.

Table 4 – Summary of Net socio-economic impacts in the PSA and South Marysburgh Ward

		Socio-economic Impacts in the Primary Study Area (PSA) and South Marysburgh Ward						
		TOURISM	LOCAL BUSINESS	PROPERTY VALUE	MUNICIPAL REVENUE	COMMUNITY CHARACTER & AESTHETIC QUALITY	EMPLOYMENT	NET IMPACTS
EFFECTS	Change in land use							
	Economic Changes							
	Visual changes							
	Noise Changes							
	Construction Nuisances							

Definition of Net Impacts (based on the table of decision rules criteria)

No impact – level of effects have no change or impact

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High impact – highest degree of positive or negative impact with changes resulting in impacts such as community displacement, physical harm and damage, etc.

APPENDIX 5:

Panoramic Visual Simulations of the Ostrander Point Wind Energy Park

APPENDIX 5:

PANORAMIC VISUAL SIMULATIONS OF THE OSTRANDER POINT WIND ENERGY PARK

Visual Simulations

Visual Simulations

APPENDIX 6:

Noise Isocontours

APPENDIX 6:
NOISE ISOCONTOURS