

## Economic Benefits of Provincial Parks in Ontario: A Case Study Approach

Peter Whiting, *The Outspan Group*  
Dan Mulrooney, *Ontario Parks*

### Abstract

The Government of Ontario's recently initiated long-term planning program *Lands for Life* covers Crown lands in Ontario's Boreal West, Boreal East and Great Lakes/St. Lawrence regions. Ontario Parks has an interest in this program and commissioned a study to provide estimates of the economic benefits produced by three classes of Provincial Parks within the area.

The purpose of the study was to derive an initial estimate of the magnitude of benefits generated by three parks: Quetico (wilderness), Lake Superior (natural environment) and Mattawa River (waterway). The economic assessment framework produced estimates of benefits attributable to each of the parks from two perspectives – the local area and the province – and recognized three types of benefits – personal, business and societal. Detailed analyses were conducted for each of the three provincial parks. The qualified results reflect only those benefits associated with the parks that could be estimated in monetary terms.

The study results for the three parks examined are significant. Quantified annual benefits to the local areas from each of Quetico, Lake Superior and Mattawa River were \$2.7 million, \$2.1 million and \$0.3 million, respectively, and to the Province of Ontario \$7.0 million, \$7.7 million and \$0.7 million, respectively. Benefits per resident at the local and provincial levels indicated their importance to these outlying communities.

The information provides a broader base to assess the benefits of provincial parks. Information on the broad range of benefits derived from provincial parks will facilitate their recognition as a highly beneficial land use alternative. This study showed that the quantifiable dollar benefits derived from these three parks are substantial, but that weaknesses in available data make it difficult to assess the full benefits of the provincial parks.

---

### Introduction

The operation of a large park system, such as Ontario Parks, provides a host of social and economic benefits. Currently very little is known about the economic benefits generated by provincial parks. *The Outspan Group* was contracted to estimate these benefits for Ontario Parks. While there were specific objectives, the overall goal was to expand the socio-economic knowledge base of the organization.

### Objectives

1. Estimate the benefits derived from three provincial parks – Quetico, Lake Superior and Mattawa River, each representing a different classification of park.

2. Assess benefits to Ontario from local and provincial perspectives.
3. Apply results to all parks in each class.

### **Economic Assessment Framework**

Key to the success of any economic assessment is the application of the right framework. The one used (Table 1) was developed for National Parks and had the following features:

- It is conceptually simple: uses three categories – personal, business and society;
- It allows different perspectives of assessment: multiple account registers;
- It incorporates economic impacts within a “benefits” framework;
- It is additive across categories of benefits;
- It incorporates qualitative benefits; and,
- It generates a total value assessment.

The accounting of benefits changes with each perspective of assessment.

### **Summary Results**

#### ***Quetico Provincial Park***

Table 2 provides a brief summary of the benefits to the local area in Ontario.

Table 3 provides a summary of the benefits to the province of Ontario from Quetico Provincial Park.

Table 4 summarizes the dollar benefits associated with Quetico Provincial Park.

### **Conclusions**

1. Each park generates substantial benefit. Some produce millions annually.
2. The results cannot be generalized to represent all parks in the same classification. More research specific to these other parks that takes into account the specific features and unique characteristics that make them important is needed to fully appreciate their value.
3. Value of the parks to society at large is substantially larger. Benefits exported from the province reflect an overall gain for society.
4. There are many advantages to the use of a consistent and additive framework for the assessment of park benefits.
5. The type of information presented in this report is important: it provides a broader base on which to assess the importance of provincial parks.

### **Overall Conclusions**

#### ***Provisos***

- a) Preliminary results are an indication of the order of magnitude of benefits involved. The numeric results should be considered both conservative and preliminary. More research is needed.
- b) Not all benefits of the parks have been quantified. Other benefits exist.
- c) Exported benefits to other provinces and countries are not included.

<i>Benefit Category:</i>		
PERSONAL	BUSINESS	SOCIETAL
<i>Definition:</i>		
benefits accruing to stakeholders (users and non-users)	Benefits derived from the net redistribution of commercial activity from one area to another	non-allocable benefits tending to be societal in scope
<i>Benefit Components:</i>		
<p>Use Values</p> <ul style="list-style-type: none"> <li>- direct use</li> <li>- indirect use</li> <li>- future use value</li> </ul>	<p>Impacts from spending by stakeholders and by location management for development and operations, as measured by increases in GDP (value added), labour income, employment and tax revenue</p>	<p>Ecological Functions: primary production, sequestering carbon dioxide, soil formation, herbivory, carnivory, oxygen production, population moderation, nutrient transport, moderation of macro- and microclimate, decomposition, maintenance of genetic diversity, and others</p>
<p>Non-Use Values</p> <ul style="list-style-type: none"> <li>- option value</li> <li>- existence value</li> <li>- bequest value</li> </ul>		<p>Resource integrity: maintenance of existing benefits; mitigate cumulative effects of human changes</p>
		<p>Health effects – mental, physical, spiritual</p>
		<p>Worker productivity</p>
		<p>Educational benefits</p>
		<p>Scientific benefits</p>
		<p>International responsibilities and agreements: NAWMP, CBD, RAMSAR, CITES, MAB, etc.</p>
<p>Business location decisions (quality of life/business), community cohesion</p>		

Table 1: Generalized Framework for Estimating the Benefits of Provincial Parks

Benefit Category	Quantitative and Qualitative Measures
Personal Benefits	
Use	\$390,000
Non-Use	\$585,000
Business Benefits	
Value Added	\$1,549,000
(Employment)	(34.5)
Societal Benefits	<ul style="list-style-type: none"> <li>- business location decisions</li> <li>- research benchmark for boreal forest ecosystems</li> <li>- Lac La Croix economic development</li> <li>- maintenance of local activity benefits</li> <li>- educational resource</li> <li>- \$210,000 health cost savings</li> </ul>

Table 2: Summary of Benefits to the Local Area from Quetico Provincial Park, 1996

Benefit Category	Quantitative and Qualitative Measures
Personal Benefits	
Use	\$1,200,000
Non-Use	\$3,300,000
Business Benefits	
Value Added	\$1,800,000
(Employment)	(32.0)
Societal Benefits	<ul style="list-style-type: none"> <li>- \$400,000 in fees paid by out-of-province park visitors</li> <li>ecological functions/services valuable to all Ontarians (\$150 million)</li> <li>- research benchmark for boreal forest ecosystems</li> <li>- natural and cultural heritage conservation</li> <li>- diversified economic development opportunities in rural areas</li> <li>- \$345,000 in cost savings to Ontario Health Insurance Plan (OHIP)</li> </ul>

Table 3: Summary of Benefits to the Province from Quetico Provincial Park, 1996

Area and Benefit Type	Economic Benefit
<b>1. Local Area</b>	
Personal Benefits	\$975,000
Business Benefits	\$1,549,000
Societal Benefits	\$210,000
Dollar Total	\$2,734,000
<b>2. Province of Ontario</b>	
Personal Benefits	\$4,500,000
Business Benefits	\$1,800,000
Societal Benefits	\$745,000
Dollar Total	\$7,045,000
<p>Note: Only those values that could be put in dollar terms are included in this table. Not all benefits associated with Quetico are included in these figures.</p>	

Table 4: Summary of Dollar Benefits Associated with Quetico Provincial Park, 1996. Note: Similar results are available for Lake Superior and Mattawa River Parks. However, only an overall summary is provided here in Tables 5 and 6.

Area and Benefit Values	Quetico	Lake Superior	Mattawa River
1. Local Area			
Personal Benefits	\$975,000	\$596,000	\$205,000
Business Benefits	\$1,549,000	\$1,318,000	\$36,500
Societal Benefits	\$210,000	\$170,000	\$56,000
Total Benefits	\$2,734,000	\$2,084,000	\$297,500
2. Province of Ontario			
Personal Benefits	\$4,500,000	\$6,101,000	\$593,000
Business Benefits	\$1,800,000	\$1,108,000	\$6,000
Societal Benefits	\$745,000	\$496,000	\$110,000
Total Benefits	\$7,045,000	\$7,705,000	\$709,000
Note: The values presented in this table are only those benefits that have been valued in monetary terms. Not all benefits associated with these parks are represented in these figures.			

Table 5: Summary Dollar Benefits for Quetico, Lake Superior and Mattawa River Provincial Parks, 1996

Area and Benefit Values	Quetico	Lake Superior	Mattawa River
1. Local Area			
Total Benefits	\$2,734,000.00	\$2,084,000.00	\$297,500.00
Local Area Population	5,500.00	5,000.00	64,000.00
Benefits per Resident	\$497.09	\$416.80	\$4.65
2. Province of Ontario			
Total Benefits	\$7,045,000	\$7,705,000.00	\$709,000.00
Provincial Population	\$10,753,573.00		
Benefits per Resident	\$0.66	\$0.72	\$0.07

Table 6: Benefit per Local Area and Provincial Resident for Quetico, Lake Superior and Mattawa River Provincial Parks, 1996