

# A STUDY OF THE SOCIAL AND ECONOMIC BENEFITS ASSOCIATED WITH THE NINE ONTARIO LIVING LEGACY SIGNATURE SITES

Dan Mulrooney<sup>1</sup>, Phil Shantz<sup>2</sup> and Will Wistowsky<sup>3</sup>

<sup>1</sup>Ontario Parks

<sup>2</sup>Engel Consulting Group and Shantz Analytica Inc.,

<sup>3</sup>Wildernomics

## Abstract

*With the implementation of Ontario's Living Legacy Land Use Strategy (OLLUS), Ontario's system of provincial parks and conservation reserves will grow to include over 600 areas and more than 9.5 million ha of the province's most significant landscapes and waterscapes. The network of protected areas is substantial and supports a wide range of environmental, social and economic benefits that enrich Ontario. The management of Ontario Parks wanted a better understanding of how the "Signature Sites" (nine special designations incorporating protected area clusters) contribute to individuals, local communities, the province and society in general. The Study of the Economic and Social Benefits of the Nine Ontario Living Legacy Signature Sites is being carried out by a group of consultants including the authors plus Lorne Johnson and Dr. Kim Rollins. The study is taking place over a 3-year term culminating in March 2004. The major components of the study include: demographic and economic baseline profiling of approximately 100 communities and 11 regions associated with each signature site; analysis of growth and demand for recreational uses associated with parks; identification of economic opportunities associated with parks for local businesses and communities; signature site case studies on the economic dependency and relationships between the park and local communities and businesses; implementation of a non-market valuation survey instrument at 3 of the signature sites; and, benefits transfer exercise to determine use values at eight of the signature sites. By June 2003 the first three components of the project will have been completed along with two of the case studies and the completion of the pilot test of the NMV survey instrument. Along with providing an estimate of use values associated with these sites, the study is intended to serve as a tool as to how to better manage the various signature sites. In addition to an overview of the project and interim findings this paper to PFRO will highlight the many challenges and benefits in undertaking a study of this nature across a geographically and economically diverse province and with a variety of different types of protected areas.*

## Introduction

The Government of Ontario through the *Ontario Living Legacy Land Use Strategy* (1999)

is in the process of establishing 332 protected areas that will represent approximately 2.3 million ha of land in two different protected area categories – provincial parks and conservation reserves. Ontario's system of provincial parks and conservation reserves will grow to include over 600 areas and more than 9.5 million ha of province's most significant landscapes and waterscapes.

As part of this comprehensive land-use planning process, the Government identified nine larger areas as "signature sites". These sites, consist of an amalgamation of different land-use designations that protect areas of outstanding ecological, tourism and recreational significance (OMNR, 1999).

While there is some understanding that protected areas in Ontario produce various societal benefits; there has been a lack of studies that have explored the wide range of economic and social dimensions protected areas in the Province can provide. In a move to better understand the flow of benefits from these protected areas, the OMNR commissioned a study entitled *The Economic and Social Benefits of the Nine Ontario Living Legacy Signature Sites*. These nine signature sites are:

- Kawartha Highlands;
- Spanish River Valley;
- Killarney;
- Algoma Headwaters;
- Nagagamisis Central Plateau Complex;
- Nipigon Basin;
- Woodland Caribou;
- St. Raphael; and,
- Great Lakes Heritage Coast.

These protected areas range from highly used recreational sites associated with the southern Ontario demand for recreation (Kawartha Highlands) to extremely remote (St. Raphael) sites where air travel is the only form of easy access.

This study is currently being carried out by a group of consultants including Phil Shantz, Lorne Johnson, Dr. Kim Rollins and Will Wistowsky and directed by a Ministry of Natural Resources Committee. The study was initiated in September of 2001 and culminates in March 2004.

As of May 2003, the first three components of the project will have been completed along with two of the case studies and the completion of the pilot test of the Non-Market Valuation (NMV) survey instrument (see Shantz *et al.*, 2002a; Shantz *et al.*, 2002b; Shantz *et al.*, 2003a; Shantz *et al.*, 2003b). This paper provides a brief overview of the completed components of the study, and some thoughts on the final products.

## **Profiling the Signature Site Regions**

One of the principal objectives of the study was to provide the OMNR with a baseline

analysis of the economic and demographic trends for each of the signature site regions from which it can undertake long-term monitoring of the regions and communities associated with each signature site.

A total number of 11 regions (one region for each signature site and three regions for the Great Lakes Heritage Coast) and 118 communities (census subdivisions) were profiled. The communities range from small northern Ontario communities, such as Pickle Lake, to larger northern regional centres, such as Sudbury, to more southerly communities such as Peterborough. Data from the 1986, 1991 and 1996 census were used and 2001 population data were obtained for the communities along the coast of the Great Lakes.

In general, the economic and demographic characteristics of the nine more northerly signature site regions differed significantly from the two southern signature site regions (Kawartha Highlands and the Great Lakes Heritage Coast Georgian Bay Region) and from the provincial averages. The nine northerly regions tend to be characterized by stagnant or minor population loss, limited immigration, a narrow economic base, higher levels of unemployment and lower personal and family incomes. The two southerly signature site regions, being located in close proximity to major economic regions such as the Greater Toronto Area benefit from the diverse economic base of southern Ontario and the relative affluence of the region's population which utilizes these areas as recreational playgrounds. These two regions have only a minor dependency on traditional resource extractive industries.

In 1986, the Province of Ontario's Advisory Committee on Resource Dependent Communities in Northern Ontario stated that the economy of Northern Ontario is resource based and will continue to be resource-based on the foreseeable future (ACRDCND, 1986). In the analysis of the economic composition of the nine northerly signature site regions and other broader regional studies (Northwestern Ontario Development Network, 2000) there is little evidence to suggest that these trends have shifted. What is becoming increasingly apparent, however, is that total employment opportunities in the resource extractive industries have at best stagnated and that there is some evidence of overall decline.

The lack of economic opportunities in Northern Ontario communities, together with the establishment of some world class protected areas, has created an environment whereby a large numbers of key stakeholders in Northern Ontario see the potential for an increase in resource-based tourism opportunities.

## **Growth and Demand for Outdoor Recreation in Ontario**

One of the principal organizing concepts for this study was to develop a better understanding of the outdoor recreational demand system in Ontario and to determine which recreation sites act as substitutes for each other.

In general, we have hypothesized that Ontario can be understood in largely three regions (although some activities do not conform to this hypothesis). The first region is central and near north Northern Ontario with the northern perimeter extending to Temagami and

the Spanish River Valley regions. This includes some of the most highly used parks in Ontario (Algonquin and Killarney), together with Crown land areas that are highly used. This region is driven by recreational use from the large populations of Southern Ontario. Based on Ontario population projections there is no reason to suspect that use is likely to plateau any time in the near future. The heavy use of this region and the existing conflicts between user groups raise significant management challenges for OMNR. The second region is Boreal Northeastern Ontario, which is at least one day's drive from Southern Ontario and located beyond the Great Lakes St. Lawrence Forest. This region of the Province is only lightly used for backcountry activities except for local uses and traditional fishing and hunting remote based tourism opportunities. The third region of the Province is Northwestern Ontario, where recreational use is, and will continue to be, significantly driven by American use.

To better understand how signature sites are used and to understand the growth and demand for Ontario Parks, an analysis of both provincial parks use and demographic trends was conducted. Thirteen years of Ontario Parks' statistical summaries were analyzed for trends in camping, day-use and interior use between the years 1988 and 2000. Of the 278 parks shown in the annual data summaries, 74 were selected for detailed analysis here based on their having complete or nearly complete records of visitation. In general, growth was witnessed on all park-related variables.

An analysis of interior statistics was carried out for the nine parks, which maintain interior use information. This was particularly important, as most of the use in the other signature sites will largely be of a backcountry nature. Interior camper nights have grown from 340,128 in 1988 to 452,617 in 2000, representing a 33.1% increase in use.

One major challenge this study has faced is the lack of recreational use data for Crown land, non-operating parks and all other protected areas in the Province. Significant efforts to collect this information by this study should provide some guidance on how OMNR can collect this data in the future.

## Non-Market Valuation Survey

The principal component of the study is a non-market valuation survey (Shantz *et al.*, 2003a) that asks the recreational user a number of questions about their trip and is used to generate willingness to pay estimates for a range of recreational activities. The primary user groups that are targeted by the survey include canoeists, fishermen, cottagers, hikers, frontcountry campers, day-users and possibly hunters and recreational boaters.

Three primary valuation study sites have been chosen, based on the criteria that the primary valuation study sites are chosen such that the combination of site characteristics and user activities is representative of those in the eight signature sites.

The primary valuation will result in economic values for incremental changes in these characteristics and activities, as functions of other variables that affect users' demands for these recreational activities. These marginal values will then be used to estimate recre-

ational demand for the other signature sites, where primary surveys were not conducted. The chosen sites are Killarney, Spanish River and Kawartha Highlands.

In 2002, the survey was pilot-tested on 408 user groups in both Killarney and the Spanish River Valley Signature Sites. In 2003, the survey will be distributed to up to 5,000 diverse recreational user groups including visitors to the Kawartha Highlands Signature Site.

## Case Studies

Two case studies (Shantz, *et al.*, 2003b), one on Killarney Provincial Park and the other on Spanish River Valley, have been completed in draft form together with a third case study for the Kawartha Highlands that is planned for the final year of the study.

The primary purpose of these case studies is to explore a particular region's or community's economic dependency and relationship with a given signature site. To better understand uses within the signature site and to quantify related economic impacts, interviews were conducted with a diversity of local business owners, community leaders, economic development agencies and park planners. These interviews were used to gain an appreciation of these businesses and used to gather data on expenditures and related impacts of various recreational activities. Economic expenditure data was obtained from the non-market valuation pilot survey to supplement the interview data and used to conduct a "demand-side" economic impact study using the Ministry's Socio-Economic Impact Model (SEIM). Finally, the case studies provide an opportunity to make some recommendations on how the various economic interests in the region could realize greater economic opportunities associated with these signature sites.

## Identifying Economic Benefits For Local Communities

One of the objectives of *Ontario's Living Legacy* was to use protected areas as the vehicle to support economic diversification through resource-based tourism. In order to provide a broad base of information for all communities near signature sites, research and recommendations on how local communities and businesses could practically benefit from protected areas was prepared. The research consisted of interviews with businesses near or adjacent to existing protected areas, a review of key government documents, and three case studies on communities benefiting from protected areas. The ensuing reports made a number of recommendations on how the OMNR and other government stakeholders could improve community and business relations, increase the flow of economic benefits from protected areas, and improve aboriginal community involvement.

## Conclusions

The Ontario Ministry of Natural Resources has made a significant step toward more fully understanding the economic and social benefits of protected areas and implementing the CPC Framework. Results from the study will provide a good foundation from which the

Ministry can account for the key use benefits associated with these sites. It will also provide new and interesting “willingness to pay” data for wilderness experiences from a wide range of recreational users. These data can help protected area managers in determining the overall value of the asset they are managing.

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