

# **Commercial Benefits of Nova Scotia's Protected Areas**

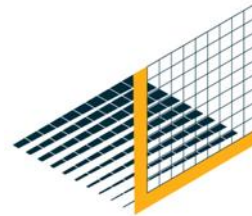
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## EXECUTIVE SUMMARY

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Protected areas throughout the world perform many functions and are essential for conserving biodiversity, delivering vital ecosystem services, providing environments for research and education, and contributing significantly to local and regional economies. Currently, about 12.4% of Nova Scotia's landmass is considered legally protected, which contributes to a worldwide effort to protect wild spaces and secure societal benefits derived from such spaces.

The purpose of this project was to analyze the commercial benefits associated with protected areas in Nova Scotia (particularly wilderness areas and nature reserves). The following report examines the current situation and identifies opportunities to enhance commercial benefits associated with protected areas. It outlines barriers to achieving benefits and provides recommendations on how opportunities may be realized.

There is a broad range of commercial activities that occur in association with protected areas in Nova Scotia. Most are businesses that derive income from offering services that either make direct use of protected areas (e.g. kayak outfitters, hunting guides) or that benefit from indirect relationships with protected areas (e.g. accommodations operators, camps, educators, and other non-profits). The following report profiles a select number of protected area clusters and include key features and current commercial activities.

Interviews with key stakeholders resulted in the identification of a core set of benefits, associated with the commercial use and development of protected areas in the province, including:

- The creation of a positive investment climate.
- Their contribution to the Nova Scotia tourism sector.
- The generation of business revenue through direct attraction of clients.
- Their support of unique business models.

Opportunities to further enhance commercial benefits included:

- Connecting thematically and geographically linked "clusters" with associated branding strategy.
- Capitalizing on increasing interest in experiential, educational, and interpretation-based travel and recreation.
- Identifying market-ready areas and implement pilot development initiatives.
- Developing higher-end commercial outdoor experiences in protected areas.
- Promoting niche outdoor experiences to encourage commercial operator development.
- Creating more comprehensive and attractive back-country opportunities.
- Identifying and develop opportunities to connect protected areas with Mi'kmaq history, culture, and spirituality.
- Establishing key access points and parking areas with adequate user-pay infrastructure.
- Promoting cultural and historic assets contained within protected areas.
- Developing and promoting linked experiences involving visiting protected areas and other activities / amenities in the broader community.
- Identifying, developing, and promoting areas with potential for year-round recreation opportunities.

- Exploring opportunities to develop non-motorized moose hunt in other protected areas in the province.
- Promoting health-related benefits of protected area use.

Key barriers to realizing opportunities to develop or enhance commercial opportunities associated with protected areas in Nova Scotia were also identified, and included:

- A general lack of developed infrastructure in many protected areas with recreational use / commercial benefit potential.
- Constrained ability to develop and promote use of some protected areas due to adjacent private land holdings which prevent access or the creation of a contiguous experience.
- A lack of financial resources to acquire strategically important small private land holdings that break up otherwise contiguous protected areas.
- A lack of central online information resource for recreational use opportunities in and around protected areas.
- A lack of awareness in other municipal, provincial, federal and federal government departments of the importance and potential of protected areas.
- Limited social media and communications presence for protected areas.
- A cultural perception of protected areas can limit public and government's awareness of potential use opportunities.
- Constraints on departmental / government / volunteer group resources that limit the ability to deliver on required improvements, enhancements, and increased communication / promotion efforts.
- Some regulatory and policy gaps that create barriers to the viability of commercial operators in protected-areas related sectors.

From the analysis of benefits, opportunities, and barriers emerged a range of recommended strategic investments aimed at enhancing commercial benefits associated with protected areas in Nova Scotia, including:

- Developing a modern, comprehensive online portal that provides users with information on how to access recreational opportunities available in protected areas.
- Investing time and resources in addressing key regulatory and policy barriers and gaps that constrain development of commercial opportunities related to protected areas.
- Developing a well-researched branding, marketing, and communications strategy to increase awareness of protected areas and shift current cultural perceptions.
- Mobilizing resources to purchase strategically important private land holdings.

Finally, a case study analysis of the development of protected areas in Costa Rica and the commercial benefits that grew out of it pointed to core elements of a strategy that could be adopted in Nova Scotia to develop protected areas and enhance related commercial benefits. They included:

- Identifying and protecting lands with recreational potential.
- Providing adequate and effective management resources.
- Investing in recreation and tourism infrastructure.
- Developing a monetization model to help finance management and development.
- Allowing and supporting private sector commercial activities in protected areas.
- Integrating ecotourism and protected areas into broader tourism marketing strategy.

# TABLE OF CONTENTS

---

<b>1. Introduction</b> .....	<b>1</b>
<b>1.1 Background</b> .....	<b>1</b>
<b>1.2 Study Purpose and Objectives</b> .....	<b>1</b>
<b>1.3 Methodology</b> .....	<b>2</b>
<b>2. Nova Scotia Protected Areas</b> .....	<b>3</b>
<b>2.1 Overview</b> .....	<b>3</b>
<b>2.2 Wilderness Areas</b> .....	<b>3</b>
2.2.1 Wilderness Areas Protection Act.....	3
2.2.2 Permitted / Prohibited Activities .....	4
<b>2.3 Nature Reserves</b> .....	<b>4</b>
2.3.1 Special Places Protection Act .....	5
2.3.2 Permitted / Prohibited Activities .....	5
<b>2.4 2013 Parks and Protected Areas Plan</b> .....	<b>5</b>
<b>3. Assessing Benefits of Protected Areas</b> .....	<b>6</b>
<b>3.1 Types of Benefits</b> .....	<b>6</b>
3.1.1 Commercial Benefits.....	6
3.1.2 Personal Benefits.....	7
3.1.3 Societal Benefits .....	7
<b>3.2 Benefits Valuation Approaches</b> .....	<b>11</b>
3.2.1 Valuing Commercial Benefits .....	11
3.2.2 Valuing Personal and Societal Benefits.....	12
3.2.3 Societal Benefits Valuation Case Examples.....	13
<b>4. Commercial Activities Analysis</b> .....	<b>14</b>
<b>4.1 Eastern Shore Islands (“Wild Islands Conservation Area”)</b> .....	<b>15</b>
4.1.1 Scope and Features.....	15
4.1.2 Protected Areas with Opportunities for Commercial Benefits – Eastern Shore Islands	16
<b>4.2 Eastern Shore Lakes and Waterways – Lake Charlotte Cluster</b> .....	<b>18</b>
4.2.1 Scope and Features.....	18
4.2.2 Protected Areas with Opportunities for Commercial Benefits – Eastern Shore Lakes	19
<b>4.3 Eastern Shore Lakes and Waterways - Liscomb Cluster</b> .....	<b>21</b>
4.3.1 Scope and Features.....	21
4.3.2 Protected Areas with Opportunities for Commercial Benefits – Liscomb Rivers	21
4.3.3 Commercial Activities.....	23
<b>4.4 Rogues Coast - HRM</b> .....	<b>25</b>
4.4.1 Scope and Features.....	25
4.4.2 Protected Areas with Opportunities for Commercial Benefits – Rogues Coast	26
4.4.3 Commercial Activities.....	30
<b>4.5 Fossil Coast – Bay of Fundy</b> .....	<b>31</b>
4.5.1 Scope and Features.....	31
4.5.2 Protected Areas with Opportunities for Commercial Benefits – Fossil Coast	32
4.5.3 Commercial Activities.....	35
<b>4.6 Fourchu Coast – Eastern Cape Breton</b> .....	<b>37</b>

4.6.1	Scope and Features.....	37
4.6.2	Protected Area Sites with Opportunities for Commercial Benefits .....	38
4.6.3	Commercial Activities.....	41
<b>4.7</b>	<b>Highlands of Cape Breton (Havens in the Highlands).....</b>	<b>42</b>
4.7.1	Scope and Features.....	42
4.7.2	Protected Areas with Opportunities for Commercial Benefits – Highlands of Cape Breton	43
4.7.3	Commercial Activities.....	48
<b>4.8</b>	<b>Cobequid Mountains .....</b>	<b>50</b>
4.8.1	Scope and Features.....	50
4.8.2	Protected Areas with Opportunities for Commercial Benefits – Cobequid Mountains .....	51
4.8.3	Commercial Activities.....	53
<b>4.9</b>	<b>Lakes and Waterways - Southwest Nova .....</b>	<b>55</b>
4.9.1	Scope and Features.....	55
4.9.2	Protected Areas with Opportunities for Commercial Benefits – Southwest Nova Lakes and Waterways.....	56
4.9.3	Commercial Activities.....	59
<b>4.10</b>	<b>Lakes and Waterways (Near-Urban HRM) .....</b>	<b>62</b>
4.10.1	Scope and Features.....	62
4.10.2	Protected Area Sites with Opportunities for Commercial Benefits: Near-Urban Lakes and Waterways.....	63
4.10.3	Commercial Activities.....	67
<b>4.11</b>	<b>Other Activities .....</b>	<b>68</b>
4.11.1	Recreational Trails.....	68
4.11.2	Research .....	71
<b>5.</b>	<b>Commercial Benefits Analysis .....</b>	<b>73</b>
5.1	Stakeholder Consultation Findings.....	73
5.2	Opportunities, Barriers, Strategies.....	76
5.3	Promotion and Marketing.....	80
<b>6.</b>	<b>Commercial Benefits, Opportunities, and Barriers Summary .....</b>	<b>81</b>
6.1	Commercial Benefits .....	81
6.2	Opportunities .....	82
6.3	Barriers.....	86
6.4	Recommended Strategic Investments .....	90
6.5	Partnership Opportunities.....	90
<b>7.</b>	<b>Case Study – Costa Rica.....</b>	<b>93</b>
7.1	Socio-economic and Commercial Benefits.....	93
7.2	Critical Success Factors .....	95
7.3	100 Wild Islands - How the Costa Rica Model is Being Successfully Applied in NS	99
<b>8.</b>	<b>Conclusion .....</b>	<b>101</b>

# 1. INTRODUCTION

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## 1.1 Background

Protected areas throughout the world perform many functions. They are essential for conserving biodiversity and for delivering vital ecosystem services, such as protecting watersheds and soils, storing carbon, improving air quality, and shielding human communities from natural disasters. Many protected areas are important to local communities. They are places for people to get a sense of peace in a busy world - places that invigorate human spirits and challenge the senses. Protected landscapes embody important cultural values; some of them reflect sustainable land use practices. They are important also for research and education, and contribute significantly to local and regional economies, most obviously from tourism and outdoor recreation.

Currently, about 12.4% of Nova Scotia's landmass is considered legally protected. This includes:

- Provincial wilderness areas (8.97%) and nature reserves (0.42%), administered by Nova Scotia Environment;
- Contributing provincial parks (0.23%), administered by Department of Natural Resources;
- National parks (2.50%) and national wildlife areas (0.04%), administered by the federal government; and
- Land trust lands (owned or under conservation easement) (0.24%)

These protected areas help Nova Scotia contribute to a worldwide effort to protect wild spaces and secure societal benefits derived from such spaces, including compatible commercial benefits.

## 1.2 Study Purpose and Objectives

The purpose of this project is to analyze regional and provincial commercial benefits of provincial wilderness areas and nature reserves in Nova Scotia. These sites comprise just over 75% of Nova Scotia's protected areas system.

While it is understood that the total benefit of protected areas includes various personal, commercial, and societal aspects, the primary focus of this project is on the regional and provincial commercial benefits of provincial wilderness areas and nature reserves in Nova Scotia (measured in terms of local economic development benefits).

The project examines the current situation and identifies opportunities to increase commercial benefits. It outlines barriers to achieving benefits and provides recommendations.

The project reflects current thinking on the subject, including (but not limited to) the Economic Benefits of Parks and Protected Areas Framework provided by the Canadian Parks Council.

### 1.3 Methodology

This study was conducted by Gardner Pinfold Consultants with support from personnel at Nova Scotia Environment's (NSE) Protected Areas and Ecosystems Branch. The consultants employed a methodology that included:

1. **Secondary Research** – all relevant documents (studies, reports, strategies, white papers, etc.) were identified, gathered, and reviewed. Internet research was employed to locate key documents and data not available from NSE.
2. **Stakeholder Consultation** – telephone and in-person interviews were conducted with a broad range of stakeholders associated with protected areas in Nova Scotia. 30 interviews were completed with individuals representing business operators, non-governmental organizations, volunteer and community groups, and provincial and municipal government. Interview guides were developed for each type of interview and served as a general framework for discussion and data collection.
3. **Internal NSE Workshop** – a half-day workshop was conducted with NSE Protected Areas Branch staff to better understand the study context and gather input on barriers, opportunities, and potential strategies.
4. **Case Study Development** - a scan of other relevant jurisdictions was completed and a case study prepared on a representative jurisdiction from which key success factors were identified.

## 2. NOVA SCOTIA PROTECTED AREAS

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### 2.1 Overview

Nova Scotia Environment's protected areas program supports the establishment and management of a comprehensive protected areas system in Nova Scotia. The department is responsible for planning and managing Nova Scotia's wilderness areas, nature reserves and heritage rivers\* (\*heritage rivers are not protected areas), and for supporting private land conservation.

Wilderness areas and nature reserves protect representative examples of the province's natural landscapes, sites and features of high natural value; and exceptional opportunities for wilderness recreation and nature tourism. Both types of protected areas are protected from human occupation and commercial resource development, while permitting a range of other uses. They are managed by Nova Scotia Environment (NSE) with support from Department of Natural Resources (DNR) and through partnerships with trail groups and other organizations. As of June 2017, Nova Scotia has 70 wilderness areas and 82 nature reserves. A total of 520,000 hectares are protected in these areas, representing 9.39% of Nova Scotia's land mass. Over 95% of this amount is protected as wilderness area.

Additional candidate wilderness area and nature reserve sites are identified in the Province's 2013 Parks and Protected Areas Plan (the Plan). The Government of Nova Scotia has pledged to increase the amount of legally protected land from the current 12.40% to 13%. It is anticipated that most new designations will be from candidate wilderness area and nature reserve sites identified in the Plan.

This project's assessment of commercial benefits is based on both existing and candidate wilderness areas and nature reserves.

### 2.2 Wilderness Areas

Wilderness Areas are provincially-significant natural areas which are designated under Nova Scotia's *Wilderness Areas Protection Act*. They protect representative examples of the province's natural landscapes, native biological diversity, and outstanding natural features. Many are remote, while others are located near communities or are easily accessed.

Although use of these lands is restricted, wilderness areas can be used for scientific research, education, and a broad range of low-impact recreation and tourism related activities such as hiking, canoeing, sea-kayaking, sport-fishing and hunting<sup>1</sup>. Limited recreational off-highway vehicle use is permitted in some wilderness areas on approved trails.

Some wilderness areas have managed trails and access points, and others do not. Much of the current recreational and tourism-related uses of wilderness areas rely on informal access points, trails, portages and campsites.

#### 2.2.1 Wilderness Areas Protection Act

The *Wilderness Areas Protection Act* came into effect on December 3, 1998 when it also established Nova Scotia's first 31 wilderness areas. The Act provides the legal framework for establishing, managing, protecting and using Nova Scotia's designated wilderness areas. The



Act's primary objectives are to "protect natural processes, biological diversity and outstanding natural features"<sup>1</sup> and secondary objectives are use related. Currently, Nova Scotia has 70 wilderness areas, protecting 8.97% of the province's landmass.

### 2.2.2 Permitted / Prohibited Activities

Permitted activities include:

- **Environmental education** – programs that teach how natural environments function, and how human beings can manage behavior and ecosystems to live sustainably.
- **Scientific research** – most wilderness areas are minimally affected by human uses and are suitable for research on a variety of topics, such as biological diversity, ecosystems, ecological processes, and protected area management. A research license is required.
- **Wilderness recreation** – low-impact activities, such as walking, hiking, snowshoeing, cross-country skiing, canoeing, and kayaking are generally encouraged in wilderness areas. Bicycle use can be authorized on designated trails.
- **Tenting, camping and camp fires** – tenting, camping and campfires are generally permitted, provided these activities adhere to low-impact standards and guidelines outlined in the brochure: "Keep it Wild – Wilderness Area Standards".
- **Trails and facilities** - trails for walking, hiking, cross-country skiing, snowshoeing, bicycle riding, portaging and other activities can and have been authorized and developed in some wilderness areas. These may include facilities such as cabins, camp sites, outhouses or bridges. Several historic warden camps have been restored for public use. Other structures that support wilderness recreation, management or use of a wilderness area may be built or authorized. Numerous informal (unmanaged) trails also exist in wilderness areas.
- **Fishing, hunting and trapping** –Hunting, trapping, and sport fishing are generally permitted under the same rules that apply on other public lands. The only current exceptions are that bear baiting for hunting is not permitted in wilderness areas, and the use of bait for deer hunting is not permitted in Tobeatic Wilderness Area.
- **Vehicle use** – vehicle use is generally prohibited in wilderness areas, but can be authorized in limited circumstances. For example, more than 100 km of connecting trails through wilderness areas are currently approved for off-highway vehicle (OHV) use under agreements with the All-terrain Vehicle Association of Nova Scotia (ATVANS) and Snowmobilers Association of Nova Scotia (SANS).

### 2.3 Nature Reserves

Nature reserves protect unique, rare or outstanding features, such as old-growth forests or the habitats of rare or endangered plants or animals. They may also protect typical examples of the province's ecosystems. Commonly referred to as "nature reserves," they are designated as "ecological sites" under the Province's *Special Places Protection Act*. As with wilderness areas, many are remote, yet others are near communities or are easily accessed. Compared to wilderness areas, most nature reserves are quite small.

Use of nature reserves is more restricted than in wilderness areas because of their sensitive features and/or relatively small size. Scientific research and education are the primary uses and recreation is generally restricted<sup>2</sup>.

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<sup>1</sup> <http://nslegislature.ca/legc/statutes/wildarea.htm>

<sup>2</sup> <http://novascotia.ca/nse/protectedareas/naturereserves.asp>

### **2.3.1 Special Places Protection Act**

Enacted in 1980, the *Special Places Protection Act* provides for the protection of important ecological sites (nature reserves) and important archaeological, historical and paleontological sites and remains, including those underwater. The part of the Act which addresses ecological sites (nature reserves) is administered by Nova Scotia Environment. The primary purpose of ecological sites (nature reserves) is to protect important parts of Nova Scotia's natural heritage and provide educational and research opportunities associated with these sites. Currently, Nova Scotia has 82 nature reserves, protecting 0.42% of the province's landmass.

### **2.3.2 Permitted / Prohibited Activities**

Prohibited activities comprise those that could damage or disturb the fauna and flora of designated areas. Examples include resource development (forestry and mining), motorized vehicle use, hunting, and fishing. Low-impact recreational and research activities are generally permitted, including walking trails and camping at approved sites.

The Province's 2013 Parks and Protected Areas Plan includes a commitment to update legislation for nature reserves to maintain high-level nature protection while clarifying the treatment of existing legal interests and certain low-impact recreational uses. This will include the consideration of hunting or other activities in circumstances where such activities are consistent with goals for the maintenance or restoration of ecological integrity for individual nature reserves.

## **2.4 2013 Parks and Protected Areas Plan**

In 2013, the Government of Nova Scotia released *Our Parks and Protected Areas: A Plan for Nova Scotia* (the Plan) which commits to a variety of goals and actions, including the designation of new wilderness areas, nature reserves and provincial parks. The intent was to increase the amount of legally protected land from 9.32% to more than 13% of Nova Scotia's landmass. The Plan builds on a commitment in the *Environmental Goals and Sustainable Prosperity Act* to achieve a goal of protecting at least 12% of Nova Scotia's landmass by 2015. The groundwork for this component of the Plan was laid by the Colin Stewart Forest Forum, which brought together major environmental organizations and forest companies between 2005-09 to identify potential protected area sites and wood supply mitigation options. Government review led to release in 2011 of study areas for stakeholder discussion and public comment. Another round of consultation with stakeholders and community members occurred early in 2013, including, 18 open-house meetings, numerous stakeholder meetings and almost 2,000 written submissions. The final Plan was released on August 1, 2013.

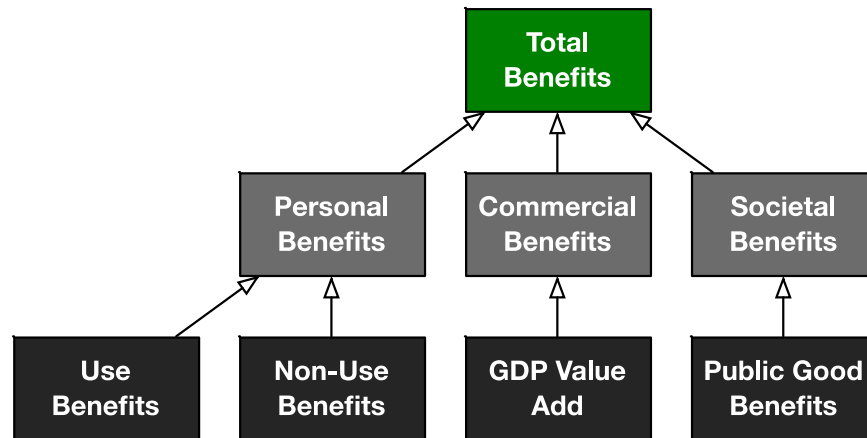
As of the end of December 2015, the Province had designated sufficient sites from the Plan to reach a cumulative total of 12.26% of Nova Scotia's landmass protected. Since then, additional sites have been designated. Today, about 12.40% of Nova Scotia's landmass is legally protected; of this total, Nova Scotia Environment's protected areas program is responsible for 9.39%. Current government commitment is to protect additional sites to reach a target of 13% land protection.

### 3. ASSESSING BENEFITS OF PROTECTED AREAS

#### 3.1 Types of Benefits

There is a broad range of personal, social, and economic benefits associated with establishing and managing wilderness areas and nature reserves administered by Nova Scotia Environment (“protected areas”). The following section provides a high-level overview of the types of key benefits that accrue to the province of Nova Scotia as a result of its protected areas program. Benefits are divided into three broad categories: commercial, personal, and societal. The manner in which benefits are identified and assessed in this context is guided by the Canadian Parks Council’s Economic Benefits of Parks and Protected Areas Framework<sup>3</sup>. The framework was developed in 1998 for the purpose of measuring the economic value of protected areas in such a way that a common terminology would be developed and the measurement of benefits would be standardized as much as possible. The framework includes both traditional economic impact measurement (e.g. tourism and capital development expenditure), as well as other more direct user benefits (e.g. consumer surplus, existence benefits) and societal benefits (e.g. benefits from biodiversity, water production, scientific and educational benefits)<sup>4</sup>. The following figure outlines the components of the framework:

**Figure 1. Canadian Parks Council’s Economic Benefits of Parks and Protected Areas Framework – Basic Structure**



Source: <http://www.parks-parcs.ca/english/pdf/Poster Eng.pdf>

#### 3.1.1 Commercial Benefits

Protected areas are generally thought of in terms of the benefits associated with their primary function of protecting nature and often also their role in supporting recreational use. What is sometimes overlooked is the commercial activity that is generated and/or supported because an area is protected as well as the stable investment environment that is created for businesses in surrounding communities. New businesses arise and existing ones develop in part because of a proximity and access to protected areas from which many directly or indirectly derive benefit from. In some cases, the business model of commercial operations is built around access to

<sup>3</sup> <http://www.parks-parcs.ca/english/pdf/Poster%20Eng.pdf>

<sup>4</sup> <http://www.parks-parcs.ca/english/pdf/251-e.pdf>

protected areas, as in the case of a wilderness recreation company or outdoor outfitter. Other businesses benefit simply because their proximity to a protected area provides an aesthetic or recreational draw to its customers, as in the case of a bed and breakfast operator whose clients have the option to spend time in a nearby protected area. Businesses can also benefit indirectly through the presence of protected areas whose mere existence draws residents and tourists to an area and who then spend money on goods and services in surrounding communities. People driving to a remote protected area for a day hike, for example, may spend money on transportation, food, and gifts at various businesses along the way.

### 3.1.2 Personal Benefits

Where commercial benefits are defined as those that accrue primarily to the businesses that operate in a given community or near a protected area, personal benefits are those that are received by stakeholders and individuals who directly make use of the area(s) or have an interest in their existence and management. A distinction is generally made between use and non-use personal benefits.

#### Use

Use-related benefits refer to those that flow to individuals who make direct on-site use of protected areas. These benefits can result from activities such as hiking, skiing, trail running, kayaking, off-highway vehicle (OHV) use, camping, bird-watching, and many others. Other uses can be consumptive, such as hunting and angling.

#### Non-use

The personal benefits derived from protected areas can also result from activities and “states of being” that do not involve direct use of the physical sites. These non-use benefits fall into four broad categories:

1. **Indirect use benefits** – those experienced by individuals who are not directly using a protected area but are involved in activities or experiences that *involve* them, including works of visual art, media productions (i.e. television programs, movies, radio, websites), and literature.
2. **Option benefits** – those derived simply from knowing an area is protected and that they have the option to use it – directly or indirectly – sometime in the future.
3. **Bequest benefits** – those derived from the knowledge that an area has been protected so that its full range of benefits will flow to future generations.
4. **Existence Benefits** – similar to option benefits, existence benefits are those derived from merely knowing protected areas exist, whether or not the individual ever makes use of them.

### 3.1.3 Societal Benefits

A third class of benefits that results from the establishment and management of protected areas are those that flow to society as a whole. Where commercial and personal benefits are assessed at the level of the enterprise or individual, societal benefits are those that contribute to the public good in ways that benefit people whether or not they use, are aware of, or personally value protected areas. The following represent some of the main societal benefits associated with protected areas in Nova Scotia:

## Ecosystem Services and Biodiversity

Ecosystem services refer to a broad range of outputs or functions related to ecosystems that have socio-economic value to individuals and communities. Some of the most important benefits associated with protected areas come from the services they provide, such as carbon sequestering, soil formation, drinking water protection, the maintenance of biodiversity, climate regulation, pollination, nutrient cycling, waste filtration, and many others. Assessing the economic value of these services is discussed below (Section 3.2).

## Climate Change Mitigation

The ecosystem services that protected areas provide play a critical role in the mitigation of the effects of climate change. The International Union for Conservation of Nature (IUCN) notes in *The Role of Protected Areas in Regard to Climate Change*<sup>5</sup> that protected areas are an effective land management strategy that can mitigate the effects of climate change by:

1. Helping to maintain ecosystem integrity through:
  - The maintenance of watersheds and water retention in soil.
  - Limiting incursion into fire-prone areas.
  - Helping to maintain traditional management systems.
  - Limiting land-use transformation.
  - Reducing other pressures such as poaching, grazing, logging or harvesting within their boundaries.

### Box 1: Canadian Protected Areas and Climate Change

“Ecological resilience is critical if ecosystems and the essential services they provide are to be able to adapt to stresses such as climate. Efforts aimed at maintaining or restoring ecosystem structure, function and diversity and enhancing the connectivity of landscapes and seascapes will generally help maintain or restore resilience and reduce the risk of catastrophic change. Resilient parks and protected areas will assist in maintaining resilient ecosystems and the flow of important ecological services to communities as climate change plays out. In doing so, they will make a critical contribution to successful adaptation in the regional landscapes and seascapes in which they occur.”

*Canadian Parks and Protected Areas:  
Helping Canada Weather Climate Change,  
Canadian Parks Council*

2. Buffering local or regional climate, depending on the scale, through:
  - Helping to reduce the impacts from extreme climatic events, such as storms, floods, droughts and sea-level rise.
  - Providing space for floodwaters to disperse and absorb impact with natural vegetation.
  - Blocking storm surges with barrier islands, mangroves, coral reefs, dunes and marshes.
  - Stabilizing soil and snow to stop slippage and reduce the movement once a slip is underway.
  - Helping capture and store CO<sub>2</sub> from the atmosphere.

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<sup>5</sup>[https://www.iucn.org/sites/dev/files/import/downloads/pa\\_cc\\_\\_scoping\\_study\\_eng\\_final.pdf](https://www.iucn.org/sites/dev/files/import/downloads/pa_cc__scoping_study_eng_final.pdf)

## Fresh Water

One of the most critical ecosystem service functions of protected area ecosystems is the production, storage, and conveyance of fresh water. Lakes, rivers, and wetlands provide a wide range of ecological services that include regulating drinking water supply, recreation, water filtration, waste treatment, providing habitat for wildlife, and many others. Nova Scotia's protected areas system (designated and pending) contains a total area of 23,800 hectares of fresh water resources (open water).

Some of these fresh water resources provide drinking water to Nova Scotians. Protected areas contain close to 21,000 hectares of watersheds within twenty municipal drinking water supply areas throughout the province (Table 1). This includes "protected water areas" (designated under the *Environment Act*), undesignated water supply areas and well-field areas. About one-third of drinking water supplied to HRM residents by Halifax Water is derived from protected areas.

From society's perspective, drinking water resources have tremendous social and economic value, although establishing an exact value is a challenging exercise involving fairly complex econometric techniques. A recent study conducted in Alberta on the value citizens place on programs that ensure drinking water supply and increase reliability determined that Albertans value such a program at approximately \$88 million per year. In other words, Albertans are willing to pay \$88 million per year to ensure water supply reliability<sup>6</sup>.

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<sup>6</sup> *Putting a Price on How Much Albertans Value the Reliability of Their Drinking Water Supply*, Adamowicz et al (2016).

**Table 1. Drinking Water Areas Within Nova Scotia Protected Areas**

<b>Designated / Pending Protected Area</b>	<b>Protected Water Area Name</b>	<b>Total Water Supply Area Within Protected Area (ha)</b>
Bennery Lake Nature Reserve	Bennery Lake	120
Blandford Nature Reserve	Mill Cove Lakes	7
Canso Coastal Barrens Wilderness Area	Wilkins Lake	10
Chignecto Isthmus Wilderness Area	North Tyndal Well Field	2,822
Eigg Mountain - James River Wilderness Area	James River	3,482
Johnson Lake Nature Reserve	Pottle Lake	118
Pockwock Wilderness Area	Pockwock Lake	1,662
Waverley - Salmon River Long Lake Wilderness Area	Lake Major	2,461
Little Soldier Lake Nature Reserve (pending)	Lake Major	28
River Inhabitants Nature Reserve Addition (pending)	Landrie and McIntyre Lake	30
Sackville River Nature Reserve (pending)	Pockwock Lake	20
St. Andrews River Wilderness Area (pending)	St. Andrews River	2,673
Waverley - Salmon River Long Lake Wilderness Area Addition (pending)	Lake Major	498
West St. Andrews (pending)	St. Andrews River	571
<b>Total</b>		<b>14,502</b>
<b>Designated / Pending Protected Area</b>	<b>Undesignated Water Supply Area</b>	<b>Total Water Supply Area Within Protected Area (ha)</b>
Bennery Lake Nature Reserve	Bennery Lake	<b>154</b>
Drug Brook	East River	34
Economy River Wilderness Area	Leamington Brook	767
North River Wilderness Area	Peters Brook	31
Rawdon River Nature Reserve	Shubenacadie River	116
The Stillwaters Wilderness Area	Kelly Lake	1,934
Waverley-Salmon River Long Lake Wilderness Area	Shubenacadie River	739
Little Soldier Lake Nature Reserve (pending)	Shubenacadie River	<b>73</b>
Sackville River Nature Reserve (pending)	Shubenacadie River	<b>352</b>
Sherlock Lake Nature Reserve	Musquodoboit River	<b>146</b>
Economy River Wilderness Area Addition (pending)	Leamington Brook	690
Ingonish River Wilderness Area (pending)	Ingonish	1,349
<b>Total</b>		<b>6,385</b>
<b>Designated / Pending Protected Area</b>	<b>Well Field Areas</b>	<b>Total Water Supply Areas Within Protected Area (ha)</b>
<b>Staples Brook Nature Reserve (pending)</b>	<b>Debert</b>	<b>60</b>
<b>TOTAL: (14,502 + 6,385 + 60)</b>		<b>20,947</b>

Source: Nova Scotia Environment

### **Culture**

Protected areas also provide a range of cultural “services” or functions that are primarily related to the personal, historic, and/or spiritual significance individuals and communities place on protected land and waterways.

Nova Scotia has a history of wilderness hunting, fishing, canoe-tripping and related outfitting. Protected areas ensure that we can continue to experience these and other traditions in wild spaces.

Of particular significance in Nova Scotia is the cultural and spiritual value attributed to protected areas by the Mi'kmaq of Nova Scotia. This includes sites such as Kluscap Mountain Wilderness Area (a sacred site), Polletts Cove-Aspy Fault Wilderness Area (important moose hunting area), Tobeatic Wilderness Area (ancient canoe routes and portages) and sites for gathering natural medicines.

## Research

Protected areas play an important role in ensuring the availability and integrity of protected ecosystems for use in scientific and other types of research. Significant research activity has occurred within protected areas in Nova Scotia by dozens of institutions across a wide range of scientific and cultural disciplines. There is direct commercial benefit in the form of revenue and wages and salaries paid to researchers and staff attached to any research funding that goes to any of these institutions that is attributable, at least in part, to the protected area in which the research is taking place. The results of the research activity could also be seen as having economic value attached to the benefit it produces for the environment and society. It is also possible that research conducted in protected areas results in intellectual property that could be used to generate revenue for a public or private enterprise.

A summary of research activity is provided in Section 5.2.

## 3.2 Benefits Valuation Approaches

### 3.2.1 Valuing Commercial Benefits

#### Economic Impact

Commercial benefits are generally assessed quantitatively by measures of the impact monetary expenditures have on the local, provincial, and/or national economy depending on the frame of reference being examined. Spending that occurs on goods and services *because* a protected area exists would be included in the assessment of impact, for example:

- Consumer spending directly attributable to a protected area (e.g. kayak rentals; transportation, food, and accommodation expenditures related to visiting a protected area; guiding and outfitting fees).
- Wages and salaries attributable to the management of a protected area.
- All “spin-off” spending that occurs because of direct spending above (e.g. wages and salaries of employees in the accommodations sector, goods and services purchased by kayak outfitters used to operate their business in a protected area).

Economic impacts of protected areas would be estimated by gathering all direct expenditure data and employing an input-output model to determine that spending’s effect on provincial (and, in some cases, national) gross domestic product (GDP)<sup>7</sup>, employment, labour income, and tax revenue. A given impact is considered a value-added benefit to the community if the

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<sup>7</sup> Gross domestic product (GDP) is the total unduplicated value of the goods and services produced in the economic territory of a country or region during a given period. GDP provides a wealth of information. This aggregate is often referred to as the economic report card of a country. The level of GDP reveals information about the size of an economy while the change in GDP from one period to another period indicates whether the economy is expanding or contracting (Source: <http://www.statcan.gc.ca/eng/nea/list/gdp>).



expenditure comes from outside the local economy. For example, if the frame of reference is the Eastern Shore of Nova Scotia, any expenditures attributable to the Eastern Shore Islands by visitors from Cape Breton would be considered a commercial benefit. The same can be said for benefits that accrue to the province as a whole as a result of spending by visitors from other provinces or countries.

Commercial benefits can also manifest in new business formation and increased investment and growth in existing operations. The establishment and management of protected areas can have the effect of encouraging the development of new businesses that provide services centred on use of and access to those areas. The designation of an area as protected provides some businesses with assurance that residential development or resource extraction will not occur in a particular area and that investment can be made in offering protected area-related services over the long term. When existing protected areas are well managed and investment is made in use-related infrastructure (e.g. trails, signage, improved access), businesses that operate in the area often see increased demand for goods and services.

Other commercial benefits that are not conventionally captured by an economic impact model include the prevention of leakages from the economy. While export revenue (e.g. revenue brought into the province by visitors) is easily measured, the money that is spent by Nova Scotians in the province on goods and services that might otherwise be purchased in other provinces or countries can be seen as a commercial benefit. For example, if the only zip line park in the Atlantic region was in New Brunswick, any money spent there by Nova Scotians would be considered a leakage from the Nova Scotia economy. The development of a zip line park in Nova Scotia would generate local economic impact that would include the prevention of what might otherwise be leakage to New Brunswick.

### **3.2.2 Valuing Personal and Societal Benefits**

The analytical methods used in attributing economic or commercial value to personal and societal benefits fall into two broad categories: market-based and non-market approaches.

#### **Market-based Valuation**

Market-based valuation techniques generally involve simple observations of market transactions related to protected areas. In the context of protected areas in Nova Scotia, these transactions would include any fees paid to enter or use a park or protected area. Total use benefit would be calculated by aggregating all user fees collected across the protected areas system. At this time, there are no examples in the province of protected areas that charge fees for access, use, or associated services (i.e. parking).

#### **Non-market Valuation**

Non-market valuation techniques are employed to assess benefits that do not have direct market transactions or user fees. Non-use personal and societal benefits generally fall into this category. Where markets do not exist, values held by 'customers' of protected areas must be determined. A wide range of methods for determining non-market values for environmental goods and services have been developed over the last few decades. Some of the more commonly used and validated methods include:

- Travel Cost
- Contingent Valuation
- Benefits Transfer

- Discrete Choice

### 3.2.3 Societal Benefits Valuation Case Examples

#### Global Forest Watch

Global Forest Watch Canada developed a preliminary estimate of the ecological service benefits of existing protected areas and all sites identified for protection in the Parks and Protected Areas Plan in Nova Scotia using a range of non-market valuation techniques. The following is a summary of the study's key findings<sup>8</sup>:

- Total estimates for all ecosystem services for all land cover types in Nova Scotia's protected areas: \$1.3 to \$4.2 billion (\$1,858 to \$5,827 per hectare) per year.
- Value of wetlands: \$466 to \$519 million (\$5,996 to \$6,687 per hectare) per year in water regulation, water filtration, flood control, waste treatment, recreation, and wildlife habitat services.
- Value of forests: \$491 million to \$3.1 billion (\$869 to \$5,415 per hectare) per year in water filtration, carbon storage, habitat, and recreation services.
- Value of lakes and rivers: \$115 to \$358 million (\$4,017 to \$12,484 per hectare) per year in drainage, recreation and tourism, water supply and genetic resource services.
- Value of barrens: \$262 M (\$5,323 per hectare) per year in carbon storage, flood control and water storage services.

#### Nature Conservancy of Canada / TD Bank Group

A recent study conducted by the TD Bank Group and the Nature Conservancy of Canada that estimated the value of ecosystem services provided by forests in Canada included a detailed case study of NCC's Long Tusk Lake conservation lands, Nova Scotia, which are located in the Silver River watershed, next to a pending addition to Silver River Wilderness Area. The 2017 study found that:

“Long Tusk Lake provides an excellent example of the many societal benefits provided by the Acadian forest. Significant carbon storage and sequestration is provided by the mix of hardwood and softwood forests. Nitrogen dioxide, ozone and other non-carbon atmospheric pollutants are also significantly reduced, while the wetlands within the property help provide flood control for downstream communities.”<sup>9</sup>

The study valued the ecological services provided by the 202-hectare property at approximately \$26,250 in annual benefits per hectare per year.

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<sup>8</sup> [http://globalforestwatch.ca/sites/gfwc/files/publications/20130628A\\_NS\\_protected\\_area\\_Natural\\_Capital\\_report\\_June2013.pdf](http://globalforestwatch.ca/sites/gfwc/files/publications/20130628A_NS_protected_area_Natural_Capital_report_June2013.pdf)

<sup>9</sup> *Putting a Value on the Ecosystem Services Provided by Forests in Canada: Case Studies on Natural Capital and Conservation*, TD Bank Group and the Nature Conservancy of Canada (2017).

## 4. COMMERCIAL ACTIVITIES ANALYSIS

### Protected Areas Commercial Activity in Nova Scotia

There is a broad range of commercial activities that occur in association with protected areas in Nova Scotia. Most are businesses that derive income from offering services that either make direct use of protected areas (e.g. kayak outfitters, hunting guides) or that benefit from indirect relationships with protected areas (e.g. accommodations operators, camps, educators, and other non-profits).

### Protected Areas Clusters

For the purposes of this analysis, many protected areas have been grouped to illustrate the potential that exists in managing and promoting clusters of protected areas that are geographically close and thematically related. The following sections profile a select number of protected area clusters and include key features, current commercial activities, and associated economic values where available.

- Eastern Shore Islands (with nearby lake and waterway protected areas)
- Rogues Coast
- Fossil Coast
- Forchu Coast
- Highlands of Cape Breton
- Cobequid Mountains
- Lakes and Waterways – Southwest Nova
- Lakes and Waterways – Halifax Region

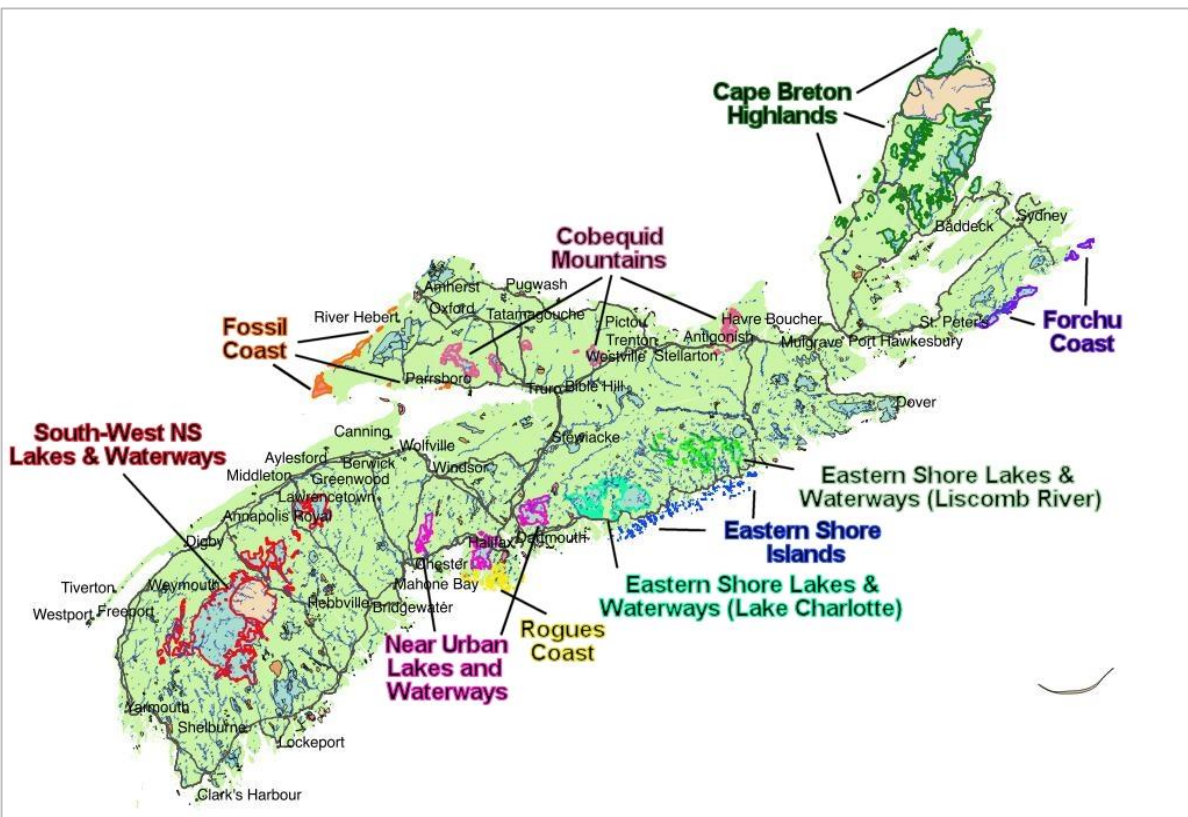
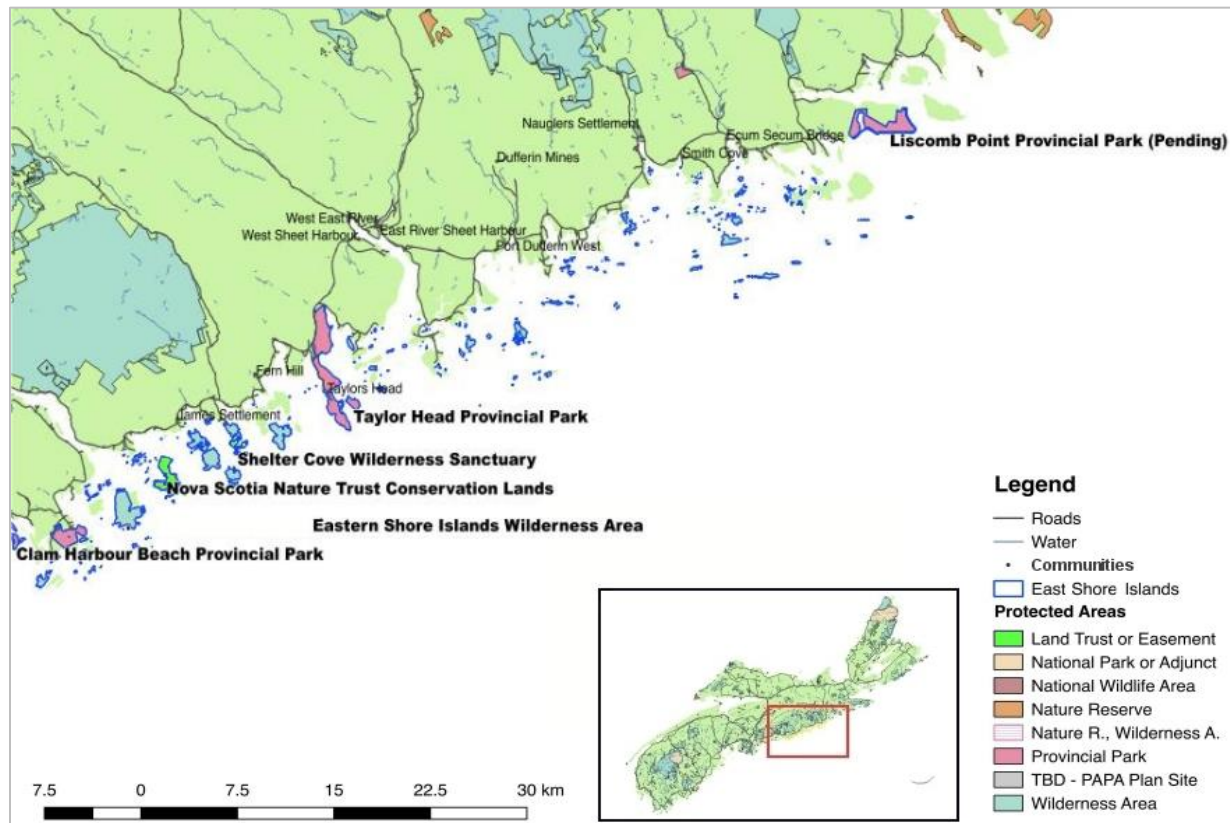


Figure 2: Nova Scotia Protected Areas Clusters

## 4.1 Eastern Shore Islands (“Wild Islands Conservation Area”)

### 4.1.1 Scope and Features

This cluster of protected areas encompasses an archipelago of hundreds of islands along 75 km of Nova Scotia’s Eastern Shore. The islands, rocky islets and headlands feature a mix of spruce-fir forests, coastal barrens, wetlands and small saltmarshes. The shores vary from exposed to very sheltered and are in many places shaped by repeating bedrock ridges and intervening cobble beaches. White sand beaches are scattered throughout. The area hosts a diversity of resident and migratory seabirds, shorebirds and other wildlife. The islands range in size from less than 0.1 hectares (0.25 acres) to over 200 hectares (500 acres).



**Figure 3: Eastern Shore Islands (Wild Islands Conservation Area).**

Sea kayaks, yachts, power boats and other vessels provide exciting opportunities to explore, hike, camp, photograph and otherwise enjoy the protected lands and surrounding waters.

The protected areas within this cluster include: Eastern Shore Islands Wilderness Area, three provincial park properties managed by the Nova Scotia Department of Natural Resources, and privately-owned lands protected by the Nova Scotia Nature Trust. The Trust and Province intend to manage their respective protected lands in coordinated fashion. These protected areas are briefly described below.

#### 4.1.2 Protected Areas with Opportunities for Commercial Benefits – Eastern Shore Islands

Protected Area	Size
Eastern Shore Islands Wilderness Area	1,850 hectares (4,600 acres)
Clam Harbour Beach Provincial Park	183 hectares (450 acres)
Owls Head Provincial Park (pending)	268 hectares (662 acres)
Taylor Head Provincial Park	856 hectares (2,115 acres)
Liscomb Point Provincial Park (candidate)	570 hectares (1,400 acres)
Nova Scotia Nature Trust conservation lands	600 hectares (1,482 acres)
<b>Total</b>	<b>4,330 hectares (10,700 acres)</b>

Most of these sites are highlighted here:

**Eastern Shore Islands Wilderness Area** – This is a collection of about 400 large and small islands along 75 km of coastline, from Clam Harbour in Halifax Regional Municipality (HRM) to Marie Joseph in Guysborough County. The wilderness area protects 1,850 hectares (almost 4,600 acres) of provincially-owned lands. The islands are a destination for sea kayaking, yachting and other boating, beachcombing, camping, picnicking, wildlife viewing, sea bird hunting and other activities. There is currently no managed visitor infrastructure.



**Figure 4: Eastern Shore Islands Wilderness Area**  
Photo: Oliver Maass

**Clam Harbour Beach Provincial Park** – For many venturing out of HRM’s urban centre, this 183-hectare (450 acre) developed park is a gateway to the Eastern Shore Islands. The beach, with associated dune systems and salt marsh, provides the first glimpses of prominent headlands, and nearby islands. This is a seasonal favourite for picnicking, walking, swimming and shorebird viewing, and hosts an annual sandcastle building competition.

**Taylor Head Provincial Park** – This large, 856 hectare (2,115 acre) coastal headland, mid-way along the Eastern Shore Islands cluster, is a recognized destination for swimming, coastal hiking, picnicking and wildlife viewing. Four bird species which inhabit the area are considered endangered. Visitors can see the effects of coastal processes and learn about local geology and coastal habitats at the interpretive kiosks.

**Liscomb Point Provincial Park (candidate).**

This candidate 570 hectare (1,400 acre) coastal park features sand and cobble shores, lagoons, coastal headlands, and coastal spruce/fir forest. It is suitable for coastal hiking and access, and is conceived as the eastern gateway to the Eastern Shore Islands protected areas “cluster”.

**Nova Scotia Nature Trust “100 Wild Islands”** – A few years ago, the Trust launched an ambitious campaign to protect almost 1,100 hectares (2,700 acres)<sup>10</sup> of privately owned islands and several mainland parcels within the area it has branded as the “100 Wild Islands,” between Clam Harbour and Mushaboom Harbour. This area encompasses the western half of the Eastern Shore Islands protected areas cluster described in this report. To



**Figure 5: Taylor Head Provincial Park**  
Photo: Oliver Maass



**Figure 6: Shelter Cove NSNT property**  
Photo: Oliver Maass

date, the Trust has raised more than \$7 million and has reported securing the protection of close to 600 hectares (1,500 acres) of private land. This amounts to over 55% of its private land securement target, and includes 25 islands, large and small. The Trust’s efforts continue, with progress being made on various properties. The aim of the Nova Scotia Nature Trust is to protect natural features and processes yet

<sup>10</sup> The 1,100 -hectare and 600-hectare figures are derived from NSE GIS analysis, using a map included in a recent NSNT news release. See: [http://www.nsnt.ca/pdf/17-02-03-GerardIslandPressRelease\(website\).pdf](http://www.nsnt.ca/pdf/17-02-03-GerardIslandPressRelease(website).pdf)

allow human enjoyment at the same time. The lands will not be developed through the sale, subdividing, or building of roads and structures. However, community access will continue and traditional uses will still be allowed where they do not conflict with conservation objectives.

### Nearby Lake and Waterway Protected Areas

An extensive network of lake and waterway protected areas along the interior of the Eastern Shore complements opportunities for coastal experiences associated with the Eastern Shore Islands protected areas cluster. These provide opportunities for canoeing, angling, camping, hiking and other activities. Thematically, the network of inland protected areas consists of two clusters, one associated with the western half of the Eastern Shore Islands, the other with the eastern half.

## 4.2 Eastern Shore Lakes and Waterways – Lake Charlotte Cluster

### 4.2.1 Scope and Features

The western cluster protects about 38,000 hectares (93,000 acres) of rugged woodlands and hundreds of lakes and waterways, in the interior, between Musquodoboit Harbour and Spry Harbour. These connected or nearly connected protected areas consist of:

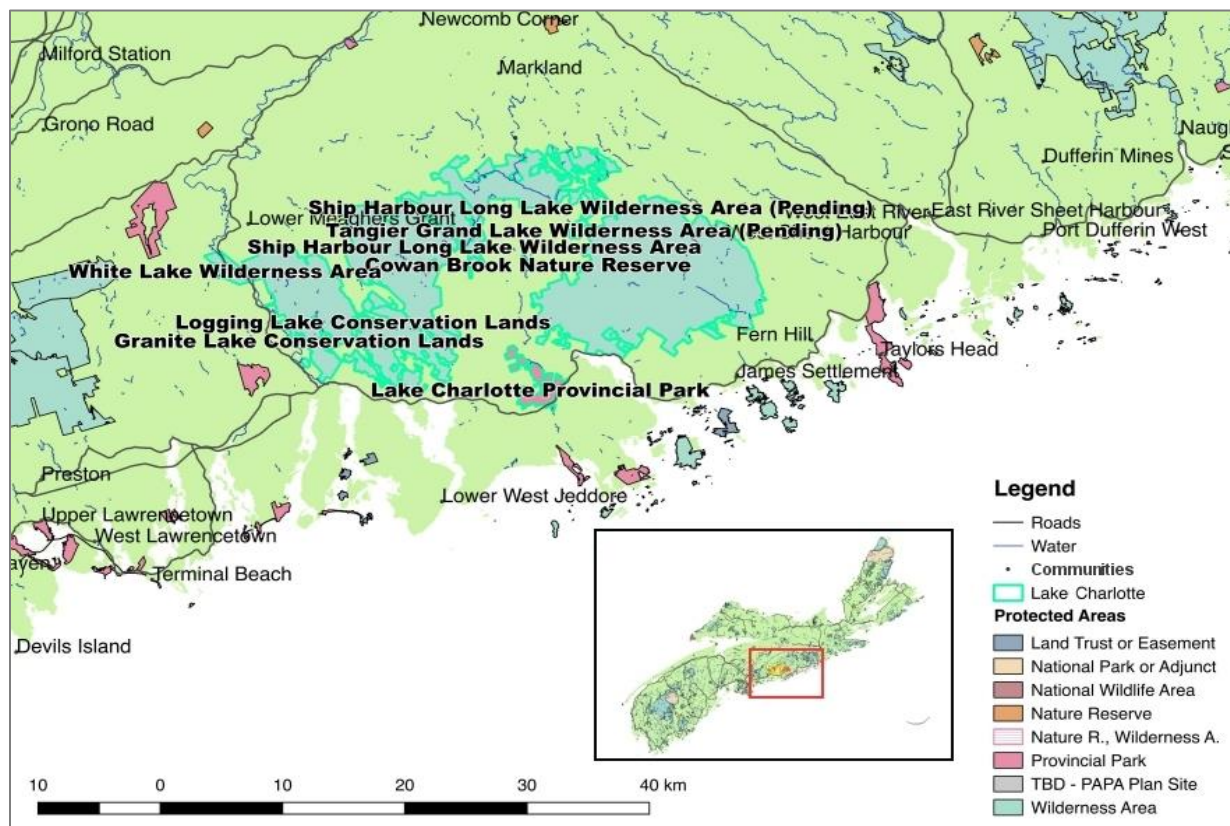


Figure 7: Eastern Shore Lakes and Waterways – Lake Charlotte Cluster

#### 4.2.2 Protected Areas with Opportunities for Commercial Benefits – Eastern Shore Lakes

Protected Area	Size
White Lake Wilderness Area	5,120 hectares (12,650 acres)
Ship Harbour Long Lake Wilderness Area	16,050 hectares (39,700 acres)
Tangier Grand Lake Wilderness Area	16,350 hectares (40,370 acres)
Lake Charlotte Provincial Park*	880 hectares (2,170 acres)
<b>Total</b>	<b>38,400 ha (94,900 acres)</b>

\* administered by Department of Natural Resources

Combined, these protected areas encompass an area about the size of Kejimikujik National Park, with three times as many lakes. They protect remote, often older forests, habitat for endangered mainland moose, at least four species of rare lichens (including globally endangered boreal felt lichen), brook trout and other fish. These protected areas are suitable for activities such as hiking, canoe-tripping, camping, angling and hunting. Numerous informal (unmanaged) portage trails connect lakes and river systems.

The only existing, managed trail infrastructure is a 26-km backcountry trail system along the western ridges of White Lake and Ship Harbour Long Lake wilderness areas, overlooking the Musquodoboit River. This is managed by Musquodoboit Trailways Association (MTA) under an agreement with Nova Scotia Environment. MTA manages another 15 km of rail trail under agreement with Department of Natural Resources, which is part of the Trans Canada Trail; this provides access to various portions of the backcountry trail system.



**Figure 8: Ship Harbour Long Lake Wilderness Area**  
Photo: Oliver Maass



**Figure 9: Gibraltar Rock Trail, White Lake Wilderness Area**



Existing public boat launch sites located off Highway #7 at Salmon River Bridge, Lake Charlotte, and at Oyster Pond can be used to access the protected areas by canoe or other small craft. Other, informal launch sites also provide access at various points. The canoe routes (water trails) would need to be improved and managed before they can be promoted for tourism-related use.



**Figure 10: Ship Harbour Long Lake Wilderness Area**  
Photo: Oliver Maass

## 4.3 Eastern Shore Lakes and Waterways - Liscomb Cluster

### 4.3.1 Scope and Features

The Eastern Shore Lakes and Waterways (Liscomb Rivers) protected areas cluster protects about 20,850 hectares (51,500 acres) of woodlands, wetlands, lakes and rivers that drain to the Atlantic Ocean near Liscomb, between Sheet Harbour and Liscomb Harbour. These connected or nearly connected protected areas include:

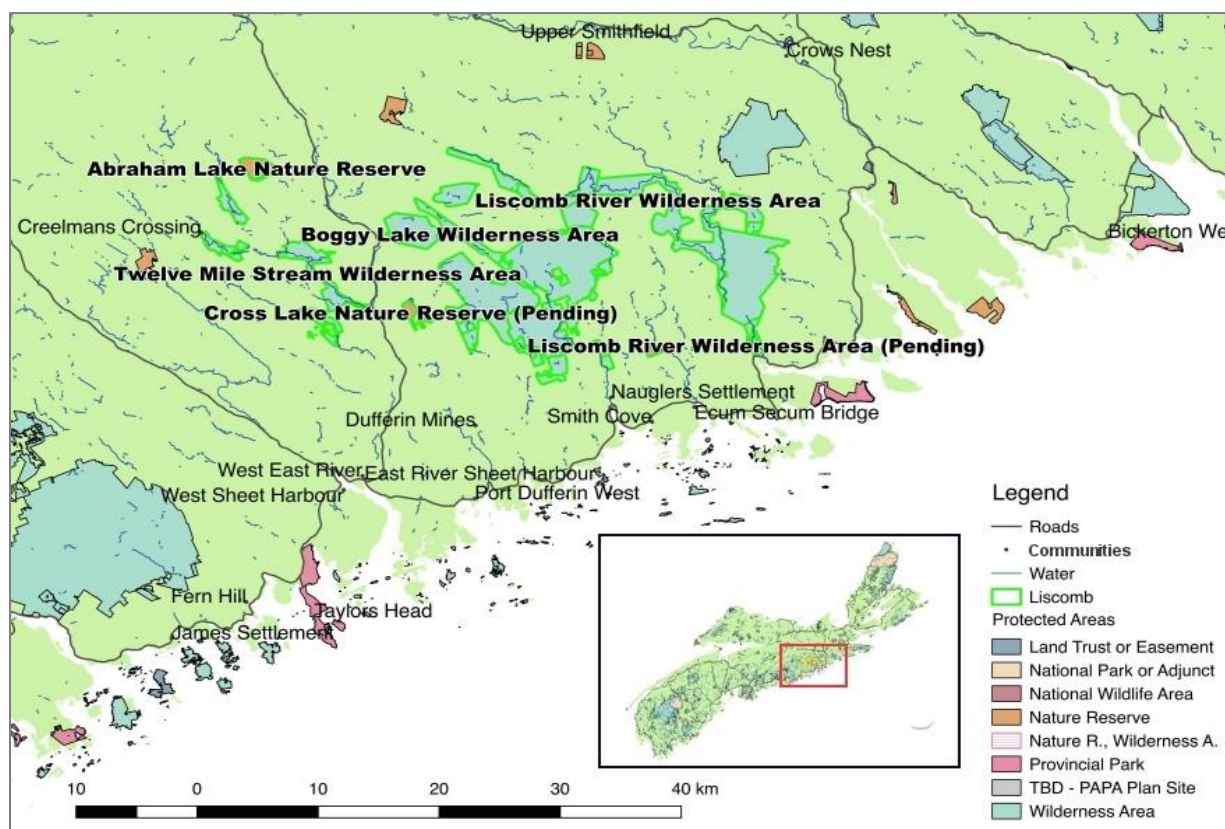


Figure 11: Eastern Shore Lakes and Waterways - Liscomb Rivers Cluster

### 4.3.2 Protected Areas with Opportunities for Commercial Benefits – Liscomb Rivers

Protected Area	Size
Liscomb River Wilderness Area	6,350 hectares (15,600 acres)
Alder Ground Wilderness Area	1,250 hectares (3,100 acres)
Boggy Lake Wilderness Area	4,700 hectares (11,600 acres)
Toadfish Lakes Wilderness Area	6,300 hectares (15,600 acres)
Twelve Mile Stream Wilderness Area	1,800 hectares (4,450 acres)
Denis Lakes Wilderness Area	490 hectares (1,200 acres)
<b>Total</b>	<b>20,900 ha (51,600 acres)</b>

Combined, these areas protect older and remote forests, habitat for endangered mainland moose, rare lichens (including globally endangered boreal felt lichen), brook trout, Atlantic

salmon and other fish, beaver, muskrat, otter, weasel, mink, and other wildlife. They include more than 70 km of river corridor.



**Figure 12: Liscomb River Wilderness Area**



**Figure 13: Boggy Lake Wilderness Area**  
Photo: Oliver Maass



**Figure 14: Alder Ground Wilderness Area**

These protected areas are suitable for activities such as canoeing, camping, angling and hunting (portions overlap with Liscomb Game Sanctuary, where hunting is limited to muzzleloader, bow or crossbow), with some potential for hiking trail development. Numerous informal (unmanaged) portage trails connect lakes and river systems. A historic warden cabin at Boggy Lake Wilderness Area has been maintained and is available for overnight public use. Portage trails need to be improved and managed before canoe routes can be promoted for tourism-related use. Currently, there are no managed campsites or trails, except for a 9-km hiking trail loop along the lower Liscomb River which has been managed by Liscombe Lodge.

Early admiration for the remote beauty of Liscomb River led to the establishment of the esteemed Liscombe Lodge Resort and Conference Centre at the mouth of this river. For a truly pristine wilderness experience, this river is home to some of Nova Scotia's finest scenery.

### **4.3.3 Commercial Activities**

Numerous commercial activities are currently benefiting from the Eastern Shore Islands protected areas and nearby inland protected areas. A few are developing commercial activity specifically related to these protected areas. Key examples of operators and their activities are described briefly here.

**Coastal Adventures** – Launching from Tangier since 1982, Coastal Adventures is founded on bringing people to the archipelago. They offer multi-day tours further afield, but the Eastern Shore Islands area is their mainstay. Whether you are seeking an introduction or certification in sea-kayaking, a sea-kayak rental for your own adventure, or an extended trip with guide and support, they invite everyone to access this coast. No doubt the local interpretation, insights, history, and ability to pick the perfect routes and rest points each day are among the highlights.

**Murphy's Camping on the Ocean** – Cited by the Globe and Mail as one of the best campgrounds in Canada, Murphy's is located in Murphy's Cove along Highway 7, past Ship Harbour. Operating since 1960, the campground is ideally positioned to launch visitors into the Eastern Shore Islands archipelago. Murphy's is clearly marketing itself as the gateway to the "100 wild islands" and offers many related activities. Scenic boat tours, fishing tours, island shuttle service, row boat and canoe rentals, marina and boat launch, swimming, clam digging, and fresh local seafood. There are 25 un-serviced tent sites, 13 serviced RV sites, and 10 seasonal sites. All the expected campground amenities are available, including wireless internet.

**Liscombe Lodge** – Located near the outflow of the Liscomb River into the Atlantic, the company has been named one of the top 101 Atlantic Canada companies. This five-star accommodation includes 30 Lodge rooms, five shared cottages and 17 private chalets. Local cuisine is served fresh daily by chefs at the resort where the dining hall enjoys panoramic views of the Liscomb river. There is a marina on-site with Liscomb Harbour tours available, or kayaks, canoes, paddle boats and fishing gear for rent. The lodge has maintained a hiking trail along Liscomb River, within a pending addition to Liscomb River Wilderness Area. Meetings, conferences, banquets, weddings and family reunions are common through the summer. The Lodge clearly markets an opportunity to escape, seclusion, nature, disconnecting, exploring, hiking, beachcombing, and learning about Mi'kmaq history while enjoying all the amenities at the resort.

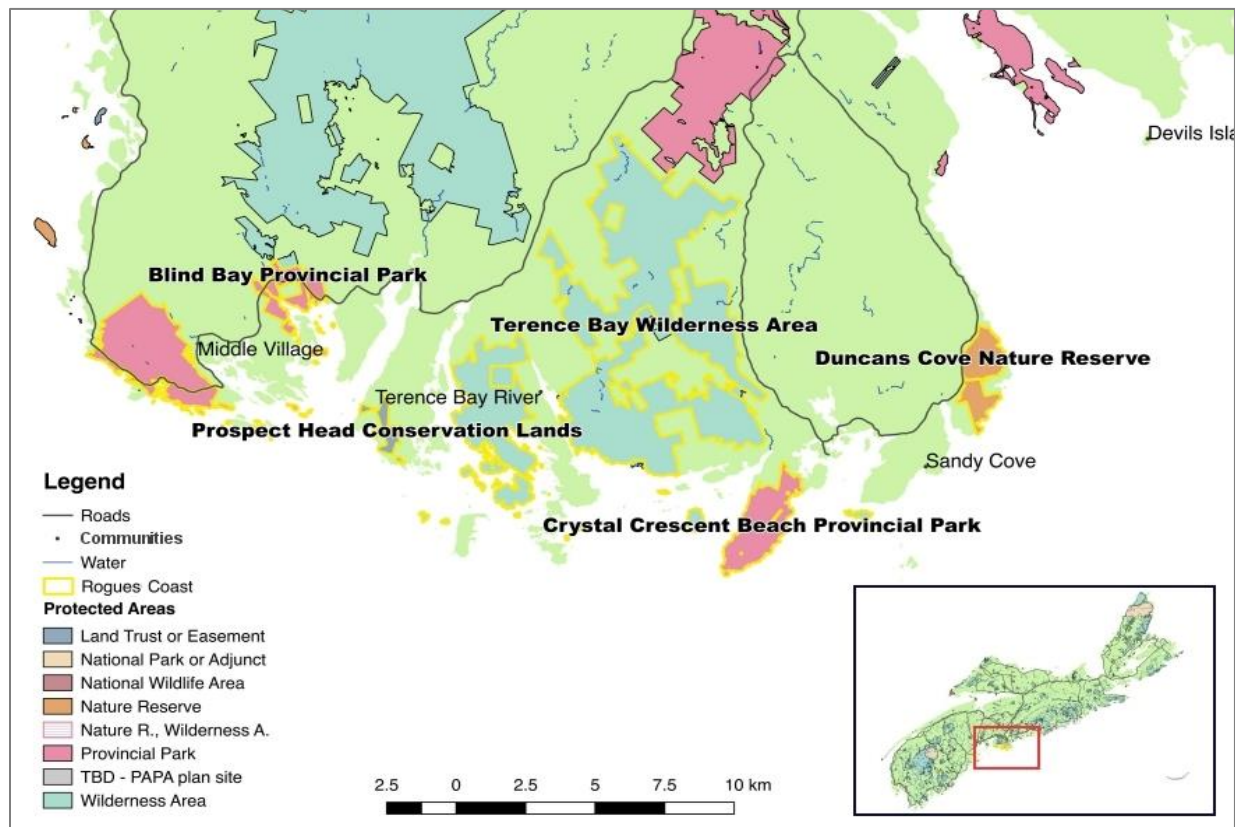
## Others

- Musquodoboit Trailways Association.
- Sherbrooke Village Inn.
- Fairwinds Motel and Restaurant.
- Salmon River Country Inn.
- Wild Islands Tourism Advancement Partnership (WITAP) / Musquodoboit Harbour-Sherbrooke STEP Strategic Plan (2016 full report) – tourism development focused on Eastern Shore archipelago as unique adventure tourism destination in North America. A full description of WITAP and the strategy is provided in Section 8.3.

## 4.4 Rogues Coast - HRM

### 4.4.1 Scope and Features

The area referred to here as “Rogues Coast” is an iconic landscape of rugged and dramatic coastal headlands and islands, with numerous coves, inlets, sheltered passageways and scattered sand beaches, just outside of metropolitan Halifax. This coastal area spans more than 40 km between Peggy’s Cove and Duncans Cove. Vegetation cover includes extensive coastal conifer forest and scenic coastal barrens in more exposed areas. The adjacent coastal waters provide overwintering habitat for common eider and endangered Harlequin duck, and are frequented by whales and other marine species.



**Figure 15: Rogues Coast - HRM**

A substantial portion of the headlands and islands is now protected, primarily by the Province, while nearby private lands are increasingly used for residential purposes. The Rogues Coast protected area cluster includes about 8,100 hectares (20,000 acres) of existing and candidate protected land. These protected areas and adjacent waters offer excellent wildlife viewing, kayaking, yachting and other boating, along with beach visits, hiking, rock climbing and other outdoor adventure. A number of commercial operators currently benefit from the protected areas

The Rogues Coast protected areas are briefly described below:

#### 4.4.2 Protected Areas with Opportunities for Commercial Benefits – Rogues Coast

Protected Area	Approximate Size
Rogues Roost Wilderness Area	1,200 ha (2,950 acres)
Terence Bay Wilderness Area	4,500 ha (11,150 acres)
Duncans Cove Nature Reserve	370 ha (900 acres)
Crystal Crescent Beach Provincial Park*	540 ha (1350 acres) (includes small candidate addition)
West Dover Provincial Park*	1,030 ha (2,550 acre)
Blind Bay Provincial Park (candidate)*	340 ha (840 acres) (potential)
Prospect High Head Conservation Lands (Nature Conservancy of Canada)	118 ha (290 acres)
<b>Total</b>	<b>8,100 ha (20,000 acres)</b>

\* administered by Department of Natural Resources

#### Rogues Roost Wilderness Area & Terence Bay Wilderness Area

These two wilderness areas protect 5,700 hectares (14,000 acres) in the heart of Rogues Coast, on either side of the communities of Terence Bay and Lower Prospect. They include the network of sheltered coves and passageways of Rogues Roost, so named for the area’s historic role as a hideout for privateers. Small sand beaches occur at Hearn Island and Inner Sambro Island. Today, this area and surrounding coastal waters is renowned for exceptional scenery that attracts yachters, kayakers and power-boaters; photographers, rock climbers, anglers and many others. The lands surround one of Nova Scotia’s most sought-after anchorages for local sailors and are used by a number of commercial tourism operators. Some of the headlands and islands are used informally for coastal hiking. No managed trails exist, but the area has excellent potential for trail development.



**Figure 16: Rogues Roost Wilderness Area.**  
Photo: Oliver Maass



**Figure 17: Terence Bay Wilderness Area**  
Photo: Oliver Maass



**Figure 18: Terence Bay Wilderness Area**  
Photo: Oliver Maass





**Figure 19: Duncans Cove Nature Reserve**  
Photo: Oliver Maass

### **Duncans Cove Nature Reserve**

Of the protected areas within Rogues Coast, this 370-hectare (900 acre) site is closest to Halifax Harbour. It protects more than 4 km of shore, with coastal headlands, barrens and forest on either side of Duncans Cove. No managed trails exist; however, the area has become very popular for hiking on informal trails in recent years. A local trails blogger reported that his Duncans Cove web page received 29,000 views in 2016. Much of the current trail use accesses the nature reserve lands across private properties and parking is difficult, causing conflicts between residents and trail users. Part of the area is also used for bouldering and for mackerel or other fishing from the shore.



**Figure 20: Duncans Cove Nature Reserve**

### **Crystal Crescent Beach Provincial Park**

This is a beautiful coastal headland park near Sambro, with three white sand crescent beaches and about 9 km of shore. The 540-hectare site is managed by Department of Natural Resources for access, parking and beach use, as well as for hiking. A popular trail to Pennant Point is the only managed trail in the Rogues Coast protected area cluster. The beaches are a destination for kayakers on day trips or more extended excursions in the Rogues Coast area.

### West Dover Provincial Park

This 1,030 ha (2,550 acre) park protects the dramatic coast, barrens and small lakes around renowned Peggy's Cove, on either side of Highway 333. The site exemplifies the effects of wind on vegetation and the perched glacial erratics found here are equaled in few places. Informal trails are popular for hiking, especially along the coast, and the area is used for bouldering. The coastal waters attract sea kayakers. A short trail leads to the Swissair Memorial Site, which is a monument in memory of the people who lost their lives in the 1998 Swissair Flight crash which occurred offshore.



**Figure 21: West Dover Provincial Park**  
Photo: Oliver Maass

### Blind Bay Provincial Park (candidate)

Unlike other protected areas within Rogues Coast, this 340-hectare (840 acre) candidate park is located at the head of a large bay, along fairly sheltered coastal waters. It includes mainland shore and a number of islands, and most of the site is wooded. It was acquired by the Province, primarily to help protect the approaches to Peggy's Cove along Highway 333. There is currently no recreational infrastructure at the site, though paddlers may launch into Blind Bay here, just off Highway 333.

### Prospect High Head Conservation Lands

Prospect High Head is a well-known coastal barrens and coastal forest site just outside the village of Prospect. A 118 ha (290 acre) portion of this area is owned by the Nature Conservancy of Canada (NCC). It was recently dedicated as "Dr. Bill Freedman Nature



Reserve" as a tribute to this long-time contributor to the NCC. The property provides habitat for native species and migratory birds, and adjacent waters are used by a variety of sea ducks such as harlequin ducks, black scoters and long-tailed ducks. This is a popular destination for hiking on informal trails, photography, bird watching and other activities. Halifax Regional Municipality owns another 30 hectares (74 acres) next to the NCC lands.

**Figure 22: Prospect High Head Conservation Lands**  
Photo: Oliver Maass

### **4.4.3 Commercial Activities**

Numerous commercial operators are benefiting from this protected area cluster, with the following focusing more so on the wilderness areas. Key examples of operators and their activities are described briefly here.

#### **East Coast Outfitters**

Operating since 2001 on the Lower Prospect Peninsula, East Coast Outfitters (ECO) specializes in kayaking tours and training for kayak guides. Popular day trips take kayakers through the bays, inlets, islands and shorelines of Cub Basin, Rogues Roost, Betty's Island, or coast along Terence Bay Wilderness Area. In addition to incredible rock formations and scenic views, paddlers are greeted by seals, porpoises, whales, eagles, and even schools of tuna. Custom, multi-day, and specialized trips including scientist interpreters are also offered. Group tours with BBQ, mussel or lobster boils can be arranged for corporate events including team building exercises, live music, and transportation. Cruise ship excursions with groups of up to 35 people can be accommodated for hike only, paddle-only, or combinations. The pristine and protected natural coast and wildlife is central to the success of this business.

#### **Great Earth Expeditions**

Along with offering kayak and hiking tours in this area, Great Earth Expeditions also offers tours across the province (e.g. Wentworth, Cape Breton, Taylor's Head) and internationally (Norway, Scotland, and Iceland). They draw on features in many of the province's protected areas to entice new and repeat customers to book tours. Tours to the Prospect area include pickup and drop-off in Downtown Halifax, making it easy for residents and tourists to get on board. Their trips to Wentworth Valley connect with Sugarmoon Farm (featured elsewhere in this report), and their expeditions to Cape Breton extend to four days and provide access to multiple protected areas in the Highlands.

#### **Kattuk Expeditions**

Focusing on land-based excursions and expeditions, this Halifax-based business also benefits from multiple protected areas across the province. Peggy's Cove and Duncan's Cove along this coast represent highly accessible adventures to seal colonies, sea caves, picturesque rocky shores, and barren coastlines. Group sizes can be up to 45 people depending on the tour, and they provide corporate teambuilding programs. These adventurous teambuilding programs can include geo-races, wilderness survival or wilderness adventure scenarios. Schools (grade 7) to university students are offered group hiking trips to Duncan's Cove Nature Reserve, Peggy's Cove (West Dover Provincial Park), Terence Bay Wilderness Area and Blue Mountain-Birch Cove Lakes Wilderness Area.

#### **Prospect Village B&B**

For those who wish to stay in the area for multi-day experiences, this B&B is ideally situated. They highlight the surrounding flora, fauna, birds and granite boulders on the two-hour natural trail around High Head. They are just a short distance to Peggy's Cove and the other protected areas nearby.

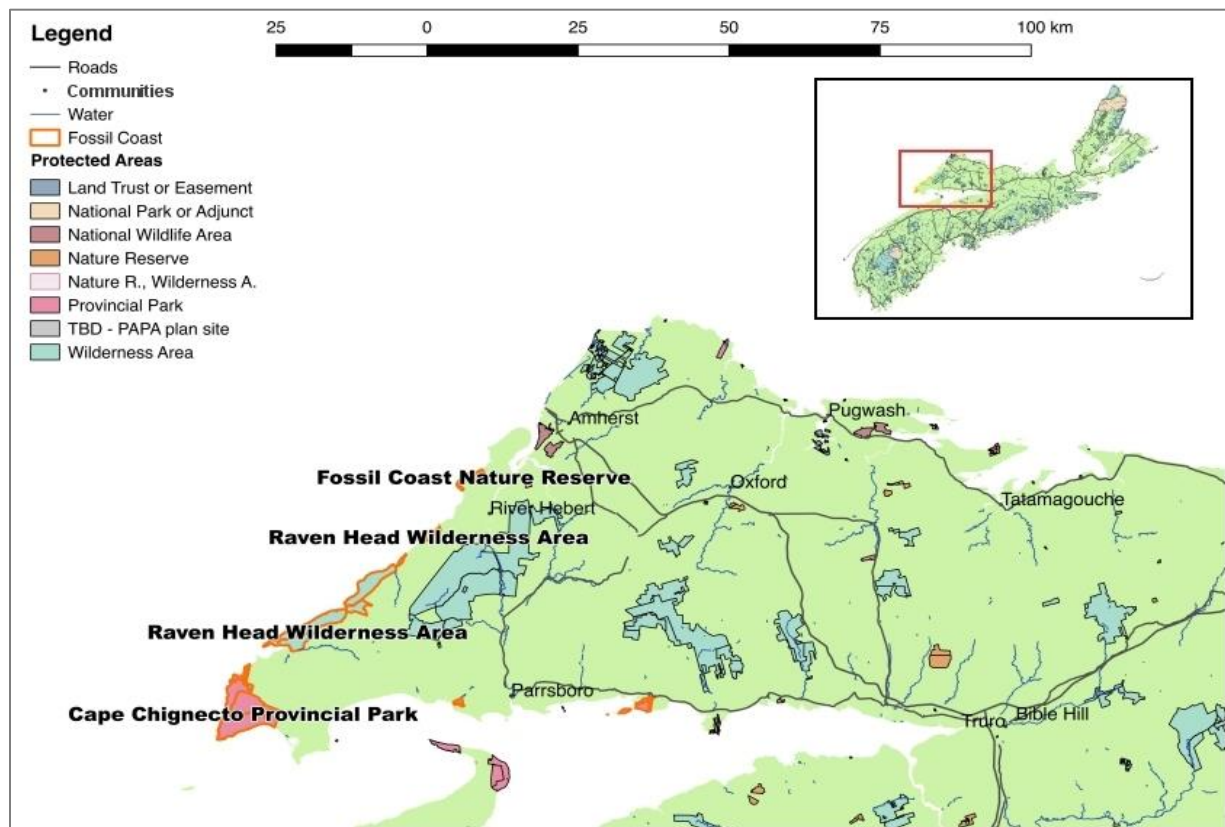
#### **Oceanstone Seaside Resort**

For a high-end accommodation option, consider this resort that boasts a top five award for best wedding locations in Canada by Elle Magazine and the Canadian Wedding Industry Awards. This resort offers several cottages, inn suites, and rooms so large wedding and corporate groups can be accommodated. The top-quality facilities, service, and cuisine fits perfectly with the stunning scenery, accessible walking trails, and wildlife in the area.

## 4.5 Fossil Coast – Bay of Fundy

### 4.5.1 Scope and Features

The area referred to here as “Fossil Coast” extends from Joggins to Parrsboro, along the Bay of Fundy, in Cumberland County. This shore is internationally recognized for its fossil-bearing coastal cliffs, and its tides and tidal features. The fossil-bearing strata are interpreted at Joggins Fossil Institute and the Fundy Geological Museum, in Parrsboro. Part of this area, near Joggins, is designated as a UNESCO World Heritage Site in recognition of the coal-age fossil record here. Other striking geological elements of this shore include glacial landforms from the last ice age, such as raised beaches and outwash plains; and evidence of the break-up of the super continent, Pangaea, and associated birth of the Atlantic Ocean.



**Figure 23: Fossil Coast – Bay of Fundy**

The extensive coastal cliffs along this part of the Bay of Fundy owe their existence to the high average tidal range of between 12 and 14 metres. Other coastal landforms include large barrier beaches and smaller sand beaches; extensive tidal flats and saltmarshes; and islands, sea stacks and sea caves.

More than 100 km of this “Fossil Coast” is now within 8 protected areas. Each of these areas feature different elements of the remarkable geology and tidal story of this shore. Some currently provide opportunities for coastal hiking (both cliff-side and shoreline at low tide), beach combing, and limited interpretation, with good potential to expand this offering. Some of the coastal waters offer unique sea kayaking experiences.

Opportunities for commercial benefits are associated with the following protected areas:

#### 4.5.2 Protected Areas with Opportunities for Commercial Benefits – Fossil Coast

Protected Area	Approximate Size
Fossil Coast Nature Reserve	275 ha (680 acres)
Raven Head Wilderness Area	5,655 ha (14,000 acres)
Cape Chignecto Provincial Park*	5,950 ha (14,700 acres)
Spencers Island Conservation Lands (Nature Conservancy of Canada)	9 ha (22 acres)
Diligent River Nature Reserve	112 ha (275 acres)
Patridge Island Conservation Lands (NS Nature Trust easement)	20 ha (50 acres)
The Brothers (Islands) Conservation Lands (NS Nature Trust)	10 ha (25 acres)
Five Islands Provincial Park*	510 ha (1,250 acres)
<b>Total</b>	<b>12,540 ha (31,000 acres)</b>

\* administered by Department of Natural Resources

A selection of these is highlighted here:

##### Fossil Coast Nature Reserve

This 276 ha (680 acre) nature reserve, which is located just north of Joggins, includes about 8 km of fossil bearing coastal cliffs, near Boss Point. Over half of the land-base was acquired by the Province in 2010. The site partially overlaps with and complements a portion of the Joggins Fossil Cliffs UNESCO World Heritage Site and the associated provincially-designated Joggins Fossil Cliffs Protected Site. The nature reserve designation extends protection landward along the cliffs. A mix of young and older coastal forest types cloak the underlying bedrock and glacial till. Extensive mud flats, shaped by the high tides, occupy portions of the adjacent intertidal zone. This area provides opportunities for geological research and interpretation. No managed trails or interpretive infrastructure exist here today.



**Figure 24: Fossil Coast Nature Reserve**

##### Raven Head Wilderness Area

Raven Head Wilderness Area protects 5,650 hectares (14,000 acres) of forest and 44 km of undeveloped coast, along the Bay of Fundy, between Apple Head and Two Rivers. These lands were acquired by the Province in 2010. Much like Fossil Coast Nature Reserve, the shore consists of fossil-bearing coastal cliffs, sheltered coves, beaches and small saltmarshes, next to a broad intertidal zone. Upland portions of the wilderness area support coastal conifer forest.

This wilderness area provides habitat for the endangered mainland moose and other sensitive species.



**Figure 25: Raven Head Wilderness Area**

The northern end of the wilderness area, near Ragged Reef Point, extends almost to the Joggins Fossil Cliffs UNESCO World Heritage Site and the associated, provincially-designated Joggins Fossil Cliffs Protected Site. This complements both of the earlier designations by extending protection to portions of the renown Ragged Reef Formation not previously protected.

The wilderness area is suitable for activities such as coastal hiking, beachcombing, camping and hunting, and offers opportunities for geological research and interpretation. A forest access road that extends much of the way to the beach at Pollys Flats, near Apple Head, may be used for public vehicle access to within 800 m of the beach. The last 800 m to the beach is accessible on foot. The access road is currently not maintained, and there are currently no managed trails or facilities within the wilderness area.



**Figure 26: Raven Head Wilderness Area**  
Photo: Irwin Barrett



**Figure 27: Refuge Cove, Cape Chignecto Provincial Park**

Photo: Oliver Maass

### **Cape Chignecto Provincial Park**

Located between Advocate Harbour and Apple River, Cape Chignecto Provincial Park is Nova Scotia's largest provincial park. Its 5,950 hectares (14,700 acres) protect close to 30 km of stunning coastal landscape. Most of the shore is defined by cliffs, some as high as 185 metres. The fossil-bearing strata which Joggins is so well known for extend past Raven Head Wilderness Area into the park at Spicers Cove. The park also clearly records the breakup of the supercontinent Pangaea and birth of the Atlantic Ocean. Raised beaches, located 30

metres above current sea level, originated at the end of the last ice age. This is also an excellent place to experience the Bay of Fundy tides.

Most of the park is forested, with a mix of hardwood and coastal conifer forest, including old forest. It provides important habitat for the endangered mainland moose and a variety of rare or at-risk vascular plants, lichens and birds, along with many other species.



**Figure 28: Cape Chignecto Provincial Park**

Visitor services include backcountry and walk-in camping, over 50 km of backcountry and front country hiking trails, day-use areas, and an interpretive centre. The park includes 85 tent-only campsites,

3 cabins/bunkhouses, and is open for camping from May to October. One of the finest ways to experience the park is by sea kayak. A number of sea kayaking outfitters offer guided day and overnight tours, including a local outfitter based in Advocate Harbour.

### **Diligent River Nature Reserve**

This 112-hectare (275 acre) site protects mature conifer and mixed forest and about 1.5 km of shoreline along the tidal portion of Diligent River. This sheltered estuary contrasts with the exposed shores and cliffs that characterize most of the other protected areas within the "Fossil Coast" area. Expansive estuarine flats and salt marsh associated with the nature reserve provide important habitat to shorebirds. This is a potential destination for coastal walking, sea kayaking, and bird watching. There are no managed trails.

### **Five Islands Provincial Park**

This mostly wooded 510 ha (1,250 acre) provincial park is located at the community of Five Islands, just east of Parrsboro. This is a scenic camping and day-use park, with over 10 km of sea cliffs and other protected shore adjacent to the impressive mudflats and tides of Minas Basin. Up to 90m high cliffs offer spectacular scenic vistas. The park includes several islands. Dinosaur tracks and other fossils may be found from either the cliff face, or from loose rocks on the beach. These same cliffs record the break-up of Pangaea and birth of the Atlantic Ocean. The park is considered one of the best sites in the Bay of Fundy for interpreting and experiencing tidal and inter-tidal phenomena, in part because the intertidal zone at Five Islands is one of the most expansive in the Bay<sup>11</sup>.

This is a popular destination for beachcombing, rock collecting, clam digging, hiking, picnicking and car-based camping. The adjacent waters can be explored by sea kayak. The park has good potential for interpretation of Mi'kmaw culture and history.

Visitor services include 88 open/wooded campsites, access to the shore, and over 5 km of managed trails. The park is open for camping from June to October, and can be accessed at other times of the year for cross-country skiing, snowshoeing and other activities.



**Figure 29: Five Islands Provincial Park**

### **4.5.3 Commercial Activities**

A number of commercial operators are currently benefiting from this protected area cluster. Key examples of operators and their activities are described briefly here.

#### **Cape Chignecto & Five Islands Provincial Parks**

Those seeking to explore wilderness areas and nature reserves are highly likely to visit local provincial parks. These may represent a great overnight accommodation option, launchpad for exploring nearby trails, or simply an ideal example of local geology and landscape diversity. Revenues at the parks may increase with more protected areas available in the area, especially if these lead to extended stays, repeat visits, and visitation at low or shoulder season periods.

#### **Joggins Fossil Institute**

Centred around the Joggins Fossil Centre, the focal point for the UNESCO World Heritage designation, this organization is multifaceted. The Centre primarily serves as a gateway to the fossil cliffs along the shore. The interpretive centre and guided tours of the cliffs are available for individuals, groups tours, and school excursions. Perhaps less recognized is the extensive research effort underway that brings together scientists from federal and provincial governments, along with several academic institutions in Nova Scotia and New Brunswick. Drawing visitors to the protected areas could increase traffic to the Institute where, in return, they gain an appreciation of the geological significance and evolutionary history of the area.

<sup>11</sup> <https://www.colchester.ca/1459-bay-of-fundy-rma-study>



### **Fundy Geological Museum**

This museum, in Parrsboro, is operated under the Nova Scotia Museum and features the geology, fossils and minerals of the Bay of Fundy. Highlights include fossil skeletons of Canada's the oldest dinosaurs, interpretation of the tidal phenomena, guided beach tours, and much more. Like the Joggins Fossil Institute, the museum benefits from visitors attracted to the area for diverse outdoor activities, and it enhances their understanding of the unique geology and significant discoveries.

### **NovaShores Adventures**

Paddling from Advocate Harbour, this kayaking tour operator markets the local UNESCO designation, the world's highest tides, and unique coastal geology, including coves, sea caves, and rock archways. Their tours take kayakers along the shores of Cape Chignecto Provincial Park on day trips or overnight trips. The knowledgeable guides help to highlight geological points of interest and notable local flora and fauna. They will help arrange local accommodation for longer visits and transportation if needed.

### **Coastal Adventures**

Also featured as part of the Eastern Shore Islands, Coastal Adventures offers a four-day tour of Cape Chignecto Provincial Park, departing from West Advocate. The trip is designed to experience the world's highest tides and highest cliffs on mainland Nova Scotia. Kayakers are enticed by the description of rock gardens, sea caves, and the land where the earliest dinosaurs roamed. Views from the water are free of human settlement all around the Cape, which is a benefit to a business seeking remote getaway experiences for clients.

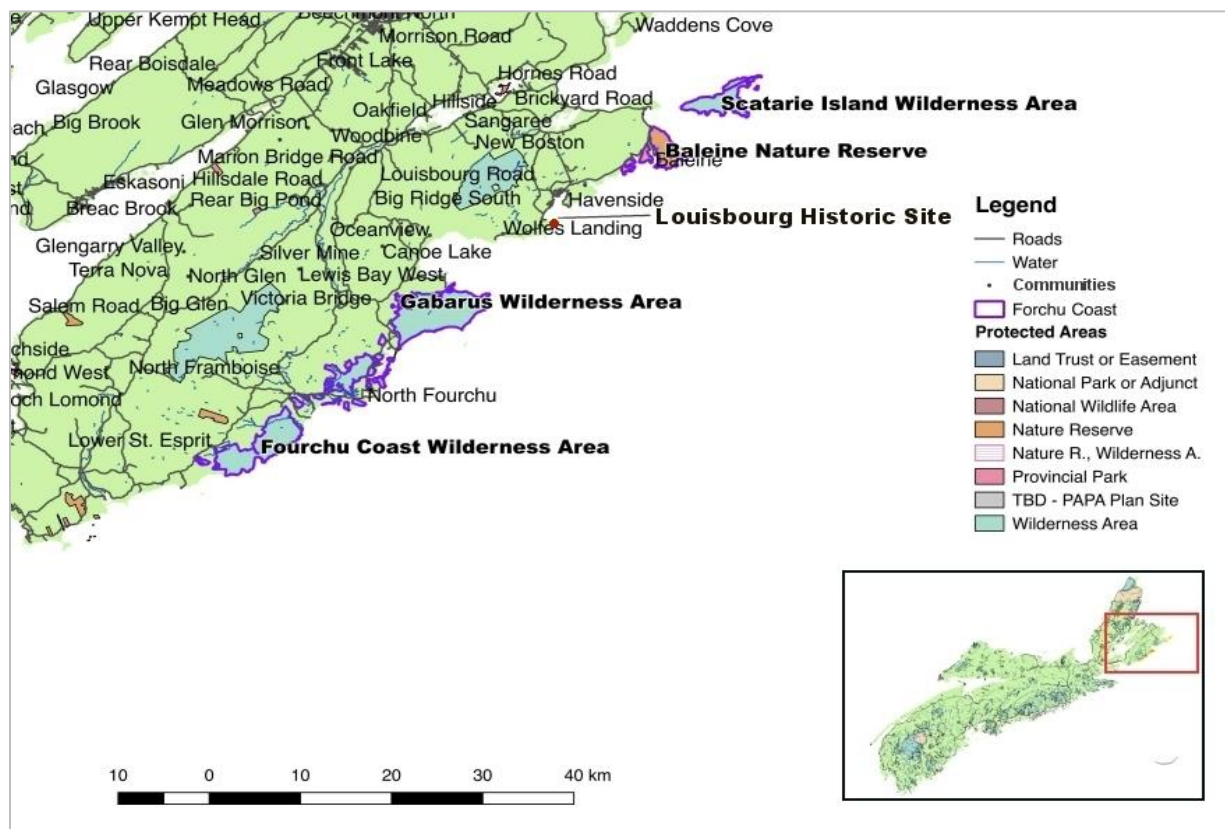
### **Geopark**

Broad-based efforts have been initiated in the region to gain a UNESCO geopark designation along the Parrsboro shore. Local businesses and communities, with support from Members of Parliament and the Nova Scotia Department of Natural Resources, are coordinating efforts towards this end. Some of the dozen or more geosites identified in the area will be located in protected areas. The UNESCO program places emphasis on tourism development and linking geologically significant sites with cultural and recreational tourism opportunities.

## 4.6 Fourchu Coast – Eastern Cape Breton

### 4.6.1 Scope and Features

The “Fourchu Coast” extends 75 km along the Atlantic coast of Cape Breton, between St. Esprit and Scatarie Island. Major portions are now protected by the Province. In the midst of this lies the almost 6,000-hectare (14,750 acre) Fortress of Louisbourg National Historic Site, administered by the federal government. Together the protected areas and national historic site encompass a mix of exposed and sheltered scenic coast, with coastal cliffs, headlands and coves; and an extensive network of brackish water lakes and barrier beaches. These coastal habitats provide important feeding and resting areas for migrating shorebirds and other birds. The shores expose an interesting and colorful geological past, and hold historical significance dating to the colonial days of the Fortress of Louisbourg.



**Figure 30: Fourchu Coast – Eastern Cape Breton**

This coast can be explored by kayak or other small craft; or on foot, along beaches, rocky shores and cliffs. The network of brackish water lakes provides an unusual and beautiful setting for sheltered coastal canoeing, with small portages. Bird watching is excellent, especially when shorebirds are moving through in spring and late summer, and whales may be spotted from the shores.

#### 4.6.2 Protected Area Sites with Opportunities for Commercial Benefits

Protected Area	Approximate Size
Fourchu Coast Wilderness Area	4,800 ha (11,900 acre)
Gabarus Wilderness Area	3,900 ha (9,600 acre)
Belfry Beach Provincial Park (Park Reserve)*	27 ha (65 acre)
Fortress of Louisbourg National Historic Site** (federal government)	5,975 ha (14,750 acre)
Baleine Nature Reserve	1,270 ha (3,130 acre)
Scatarie Island Wilderness Area	1,500 ha (3,700 acre)
<b>Total</b>	<b>17,450 ha (43,100 acres)</b>

\* administered by Department of Natural Resources

\*\*This is a national historic site and is technically not a protected area, as its primary objectives are not for managing biodiversity conservation.

A selection of these protected areas is described below:

##### Fourchu Coast Wilderness Area & Gabarus Wilderness Area

These two wilderness areas protect about 8,700 hectares (21,500 acres) and 40 km of Atlantic shore, between Gabarus and St. Esprit. Extensive barrier beaches and low shoreline with rock outcrops and glacial till cliffs face the open ocean. Behind the barrier beaches are numerous brackish water lakes and lagoons, with tidal flats and salt marsh. On higher ground are found humid coastal conifer forests, windswept coastal barrens, and sprawling wetlands that support rare coastal plain plants.

This region is rich in wildlife. Diverse habitats provide staging and nesting sites for shorebirds, waterfowl and seabirds. In spring and late summer, migratory shorebirds include ruddy turnstones, black-bellied plovers, short-billed dowitchers, great blue herons and semipalmated plovers. The breeding ranges of great cormorants and double-crested cormorants overlap here – both nest on nearby Sugar Loaf Island. Immature common eider ducks feed off of the outer islands and headlands during the fall and winter. Green Island, just off Cape Gabarus, has the most southerly nesting colony of black-legged kittiwakes. Harbour seals and grey seals breed in the coastal zone, with adults, immatures and pups found along the shore in June and July. Some of the brackish water lakes maintain a popular sport fishery (striped bass, sea trout).



**Figure 31: Fourchu Coast Wilderness Area**

The remains of former settlements are evident at Gull Cove and elsewhere, with remnant old fields, stone walls and foundations. There are also considerable private land holdings around the communities of Fourchu, North Fourchu and Framboise, which are not part of either wilderness area. The St. Peters-Fourchu Road (Fleur-de-lis Trail) and its side roads provide access to different parts of the wilderness areas.

Both wilderness areas offer unique and memorable opportunities for hiking, beachcombing, bird watching, sea kayaking, canoeing, angling and hunting. The entire shore of Gabarus Wilderness Area can be hiked between the community of Gabarus and Belfry Beach Provincial Park Reserve, along unmanaged trails and the shore. Gull Cove Trail Society, based out of Gabarus, is currently working to rehabilitate the section of trail to Gull Cove and may expand its efforts to additional trail within Gabarus Wilderness Area.



**Figure 32: Fullers River, Fourchu Coast Wilderness Area**

Another highlight is the beach at Capelin Cove and surrounding coastal barrens at Fourchu Coast Wilderness Area; however, the access road from the Fleur-de-lis Trail, to within easy walking distance of the Cove, is in poor condition. Hiking along the coast is of easy to moderate difficulty, and can include day or overnight trips. There are currently no managed trails.

The sheltered waters between Framboise and Gabarus Lake can be explored by canoe or kayak along portions or all of a unique, 20 km route that weaves through the interconnected lagoons and

brackish lakes, protected from the open ocean by barrier beaches and headlands<sup>12</sup>. Along the way, the route passes under or over several roads and a mix of protected and private lands. Like the hiking routes, this route is not marked or managed. Another sheltered water option is to paddle Belfry and Gabarus lakes beginning or ending either at Belfry Gut or the bridge crossing the channel between the two lakes. Paddling the more open coastal waters is more suitable by sea kayak than canoe, with opportunities to cross into the more sheltered waters as desired.

### **Baleine Nature Reserve**

This nature reserve protects 1,270 hectares (3,130 acres) of coastal spruce-fir forest, extensive wetlands and ponds, and coastal barrens near the community of Baleine, northeast of Louisburg. Low cliffs and headlands define much of almost 20 km of shoreline, along with small barrier beaches and brackish lagoons, and the 4 hectare Ile Aux Cannes. These habitats support unique plant communities, including at least seven rare arctic/alpine species. Several species of colonial seabirds nest here, including Leach's storm petrel. Migrating shorebirds such as whimbrel frequent the barrens and beaches.

<sup>12</sup> [http://www.trails.gov.ns.ca/nscwt/Cape\\_Breton\\_Atlantic/Intro\\_ACCB.pdf](http://www.trails.gov.ns.ca/nscwt/Cape_Breton_Atlantic/Intro_ACCB.pdf)



**Figure 33: Baleine Nature Reserve**

The highly indented and scenic coastline is enjoyed by sea kayakers and hikers, with camping at certain sites. Berry picking for personal use is permitted. The shoreline reveals an interesting and colourful geology, and offers good opportunities for bird watching. There are currently no managed trails or designated campsites.

**Scatarie Island WA**

Scatarie Island, one of Nova Scotia's largest islands, is located about 3 km off of Baleine Nature Reserve and the nearby community of Main-a-Dieu. Most

of the 10-km long island and its much smaller neighbor, Hay Island, is designated as wilderness area – about 1,500 hectares (3,700 acres) altogether. The islands are also designated as a provincial wildlife management area, with regulations that permit waterfowl and deer hunting, but prohibit hunting or trapping of fur-bearing mammals and upland fauna.

About 30 km of shore consists primarily of cliffs, headlands, rocky beaches, and barrier beaches with small lagoons. Much of the perimeter along the shore is open bog, barren and meadow complexes. A mix of spruce-fir forest, wetlands and barrens cover the interior. The windy and often foggy conditions have shaped this island more than any of the other protected areas along the Fourchu Coast. Scatarie Island hosts a remarkable variety of rare or unusual flora, as well as a large colony of Leach's storm petrels. This is a stopping point for many migrants, including whimbrel. Eiders and gulls nest on Hay Island, which also hosts a breeding colony of grey seals.



**Figure 34: Scatarie Island Wilderness Area**

Photo: Oliver Maass

Archaeological research has revealed evidence of 18th century fishing properties on the island, which were active when France controlled the nearby Fortress of Louisbourg. Tales also abound of 19th and 20th century fishing settlement life, and many people have shipwrecked here. Local residents still use the island as a destination for picnicking and other recreation, and maintain summer cottages on several private parcels. Several light stations are now fully automated.

The island offers excellent, scenic coastal hiking and sea kayaking opportunities. An unmanaged trail skirts the length of the northern shore. Much of the remainder of the shore can also be hiked. As at Baleine, the exposed shoreline bedrock geology is interesting and colorful. Sea kayaking is appealing for many of the same reasons as coastal hiking. The rugged shore, with its cliffs, beaches, headlands and many shoals, provides dramatic paddling experiences. These characteristics, together with strong tidal currents, can also be hazardous and care must be taken to ensure safe travel to and around this exposed shore.



**Figure 35: Scatarie Island Wilderness Area**

Photo: Oliver Maass

#### **4.6.3 Commercial Activities**

A number of commercial operators are currently benefiting from this protected area cluster. Key examples of operators and their activities are described briefly here.

##### **Louisbourg**

Visitors to this area will be familiar with and mostly drawn by the Fortress of Louisbourg, and may then seek active attractions in the area such as walking trails and scenic viewpoints. This National Historic Site is a partial reconstruction of an 18th century French fortress. This represents the largest reconstruction project in North America. At the time, it was the third busiest port in North America after Boston and Philadelphia due to the bustling fish trade. Some 84,000 visitors entered the fortress in 2016, down from a peak of over 200,000 per year in the 1960s.

##### **Accommodations and Food Service**

Developing protected areas into accessible attractions will currently benefits the collection of accommodations and food service establishments such as: The Point of View Suites, Louisbourg Harbour Inn, Louisbourg Heritage House B&B, Cranberry Cove Inn, Peck's Cottages, Montebello Cottage, Fortress Inn, Lobster Kettle Restaurant, Station House Restaurant, and others. As visitation at the fortress has waned the development of trails and other attractions may become more important to the viability of these tourism businesses.

##### **Marine activities**

Local kayak trips are offered by Paradise Kayak Tours, based out of Catalone, N.S. Louisbourg Kayaking also offers trips and meals based out of Gabarus, N.S, and Coastal Adventures, based in the Eastern Shore (100 Wild Islands), is also operating tours in this cluster this year. All operators have flexible options for length of trip and areas of focus. Louisbourg Scuba Services provides scuba lessons, equipment, and guides for local scuba exploration.



These protected areas offer the more adventurous a unique opportunity to sample exciting natural and cultural experiences. They are highly suitable for trail-related uses, such as hiking, snowshoeing, backcountry skiing, mountain biking and camping. And, they are highlights in the provincial snowmobile and all-terrain vehicle trail systems, where such use is permitted. Other recreational opportunities include wildlife, bird and wild flora viewing, geocaching, and sea kayaking and whale watching in coastal areas. The major opportunities for commercial benefits are associated with the following protected areas:

#### 4.7.2 Protected Areas with Opportunities for Commercial Benefits – Highlands of Cape Breton

Protected Area	Approximate Size
Polletts Cove-Aspy Fault Wilderness Area	27,300 ha (67,500 acres)
Cape Breton Highlands National Park*	94,900 ha (235,000 acres)
Ingonish River Wilderness Area (candidate)	10,700 ha (26,500 acres)
Cape Smokey Provincial Park**	720 ha (1,800 acres)
French River Wilderness Area	23,500 ha (58,000 acres)
North River Wilderness Area	5,000 ha (12,400 acres)
Baddeck River Wilderness Area	2,800 ha (6,900 acres)
Uisge Ban Falls Provincial Park**	150 ha (360 acres)
Kluscap Mountain Wilderness Area	2,800 ha (6,850 acres)
Margaree River Wilderness Area	9,000 ha (22,200 acres)
Sugar Loaf Mountain Wilderness Area	750 ha (1,850 acres)
Middle River Wilderness Area (existing plus candidate addition)	5,600 ha (13,900 acres) <i>plus</i> 3,200 ha (7,900 acre) potential expansion
Humes River Wilderness Area	3,625 ha (8,950 acres)
Trout Brook Wilderness Area	3,050 ha (7,500 acres)
Cape Mabou Wilderness Area (candidate)	1,500 ha (3,700 acres) (potential)
<b>Total</b>	<b>195,000 ha (482,000 acres)</b>

\* administered by Parks Canada

\*\* administered by Department of Natural Resources

A selection of these is highlighted here:



**Polletts Cove – Aspy Fault Wilderness Area** – Bordering Cape Breton Highlands National Park, this wilderness area encompasses over 27,000 hectares (67,500 acres). As the province’s most northern protected area, this is one of the most remote and rugged landscapes in Nova Scotia. More than 20 km of coastal cliffs, 4 km of sand beaches and several islands are protected. The harsh conditions on the cliffs support arctic ecosystems rarely found in Nova



**Figure 37: Polletts Cove – Aspy Fault Wilderness Area**

Photo: Seawall Trail Society

Scotia. Moose are abundant and the heavy snowfalls help support the provincially endangered Canada lynx. Arctic flora such as blue mountain heather, northern blueberry and alpine bilberry flourish here.

Hiking, snowshoeing and backcountry skiing, wilderness camping, and horseback rides are spectacular. Whale watching, sea-kayaking and even a non-motorized moose hunt is possible. The Seawall Trail Society intends to develop a 50+ km hiking trail and hut system, under agreement with Nova Scotia Environment.

**French River Wilderness Area & North River Wilderness Area**

These two adjoining wilderness areas protect close to 28,500 hectares (74,400 acres), overlooking St. Ann’s Bay and the Cabot Trail. The diverse terrain extends from the shores of St. Ann’s Bay to stunted fir forests on the plateau, and includes incised river canyons, hardwood ravines and slopes, remote ponds and lakes, talus slopes, old growth hemlock stands and waterfalls. The major river canyons of Barachois River, Indian Brook, French River and North River provide dramatic contrast to the surrounding highlands.



**Figure 38: French River Wilderness Area**



**Figure 39: At Bald Mountain, North River Wilderness Area.**

Photo: Oliver Maass

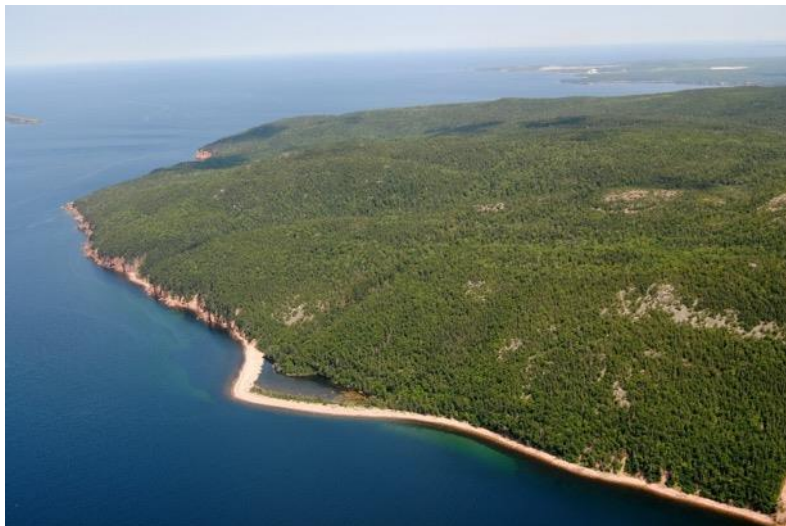
The well-known North River Falls hiking trail (9 km each way) follows the river to North River Falls, which is one of the highest in the province. This trail is managed by the province. Informal trails also extend to the top of Bald Mountain (North River Wilderness Area) and to peaks at the Spinnigan Lakes (French River), both with stunning views of the nearby Atlantic Ocean. Part of Ski Tuonela's managed backcountry ski trail system extends into North River Wilderness Area, where clients may also explore off-trail, such as to Bald Mountain.

These wilderness areas are suitable for development of four-season managed trail opportunities which can support commercial benefits. They also offer opportunities for angling, moose or other hunting, and exploring the shores of St. Ann's Bay.

**Kluscap Mountain Wilderness Area** – This nearly 2,800-hectare (6,850 acre) wilderness area protects much of the northern part of Kluscap Mountain (Kelly's Mountain), next to St. Ann's Bay, and 15 km from North Sydney. The slopes rise abruptly out of the sea to a narrow plateau, with stunning viewpoints. Cobble beaches and coastal cliffs extend almost 6 km along St. Ann's Bay. Pilot whales and dolphins are commonly sighted in summer feeding season, and bald eagles soar overhead.



**Figure 40: North River Falls**



**Figure 41: Kluscap Mountain Wilderness Area**

The mountain is a sacred Mi'kmaq site where it is said that the prophet Kluscap (or "Glooscap") once lived in a sea cave near Cape Dauphin, at the northern tip of the wilderness area. Visitors to the sea caves must be prepared to get wet in order to enter the caves on calm days.

This wilderness area provides opportunities to interpret, appreciate and honour Mi'kmaq lands and culture, and to enjoy the beautiful geography. Currently, visitors come to explore by informal trail or by sea. No managed trails or other infrastructure currently exist here. The Province and Nova Scotia Mi'kmaq intend to explore options for cooperatively managing this wilderness area.

### **Middle River Wilderness Area (existing plus candidate addition)**

This 5,600-hectare (13,900 acre) wilderness area protects headwaters of the Middle River, with a mix of plateau, steep slopes and incised canyons. Most of a candidate 3,200-hectare (7,900 acre) expansion within the Margaree River Watershed would extend the wilderness area to the Cabot Trail and the 2-hectare (5 acre) Lake O'Law Provincial Park. These scenic slopes contain old forest and offer opportunities for developing and marketing hiking and other trail opportunities right off the Cabot Trail. There are currently no managed trails in this area.



**Figure 42: Middle River Wilderness Area (existing and candidate) at Second Lake O'Law**

### **Humes River Wilderness Area**

This scenic wilderness area overlooks Bras d'Or Lake and encompasses much of the Humes River watershed. It protects 3,625 hectares (8,950 acres) of highlands, steep slopes and humid river canyons, with impressive older hardwood forests with red spruce and hemlock. Higher elevation areas transition to boreal conifer forest, barrens and semi-barrens.

Elevations range from 50 to 300 metres above sea level, with most in excess of 200 metres.

An unmanaged, old cart track at Lewis Mountain, off Highway 105, is currently used for hiking. Biosphere Northeast Trails Association (BNTA) has recently developed a proposal to develop a managed hiking trail, with a trail head at the Mi'kmaq community of Wagmatcook and extending into Humes River Wilderness Area. The first phase of the project will include construction of 6 km of trail within the wilderness area and will highlight several waterfalls. Other phases have the potential to offer expansive views of Bras d'Or Lake.

The recreation and nature tourism potential of this wilderness area is enhanced by its proximity to the Trans-Canada Highway (Highway 105). It can be accessed from Humes Rear Branch



Road, where an unmaintained public road passes through part of the wilderness area. This road will be part of the proposed BNTA trail system and is also a snowmobile route (SANS 700 trail). A forest access road near Lewis Mountain which forms part of the boundary of the wilderness area can also be used to gain access from the north. This road separates Humes River Wilderness Area from the adjacent 3,050-hectare (7,500 acre) Trout Brook Wilderness Area.

**Figure 43: Falls on Humes River**

Photo: Biosphere Northeast Trails Association

#### **Cape Mabou Wilderness Area (candidate)**

This is a scenic and culturally-significant highlands area which overlooks the Northumberland Strait, between Mabou and Inverness. Rising to more than 300m above sea level, this small highland plateau is dissected by steep ravines on all sides. Most of the 1,500-hectare (3,700 acre) site is heavily forested, including dense, older hardwood in ravines and on slopes. Areas of highland plateau support hardwood and transitional boreal forest.

More than 400 hectares (1,000 acres) of the adjacent private land between the candidate wilderness area and Northumberland Strait has been protected by the Nova Scotia Nature Trust (NSNT) and Nature Conservancy of Canada (NCC), either through acquisition or conservation easements with the landowners.



**Figure 44: Cape Mabou Wilderness Area (candidate)**

Photo: Oliver Maass

A trail head and about 10 km of a popular 35 km hiking trail system is within the candidate wilderness area. Managed by Cape Mabou Trail Club, other parts of the trail system cross the land trust-protected lands or use old, provincially-owned cart tracks. Trail users can explore humid ravines and hardwood ridges, visit abandoned farmsteads, and enjoy stunning views of

the Northumberland Strait. One tourism website claims the trail system offers “some of the best hiking that you will find anywhere in Nova Scotia”.

### 4.7.3 Commercial Activities

Numerous commercial activities are benefiting from this protected area cluster, with the following focusing more so on the wilderness areas. Key examples of operators and their activities are described briefly here.

**Cape Breton National Park** – CBNP maintains six front-country campgrounds and one back-country campground. The park now has 20 oTENTik sites among the 424 front-country sites. The park charges entrance fees and camping fees. The federal government supports staff and operational costs to meet the overall mandate of public enjoyment and nature conservation.

**Big Intervale Fishing Lodge** - Located between the hills of the Margaree Highlands and the Margaree River, Big Intervale Fishing Lodge offers luxury accommodations and dining, attracting salmon anglers, snowmobilers, hikers and others seeking adventure in a remote natural setting. The lodge is surrounded by the scenic slopes of Sugarloaf Mountain and Margaree River wilderness areas.

**Cabot Trail Adventures & Eagle North River Kayak Tours** – Based out of South Harbour, Aspy Bay, this merger of outdoor adventure enterprises has 20 years of experience in the business. Whether your preference is to hike, bike, or kayak, they can provide rental equipment or fully-supplied guided expeditions, including within local wilderness areas. They offer packages with whale watching operators and local accommodations.

**Sea Spray Outdoor Adventures** – Founded in 1993, they provide custom itineraries and support guided or self-guided outings in the areas at the northern tip of Cape Breton. Primary activities involve cycling, hiking, kayaking, whale watching, cross-country and back country skiing and snowshoeing, including activities in Polletts Cove-Aspy Fault Wilderness Area.

**Hike the Highlands Festival** – For ten days in September a series of guided walks are organized to facilitate hikes on a range of trails in Cape Breton. Some of these feature wilderness areas. Various social events and activities are organized in the evenings. Registration cost varies for individuals versus groups and for single day or multi-day hikes. The same organization also promotes the annual 3 Peaks Challenge where 24 teams of four people hike 24 kms in one day to the top of Aspy (1500 ft.), Tenerife (1200 ft.), and Coastal (150 ft.).

**Meat Cove Outfitters** - have operated for 29 years offering guide services for the non-motorized moose hunt permitted in Polletts Cove – Aspy Fault Wilderness Area. Hunting can launch from their main lodge or spike camp using horses. This is only open to Nova Scotians through a lottery draw for a moose hunting permit.

**Bulls n Boars Outfitters** – Based out of Cheticamp, they maintain a bear hunting lodge 12 minutes from town and additional camps for moose hunting. Bear hunts are for one week with 5 to 10 hunters per week and a 2:1 preferred ratio of guides to hunters. They conduct guided moose hunts in three moose hunt zones, including Polletts Cove-Aspy Fault Wilderness Area. Packages include guiding and cleaning of the animal, and in most case accommodation is included.

**Whale and seabird watching** – There are several operators, including Captain Cox’s Whale Watch, sailing from Bay St Lawrence with hydrophone on-board to hear whale and dolphin vocalizations. Oshan Whale Watch also sails from Bay St Lawrence and offers free trips after you have paid for one trip (space permitting). Guaranteed Whales, formerly known as Wesley’s Whale Watching, is based out of Pleasant Bay with four sailings in a typical day. Captain Zodiac Whale Cruise travels in two zodiacs from Cheticamp offering the chance to snorkel with whales. The dramatic cliffs and highlands of Polletts Cove-Aspy Fault Wilderness Area provide the backdrop to most of these experiences.

Bird Island Boat Tours sails three times per day from Big Bras d’Or focusing on the unique Bird Islands-dwelling Atlantic puffins, other seabirds, eagles, and grey seals. The surrounding protected highlands provide the scenic backdrop to this experience. The Bird Islands are designated as wildlife management area.

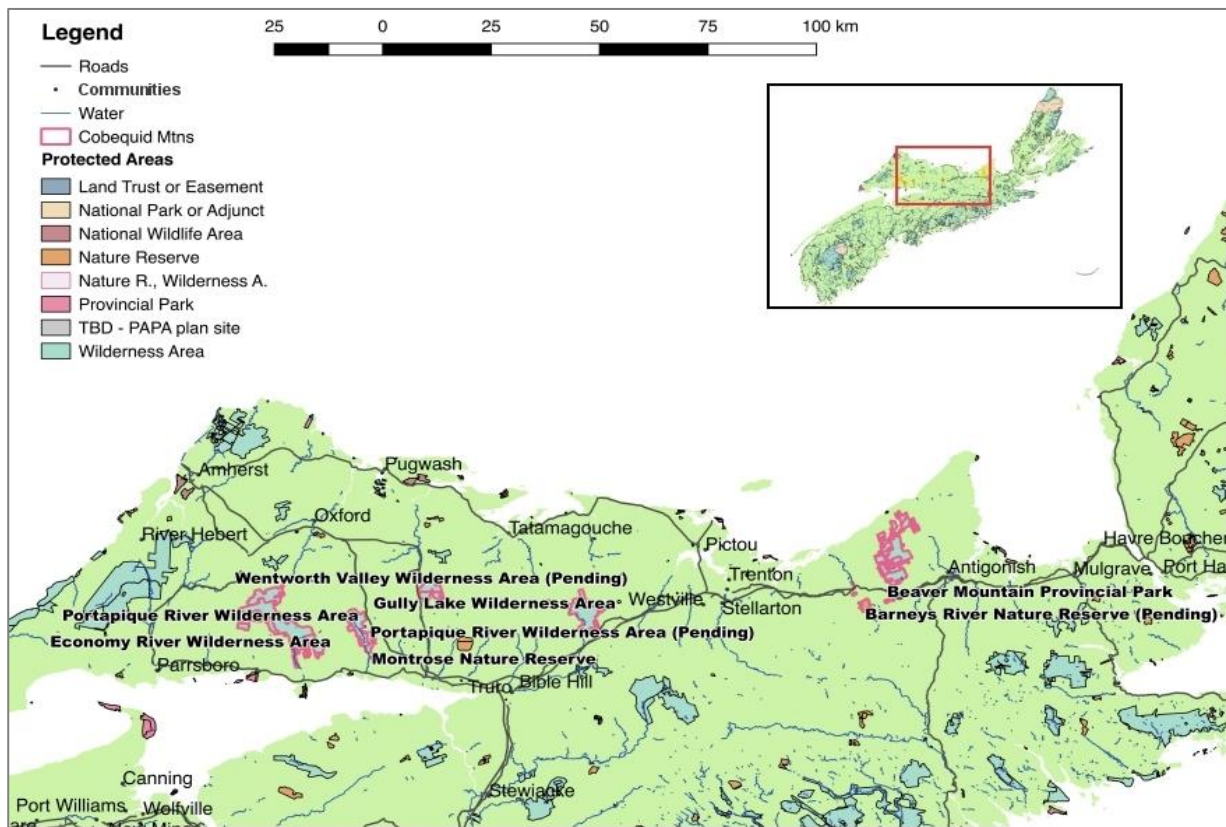
**Accommodations** – There are many accommodation establishments but a few are particularly attractive for protected areas exploration. The Cabot Shores Wilderness Resort, Meat Cove Campground, and Hines’ Ocean View Lodge are prime examples.

**Ski Tuonela** – Located in Goose Cove on the Cabot Trail, they are just 20 minutes from Baddeck. They promote their ski village and trails as the only serviced Telemark ski area in the Maritimes. The Telemark hill has a 1400 foot run over a 400-foot vertical, and there are 18 kms of cross country ski trails. They provide equipment rentals, chalet accommodations and sauna. Clients can explore beyond the groomed trails into North River Wilderness Area. Explore Magazine listed Ski Tuonela in their top 25 cross country ski resorts in Canada.

## 4.8 Cobequid Mountains

### 4.8.1 Scope and Features

The Cobequid Mountains form a long, linear upland, spanning portions of Cumberland, Colchester, Pictou and Antigonish counties. Broad hardwood hills alternate with fast flowing headwater rivers and streams in damp ravines and incised valleys. Scattered vernal pools, ponds, and a few small lakes occur throughout, and waterfalls are common in ravines. Certain areas offer scenic look-offs. This region offers the most reliable winter snow-cover in mainland Nova Scotia, and impressive wild flower blooms occur in certain hardwood areas in May. This remains a stronghold for the endangered mainland moose, especially in the more remote areas. Atlantic salmon continue to spawn in the headwaters of some of the rivers.



**Figure 45: Cobequid Mountains**

A substantial portion of the larger, provincially-owned land holdings in this region are now protected or identified as candidates for protection – about 30,000 hectares (75,000 acres) altogether. These lands are highly suitable for trail-related uses, such as hiking, snowshoeing, backcountry skiing, mountain biking and camping. They are highlights in the provincial snowmobile and all-terrain vehicle trail systems, where such use is permitted. Other recreational opportunities include wildlife and wild flora viewing, geocaching, orienteering and hunting. Several municipalities derive their drinking water from protected areas in this region.

The major protected areas with opportunities for commercial benefits include:

#### 4.8.2 Protected Areas with Opportunities for Commercial Benefits – Cobequid Mountains

Protected Area	Approximate Size
Eigg Mountain-James River Wilderness Area	7,650 ha (18,900 acres)
Gully Lake Wilderness Area (existing plus candidate addition)	3,800 ha (9,450 acres) <i>plus</i> 200 ha (450 acre) potential expansion
Wentworth Valley Wilderness Area (candidate)	1,900 ha (4,700 acres) (potential)
Portapique River Wilderness Area (existing plus candidate addition)	2,050 ha (5,100 acres) <i>plus</i> 1,130 ha (2,800 acre) potential expansion
Economy River Wilderness Area (existing plus candidate addition)	6,150 ha (15,200 acres) <i>plus</i> 5,700 ha (14,150 acre) potential expansion
<b>Total</b>	<b>28,500 ha (70,500 acres)</b>

A selection of these is highlighted here:

##### Gully Lake Wilderness Area

This nearly 4,000-hectare (10,000 acre) wilderness protects hardwood and mixed forest hills in the headwaters of the Salmon River, about 20 km northeast of Truro, near Earltown. Small flood plains, vernal ponds, small lakes, and waterfalls host a rich association of plants, including some rarities. This was home to the Hermit of Gully Lake. The area is easily accessed via adjacent public roads.

The Cobequid Eco-Trails Society (CE-TS) manages 25 km of hiking trails within the wilderness area under an agreement with Nova Scotia Environment. These trails are also suitable for snowshoeing and, to some extent, backcountry skiing. The trail system extends beyond the wilderness area, on private land, to Earltown Lake, Sugarmoon Farm and Rogart Mountain.



10 km of designated snowmobile trail and 7.5 km of all-terrain vehicle trail also cross the wilderness area. These are managed by the Snowmobilers Association of Nova Scotia (SANS) and the All-terrain Vehicle Association of Nova Scotia (ATVANS), also under agreements with Nova Scotia Environment.

**Figure 46: Gully Lake Wilderness Area**

Photo: Oliver Maass



### **Wentworth Valley Wilderness Area (candidate)**

This 1,900-hectare (4,500 acre) candidate wilderness area consists of hardwood and mixed forest hills and slopes along the east side of Wentworth Valley. It includes the highest peak in mainland Nova Scotia (365 m above sea level), as well as headwaters of the Wallace River, which supports an Atlantic salmon run. This area is a refuge for the endangered mainland moose and other species which prefer undisturbed woodlands.

A 3-km section of a more extensive Nordic ski trail system extends into the candidate wilderness area from adjacent lands of Ski Wentworth (Wentworth Valley Developments). No other managed trails exist, though informal trail use occurs, including for off-highway vehicle use. The area has also been used for provincial and national orienteering events.

These lands are easily accessed via highway #4, Ski Wentworth, and other locations. The hilly, scenic geography, good access, and proximity to major population centres make this area highly suitable for development of managed trail opportunities which can support commercial benefits. This potential has been recognized by Wentworth Trails Association and Ski Wentworth, which have articulated a vision of four-season experiences within and around the candidate wilderness area, including hiking, trail running, backcountry and Nordic skiing, snowshoeing, adventure racing, mountain biking and zip lining and rope/obstacle courses.



**Figure 47: Wentworth Valley Wilderness Area (candidate)**



### **Economy River Wilderness Area (existing plus candidate addition)**

This wilderness area straddles the Cobequid Mountains between Economy and Springhill. It protects hardwood forest uplands; conifer forest flats; and steep-sided, mixed forest canyons. Highlights include Economy Falls and other water falls. Like other protected areas in the Cobequid Mountains, this is a refuge for the endangered mainland moose and other species which prefer undisturbed woodlands. The wilderness area protects part of the drinking water supply for Springhill.

The Kenomee Trail Society (KTS) manages 20 km of hiking trail within the wilderness area under an agreement with Nova Scotia Environment. This includes designated campsites. The Society manages another 7 km of trail under authority of the Department of Natural Resources, within a candidate addition to the wilderness area. Aside

**Figure 48: Kenomee Trail, Economy River Wilderness Area**

from hiking, these trails are suitable for snowshoeing and backcountry skiing. KTS has expressed interest in expanding this trail system.

Almost 8 km of designated snowmobile trail and 5 km of all-terrain vehicle trail also cross the existing wilderness area. These trails are managed by the Snowmobilers Association of Nova Scotia (SANS) and the All-terrain Vehicle Association of Nova Scotia (ATVANS) under agreements with Nova Scotia Environment. Another 15 km and 10 km of trail, respectively, will likely be added to the agreements assuming the candidate addition is protected. Much of the SANS and ATVANS trail systems overlap.



**Figure 49: Economy River Wilderness Area**  
Photo: Oliver Maass

### 4.8.3 Commercial Activities

#### **Tim Hortons Children's Camp**

Based out of Tatamagouche, Tim Horton's Camp is running three-day backpacking trips for youth on the managed trails at Economy River Wilderness Area and Gully Lake Wilderness Area, beginning this season. The trips are part of a multi-year leadership training program for youth from lower income families. The camp builds the capacity of participants to meet outdoor challenges with confidence. As participants succeed from one trip to the next, the challenges increase in difficulty and help develop more advanced skills and decision-making. The trips run from mid-June to the end of August, with seven trips every ten days. Each trip through the season involves eight youth and two staff for a combined total of 1,500 hiker days per summer. The back-country wilderness experience is essential to the program since self-reliance without modern conveniences and security is a new and important experience for most participants.

#### **Sugarmoon Farm**

This is a maple-themed 4-season restaurant near Earltown, which also offers sugar camp tours, snowshoe rentals and a trail head to over 30 kms of hiking trail managed by Cobequid Eco-Trails Society, over 70% of which is within Gully Lake wilderness area. Their website prominently promotes cross-country skiing, snowshoeing, and hiking. The trails are also connected to the developing Cape-to-Cape Trail from Cape George, Antigonish County to Cape Chignecto, Cumberland County. Sugarmoon Farm offers group events, including corporate parties, school trips, travel tour groups, university student trips, and other private group

functions. For all of these, day packages tie outdoor activity with excellent food and maple production tours in season. Transportation and nearby accommodations can be arranged. For an exceptional unique experience, Sugarmoon Farm brings in top chefs from the Maritimes to showcase maple-inspired dinners periodically throughout the year.

### **Ski Wentworth**

Downhill ski resorts across North America are building four-season revenue streams to expand their business and reduce risks associated with variable winter conditions. Ski Wentworth is no exception and has already hosted numerous cross-country running and mountain biking events. The rapid rise in fat-bike enthusiasm also fits well with ski hills in both winter and shoulder season conditions. Ski Wentworth offers diverse trail experiences, primarily on their own lands, and wishes to expand this network within the adjacent, candidate Wentworth Valley Wilderness Area and on other lands. A larger trail network offers more features to draw in visitors, as well as more variety to extend their stay and increase repeat visits. The company believes protection of local wilderness areas helps ensure the long-term, four-season viability of Ski Wentworth. Growing the business will support investment in four-season resort facilities and employment. Resort-based access to wilderness areas for these types of activities is the business model for many four-season mountain resorts in western North America and more recently in the east. Examples of such access and partnerships can be found in B.C., Alberta and Quebec<sup>14</sup>.

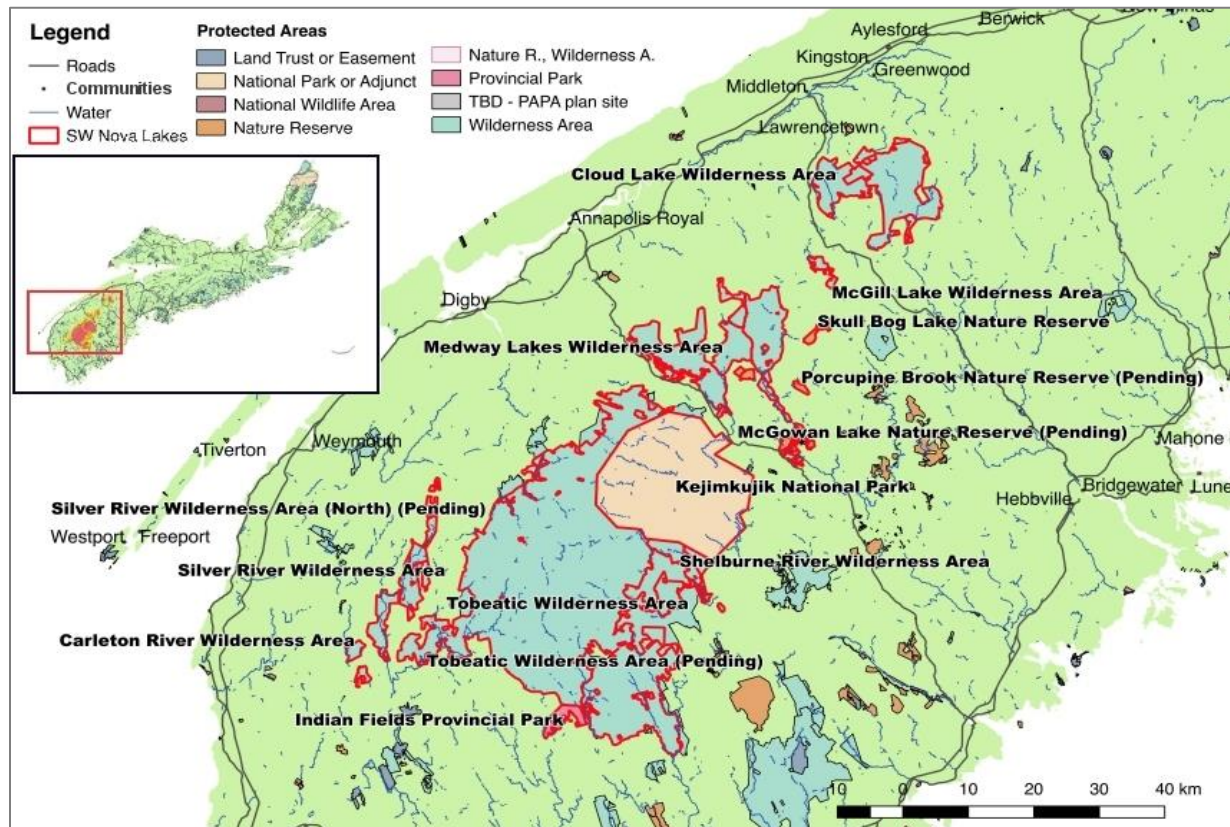
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<sup>14</sup> Personal communication, Gregor Wilson.

## 4.9 Lakes and Waterways - Southwest Nova

### 4.9.1 Scope and Features

The interior of southwestern Nova Scotia is blessed with an abundance of woodland lakes and waterways. A significant cluster of protected areas in this region provides remarkable opportunities to enjoy these lakes, rivers and woodlands in a wilderness setting. These protected areas are especially suitable for paddling, angling and camping, and some offer excellent opportunities or potential for hiking, hunting and other uses.



**Figure 50: Lakes and Waterways - Southwest Nova**

The major protected areas with opportunities for commercial benefits include:

#### 4.9.2 Protected Areas with Opportunities for Commercial Benefits – Southwest Nova Lakes and Waterways

Protected Area	Approximate Size
Tobeatic Wilderness Area	121,000 ha (299,000 acres)
Indian Fields Provincial Park*	1,550 ha (3,900 acres)
Shelburne River Wilderness Area	3,450 ha (8,500 acres)
Kejimkujik National Park and Historic Site**	38,100 ha (94,000 acres) (not including coastal adjunct)
Medway Lakes Wilderness Area	19,650 ha (48,600 acres)
Cloud Lake Wilderness Area	16,400 ha (40,600 acres)
Silver River Wilderness Area (existing plus candidate expansion)	5,300 ha designated (13,100 acres) 1,000+ ha candidate (2,500 acres)
Silver River conservation lands – Nature Conservancy of Canada	1,150 ha (2,840 acres)
<b>Total</b>	<b>207,600 ha (513,000 acres)</b>

\* administered by Department of Natural Resources

\*\*administered by Parks Canada

A selection of these is highlighted here:

##### **Tobeatic Wilderness Area**

Tobeatic Wilderness Area is more than triple the size of the adjacent Kejimkujik National Park and Historic Site. At about 121,000 hectares (almost 300,000 acres), this is the largest protected area in the Maritimes. “The Tobeatic” is a core part of the UNESCO Southwest Nova Biosphere Reserve, established in 2001. In 2014, the UNESCO-endorsed Starlight Foundation recognized Tobeatic Wilderness Area and the adjacent Indian Fields Provincial Park as the core of North America’s first Starlight Preserve.

At the heart of this wilderness area is a semi-barren landscape that is surrounded by more productive woodlands, including pockets of old-growth pine and hemlock. Striking glacial features are common throughout. Nine rivers originate in Tobeatic Wilderness Area, with drainage to both the Bay of Fundy and Atlantic coasts. The rivers and many streams connect numerous wetlands and more than 100 lakes. This wilderness is home to endangered mainland moose, black bear, American marten, rare snakes and turtles, and many other species.



Together with the adjacent Shelburne River Wilderness Area and Kejimkujik National Park and Historic Site, the area offers exceptional canoeing, angling and camping opportunities. Mi’kmaw people, sport fishermen, hunters, professional outfitters and outdoor enthusiasts alike have long enjoyed this wilderness. Centuries old canoe and portage trails criss-cross the

**Figure 51: Tobeatic Wilderness Area**

Photo: Oliver Maass

Tobeatic and link to the adjacent protected areas. An historic warden camp in Tobeatic Wilderness Area has recently been restored for public use, and work is underway to restore a second.

Information on canoe routes and access is available from several sources on-line:

- [Into the Tobeatic: A Guide for Planning Wilderness Travel in Tobeatic Wilderness Area - Text](#) (PDF:1.2mb) | [Map](#) (PDF:4.2mb)
- [Tobeatic Canoe Routes](#) : an on-line paddling guide created by local paddling enthusiasts. Coverage includes the adjacent Shelburne River Wilderness Area and Kejimikujik National Park and Historic Site.



**Figure 52: Shelburne River (within Tobeatic Wilderness Area)**

Photo: Oliver Maass

### **Shelburne River Wilderness Area**

This 3,500-hectare (8,500 acre) wilderness area straddles the lower Shelburne River, wedged between Tobeatic Wilderness Area and Kejimikujik National Park and Historic Site. It protects the river, old forest and rare plants, and provides habitat for species which best thrive in wild spaces. Opportunities for wilderness adventure are intertwined with those in the adjacent Tobeatic Wilderness Area and Kejimikujik National Park and Historic Site. The area's canoeing and angling tradition was immortalized in Albert Bigelow Paine's 1912 book, "The Tent Dwellers".



**Figure 53: Shelburne River Wilderness Area**  
Photo: Oliver Maass

### **Kejimikujik National Park and Historic Site**

Managed by the federal government, Kejimikujik National Park and Historic Site is the most familiar part of this protected area cluster and offers a traditional park experience. Known by many as "Keji," generations of campers, canoeists, and hikers return here annually. The 38,100-hectare (94,000 acre) park includes typical elements of the region's Acadian forest, including old-growth hemlock stands. Twelve percent of the area is freshwater lakes and river, with many lakes, still-waters, islands and other features to explore. Park wildlife includes white-tailed deer, porcupine, beaver, black bear, three turtle species, and many birds, including the common loon. The park protects several endangered species, such as Blanding's turtle, piping plover, mainland moose, American marten, and lichen species.

Mi'kmaw heritage, including rock engravings, canoe routes, and settlement areas, is interpreted here for visitors. As of 2010, the park has been recognized by the Canadian Astronomical Society as one of Canada's Dark Sky Preserves in recognition of the low level of light pollution, which makes this a prime location for night sky viewing.

Paddling, hiking, swimming, fishing, camping, and cross-country skiing are among the most popular activities in the park. More recently, the park is facilitating geocaching, star-gazing, and opportunities for visitors to engage in species at risk conservation and monitoring, and brook trout management. The park is used for staging adventures that extend into the adjacent Tobeatic and Shelburne River wilderness areas.

**Medway Lakes Wilderness Area** – Designated in 2015, this 19,650-hectare (48,600 acre) wilderness area protects much of the headwaters of both the Mersey and Medway river systems, just north of Kejimikujik National Park and Historic Site. This includes impressive hardwood and conifer forest, and numerous lakes and waterways. A number of species at risk are protected here, including Blanding's turtle, snapping turtle, American marten, and several bird species. The waterways support native brook trout and a remnant Atlantic salmon population.



**Figure 54: Medway Lakes Wilderness Area**

This wilderness area offers exciting opportunities for adventure in a wilderness setting, including canoeing, camping, angling, hunting, hiking, cross country skiing and nature education. A variety of canoe routes enable short excursions on individual lakes to challenging white-water conditions or a multi-day, lake-to-lake traverse of the entire area. Canoe route descriptions and maps are available from the Municipality of Annapolis, both as hard copy and on-line. The website hosted by “Friends of Medway Lakes Wilderness Area” also hosts a map of canoeing routes and access points. Numerous informal access points exist, some of which require higher clearance vehicles for access.

About 11 km of designated all-terrain vehicle trail and 12 km of designated snowmobile trail cross the wilderness area. These trails are managed by the All-terrain Vehicle Association of Nova Scotia (ATVANS) and Snowmobilers Association of Nova Scotia (SANS), under agreements with Nova Scotia Environment.

### **4.9.3 Commercial Activities**

Numerous commercial activities are benefiting from this protected area cluster, with the following focus primarily on the Tobeatic, Shelburne River and Medway Lakes wilderness areas. A number of commercial operators are developing activities specifically related to these protected areas. Key examples of operators and their activities are described briefly here.

**Kejimkujik National Park and Historic Site** – This is a full-service national park with RV, tent, cabins, and recently added oTentik’s and yurts. There are “front-country” sites near park amenities including wireless internet, and remote “back-country” sites with complete privacy. The park charges entrance fees and camping fees, which have been waived for the 2017 season. The federal government supports staff and operational costs to meet the overall mandate of public enjoyment and nature conservation.

**Trout Point Lodge** – This three-season luxury hotel/resort on 100 acres of woodland is located on the East Branch Tuskent River, with a view of Tobeatic Wilderness Area across the river. Considered a 4.5-star luxury inn, the lodge promotes nature retreats with fine cuisine,



accommodations and nature experiences. The Lodge offers suites, guest rooms, and a two-bedroom cottage to accommodate a range of tastes or small group corporate and family events. Partly oriented towards U.S. travelers, the proximity of the Yarmouth Ferry Terminal is a distinct benefit. Suggested activities include canoeing & kayaking, star gazing, geo-tours, forest bathing, cooking classes, an outdoor barrel sauna & wood-fired hot tub, swimming in refreshing river water, hiking trails, and nature walks.

Trout Point Lodge has used its association with Tobeatic Wilderness Area to create a marketing advantage. At the lodge's initiative, North America's first certified Starlight Reserve and Starlight Tourist Destination was designated in this region in 2014, now known as "Acadian Skies & Mi'kmaq Lands". At the core of this designation is Tobeatic Wilderness Area. Trout Point Lodge is also the world's first certified starlight hotel.

**Medway Community Forest Co-op (MCFC)** - The community forest is managing close to 15,000 hectares of provincial (Crown) land under an agreement with Department of Natural Resources. The Co-op lands lie entirely within the UNESCO Southwest Nova Biosphere Reserve, and are directly adjacent to Kejimikujik National Park and Historic Site, Tobeatic Wilderness Area, Medway Lakes Wilderness Area, and multiple Nature Reserves. While harvestable timber volumes may be currently limited on MCFC's land base, the area is generally productive and represents a good diversity of ecosites and habitats. A board of directors is implementing a forest management plan with the view of restoring valuable Acadian forest timber resources and maintaining wildlife and recreation priorities. These efforts may support or complement management of the adjacent protected areas, including adventure tourism opportunities.

**Keji Outfitters and Whynot Adventure** – The operator aims to support your every need in order to better enjoy Kejimikujik National Park and beyond into the Tobeatic and Shelburne River wilderness areas. They offer camping gear, canoes, shuttles and transfers, and guide services that are perfect for those that want to experience back-country wilderness with insight and support from local experts. They also teach outdoor skills and support the Duke of Edinburgh awards program. Workplaces, school groups, organizations and athletes may take advantage of their outdoor team-building and leadership training challenges.

**Ukaliq Wilderness Adventures** – Ukaliq means 'Arctic Hare' in Inuktitut - the language of the Arctic People of Canada. As the name suggests, this operation focuses on advanced wilderness expeditions and survival training. Staff include certified wilderness guides with professional experience in special forces, emergency response, education and forestry. Their offering includes 3, 5 or 7-day guided adventures in Tobeatic Wilderness Area.

**Mersey Tobeatic Research Institute (MTRI)** – This non-profit cooperative is advancing sustainable use of natural resources and biodiversity conservation, particularly in the Southwest Nova Biosphere Reserve. The protected areas in this part of the province play an important role in MTRI's work. The 16 part-time and full-time staff maintain linkages to university and government researchers, volunteers, and community members to carry-on their research and conservation projects. The organization offers seminars, workshops, and opportunities to conduct research including student summer internships for those interested in developing research skills and learning more about research interests in the area. MTRI operates a research station and a bunk house as a base for field work; and has recently restored an old warden camp (Cofan camp) in Tobeatic Wilderness Area as a research base and for public use, and is now restoring a second warden camp (Bats Rest camp).

**Mersey River Chalets & Nature Retreat** – This four-season wilderness resort is located on the Mersey River, off Highway 8, and is nearly surrounded by lands of Medway Lakes Wilderness Area. The UNESCO Southwest Nova Biosphere Reserve designation, wilderness setting and proximity to Kejimikujik National Park and Historic Site is a key marketing point for Mersey River Chalets. A year-round accommodation option, they offer small and large chalets, a log house, rooms in the lodge, and a Sioux style tipi village. Snowshoeing and skiing are promoted in winter, while hiking, paddling, and relaxing in nature are three-season favourites. Canoes are available for free to encourage exploration of the adjacent waterways and wilderness. With ample accommodation capacity, they can support large groups, including weddings and corporate retreats. Some stay packages include the Kejimikujik National Park Dark Sky Kits.

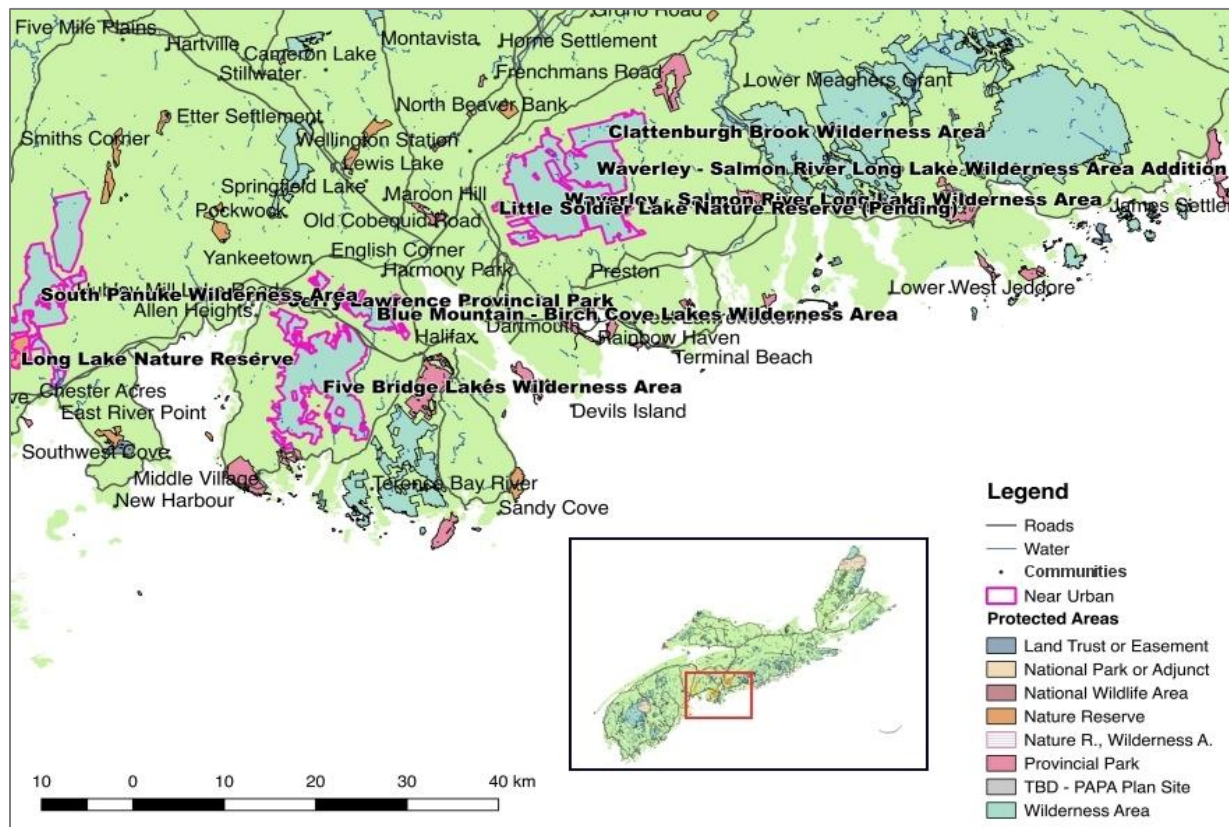
#### **Others**

- Hinterland Adventures & Gear.
- The Wilder Restaurant and General Store.
- Hollow Log Café.
- Carleton Country Outfitters.

## 4.10 Lakes and Waterways (Near-Urban HRM)

### 4.10.1 Scope and Features

The metropolitan Halifax region is favored with an abundance lakes and waterways, which are attractive for residential living, experiences in nature and outdoor adventure. Most of the undeveloped provincially-owned lands in this region consist of rugged forest, with numerous lakes and waterways. The underlying bedrock is mainly granite, which may form barren ridges or outcrops. A large portion of these lands has been protected by the Province or is under consideration for protection – encompassing an area close to 20 times the size of the peninsula of Halifax.



**Figure 55: Lakes and Waterways (Near-Urban HRM)**

This rugged and scenic protected areas cluster is suitable for activities such as hiking, trail running, canoeing, angling, hunting, camping, geocaching, mountain biking and ATV riding, as permitted. Currently, many of the trails in use are informal, unmanaged trails.

These “lake and waterway” protected areas complement the coastal protected area clusters in the vicinity of HRM (“Eastern Shore Islands” and “Rogues Coast”). Few cities have a comparable system of protected open spaces, with such potential for experiencing nature, outdoor adventure and generating commercial benefits. The following table identifies the larger of these near-urban, non-coastal protected areas.

#### 4.10.2 Protected Area Sites with Opportunities for Commercial Benefits: Near-Urban Lakes and Waterways

Protected Area	Approximate Size
Waverley-Salmon River Long Lake Wilderness Area (existing plus candidate addition)	8,900 ha (22,000 acre) <i>plus</i> 3,200 ha (8,000 acre) potential expansion
Blue Mountain-Birch Cove Lakes Wilderness Area	1,750 ha (4,350 acre)
Long Lake Provincial Park*	1,700 ha (4,250 acre)
Five Bridge Lakes Wilderness Area	8,600 ha (21,300 acre)
South Panuke Wilderness Area	6,850 ha (16,900 acre)
Long Lake Nature Reserve	800 ha (1,975 acre)
<b>Total</b>	<b>31,800 ha (78,775 acres)</b>

\* administered by Department of Natural Resources

A selection of these protected areas is described below:

##### Waverley-Salmon River Long Lake Wilderness Area

The rugged woodlands, lakes and waterways of this wilderness area, between Halifax International Airport and Lake Echo, encompass about 8,900 hectares (22,000 acres). The area helps protect 1/3 of HRM's Lake Major drinking water supply, and contains stands of



**Figure 57: View from Crowbar Lake Trail, WSRLW Wilderness Area**  
Photo: Oliver Maass



**Figure 56: Waverley-Salmon River Long Lake Wilderness Area**  
Photo: Oliver Maass

old-growth hemlock, pine and spruce. The candidate addition would protect additional lakes and drinking water supply lands, as well as old and productive woodlands.

A network of lake-to-lake canoe routes, with portages, provides scenic access throughout for canoe tripping, angling and camping in a wilderness setting. These routes are currently not managed. The Crowbar Lake Trail is a managed, 18 km hiking trail system, with trail head on Myra Road. This is used for hiking, trail running and other activities, year-round. It features a mix of high viewpoints and lake or river frontage experiences. Former forest access roads and informal trails offer other

opportunities for recreation and access, including hunting. Additional hiking or other trails could be authorized and developed within this wilderness area, including potential for mountain bike trails. Limited off-highway vehicle access will likely be authorized within the candidate addition assuming this is added to the wilderness area.



**Figure 58: Blue Mountain-Birch Cove Lakes Wilderness Area**  
**Photo: Oliver Maass**

### **Blue Mountain-Birch Cove Lakes Wilderness Area**

This wilderness area, between highways 103 and 102, is surrounded by subdivisions and Bayers Lake Business Park and can be accessed by city transit. The 1,750-hectare (4,350 acre) area includes forests, barrens and interconnected lakes and wetlands over an area about the size of the peninsula of Halifax. It protects near-urban wildlife habitat and secures the land base for a range of outdoor recreation and education activities in a wilderness setting. As outlined in its Regional Plan, Halifax Regional Municipality intends to acquire adjacent private lands for a regional park, mostly in the Birch Cove Lakes (Susie and Quarry lakes) area. Functionally, the wilderness area will be part of the regional park.

The wilderness area borders on parts of the Birch Cove Lakes, which are popular for sheltered water paddling, swimming, skating, snowshoeing, angling and other activities. From here, paddlers and anglers can explore a circular canoe route, with portages, through the wilderness area, returning to

the Birch Cove Lakes. This unmanaged route can easily be completed in a day or can be extended by camping. Parts of a canoe route in the Nine Mile River system, between Cox Lake and Fraser Lake, also pass through the wilderness area.

A variety of informal walking, hiking / trail running and mountain bike trails crisscross parts of area. None of these popular trails are currently managed or sanctioned. With support from Nova Scotia Environment, the Blue Mountain Trails Association (BMTA) has recently developed a trail concept plan for 12 km of hiking trail, which is intended to rationalize the informal trails between Kearney Lake and Blue Mountain. As with hiking trails, mountain bike use on designated trails may be authorized by Nova Scotia Environment. Other activities in this wilderness area include geocaching, dog walking, trail running, camping, wilderness survival training and other education programs. Wild Child Forest School is currently delivering children's forest school programming within the wilderness area, under an agreement with Nova Scotia Environment.

### **Five Bridge Lakes Wilderness Area**

The rugged, near-urban landscape of forest, barrens, wetlands, rivers and lakes of this wilderness area spans 8,600 hectares (21,300 acres) of provincial lands, between highways 103 and 333. This includes parts of the Nine Mile River, Scotts River, Woodens River and Prospect River watersheds, including numerous lakes. These undeveloped waterways are important habitat for fish, waterfowl, and other water-dependent species. This is also home to a small population of endangered mainland moose and many other species.

Halifax Regional Municipality is a major landowner next to the wilderness area, both at Big Five Bridge Lake/Moores Lake, and at HRM's "Western Common," between Nine Mile River and Prospect Road (HW 333). Most of these lands are intended for conservation or park use and therefore complement the wilderness area.



With its scenic geography, wildlife and proximity to a large population, Five Bridge Lakes Wilderness Area is enjoyed by many for hiking, trail running, paddling, trout fishing, hunting and nature appreciation. For similar reasons, the area is also well suited for education and research. Several community organizations actively foster stewardship, research and management of this wilderness area.

**Figure 59: Five Bridge Lakes Wilderness Area**  
Photo: Oliver Maass

Paddlers can travel through the wilderness area via lakes and portages between an access point at the north end of Hubley Big Lake to Highway 333 at Blind Bay. This route crosses parts of three watersheds. Nine Mile River can also be paddled seasonally to Shad Bay. Several portages along both routes cross private properties, which limits ability to manage or promote these routes without landowner permission or property acquisition.

Over 12 km of the Old Coach Road and Fire Road, where they cross the wilderness area, are designated for ATV and bicycle use. These trails are managed by the All-terrain Vehicle Association of Nova Scotia (ATVANS) under an agreement with Nova Scotia Environment.

The Bluff Wilderness Trail provides more than 30 km of managed backcountry trail for hiking, trail running and other uses. This is a popular destination for trail running. Camping is permitted at select sites; bicycle or motorized vehicle use is not permitted. Part of the trail system has incorporated old portages between Hubley Big Lake and Middle Five Bridge Lake. This trail system is managed by Woodens River Watershed Environmental Organization (WRWEO)



**Figure 60: Bluff Trail, Five Bridge Lakes Wilderness Area**  
Photo: David Patriquin

under an agreement with Nova Scotia Environment. The trail has attracted very heavy use in recent years. With support from Nova Scotia Environment and other partners, WRWEO is addressing impacts from damaging trail use, such as improper human and dog waste disposal, poor camping practices and inappropriate camp fire use.

There is considerable potential in this wilderness area for additional trail development for hiking, mountain biking or other trail uses.

### **South Panuke Wilderness Area (and adjacent Long Lake Nature Reserve)**

South Panuke Wilderness Area protects 6,850 hectares (16,900 acres) of conifer woodlands around scenic lakes and along Canaan River, between the south end of Panuke Lake and Highway 103, north of Chester. The adjacent 800 hectare (1,975 acre) Long Lake Nature Reserve has similar features and complements the wilderness area, though certain activities like hunting and fishing are prohibited. The terrain in both protected areas is generally rugged, with forested hills, ridges and hummocks. Concentrations of old forest occur in both areas, with a mix of mature and young forest elsewhere.



**Figure 61: South Panuke Wilderness Area**

The wilderness area encompasses part of an ancient Mi'kmaw travel route between the Bay of Fundy and Atlantic coasts. Visitors can still follow traditional canoe routes and old portages, overnight at secluded beach campsites, and enjoy hunting and fishing. Boats can be launched at the southern ends of Timber, Panuke and Connaught lakes. Much of the area is accessible from major forestry roads, as well as the Chester Connection Rails-to-Trails. Nova Scotia Environment has authorized ATVANS to manage and use a 7 km ATV route which crosses the wilderness area, connecting Canaan and the Timber Lake area. Chester Municipality has been in discussion with Nova Scotia Environment about shared interests, including trail development; some planning has been undertaken by the Municipality, but no details are available.

### **4.10.3 Commercial Activities**

#### **Wild Child Forest School**

Operated by Sierra Club of Canada's Atlantic Chapter, this program gives children the opportunity to engage positively with the natural environments in their communities; through games, art, discussions and various fun activities in a forest setting. In particular, children learn about native plants, animals and trees, and basic ecological concepts including; conservation, habitats, and life cycles. They utilize the Blue-Mountain Birch Cove Lakes wilderness area as an outdoor classroom.

#### **Kattuk Expeditions**

As featured in the section on "Rogue's Coast," this Halifax-based business organizes land-based expeditions and utilizes the protected areas in the Halifax vicinity. Wilderness areas in close proximity to Halifax are especially valuable for school excursions and corporate team building where clients are time-sensitive. Being able to access wilderness with minimal transportation means more recreational use can be achieved.

#### **Free Range Therapy**

This business is led by highly credentialed therapists focused on Therapy Outside Normal Environments (TONE) as a method for helping those with PTSD, depression, anxiety, addictions, and related challenges. TONE promotes outdoor spaces, physical movement and adventure activities as both a place and way for therapy to work. They use wilderness areas near Halifax for a series of alternating weekday evening and weekend outings that complete a therapy cycle.

#### **Brunello Estates**

This real-estate development in Bayers Lake promotes outdoor recreation as part of the appeal to live in this community. Cross-country skiing in winter and walking, running, and biking along trails all connect with the nearby wilderness areas. They also advertise birding and other wildlife viewing in Five Bridge Lakes Wilderness Area (The Bluff Wilderness Trail), Blue Mountain-Birch Cove Lakes Wilderness Area, Halifax Wilderness Common, and Long Lake Provincial Park.

#### **Many urban services**

As residents and visitors use the near urban wilderness areas and waterways, they will rely on a wide range of service providers including cafes, restaurants, local food markets, accommodations, bike shops, outdoor gear shops and outfitters. There are too many to specify though they will each gain a small portion of their business from wilderness enthusiasts. These businesses continue to grow with improved access, promotion, and expansion of wilderness recreation opportunities and infrastructure.



## 4.11 Other Activities

Other entities, although not usually thought of as commercial, derive benefit from having access to protected areas. These include community not-for-profit trails groups and research and education organizations.

### 4.11.1 Recreational Trails

There is a growing system of community and non-profit-managed trails throughout Nova Scotia. Recreational trails are recognized for their contribution to the economy and are increasingly viewed as valuable investments for community and tourism development. A Gardner Pinfold study of nine multi-use trails (i.e. hiking, cycling, skiing, off-highway vehicle) in Nova Scotia estimated that annual incremental trail-related expenditures by Nova Scotians and non-Nova Scotian visitors are about \$30 million. Some of these expenditures are captured locally as revenues within a 30-minute drive of a trail, others are captured in association with a broader system of recreational trails. The expenditures relate to accommodations, food, entertainment, transportation, gear for trail users, travel guides, nature interpretation, and other community or tourism products and services. Trails often provide other non-expenditure benefits including health, fitness, and community quality of life improvements.

There is a total of 150 km of managed hiking trails that are wholly or partially located in Nova Scotia's established and candidate protected areas, with an additional 72 km proposed in existing wilderness areas. The following tables outline the hiking trails and associated protected areas.

**Table 2: Managed Hiking Trails\* in Nova Scotia Protected Areas**

Trail System	County	Protected Area	Trail Group	Trail Length in WA
Kenomee Canyon Trail	Colchester, Cumberland	Economy River Wilderness Area	Kenomee Trail Society	20 km
Gully Lake Trails System	Colchester, Pictou	Gully Lake Wilderness Area	Cobequid Eco-Trails Society	25 km
Crowbar Lake Hiking Trails	Halifax	Waverley-Salmon River Long Lake Wilderness Area	Porters Lake-Myra Road Wilderness Area Society	18 km
Musquodoboit Trailway	Halifax	White Lake Wilderness Area; Ship Harbour-Long Lake Wilderness Area	Musquodoboit Trailways Association	26 km
The Bluff Trail	Halifax	Five Bridge Lakes Wilderness Area	Woodens River Watershed Environmental Organization	30 km
North River Falls Trail	Victoria	North River Wilderness Area	Maintained by Province	10 km
<b>Total managed trail in protected areas</b>				<b>129 km</b>

**Table 3: Managed Trails in Candidate Wilderness Areas (Parks & Protected Areas Plan sites not designated to date)**

Trail System	County	Protected Area	Trail Group	Trail Length in WA
Kenomee Canyon Trail	Colchester	Economy River WA expansion	Kenomee Trail Society	7 km
Gully Lake Trails System	Colchester, Pictou	Gully Lake WA expansion	Cobequid Eco-Trails Society	3.5 km
Cape Mabou Highlands Hiking Trails	Inverness	Cape Mabou WA	Cape Mabou Trail Club	10 km
Crowbar Lake Hiking Trails	Halifax	Waverley-Salmon River Long Lake WA expansion	Porters Lake-Myra Road Wilderness Area Society	0.2 km
<b>Total managed trail in candidate protected areas</b>				<b>20.7 km</b>

**Table 4: Proposed Hiking Trails – All in Existing Wilderness Areas**

Trail System	County	Protected Area	Trail Group	Trail Length in WA
Blue Mountain Wilderness Trails	Halifax	Blue Mountain-Birch Cove Lakes WA	Blue Mountain Wilderness Trails Association	12 km
Humes River Trail System	Victoria	Humes River WA	Biosphere Northeast Trails Association	6 km
Seawall Trail	Inverness, Victoria	Polletts Cove-Aspy Fault WA	Seawall Trail Society	50 km
Gull Cove Trail	CBRM	Gabarus WA	Gull Cove Trail Society	4 km
<b>Total proposed managed trail in existing protected areas</b>				<b>72 km</b>

\* may also be suitable for snowshoeing, cross-country skiing, trail running, etc.

There is also a well-established and growing network of off-highway vehicle (OHV) trails that Nova Scotia Environment has developed (or is in the process of developing) management agreements with the All-Terrain Vehicle Association of Nova Scotia (ATVANS) and the Snowmobilers Association of Nova Scotia (SANS). The following table outlines the OHV routes managed or to be managed under trail management agreements within Nova Scotia protected areas:

**Table 5: OHV Routes Managed (or to be Managed) under Trail Management Agreements**

Existing Wilderness Area	County	SANS (km)	ATVANS (km)
Bonnet Lake Barrens WA	Guysborough	0	4
Baddeck River WA	Victoria	1	1
Economy River WA	Cumberland /Colchester	7.6	2.6
Eigg Mt-James River WA	Antigonish	6.2	4.5
Five Bridge Lakes WA	Halifax	0	12.6
Gully Lake WA	Colch/Pictou	10	7.5
Jim Campbells Barren WA	Inverness	0.65	0.65
Kelley River WA	Cumberland	34	34

<b>Existing Wilderness Area</b>	<b>County</b>	<b>SANS (km)</b>	<b>ATVANS (km)</b>
Medway Lakes WA	Annapolis	12	11
Polly Brook WA	Cumberland	4	4
South Panuke WA	Halifax / Hants / Lunenburg	0	7
Tracadie River WA	Guysborough	4	0
<b>TOTALS</b>		<b>~79.5 km</b>	<b>~89 km</b>
<b>Candidate Wilderness Area</b>	<b>County</b>	<b>SANS (km)</b>	<b>ATVANS (km)</b>
Chignecto Isthmus WA expansion	Cumberland	2	2
Economy River WA expansion	Cumb/Colch	15	10
Giants Lake WA	Guysborough	10 *	10 *
Ingonish River WA	Victoria	8 *	8 *
Middle River WA expansion	Invern / Victoria	3.5	3.5
Silver River (North) WA	Digby / Yarm	0	2 *
Waverley-Salmon River Long Lake WA expansion	Halifax	0	10.5 *
Wentworth Valley WA	Colchester /Cumberland	4	4
<b>TOTALS</b>		<b>~42.5 km</b>	<b>~50 km</b>
<b>Potential Total</b>		<b>~122 km</b>	<b>~139 km</b>

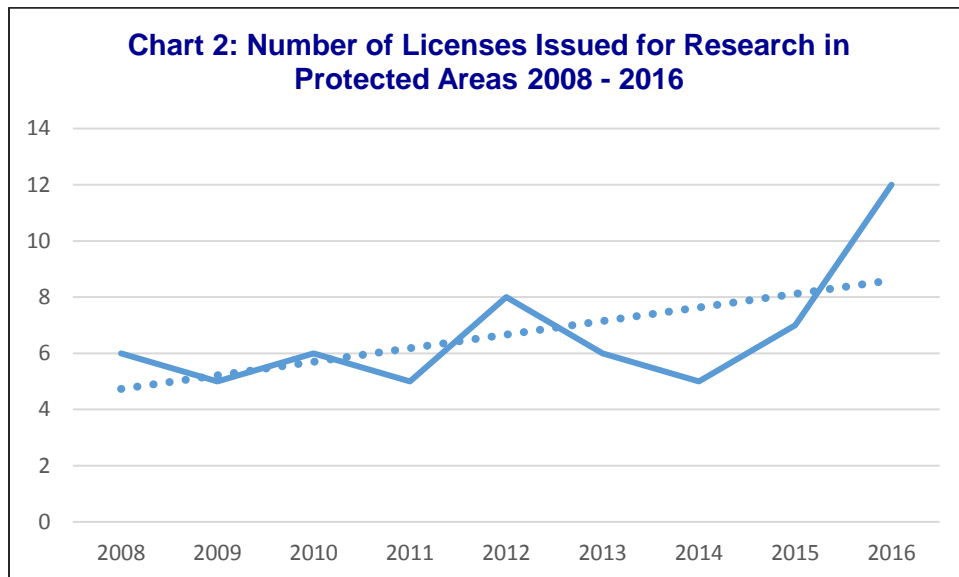
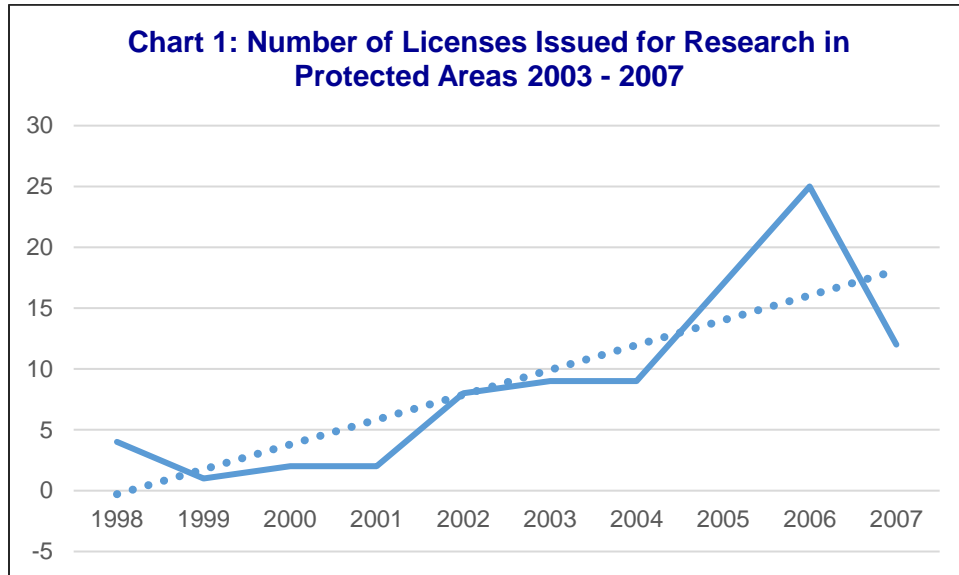
\* figure is subject to considerable uncertainty at this time

Commercial benefits associated with OHV trail use can be significant, as OHV users spend considerably in the communities through which their day- and multi-day trips take them. A study conducted by Gardner Pinfold in 2009 estimated total economic impact of expenditures by Nova Scotia snowmobilers alone totaled approximately \$36 million per year<sup>15</sup>. In addition to OHV trails which run within protected areas in the province (as detailed above), others run next to or pass through protected areas along routes not included within the protected area designations. All of these can serve as a draw to OHV users seeking wilderness trail experiences.

<sup>15</sup> *Economic Impact of Snowmobiling in Nova Scotia*, Gardner Pinfold (2009).

### 4.11.2 Research

Nova Scotia's protected areas system has attracted an increasing amount of academic and scientific research. Since 2003, nearly 150 licenses have been granted to 37 institutes to conduct research across a broad range of disciplines in 68 wilderness areas and nature reserves. Charts 1 and 2 illustrate the growth in research activity that has taken place over two research strategy periods (2003 – 2007 and 2008 – 2016):



The Protected Areas and Ecosystems Branch of Nova Scotia Environment has also been a generator of research activity by hiring student researchers and investing money directly in research. Over the past ten years, the following research activities have been supported by the Branch:

- The hiring of five Masters and nine undergraduate students.
- Sponsoring six BioBlitz biodiversity workshops.
  - 7 institutions involved
  - 900 species documented
  - 8 scientific publications
- In 2005 and 2006, investing \$6,500 in research which generated over \$300,000 value in additional research<sup>16</sup>.

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<sup>16</sup> Cameron, R.P. 2010. Research strategy for Nova Scotia protected areas. In S. Bondrup-Nielsen, K. Beazley, G. Bissix, D. Colville, S. Flemming, T. Herman, M. McPherson, S. Mockford, and S. O'Grady (Eds). 2010. Ecosystem Based Management: Beyond Boundaries. Proceedings of the Sixth International Conference of Science and the Management of Protected Areas, 21–26 May 2007, Acadia University, Wolfville, Nova Scotia. Science and Management of Protected Areas Association, Wolfville, NS.

## 5. COMMERCIAL BENEFITS ANALYSIS

### 5.1 Stakeholder Consultation Findings

The following table summarizes findings from approximately 30 interviews with commercial operators, community groups, municipal officials, government staff, and other stakeholders associated with protected areas in Nova Scotia. Commercial activities and identified benefits are summarized by stakeholder category.

**Table 6: Commercial and Community Benefits from Protected Areas in Nova Scotia – Stakeholder Interview Findings**

Operation Type	Involvement in / Use of Protected Area	Identified Benefits
Accommodations / Campground Operators	<ul style="list-style-type: none"> <li>• Offer accommodations adjacent to or nearby PA.</li> </ul>	<ul style="list-style-type: none"> <li>• PAs ensure no residential development will occur, which provides business owners confidence in investing in operation for long term.</li> <li>• Able to market pristine wilderness, guaranteed quiet, little industrial light, outdoor / nature experience.</li> <li>• Wilderness features are often why people come to stay with us – stay with us to hike the WA trails.</li> <li>• Have a unique product offering because of the PA.</li> <li>• Provides a wealth of activities for our clients – couldn't offer if the area wasn't protected.</li> <li>• 25% of our guests come to hike the WA trail – estimate \$200,000 attributable to PA.</li> <li>• Attribute 2% revenue growth to offering excursions in WA.</li> <li>• 90% of our \$900,000 in revenue last year came from clients booking with us because of the wilderness experience we have access to.</li> <li>• 80% campers come to hike or kayak.</li> <li>• If I lost access to the PA, I would lose my business.</li> <li>• Business would still exist without WA, but growth depends on it.</li> </ul>

Operation Type	Involvement in / Use of Protected Area	Identified Benefits
Kayak / Boating Outfitters	<ul style="list-style-type: none"> <li>• Offer ocean / river / lake boating tours and/or boat rentals.</li> <li>• Have access to protected islands where they offer on-shore excursions, meals, camping.</li> <li>• Some offer / host educational programs that take place on protected islands, WAs.</li> </ul>	<ul style="list-style-type: none"> <li>• Whole business model is built around wilderness experience and exploration.</li> <li>• Earn revenue from access to PA.</li> <li>• Able to hire local students from the area – the longer they stay, the more money they spend in the community.</li> <li>• Tobeatic WA brings people to our business who specifically want to explore it – being nearby has directly impacted business.</li> <li>• Positioned in proximity to Medway Lakes and expect to see benefit from it.</li> <li>• Access to PAs essential to our business.</li> <li>• 10% of our business growth is due to establishment of PA in the area.</li> <li>• Newly designated PA will increase our revenue.</li> <li>• 2/3 of our revenue comes from access to coastal islands.</li> </ul>
Hunting and Fishing Guides / Outfitters	<ul style="list-style-type: none"> <li>• Offer guiding services to hunters and anglers in PAs.</li> <li>• Provide unique non-motorized moose hunting services via horseback.</li> </ul>	<ul style="list-style-type: none"> <li>• None identified.</li> </ul>
Hiking / Walking Tour Operators	<ul style="list-style-type: none"> <li>• Offer half and full-day guided hikes in PAs.</li> </ul>	<ul style="list-style-type: none"> <li>• None identified.</li> </ul>
Food and Beverage Operators	<ul style="list-style-type: none"> <li>• Offer food and beverage products, facility tours, outdoor experiences related to their operation.</li> <li>• Hiking, skiing, and snowshoeing trails.</li> </ul>	<ul style="list-style-type: none"> <li>• Creates traffic to the operation.</li> <li>• Benefits to being associated with wilderness, environment.</li> <li>• Has created partnership opportunities.</li> </ul>
Other Commercial Operators	<ul style="list-style-type: none"> <li>• Other businesses have started that make use of PAs in their operations.</li> <li>• Several dog walking services in Nova Scotia advertise wilderness environments and make use of PAs.</li> <li>• Adventure therapy practices have been created that offer programming in PAs specifically because of their wilderness attributes (e.g. Wild Child Forest School, Free Range Therapy).</li> </ul>	<ul style="list-style-type: none"> <li>• Establishing PAs can support or stimulate local entrepreneurial activity.</li> </ul>
Community Groups	<ul style="list-style-type: none"> <li>• Museum located near a number of PAs.</li> <li>• Working to develop trail system partly in PA.</li> <li>• Built / manage trail system partly in PA.</li> </ul>	<ul style="list-style-type: none"> <li>• Major health and environmental benefits to having trails in PAs – encourages physical activity, stress management, connection with environment.</li> </ul>

Operation Type	Involvement in / Use of Protected Area	Identified Benefits
	<ul style="list-style-type: none"> <li>• Worked to lobby for protected status of WA.</li> </ul>	<ul style="list-style-type: none"> <li>• Major growth in dog walking services that make use of trail systems and WAs (some market the wilderness aspect of their business).</li> <li>• Encourages growth of outdoor equipment / clothing / outfitting sector.</li> <li>• Commercial activity generated in trail planning, building, and maintenance services.</li> <li>• Some organizations receive grants to employ people to work in their organization or on trail development.</li> </ul>
Municipalities / Government Departments	<ul style="list-style-type: none"> <li>• Manage parks for municipality, including number of PAs.</li> <li>• Promote the recreational use of trails in the province, including those in PAs.</li> </ul>	<ul style="list-style-type: none"> <li>• PAs create green belt, buffer, recreation, and health promotion opportunities.</li> </ul>

PA = Protected Area  
WA = Wilderness Area



## 5.2 Opportunities, Barriers, Strategies

The following table summarizes opportunities, barriers, and strategies identified during interviews with commercial operators, community groups, municipal officials, government staff, and other stakeholders associated with protected areas in Nova Scotia. Opportunities, barriers and strategies to increase benefits are summarized by stakeholder category.

**Table 7: Opportunities, Barriers, and Strategies Associated with Protected Areas in Nova Scotia – Stakeholder Interview Findings**

<b>Commercial Operation / Community Group</b>	<b>Opportunities</b>	<b>Barriers</b>	<b>Strategies to Increase Benefits</b>
Accommodations / Campground Operators	<ul style="list-style-type: none"> <li>Promote more recreational and health-related activities linked to PAs and wilderness exploration.</li> <li>Develop guided tours.</li> <li>Set up information kiosks (e.g. Fundy Geological Museum).</li> </ul>	<ul style="list-style-type: none"> <li>Lack of signage.</li> <li>Lack of resources at Nova Scotia Environment to coordinate, lead development of PAs.</li> <li>Lack of provincial funding to maintain existing trails – limits ability of businesses to offer tours / hiking packages (i.e. safety / liability issue).</li> <li>Broader road system in some regions in need of major repair / upgrade. Major limitation on growing traffic, especially bus tours. No major work in some areas of province since 1970s.</li> </ul>	<ul style="list-style-type: none"> <li>Increase length and number of hiking trails.</li> <li>Provide signage at PA site that indicates it is a PA.</li> <li>Provide parking at trail sites.</li> <li>Department of Tourism needs to create more awareness, promote PAs, species at risk.</li> <li>Advertise inland areas (not just coastal).</li> <li>Create maps and other resources and make them available to public.</li> <li>Develop community / regional economic goals that tie in use of PAs.</li> </ul>
Kayak / Boating Outfitters	<ul style="list-style-type: none"> <li>None identified.</li> </ul>	<ul style="list-style-type: none"> <li>None identified.</li> </ul>	<ul style="list-style-type: none"> <li>Increase / improve infrastructure in PAs to enhance tourism experience.</li> <li>Operators meet with MLAs, department officials to discuss issues and develop strategy.</li> <li>Improved highway, bike lanes, water access.</li> <li>Provide government support and funding to grow businesses in rural areas.</li> </ul>

Commercial Operation / Community Group	Opportunities	Barriers	Strategies to Increase Benefits
			<ul style="list-style-type: none"> <li>• Develop trail entry and exit points, parking, interpretive signage, campsite demarcation, portage routes.</li> <li>• Learn from Newfoundland and Labrador's marketing of islands and rural areas.</li> </ul>
Hunting and Fishing Guides / Outfitters	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of official agreements with government, inability for businesses to make improvements to trails.</li> <li>• Lack of trail maintenance, markings, development.</li> </ul>	<ul style="list-style-type: none"> <li>• Need to reduce red tape / bureaucracy, make decisions in a timelier fashion.</li> <li>• Focus effort and resources on areas with great potential.</li> <li>• Develop moose hunting guide license for special management areas (vs. lottery system) to attract high-end clients.</li> </ul>
Hiking / Walking Tour Operators	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult for businesses to offer tours and advertise access to PAs without liability insurance – cost to date has been a barrier.</li> <li>• Engagement of First Nations has been slow, creates bottlenecks to approvals.</li> </ul>	<ul style="list-style-type: none"> <li>• Resolve conflicts between hunters / ATV clubs and other trail users (hikers, walkers, runners, etc.).</li> <li>• Improve access and infrastructure by contracting out to local companies to manage and maintain.</li> <li>• Improve trail connectivity.</li> <li>• Legally formalize trail system.</li> <li>• Allow volunteer trail groups to earn (and keep) revenue generated from trails through passes, parking, guiding/interpretation, etc.).</li> <li>• Provide better access, trail maintenance / development, GPS coordinates, maps, etc.</li> </ul>
Food and Beverage Operators	<ul style="list-style-type: none"> <li>• Develop guided hiking and interpretation along more trails.</li> <li>• Significant opportunity for more</li> </ul>	<ul style="list-style-type: none"> <li>• No association made publically between businesses and PAs.</li> <li>• Lack of signage indicating where /</li> </ul>	<ul style="list-style-type: none"> <li>• Tourism promotion should work hand in hand with trail promotion.</li> <li>• Partner with trails organizations.</li> </ul>

Commercial Operation / Community Group	Opportunities	Barriers	Strategies to Increase Benefits
	<p>accommodation businesses – people want multi-day experiences but few places to stay.</p> <ul style="list-style-type: none"> <li>• Create more official linkages between WAs and businesses operating nearby – done in partnership with NSE.</li> <li>• Link WA's in close proximity – cluster and make them continuous.</li> </ul>	<p>what PA is.</p> <ul style="list-style-type: none"> <li>• Lack of guided (even by signage) access makes exploring some areas unsafe from business liability perspective.</li> </ul>	<ul style="list-style-type: none"> <li>• Need to increase general awareness of PAs, why they're protected, and what can be done in them.</li> <li>• Need much better signage that identifies area as PA.</li> </ul>
Other Commercial Operators	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Bureaucracy and red tape is a major barrier to development.</li> <li>• Permitting, maps, management plans either outdated or non-existent.</li> <li>• Getting permission to develop / improve / change trails is slow.</li> <li>• Lack of infrastructure in PAs (i.e. trails, amenities) major barrier to attracting more visitors / users.</li> </ul>	<ul style="list-style-type: none"> <li>• None identified.</li> </ul>
Community Groups	<ul style="list-style-type: none"> <li>• Effective development and promotion of trails has the potential to extend tourist season through the winter.</li> <li>• Partnerships between commercial operators (e.g. accommodations sector) and trails groups to offer hiking/skiing/snowshoeing packages. Commercial operators help fund trail development and maintenance.</li> <li>• Major opportunity in select areas to develop multi-day hiking experiences with accommodations along the way.</li> <li>• Increasing demand for high-end camping / outdoor experiences</li> </ul>	<ul style="list-style-type: none"> <li>• Social justice and equity concerns around charging for access to public areas – how accommodate those who cannot afford.</li> <li>• Lack of an organizing “umbrella” organization to coordinate myriad trails, nature, environmental, commercial, and government interests so that coordinated development and promotion can occur.</li> </ul>	<ul style="list-style-type: none"> <li>• Improvements to existing and development of new infrastructure, signage, information.</li> <li>• Commit resources to bring key trails up to defined standard and maintain them.</li> <li>• Better / more canoe and boating access.</li> <li>• Develop camping system with bookings and user fees.</li> </ul>

Commercial Operation / Community Group	Opportunities	Barriers	Strategies to Increase Benefits
	<p>(i.e. “glamping”).</p> <ul style="list-style-type: none"> <li>• Look for opportunities to monetize PAs / trail systems (e.g. day passes on developed trails).</li> <li>• Develop themed hikes (e.g. White Point Lodge and Hike NS culinary hike in Keji).</li> <li>• Develop interpretive programming and charge fee or trail pass.</li> <li>• Increasing demand for educational / interpretive travel.</li> <li>• License/ authorize commercial operators or community groups to develop infrastructure, maintain trails, charge user fees.</li> <li>• Identify PA experiences that are market ready and focus promotion and planning on those as first step.</li> <li>• Opportunity to connect with culture and history of Mi’kmaq, partner in PA development and management.</li> </ul>		
Municipalities / Government Departments	<ul style="list-style-type: none"> <li>• Capitalize on increasing interest in outdoor recreation.</li> <li>• Increase awareness and participation by focusing on trails and trails development as a first step – widely known and understood, popular activity.</li> </ul>	<ul style="list-style-type: none"> <li>• Deep lack of awareness among government departments of potential of PAs for recreational use and commercial benefit / development.</li> <li>• Nobody knows promoting PAs and use of PAs is possible.</li> </ul>	<ul style="list-style-type: none"> <li>• First priority is to address public and government lack of awareness.</li> </ul>

### **5.3 Promotion and Marketing**

Commercial stakeholders were asked whether their proximity or access to a protected area is included in the marketing and promotional material they have developed to attract clients to their business. Most report that they do not specifically identify PA in advertising for their business but refer to pristine wilderness experience in general. A small number of specialty outdoor outfitting businesses name the protected area in which business operates. Barriers to effectively promoting PAs in their marketing efforts centred primarily around a reluctance to attract visitors to protected areas with inadequate infrastructure and/or signage. Some operators viewed the possibility of a guest or client becoming lost or injured in an undeveloped or unmaintained protected area as a business risk.

## 6. COMMERCIAL BENEFITS, OPPORTUNITIES, AND BARRIERS SUMMARY

The following section summarizes the commercial benefits, opportunities, and associated barriers with Nova Scotia's protected areas system as identified through consultation with business, community, and government stakeholders.

### 6.1 Commercial Benefits

A sample of business operators and community groups interviewed for this study identified a range of commercial benefits they associate with being located near and/or operating within protected areas in Nova Scotia. The main areas of benefit creation identified are summarized below:

**Creation of a positive investment climate** – designation of land as protected ensures that no residential development or industrial resource extraction will take place within its boundaries in perpetuity. This permanent restriction on the use of land allows entrepreneurs to invest in their businesses with the confidence that, for example, the wilderness area in which they intend to operate will remain in its natural state for as long as they are in business. Many stakeholders interviewed stated that, were it not for the legal protection of the land their business has access to, they would cease to operate. Many have made significant capital investments to grow their businesses based on the confidence they have that their greatest asset will remain protected.

**Contribution to the Nova Scotia tourism brand** – Tourism Nova Scotia understands that a critical component of what makes this province a place that people want to visit is our landscape and natural beauty. The provincial tourism strategy is centred around a target market identified as “the outdoor enthusiast - not the extreme adventurer - but the soft adventurer who appreciates local culture and cuisine after a day spent hiking or whale watching”. The network of protected areas that has developed throughout the province helps ensure that the natural beauty and landscape that draws visitors to Nova Scotia remains intact. An iconic example is Cape Breton Highlands National Park and the Cabot Trail. The Cabot Trail – one of the most popular driving routes in the province – winds its way through the highlands, including a large coastal portion of Cape Breton Highlands National Park, which sees over 200,000 visitors per year. The trail and park are located in a region of Cape Breton that contains a large number of protected areas (Figure 63). Having these areas protected guarantees that a large proportion of the



**Figure 62: Protected Areas Around Cape Breton Highlands National Park**

geography that makes up the iconic views and landscapes that draw hundreds of thousands of visitors and help generate over \$200 million<sup>17</sup> in annual tourism revenue for the island of Cape Breton remains pristine and undisturbed by residential, industrial or resource development.

**Generation of business revenue through direct attraction of clients** – many businesses in Nova Scotia offer products and services that directly or indirectly involve protected areas. Accommodations providers located near a protected area, outdoor outfitters who offer tours in wilderness areas, and food and beverage businesses located in communities near popular hiking destinations are examples of the types of operations that benefit when recreational users of protected areas are drawn to their communities and businesses. While quantifying benefits attributable to protected areas is challenging, anecdotal evidence suggests that for many small businesses in Nova Scotia, revenues generated by clients visiting protected areas can be significant. Consultations revealed that one outdoor outfitter attributes \$200,000 in annual revenue directly to the protected area they operate in; an internationally renowned accommodations business in rural Nova Scotia stated that 90% of its \$900,000 annual revenue was due to the protected status of the wilderness area located adjacent to their property.

**Direct support of unique business models** – the creation of protected areas has had a direct impact on the number and types of businesses that have formed in the province. Access to wilderness areas guaranteed to be undisturbed by residential or industrial development has led to the establishment of commercial enterprises that offer unique wilderness-based services delivered in protected areas. Operators in outdoor outfitting, guiding and wilderness therapy businesses stated that the existence of protected areas provided them opportunities to offer unique services that they would otherwise be unable to offer.

## 6.2 Opportunities

### **Connect thematically and geographically linked “clusters” with associated branding strategy.**

As outlined in the Commercial Activities Analysis (Section 4.0), there are many opportunities to manage and promote clusters of individual protected areas that are thematically and/or geographically linked. Clustering could have the effect of creating more comprehensive recreational / nature tourism opportunities that include a wider range of possible experiences. It would also create opportunities for branding specific regions as destinations, thereby providing commercial operators with something specific to base individual and community-level marketing initiatives around. To some extent, the Eastern Shore is a good example of this, where commercial operators and communities are marketing the area with a fairly consistent brand focused on a cluster of coastal protected areas. Other examples detailed in Section 4.0 with significant potential include “Rogues Coast”, “Fourchu Coast”, “Cape Breton Highlands”, and the “Fossil Coast”.

### **Capitalize on increasing interest in experiential, educational, and interpretation-based travel and recreation.**

The Nova Scotia Tourism Agency’s 2013 Tourism Strategy recognized that “Experiential tourism should be a key component of our product. It will help to connect various attractions, result in longer visits, and spread economic benefits across the province.”<sup>18</sup> The province’s protected areas provide a wide range of experiential opportunities for visitors and, if effectively developed and promoted, could serve as a major element of the province’s tourism strategy.

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<sup>17</sup> <https://tourismns.ca/research/tourism-revenues/economic-impact-reports>

<sup>18</sup> [https://tourismns.ca/sites/default/files/page\\_documents/tourism-strategy-final-2013.pdf](https://tourismns.ca/sites/default/files/page_documents/tourism-strategy-final-2013.pdf)

**Identify market-ready areas and implement pilot development initiatives.**

“Market readiness refers to the state of preparedness of a tourism operation, or a destination as a whole, in meeting the expectations of its customers.”<sup>19</sup> Although the province’s protected areas are much more than a tourism product, attracting both local and out-of-province visitors is key to increasing recreational use and the associated commercial benefits. There is a fairly broad range in terms of the market-readiness of protected areas – from remote, fairly inaccessible wilderness areas to popular destinations with developed trail systems. Informal trails are also common in many protected areas but cannot be promoted. This includes trails in near urban areas like Blue Mt-Birch Cove Lakes Wilderness Areas and Duncans Cove Nature Reserve, which are very popular, but heavy use is causing major impacts due to poor alignment and no management. Opportunities exist to focus investment and growth on areas considered more market ready than others with the goal of increasing interest and use, building partnerships, and fine tuning the overall strategy around protected areas development. Consideration should be given to managing key water trails to a market ready standard (canoe routes and sea kayak routes).

**Develop higher-end commercial outdoor experiences in protected areas.**

Outdoor recreation enthusiasts are increasingly looking for higher-end, more luxurious ways to experience nature. This newly identified niche market has been termed “glamping” and is seen as a major opportunity for commercial tourism and recreation operators<sup>20</sup>. This market has been developed in some areas of the US, Europe and New Zealand, for example, where hikers pay considerable fees to access parks and protected areas, stay in accommodations along well-maintained trails, and are provided with food, beverages, and other amenities. Opportunities exist in some of Nova Scotia’s protected areas to improve trail infrastructure, build accommodations, and develop high-end packages targeted to the emerging “glamping” market.

**Promote niche outdoor experiences to encourage commercial operator development.**

Opportunities exist for businesses to develop other niche outdoor recreation experiences in some of the province’s protected areas. These could include zip lining, paragliding, rock and ice climbing, bird watching, whale watching, wild flower and fall colour viewing and interpretation, night sky observation, horseback riding, and others.

**Create more comprehensive and attractive back-country opportunities.**

Although a small number of outdoor recreation enthusiasts are willing to pay significantly for high-end “glamping” excursions, the average visitor to a protected area is generally content with more conventional outdoor experiences. Opportunities exist to enhance and increase the use of protected areas by creating more comprehensive wilderness experiences that include longer and more developed trail systems with basic overnight cabins along longer routes.

**Identify and develop opportunities to connect protected areas with Mi’kmaq history, culture, and spirituality.**

Opportunities exist to involve the Mi’kmaq in the management of protected areas and commercial activities associated with them. Aboriginal business operators would have the advantage of being able to market a wilderness experience that involves interpretation from a Mi’kmaq perspective, which is of significant interest to a particular segment of the travel market.

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<sup>19</sup> [https://tourismns.ca/sites/default/files/2017-01/final\\_a\\_guide\\_to\\_marketing\\_your\\_ns\\_tourism\\_business\\_nov\\_2013-2.pdf](https://tourismns.ca/sites/default/files/2017-01/final_a_guide_to_marketing_your_ns_tourism_business_nov_2013-2.pdf)

<sup>20</sup> <http://www.travelmarketreport.com/articles/Glamping-Experiencing-the-Great-Outdoors-in-Luxury>



## Box 2: South Africa National Parks and Tourism Development

South African National Parks (SANParks) recently decided that tourism and related commercial ventures in South Africa's PAs should be undertaken by the private sector, charging market prices, within a regulatory framework designed to minimize adverse impacts on biodiversity and ensure a relatively risk-free return to the conservation assets being leveraged. One component of the commercialization strategy was to lease several existing small camps (8–32 beds) in Kruger National Park, along with a number of new concession sites in Kruger and other parks. It was anticipated that such concessions would generate significant revenues for SANParks and also contribute to broader economic development objectives.

Eleven concessions were awarded to private operators, seven in Kruger NP, two in the Addo Elephant NP, and two in the Cape Peninsula NP. In addition, an agreement was reached with a private company to manage the only hotel in SANParks' portfolio – the Brandwag Hotel in Golden Gate Highlands NP. The contract is for 20 years with no automatic right of renewal.

The results exceeded expectations. New accommodations in the parks amounted to some 380 beds, with total private investment estimated at over US\$35 million. Total income to SANParks from tourism concessions over 20 years is forecast at more than US\$ 90 million (undiscounted), representing a major contribution to the finances of the organization. Moreover, government tax receipts at maturity are estimated to exceed ZAR60 million per annum, more than the annual subsidy that SANParks currently receives from government. Tourism development linked to South Africa's National Parks likewise makes a significant contribution to export receipts, employment and wider social development goals. Some of the factors underlying the success of this experience include:

- Good quality sites as a starting point for viable operations.
- Experienced operators capable of quick and responsible delivery of the anticipated financial and empowerment objectives.
- A competitive bidding system requires excess demand for sites.
- Motivated operators able to develop imaginative and far-reaching empowerment schemes.
- "Balanced" contract management to ensure long-term success of the process.
- Managerial flexibility to update environmental rules on issues such as carrying capacity in light of experience.

Taken directly from *Sustainable Financing of Protected Areas: A Global Review of Challenges and Options* Emerton, Bishop, and Thomas.

### **Establish key access points and parking areas with adequate user-pay infrastructure.**

There are opportunities to improve the experience of users of protected areas and generate commercial and economic benefits for businesses and communities by developing key points of access associated with trail systems (land or water) with adequate user-pay parking infrastructure. Parking could be operated by commercial enterprises or community groups under

license with the Province. The implementation of pilot user-pay infrastructure (including accommodation huts in select areas – Seawall Trail, for example) could test the strength and viability of this opportunity.

**Promote cultural and historic assets contained within protected areas.**

Some protected areas contain significant artifacts and points of interest that are not widely known. Abandoned homesteads, camps, whole communities, graveyards, and other artifacts could be of significant interest to some potential visitors. Known points of interest could be identified, mapped, interpreted and promoted, in conjunction with natural history.

**Develop and promote linked experiences involving visiting protected areas and other activities / amenities in the broader community.**

There is an opportunity to promote the use of protected areas in combination with other attractions and amenities in the area. Government, communities, and businesses could work together to identify market “packages” of experience that include recreational use of protected areas. For example, a hiking experience in a protected area, a museum in the community, dinner at a local restaurant, and a performance in the evening. This multi-activity experience could draw more people to an area who then have reasons to stay longer and generate more commercial benefit than doing one activity in isolation.

**Identify, develop, and promote areas with potential for year-round recreation opportunities.**

While protected areas are generally available for year-round recreational use, there are opportunities to focus on specific areas, or protected area clusters that are particularly suited (or could be developed) for this purpose. An example is the Wentworth Valley, which has commercially developed skiing, hiking, biking, and trail running infrastructure on private land. This could be expanded and diversified using lands of the candidate Wentworth Valley Wilderness Area and others that could be used for hiking, camping, swimming, recreational fishing, and other activities. Linking and promoting these areas and activities as year-round recreational opportunities could increase use and associated commercial benefits.

**Explore opportunities to develop non-motorized moose hunt in other protected areas in the province.**

There is a well-established non-motorized moose hunt that takes place in Polletts Cove – Aspy Fault Wilderness Area. Some of the moose hunting guides use horses to haul equipment and harvested moose. It has been suggested that there are a number of areas in the province in which commercial operators could establish similar hunts and outfitting services. Opportunities may also exist to develop non-motorized deer hunting and horseback trail riding in some protected areas in Nova Scotia.

**Promote health-related benefits of protected area use.**

Some of the most tangible and important benefits of protected areas are in the categories of personal and societal health. Recreational uses of these areas that involve physical activity and/or the reduction of psychological stress benefit individuals by maintaining or improving health outcomes and society in general by reducing the health care burden and costs associated with inactivity. Exposure to the outdoors (particularly in wilderness settings<sup>21</sup>) and physical activity are key aspects of emerging health promotion initiatives. Recreational use of protected areas could be tied into provincial health and wellness education and promotion

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<sup>21</sup> Lovell, Rebecca, et al. "A systematic review of the health and well-being benefits of biodiverse environments." *Journal of Toxicology and Environmental Health, Part B* 17.1 (2014): 1-20.

activities. There are currently a number of small businesses that offer wilderness therapy services and programming in protected areas.

### **6.3 Barriers**

The following represent key barriers to realizing opportunities to develop or enhance commercial opportunities associated with protected areas in Nova Scotia.

#### **There is a general lack of developed infrastructure in many protected areas with recreational use / commercial benefit potential.**

Many stakeholders consulted identified the lack of access, parking, signage, and built trail infrastructure as a major barrier to commercial benefit enhancement. Business operators in all sectors stated that investment in and maintenance of infrastructure is critical to attracting more local and out-of-province users. Some stated that they hesitate to include information about nearby protected areas in their marketing strategy for fear that clients will get lost or injured using unmarked and non-maintained hiking trails.

#### **Ability to develop and promote use of some protected areas constrained by adjacent private land holdings which prevent access or the creation of a contiguous experience.**

The development and management of comprehensive and uninterrupted recreational experiences is constrained in some of Nova Scotia's protected areas by private holdings. These may be located at the edge of a protected area (constrains access) or may be remote, in-held properties surrounded by protected area (interrupts continuity of critical portages or other trails). The development, management and promotion of continuous trails and other amenities is therefore dependent on either gaining permission to use private land or acquiring it. Pristine wilderness experiences in protected areas can also be diminished by development or activity on adjacent private land, particularly in-held properties.

#### **Lack of financial resources to acquire strategically important small private land holdings that break up otherwise contiguous protected areas.**

Small private land holdings can limit development / promotion of protected areas (see above). There are currently no government resources allocated to acquire and secure such private land holdings.

#### **Lack of central online information resource for recreational use opportunities in and around protected areas.**

Information on trail systems, accommodation options, driving directions, commercial outfitters / service providers is currently extremely disjointed and not well maintained or updated. The provincial government website provides basic information on each protected area but is not well linked to other information resources (i.e. commercial operators near protected areas, community trail groups, etc.). Potential visitors to Nova Scotia would currently have significant difficulty planning a trip centred on experiencing protected areas.

#### **Lack of awareness in other municipal, provincial, federal and federal government departments of the importance and potential of protected areas.**

Other departments and government agencies do not currently see themselves playing a role in the development and promotion of protected areas. Many have stated that they are generally unaware of the recreational and tourism potential of these areas or that they are unable to include them in marketing and promotional initiatives. For example, tourism agencies advertise the natural beauty and outdoor recreation opportunities in Nova Scotia but do not specifically

identify or promote protected areas, which could be of significant interest to many potential visitors.

**Limited social media and communications presence for protected areas.**

Nova Scotia Environment engages in social media or other direct communications activities in a limited manner. Important and engaging protected areas news and messaging are often overlooked in broader provincial communications initiatives. A major overhaul to the protected areas communication strategy is needed if development and enhancement of commercial benefits is to occur.

**Cultural perception of protected areas can limit public and government’s awareness of potential use opportunities.**

Conventional language describing protected areas as “reserves, “set aside” and “protected” can create the perception that all use of the land is prohibited or severely restricted. It is not widely understood that protected areas are generally open to the public for a wide range of non-invasive, sustainable uses. In some cases, the public is unaware that a trail system or wilderness area that is well known and heavily visited is, in fact, within a designated protected area. In both cases, awareness of the existence and potential uses of protected areas must be increased.

**Constraints on departmental / government / volunteer group resources limit the ability to deliver on required improvements, enhancements, and increased communication / promotion efforts.**

In general, resources within the Protected Areas Branch of Nova Scotia Environment are constrained and insufficient to deliver on the improvements and enhancements that are required to bring many protected areas up to a level of market readiness that could help increase their commercial benefits potential. Volunteer groups, such as trail groups, are in a similar situation and are further constrained by protected areas legislation which currently does not provide clear authority for such groups to retain protected-area related revenue (e.g. trail pass or parking fees).

**Some regulatory and policy gaps create barriers to the viability of commercial operators in protected-areas related sectors.**

A small number of commercial operators consulted stated that specific regulations or policies create barriers to operating some businesses in (or in association with) protected areas. Examples include the non-motorized moose hunt at Polletts Cove-Aspy Fault Wilderness Area, which is constrained by the current licensing system, including the limitation of guide’s clients to license-lottery winners. Water trail groups who wish to maintain portages, campsites and access points have reported they cannot access group liability insurance available to other trail groups through the Nova Scotia Trails Federation, and have reported difficulty obtaining such insurance elsewhere.

Consultation with Nova Scotia Environment identified a broader range of regulatory and policy barriers or gaps that may impact the capacity of businesses and communities to realize commercial benefits from protected areas. These barriers are summarized in the tables below:

**Table 8: Summary of Regulatory Barriers to Enhancing Commercial Benefits Associated with Protected Areas in Nova Scotia**

<b>Act</b>	<b>Activity</b>	<b>Potential Regulatory Barrier</b>
Wilderness Areas Protection Act	Commercial activities in general	<ul style="list-style-type: none"> <li>Commercial activities are not specifically addressed in legislation or regulation, except indirectly, where authority is needed for building and operating structures or trails to support commercial use.</li> </ul>
	Third party collection of fees	<ul style="list-style-type: none"> <li>Lack of clarity with respect to third party collection of fees (e.g. trail use permits, campsite or hut reservation, parking fees), particularly where fees are needed by the third party to finance management of trails or other infrastructure.</li> </ul>
	Parking	<ul style="list-style-type: none"> <li>No clear authority to allow vehicle access to trail head parking or boat launch sites which may be just inside a PA boundary.</li> <li>No clear authority to allow development of parking for OHVs along approved OHV routes.</li> </ul>
	Informal trail maintenance	<ul style="list-style-type: none"> <li>Numerous portages, traditional angling access trails, and other informal trails are not managed by NSE or under agreement with a third party. There is no clear authority for allowing basic maintenance by trail users / commercial operators (such as removing trees that have fallen over a trail).</li> </ul>
	Motorboat use for commercial guiding	<ul style="list-style-type: none"> <li>The Minister may authorize motorboat use by license or agreement but it is not clear if this could be used to authorize a commercial operator to deliver food or supplies to a campsite.</li> </ul>
	Guided moose hunt	<ul style="list-style-type: none"> <li>Commercial viability of moose hunt guiding is limited by current licensing system.</li> </ul>
	Camping and campfires	<ul style="list-style-type: none"> <li>Permitted under terms of an Order on Camping and Campfires, but public often misinterprets Act (S.23(1)), concluding these activities are generally prohibited.</li> <li>Order has not been reviewed to address potential barriers to commercial uses.</li> </ul>
Special Places Protection Act (Nature Reserves)	General commercial activities	<ul style="list-style-type: none"> <li>Nature Reserves, which comprise less than 5% of NSE's protected areas (existing and candidate), permit much more limited human uses relative to wilderness areas.</li> <li>The Act is older and has not been reviewed and updated to support effective management and enforcement.</li> </ul>
	Trail management	<ul style="list-style-type: none"> <li>No clear authority to enable the Minister to enter into agreements with third parties to build and manage hiking trails (or perhaps other trails) in nature reserves.</li> </ul>
	Camping	<ul style="list-style-type: none"> <li>Lack of clarity regarding camping, including under what conditions camping may be permitted.</li> </ul>

**Table 9: Summary of Policy Gaps to Enhancing Commercial Benefits Associated with Protected Areas in Nova Scotia**

<b>Act</b>	<b>Activity</b>	<b>Policy Gaps</b>
Wilderness Areas Protection Act	Commercial activities in general	<ul style="list-style-type: none"> <li>No policy</li> </ul>
	Bicycle use	<ul style="list-style-type: none"> <li>No trail planning and development guide for public and stakeholder distribution</li> </ul>
	Water trails	<ul style="list-style-type: none"> <li>No trail planning and development guide;</li> <li>Trail groups have reported difficulty in securing liability insurance for portage maintenance</li> </ul>
	Structures management	<ul style="list-style-type: none"> <li>No policy guiding use and management of structures for commercial purposes or managed by non-profit groups (e.g., backcountry huts, warming huts on OHV trails, canopy walk structures, zip lines, etc.).</li> </ul>
	Government owned cabins	<ul style="list-style-type: none"> <li>No policy guiding use and management of government owned cabins (such as old warden cabins in Toboatic and several other wilderness areas).</li> </ul>
	Mi'kmaq communal camps	<ul style="list-style-type: none"> <li>Further work needed on use and management of communal camps.</li> </ul>
	Campsite / cabin reservation	<ul style="list-style-type: none"> <li>No policy – may also need regulation.</li> </ul>
	<i>Keep it Wild</i> brochure	<ul style="list-style-type: none"> <li>This guide for low impact recreation in wilderness areas did not consider needs of commercial users when originally developed</li> </ul>
	Various: Geocaching Rock climbing Domestic animal use (horses, llamas, etc.) Adventure racing Use of drones Special events (wedding, films, etc.)	<ul style="list-style-type: none"> <li>No policy</li> </ul>
Special Places Protection Act (Nature Reserves)	General commercial activities	<ul style="list-style-type: none"> <li>No policy</li> </ul>
	Trail management	<ul style="list-style-type: none"> <li>No policy or guide on trail planning and development for public and stakeholder distribution.</li> </ul>

## 6.4 Recommended Strategic Investments

### **Develop a modern, comprehensive online portal that provides users with information on how to access recreational opportunities available in protected areas.**

An umbrella resource is required that pulls together currently disconnected information on trails, commercial operators, and other amenities. There is currently no central online resource for information on the recreational use potential of protected areas, which is a major gap in terms of attracting resident users and non-resident visitors.

### **Invest time and resources in addressing key regulatory and policy barriers and gaps that constrain development of commercial opportunities related to protected areas.**

Key regulatory and policy barriers or gaps that need to be examined include moose hunting licensing, affordable liability insurance for water trail groups, the ability of non-profit trail management groups to raise revenue and use it for trail development, and the ability of government to allow commercial operators to develop and manage user-pay infrastructure (e.g. parking, trail permits, overnight accommodations on trails, etc.) under authorization with the Province. Various others are listed in the previous tables. Any efforts to address regulatory and policy gaps should include a review of how other jurisdictions manage and regulate commercial activities.

### **Develop a well-researched branding, marketing, and communications strategy to increase awareness of protected areas and shift current cultural perceptions.**

Promotion of the recreational use and commercial potential of protected areas needs to occur on two levels. First, awareness of protected areas among various provincial government departments must be increased, as many are unaware of the recreational and commercial uses that are permitted or promoted in these areas. Increased awareness could result in better alignment of a number of key strategies, including health and wellness and tourism, with protected areas strategy. Second, a major public awareness campaign is required to increase use of protected areas for recreational and commercial purposes. For this second need, a professionally developed branding and marketing strategy is recommended that includes potential uses, branding of protected areas and clusters, and ongoing communications focused primarily online and through social media.

### **Mobilize resources on an annual basis to purchase strategically important private land holdings.**

Certain land or water trail opportunities in protected areas cannot be developed, managed or promoted without securing access across adjacent private lands. Typically, such access is secured by acquiring the land. Protected area clusters could also be more readily linked and the experience made more comprehensive if Nova Scotia Environment had the resources to acquire strategically important private land holdings. Varying amounts of annual funding for private land acquisition have been allocated to NSE in past years, but this is no longer the case.

## 6.5 Partnership Opportunities

One of the strongest messages to come out of consultation with stakeholders at all levels was the need for government departments, non-governmental organizations (NGOs) and communities to work together to develop, manage, and promote commercial benefits enhancement opportunities in protected areas across the province. There are currently many strategies and initiatives in place across all of these stakeholder groups aimed at developing these opportunities, but most exist and/or have been implemented in isolation and without

collaboration with others. The following table outlines some of the work being done in Nova Scotia related to protected areas and potential opportunities for collaboration with Nova Scotia Environment's protected areas initiatives. While this table is limited to provincial government departments and agencies, there are many other partnership opportunities that have potential or have been developed with NGOs, community groups, federal and municipal governments, and others.

**Table 10: Potential Partnership Opportunities in the Development and Management of Protected Areas in Nova Scotia**

Department / Organization	Protected Areas Related Initiatives / Strategies	Partnership Opportunities
Tourism Nova Scotia	<ul style="list-style-type: none"> <li>• Tourism Strategy for Nova Scotia (2017) identifies experiential tourism as a key component of NS tourism product offering.</li> <li>• Identifies key target visitor as outdoor enthusiasts who appreciate local culture and cuisine after a day spent hiking or whale watching.</li> <li>• Encourages investment in products and experiences that align with the Nova Scotia brand.               <ul style="list-style-type: none"> <li>○ Identifies improving coastal hiking trails as priority.</li> </ul> </li> <li>• Identifies need for provincial signage strategy.</li> </ul>	<ul style="list-style-type: none"> <li>• Include protected areas more explicitly in provincial tourism marketing strategy targeted at outdoor enthusiasts.</li> <li>• Incorporate protected areas and related businesses in market-readiness initiatives.</li> <li>• NSE continue to liaise with Tourism NS to increase awareness of tourism attraction / recreational use potential of protected areas.</li> </ul>
Communities, Culture and Heritage	<ul style="list-style-type: none"> <li>• Administer three trail funding programs:               <ul style="list-style-type: none"> <li>○ Trail Maintenance Program.</li> <li>○ Community Trails Leadership Program.</li> <li>○ Engineering Assistance Grant Program.</li> </ul> </li> <li>• Enabled by the <i>Special Places Protection Act</i> to designate outstanding heritage sites as protected sites.</li> <li>• Administer Community Recreation Capital Grant.               <ul style="list-style-type: none"> <li>○ Assists in the development of small scale indoor and outdoor capital recreation projects, less than \$20,000.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Collaborate on development of trails systems / infrastructure in protected areas.</li> <li>• Work together to identify heritage / cultural sites of interest in protected areas.</li> <li>• Develop information / interpretive resources on heritage sites of interest in protected areas.</li> <li>• With the Nova Scotia Mi'kmaq, identify opportunities for integration of Mi'kmaq history / culture in development / management of protected areas.</li> </ul>
Fisheries and Aquaculture	<ul style="list-style-type: none"> <li>• Recognizes that sportfishing industry was worth more than \$56.4 million in 2010.</li> <li>• Licenced anglers spent 1.1 million days fishing.</li> <li>• Approximately 80,000 anglers participated in sportfishing in 2014.</li> <li>• Nova Scotia's 6,700 lakes, 100 rivers and 7,400 kilometers of</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborate on strategy to manage for quality wilderness sportfishing opportunities, and potentially increase participation in sportfishing in wilderness areas.</li> <li>• Develop information resources on sportfishing locations in protected areas.</li> <li>• Identify opportunities for</li> </ul>



Department / Organization	Protected Areas Related Initiatives / Strategies	Partnership Opportunities
	<p>coastline offer incredible opportunities for angling enthusiasts</p> <ul style="list-style-type: none"> <li>• New strategic initiatives underway to attract more out-of-province visitors and increase recreational angling overall.</li> </ul>	<p>partnership in the development of recreational fishing / boating infrastructure (e.g. access trails, parking, boat launches, etc.).</p> <ul style="list-style-type: none"> <li>• Manage and promote better walk or canoe-in fishing trails while restricting direct vehicle access to fishing sites.</li> </ul>
Nova Scotia Business Inc.	<ul style="list-style-type: none"> <li>• Highlights Nova Scotia's beaches, scenic coastline, and outdoor recreation opportunities in lifestyle component of investment attraction strategy.</li> </ul>	<ul style="list-style-type: none"> <li>• Incorporate information about protected areas in marketing and investment attraction campaigns.</li> <li>• Highlight positive investment climate created for some industries as a result of protected areas.</li> </ul>
Department of Natural Resources	<ul style="list-style-type: none"> <li>• The 2011 Natural Resources Strategy for Nova Scotia committed to deliver an integrated and sustainable parks and protected areas program.</li> <li>• Strategy laid out following goals for provincial parks: shared stewardship, far-sighted planning, protection, education, and recreation.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate parks and protected area management, as envisaged in the 2013 Parks &amp; Protected Areas Plan.</li> </ul>

## 7. CASE STUDY – COSTA RICA

In considering potential strategies to develop and/or manage Nova Scotia's protected areas to increase commercial benefits, it can be useful to identify and explore models that have succeeded in other jurisdictions. Over the past 20 years, there has been a significant increase in the number and coverage of protected areas established around the world, with approximately 15% of the earth's land base and 10% of its territorial waters now under protection<sup>22</sup>. Costa Rica is an example of a jurisdiction where the growth of commercial benefits has occurred alongside the protection of land and ecosystems. The following section highlights this case with the goal of identifying underlying principles and approaches that may inform protected areas strategy in Nova Scotia.

Costa Rica encompasses one of the most biologically diverse and important ecosystems in the world - an estimated 500,000 species representing 5% of global biodiversity contained in a relatively small geographic area<sup>23</sup>. Over the past 40 years, the government of Costa Rica has concentrated its efforts on designating a large percentage of representative land as protected under a system that includes national parks, conservation areas, reserves, and heritage sites. As of 2014, nearly 30% of the country's total land mass (~14,000 km<sup>2</sup>) was protected, representing a 38% increase since 1990<sup>24</sup>.

Costa Rica and Nova Scotia are very different places, yet there are a number of key similarities that make the comparison relevant. While Costa Rica has a much greater population, measures of total land area, GDP, and annual tourism visitation in recent years are very comparable. One major difference is in the land area that has been designated as protected, with Costa Rica having protected more than double the area in Nova Scotia (Table 10).

**Table 11: Comparison of Nova Scotia and Costa Rica – Select Statistics**

	<b>Nova Scotia</b>	<b>Costa Rica</b>
Population (2016)	0.9 million	4.8 million
Land Area	55,283 km <sup>2</sup>	51,100 km <sup>2</sup>
GDP (2015 CAD)	\$40 billion	\$41 billion
Tourism Visitation (2015)	2.2 million	2.7 million
Total Protected Area	6,800 km <sup>2</sup>	14,000 km <sup>2</sup>
Protected Area as % of Total	12.4	27.4

### 7.1 Socio-economic and Commercial Benefits

Protecting such a relatively large percentage of land has created a wide range of socio-economic and commercial benefits for communities and businesses in Costa Rica. Prior to the acceleration in the designation of protected areas that began in the late 1980s, the country's economy was driven primarily by the export of commodities like coffee, pineapple, and bananas. With largescale designation and promotion of protected areas came a dramatic increase in eco-tourism visitation. Visitation rose from approximately 329,000 in 1988 to a record 2.9 million in

<sup>22</sup> *Protected Planet Report 2016*, International Union for Conservation of Nature (IUCN).

<sup>23</sup> <http://www.inbio.ac.cr/en/conservacion/biodiversidad.html>

<sup>24</sup> <http://data.worldbank.org/indicator/ER.LND.PTLD.ZS>

2016 – a growth rate of 28% per year<sup>25</sup> - and 66% of all visitors between 2014 and 2016 engaged in ecotourism related activities<sup>26</sup>.

Tourism has made a significant contribution to the economy of Costa Rica in large part because of the development and marketing of ecotourism related activities in protected areas. The total economic contribution of travel and tourism accounted for 12.5% of GDP (direct and indirect impact) and nearly 100,000 direct jobs in Costa Rica in 2015<sup>27</sup>. By comparison, tourism accounts for approximately 2% - 3% of total GDP in Nova Scotia<sup>28</sup>. This economic benefit has been generated across a wide range of direct and indirect commercial activities. Direct benefits are generally derived from fees charged to visitors entering or making use of services attached to protected areas. The National System of Conservation Areas (SINAC) was created in 1998 and has the authority to charge a range of rates for use of protected areas in Costa Rica based on visitor status (i.e. resident vs. non-resident), operational costs of the area visited, and services available to visitors. Revenue generated from user fees are placed into a designated account earmarked for the development and management of the protected areas system as a whole. Table 11 outlines some of the protected areas user fees charged in Costa Rica:

**Table 12: User Fees Charged for Access and Services Provided in Protected Areas in Costa Rica**

Service	Residents (USD per day)	Non-Residents (USD per day)
Average Protected Area (PA) Entry Fee		
Children, 6 to 12 years old	\$0.50	\$1.00
Adults	\$1.63	\$7.56
Average Lodging in Protected Area Facilities	\$6.00	\$10.50
	<b>All Users (USD per day)</b>	
Parking		
Light Vehicle	\$0.50	
Bus	\$1	
Storage Facilities	\$2	
Diving	\$10	
Equipment Rentals		
Tent	\$7	
Surfboard	\$20	
Caving Equipment	\$2	
Conference Rooms	\$13	
Research Facilities		
Daily	\$10	
Monthly	\$100	
Filming		
Educational, Scientific, Tourism	\$300	
Commercial	\$1,000	

Source: <http://www.gaceta.go.cr/Gaceta/?date=30/04/2014#n38295-minae>

<sup>25</sup>"País logra récords en divisas y visitantes por el turismo", Barquero (2016).

<sup>26</sup> <http://www.ict.go.cr/en/documents/estad%C3%ADsticas/cifras-tur%C3%ADsticas/actividades-realizadas/1033-2014-2016/file.html>

<sup>27</sup> *Travel and Tourism Economic Impact Costa Rica 2016*, World Travel and Tourism Council (2016).

<sup>28</sup> [https://tourismns.ca/sites/default/files/2017-01/industryfacts2010-11final\\_0.pdf](https://tourismns.ca/sites/default/files/2017-01/industryfacts2010-11final_0.pdf)

SINAC collected approximately \$21 million CAD in total fees related to activities taking place in protected areas in 2015, \$17.5 million CAD of which came from entrance fees alone<sup>29</sup>.

Indirect benefits are generated through commercial activities that operate in or around protected areas, including operators in the food, accommodations, transportation, outdoor outfitting, rentals, souvenirs and gifts, and other services industries. SINAC estimates that visitors spent approximately \$1,000 per person per visit to Costa Rica in 2015, or a total tourism-related expenditure of \$2.7 billion. Top protected areas-related activities that visitors participated in included observing flora and fauna (1.2 million visitors - 45%), visiting volcanoes (972,000 – 36%), trekking and hiking (810,000 - 30%), zip lining (783,000 - 29%), and visiting hot springs (756,000 – 28%). Commercial operations providing products and services related to these activities as well as other services - transportation, food and beverage, souvenirs – would have been the direct and indirect beneficiaries of the large numbers of visitors participating in these activities in and around protected areas.

The development of Costa Rica's protected areas system has created a wide range of benefits in addition to those accruing to local business operators. A recent study examining the impact protected areas and ecotourism has had on the quality of life of Costa Ricans concluded that a 16% reduction in poverty in communities adjacent to or nearby designated protected areas is driven mostly by inducing changes in tourism and recreation services. As areas become protected, the number of local businesses aimed at capturing the commercial benefits associated with ecotourism rises thereby generating opportunities for increasing household income<sup>30</sup>. A survey conducted in three communities that surround the four most visited protected areas in Costa Rica support the above findings concluding that protected areas help communities through environmental services and socioeconomic benefits. The study concluded that the following percentages of respondents perceive protected areas benefit communities by<sup>31</sup>:

- Increasing overall landscape beauty (89%).
- Protecting biodiversity (84%).
- Increasing surrounding property values (69%).
- Increasing economic opportunities for tourism (62%).

## 7.2 Critical Success Factors

There are a number of critical success factors that can be extracted from the case study of Costa Rica and its development and promotion of protected areas. While there are many notable differences between the country of Costa Rica and the province of Nova Scotia, the following factors represent core elements of a strategy to successfully develop protected areas and enhance related commercial benefits.

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<sup>29</sup> <http://www.sinac.go.cr/ES/transprncia/Paginas/presupuesto.aspx>

<sup>30</sup> Ferraro, Paul J., and Merlin M. Hanauer. "Quantifying causal mechanisms to determine how protected areas affect poverty through changes in ecosystem services and infrastructure." *Proceedings of the National Academy of Sciences* 111.11 (2014): 4332-4337.

<sup>31</sup> Molina-Murillo, Sergio A., Mauricio Fernández Otárola, and Kelly N. Shreeve. "Understanding the link between benefits from protected areas and their relationship with surrounding communities: an exploration in Costa Rica." *Parks* 22.1 (2016): 79-88.

### **1. Identifying and protecting lands with recreational potential.**

While the primary focus of protected areas designation is the conservation and protection of biodiversity and representative landscape, effort was made in Costa Rica to designate areas that had potential to attract visitors interested in observing nature and pursuing recreational activities. Many of Nova Scotia's protected areas provide excellent opportunities for exploring the wilderness and engaging in recreation. Further identification and development of those areas is necessary if commercial benefit opportunities are to be enhanced.

### **2. Providing adequate and effective management resources.**

The establishment of SINAC in Costa Rica in 1994 was a critical step in the further development of the protected areas system. SINAC has the legislative mandate and resource support to effectively oversee the management and development of the country's growing protected area land base. The organization is funded to a great extent by the \$21 million CAD (2016) collected through entrance and user fees across the protected areas system, as well as through national and international grants and donations. Nova Scotia Environment currently receives a total of \$5.8 million for administration and policy for the entire department, of which protected areas is one branch. There are also currently no mechanisms in place to collect fees from visitors to protected areas in the province.

### **3. Investing in recreation and tourism infrastructure.**

Tourism analysts and policymakers often cite a region or industry's "market readiness" as a priority component in determining tourism market potential. As the protected areas system was rapidly developing in Costa Rica, the ecotourism industry was undergoing a parallel expansion. With this expansion came an investment in ecotourism-focused infrastructure. As noted in the IUCN's 2002 *Tourism and Protected Areas*, "The design of infrastructure, buildings and facilities is clearly integral to the ability of a site to attract and provide for visitors. Proper design enhances utility, improves effectiveness and permits development with minimal impact on the environment."

In order to develop an effective marketing and promotion campaign to attract more visitors to protected areas, infrastructure must be there to provide the range of experiences sought after by ecotourists. While some may be content with and capable of exploring undeveloped wilderness, most travelers expect a minimum level of infrastructure development that may include signage, maintained trails, and adequate information on protected areas. Other infrastructure investments, such as parking lots

and accommodations, can be made to enhance the experience and potentially serve as a means to generating revenue. Development of infrastructure in Nova Scotia's protected areas

#### **Box 3: Infrastructure Development in New Zealand's Protected Areas**

"The [New Zealand] Department of Conservation (DOC) manages around 80,000 km<sup>2</sup> of public conservation lands, comprising around 30% of New Zealand's land area. While New Zealand's population is small (3.7 million) and highly urbanised in coastal cities, there is a strong cultural tradition of active outdoor recreation. This has resulted in a significant infrastructure supporting public access to high quality natural areas. In an international setting where the proportion of protected natural areas is under 10% and where there is long history of human occupation, use and development of such areas, the types of nature-experience opportunities available in New Zealand are relatively unique and highly reputed. Consequently, many international and domestic visitors are attracted, and tourism is a major issue for DOC."

Managing Tourism in the New Zealand Protected Area System, Tourism and Protected Areas, IUCN

system is minimal, and there are many opportunities for infrastructure investments that could lead to increased visitation and enhancement of commercial benefits.

#### **4. Developing a monetization model to help finance management and development.**

In developing its protected areas system and dramatically increasing tourist visitation, Costa Rica saw the importance of generating revenue to help finance the development and management of protected areas and their infrastructure. SINAC was given the authority to charge resident and non-resident visitors user fees across a wide range of services (see Table 12). Doing so has enabled SINAC to effectively manage and maintain the areas under its purview. The services offered enhance the visitor experience by offering excellent infrastructure (e.g. trails, roads, zip lines, accommodations), amenities (e.g. parking, restrooms, food and beverage, storage, etc.), and recreation equipment and services. To date, the use of protected areas in Nova Scotia is completely free of charge, and the amenities available to visitors are minimal. Other jurisdictions, like Costa Rica, have recognized that visitors are willing to pay for access to protected areas and the amenities attached to them. A recent study by Gardner Pinfold on the economic impact of Nova Scotia's Rum Runners Trail examined trail users' willingness to pay to access and use the trail, which, when aggregated, totaled a potential revenue stream of \$1.5 million per year in development and user fees<sup>32</sup>.

#### **Box 4: Revenue Generation and Economic Impact – Overland Track, Tasmania**

The Overland Track, one of Australia's most famous hiking tracks, is located in the Cradle Mountain-Lake St Clair National Park, in Tasmania. The track runs for 65 km through terrain ranging from sheer mountains, temperate rainforest, wild rivers and alpine plains all in the Tasmanian Wilderness World Heritage Area<sup>1</sup>.

The Track has been a significant part of the Tasmanian tourism brand for many years, and it's making an important contribution to regional economic development and the broader Tasmanian economy. The Track generates revenue by charging a user fee of \$200 AUD to their approximately 8,000 visitors each year. The Parks and Wildlife Service (PWS) also sells merchandise and information packages, including a guidebook and map. Revenue generated during the 2013/14 season totaled \$1,247,551 AUD, with total Track expenditures equaling \$905,000 AUD. Net income generated was reinvested in the Overland Track through the employment of workers, development of infrastructure and signage, communications, and general operations.

A recent socio-economic analysis of the Overland Track estimated the value of direct and indirect tourism expenditure from the Track in 2012- 2013 was just over \$16 million AUD, with the creation of the equivalent of 85 full-time jobs<sup>2</sup>. PWS stated in the report that "The Track has a direct benefit to the many businesses that are associated with it through providing guided walks or transport for walkers to and from the track. Other businesses supply PWS with materials and/or services including track materials, products and services for the huts and toilets, energy supplies and helicopter services."

Sources:

1. [https://en.wikipedia.org/wiki/Overland\\_Track](https://en.wikipedia.org/wiki/Overland_Track)
2. <http://www.parks.tas.gov.au/file.aspx?id=37728>

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<sup>32</sup> *Economic Impact Study for the Rum Runners Trail*, Gardner Pinfold Consultants (2016).

## **5. Allowing and supporting private sector commercial activities in protected areas.**

The growth in visitation to Costa Rican protected areas has led to a dramatic increase in the number and scale of commercial operations in and around the areas. Many of the services available to visitors in

protected areas are provided by private commercial enterprises supported and enabled by government. While entrance and user fees are collected by SINAC, tourism revenues are generated and collected by private enterprises operating in and around protected areas. This provides for a vibrant ecotourism industry without the requirement of government to completely shoulder the responsibility of providing all services and maintaining infrastructure. The Nova Scotia government does not currently have the capacity nor the mandate to provide tourism-related services and develop and maintain infrastructure in protected areas. Working together with private industry

to develop this aspect of the protected areas system could be one way to attract and satisfy more visitors, thereby enhancing both commercial benefits and the protected areas experience.

### **Box 5: Ecotourism Concessions in the National Parks of Colombia**

Colombia's National Parks System provides ecotourism-related goods and services through contracts between the state and private operators (private, public, community or mixed). Under agreement with government, private vendors are licensed to provide lodging, food, administration of entrance fees, parking facilities and other complementary services, using infrastructure owned and built by the government in the national parks. This arrangement was established through a comprehensive review of existing legislation and an analysis of the socioeconomic implications of entering into these partnerships, which identified a significant opportunity for the government to improve its ecotourism services and increase its resources while attracting more visitors to national parks and protected areas.

*Tourism, Protected Areas and Communities: Case Studies and Lessons Learned from the Parks in Peril*  
Nature Conservancy / USAID

## **6. Integrating ecotourism and protected areas into broader tourism marketing strategy.**

Ecotourism and protected areas have become the cornerstones of Costa Rica's tourism attraction strategy. Tourism strategy has evolved from focusing solely on the country's natural beauty and culture to incorporating those attributes with modern, full-service, higher-end experiential and ecotourism attractions. The Costa Rican tourism industry has responded to the ever-expanding demands and requirements of modern tourists by investing in infrastructure, amenities, information provision, and tourism enterprise around and within protected areas. Nova Scotia's most recent tourism strategy and promotional campaign highlights outdoor activities that could occur in protected areas (e.g. hiking, kayaking, cycling, walking), although no mention of the areas is made in the strategy. A protected areas development strategy that includes key investments in infrastructure and amenities supported by a promotional campaign that highlights recreational opportunities in the areas is required to fully realize the potential of the province's protected areas.

### 7.3 100 Wild Islands - How the Costa Rica Model is Being Successfully Applied in NS

The model of identifying, protecting, developing, and promoting protected areas as a premier tourist and recreational user destination that has driven the enormous growth in visitation and economic impact in Costa Rica is in the early stages of implementation in the 100 Wild Islands region along the Eastern Shore of Nova Scotia. The 100 Wild Islands area (profiled in the Commercial Activities section of this report) contains “untouched white sand beaches, idyllic sheltered coves, and dramatic, windswept headlands, unique boreal rainforests, bogs and barrens, and over 250 km of shoreline...largely undisturbed by humans for over 10,000 years<sup>33</sup>”. The Nova Scotia Nature Trust (the Trust) has raised approximately \$7 million to date in support of the aim of protecting 1,100 hectares of private land through conservation agreements with island owners, land donations, and purchases. The Province of Nova Scotia is also contributing to this effort through existing and candidate provincial parks and by recently designating 1,850 hectares of provincially-owned islands as wilderness area. Together, these efforts have so far resulted in the protection of over 80% of the 100 Wild Islands’ coastal wilderness.

Recognizing these conservation lands as an asset, in 2014, the 100 Wild Islands area was identified as a candidate community for the Atlantic Canada Opportunities Agency (ACOA) Strategic Tourism Expansion Program (STEP). The Musquodoboit-Sherbrooke STEP was initiated in 2015 through the formation of a working group that included 17 local businesses and two municipal units. This STEP initiative was driven by four strategic priorities<sup>34</sup>:

1. **To Capitalize on the Nature-based Opportunity** - Define and build the destination area based on its unique selling proposition (USP) and positioning that focuses on the wild islands and outstanding nature-based tourism opportunities.
2. **To Build Success Through Engagement** - Engage community members, key influencers, and partners to broaden support for developing the area as a world-class tourism destination.
3. **To Advance Experiential Tourism Development** - Enhance and generate tourism products and experiences that align with the USP, brand positioning of the region, and the Nova Scotia brand.
4. **To Enrich Quality of Life** - Enrich the quality of life for residents of the destination area.

The STEP initiative ended in 2016 with completion of a strategic plan. This led to the establishment of the Wild Islands Tourism Advancement Partnership (WITAP) which intends to build on the success of both the 100 Wild Islands Campaign and the strategic plan created through STEP. WITAP has been tasked with continuing work outlined in STEP, which includes the identification of the region’s unique selling proposition (USP) and the strategy’s vision and positioning statements:

- **Unique Selling Proposition** - A unique network of ‘wild islands’ and coastal headlands.
- **Vision Statement** - Musquodoboit Harbour-Sherbrooke is internationally recognized as a sustainable one-of-a-kind Canadian coastal nature-based destination offering outstanding touring, outdoor, cultural and culinary experiences.
- **Positioning Statement** - Musquodoboit Harbour-Sherbrooke will be competitively positioned for the domestic and international tourism markets as a unique network of ‘wild islands’ forming a one-of-a-kind Canadian coastal touring and activity-engaging experience.

<sup>33</sup> <http://www.100wildislands.ca/#ecosystem>

<sup>34</sup> [https://tourismns.ca/sites/default/files/musquodoboithbr-sherbrooke-step-strategic\\_plan-april2016.pdf](https://tourismns.ca/sites/default/files/musquodoboithbr-sherbrooke-step-strategic_plan-april2016.pdf)



A number of key actions are now in progress, including developing:

- A comprehensive inventory and analysis of the natural and cultural heritage values and assets associated with the conservation lands along with a well-organized inventory and assessment of recreation opportunities and tourism assets for the region.
- A clearly understood and coordinated management approach for the conservation lands.
- A professionally developed and market-tested brand and concept.
- Well-linked and cohesive information resources available to help promote the region, attract investment, and advance the tourism development process.
- Effective communication tools and processes to ensure ongoing awareness of the region.
- An increased number of monetized experiential tourism products.
- More local employment opportunities connected to tourism and supporting industries

The identification of the 100 Wild Islands region's potential as a unique tourism destination, and the strategy developed to create and enhance commercial benefits that are a direct outcome of protecting the land and promoting its sustainable use can serve as a model for the development of other protected areas clusters throughout Nova Scotia.

## 8. CONCLUSION

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Nova Scotia's protected areas are a significant generator of commercial and socio-economic benefits. Small businesses that operate in close proximity to or within the boundaries of protected areas see a range of benefits that include increased attraction of clientele, unique and more diversified business opportunities, and the creation of a stable investment climate. Many businesses in Nova Scotia have been created, have grown, and continue to thrive because of the existence of protected areas in their region. Protected areas in Nova Scotia not only deliver critical ecosystem and climate change mitigation services, but contribute immensely to the very identity of our province and its ability to attract visitors who come here to see the natural beauty of our inland and coastal landscape.

To date, little development aimed at attracting visitors has occurred within protected areas in Nova Scotia. In many other jurisdictions around the world, significant investment has been made in infrastructure, services, marketing, and information resources all with the objective of creating recreational opportunities, increasing visitation and use, and enhancing the commercial benefits generated by protected areas. In some cases, government has developed user-pay systems and partnered with private industry to deliver services in order to generate revenue used in the development, maintenance, and management of their protected areas systems.

The 100 Wild Islands region of Nova Scotia provides some insight into the potential protected areas in the province have when strategic planning and multi-stakeholder collaboration are applied to developing a comprehensive and unique tourism destination centred around protected areas. Many small businesses are thriving in the region as visitation to protected areas and surrounding communities increases.

Significant opportunity exists in Nova Scotia to build on the accomplishments of the 100 Wild Islands initiative and emulate some of the more successful models in other jurisdictions to attract more visitors to protected areas around the province. Doing so would require increased collaboration among provincial, municipal, and federal government departments and strategic investment in infrastructure, information resources, marketing and communications, and regulatory review. To realize the many commercial and socio-economic benefits that protected areas have to offer, acknowledgement must be made of their value as premium recreation destinations and key assets upon which our provincial identity and tourism brand is based.