

# Five Bridge Lakes Candidate Wilderness Area Socio-economic Analysis Summary

June 2011

## Overview

Before a new wilderness area can be designated, an analysis of its socio-economic impact must be made available to the public. This is required by the *Wilderness Areas Protection Act*.

Here is a summary of a socio-economic analysis of the effects of designating Five Bridge Lakes Wilderness Area within Crown lands of the Chebucto Peninsula, in western Halifax Regional Municipality (HRM). This was prepared by Nova Scotia Environment, with input from the Department of Natural Resources. The study considers a range of social and economic benefits and costs of designation. It is not intended to be a strictly mathematical exercise, since many costs and benefits are difficult to quantify.

The study has been prepared as a discussion paper to foster awareness and support informed discussion and decision-making. Now, individuals and groups are invited to provide comment. Public comments will be reviewed by Nova Scotia Environment and considered in making final decisions on designation.

You can view and download the discussion paper, submit comments, and find more information about the candidate wilderness area (CWA) by visiting the department's web site, writing in, or calling the Protected Areas and Wetlands Branch until July 08, 2011.

## Effects of Designation

### Biological Conservation

Designation will help maintain large patches of roadless habitat, and typical examples of our natural landscape diversity. It is expected to maintain and potentially increase biodiversity within the candidate wilderness area and help protect endangered, threatened or rare species, such as mainland moose, olive-sided flycatcher or mountain sandwort. Protection also allows for the development of old forests, which have become uncommon in Nova Scotia.

### Maintaining Natural Processes

Designation will help secure and maintain valuable natural (ecological) processes, such as gas regulation/air quality,

water regulation, water supply, soil formation and erosion control, and waste treatment. These and other processes have regional, provincial, and global value, which can be considered as "ecosystem services". With protection of the land, these ecological processes / ecosystem services are predicted to be conserved and maintained.

### Climate Change Mitigation and Adaptation

Overall, designation of the CWA is predicted to increase climate change mitigation and adaptation values. The protection of forests and wetlands helps ensure continued carbon storage and increased carbon sequestration in the area. With protection, the present value of carbon storage potentially exceeds well over \$ 1 million compared with other land use options. Currently, these benefits are global. Nova Scotia may benefit more directly if carbon markets are established which recognize the role of land protection in storing atmospheric carbon.

### Mi'kmaw values

By protecting the land, designation should secure or enhance some Mi'kmaw uses or activities, such as hunting, fishing, trapping, berry or mushroom picking (personal use). Designation can also help protect mainland moose, along with sites of archaeological and cultural value which may occur within the area. Some other activities are ordinarily prohibited or restricted. For example, the *Wilderness Areas Protection Act* prohibits building permanent hunting camp structures, and restricts public vehicle use. The method of hunting or fishing may therefore be affected by designation.

Discussions are ongoing between the province and the Nova Scotia Mi'kmaq to explore how potential conflicts between designation and Mi'kmaw interests can be resolved; and how to integrate Mi'kmaw interests in planning and managing this and other wilderness areas.

### Forestry Values

Designation prohibits commercial forest harvesting. Potential foregone gross revenue is estimated at \$1.3-2.5 million, based on calculations of total present stumpage value of all the potential working forest of the area. These figures assume repeated harvesting of 100% of the potential working forest, with the usual operational restrictions.

### Mining Values

Future exploration and mine development are prohibited by designation, except where pre-existing mineral explora-



tion licenses exist. Several mineral occurrences have been discovered in the CWA, mostly consisting of minor uranium occurrences, however, no economic deposits were discovered. With the existing legislated ban on uranium exploration and mining, established in 2009, the CWA is considered to have decreased potential for economic deposits. Several areas within the CWA are underlain by fine-grained granitic rocks and have good potential for use as crushed stone aggregate resource. No existing licenses or known economic deposits occur within the area. The effects of designation on mining values cannot be quantified, as they primarily relate to lost opportunities related to the discovery and development of potential deposits, which are currently unknown.

### **Energy Values**

Designation will prohibit future energy exploration and development. No pre-existing licenses or rights exist in the candidate wilderness area. The underlying rock types of the area are mostly granites from the late Devonian period, which are not known to host petroleum deposits.

Wind energy potential of the candidate wilderness area is generally moderate; nearby coastal lands have much higher wind energy potential. A local community group has expressed interest in exploring the potential for community wind power development near the eastern shore of Hublely Big Lake, within the candidate wilderness area. Designation of these lands would prohibit such development.

### **Tourism Values**

Designation will protect lands suitable for developing and marketing nature tourism opportunities. The discussion paper does not quantify existing tourism values in dollar terms. The popular Bluff Wilderness Hiking Trail offers the best existing tourism opportunity. Other trails and related nature tourism opportunities could be developed within this scenic, near-urban landscape. As a result of designation, tourism values for the area are expected to increase over time.

### **Research and Education Values**

Designation of Five Bridge Lakes Wilderness Area will secure a protected land base which is ideal for education and research on natural ecosystems. The area has already been a focus of a variety of research and environmental monitoring projects. The discussion paper does not quantify current research and education values. As a result of designation, these values are predicted to increase.

### **Vehicles**

Designation will restrict the use of vehicles within the wilderness area, including off-highway vehicles (OHVs). However, socio-economic effects of designation are expected to be minimal if major, connecting routes remain available for use. Nova Scotia Environment is willing to authorize OHV

use along the Old Coach Road and Fire Road through a trail management agreement. This would maintain primary connections within the regional OHV trail system. Riding on side trails will be prohibited.

### **Sport Fishing, Hunting, and Trapping**

The CWA offers good angling and hunting opportunities. Since fishing, hunting, and trapping are generally permitted in wilderness areas, designation will have a limited impact on these activities; although use patterns may change due to vehicle use restrictions. In the long run, protection of the land will help ensure that these activities remain available and viable into the future.

### **Outdoor Recreation**

Designation will help secure low-impact, self-propelled outdoor recreation opportunities such as hiking, canoeing, trail running, bird watching, etc. The existing natural settings that form the foundation for these activities will be protected. Wilderness recreation in the area is likely to increase over time.

### **Cultural and Heritage Values**

Designation of lands with cultural and heritage significance helps protect the province's uniqueness and diversity. It contributes to a sense of identity and community. Key indicators used to assess cultural and heritage values include archaeological significance, and long-standing traditions of hunting, fishing and recreation. Designation is expected to benefit cultural and heritage values of the candidate wilderness area.

### **Existence Values**

Existence values are benefits which are not related to direct use of an area. Maintaining large natural spaces can strengthen cultural identity and heritage values, and inspire artists and others. They also represent a legacy for future generations. Designation will help conserve existence values associated with the candidate wilderness area lands.

### **Other Values**

Due to project scope and data limitations, the socio-economic analysis does not consider all possible values. For example, the impacts of designation on human health, adjacent land values, community, or regional development are not evaluated.

#### **Contact Information**

Protected Areas and Wetlands Branch  
Nova Scotia Environment  
Box 442, 5151 Terminal Road, Halifax, NS, B3J 2P8  
Tel: (902) 424-2117 Fax: (902) 424-0501  
Email: [protectedareas@gov.ns.ca](mailto:protectedareas@gov.ns.ca)  
website: [www.gov.ns.ca/nse/protectedareas](http://www.gov.ns.ca/nse/protectedareas)