Kelly River and Raven Head Candidate Wilderness Areas

Consultation Newsletter #3 - Spring, 2011

(Chignecto Crown Lands Evaluation)

Overview

On April 21, 2011, the Province released proposed boundaries of two new wilderness areas in Cumberland County. Wilderness areas are significant natural areas designated under the *Wilderness Areas Protection Act*. They protect the natural environment while providing opportunities for wilderness recreation, camping, sport fishing, hunting, education, research, community stewardship and other activities.

The proposed wilderness areas were identified by Nova Scotia Environment (NSE) and the Department of Natural Resources (DNR), following a joint review of more than 35,000 hectares of Crown land in the vicinity of Chignecto Game Sanctuary. This review began in October 2009, after the government announced its intent to consult widely to evaluate options for establishing a large wilderness area within these Crown lands.

Our initial consultation newsletter, released in December 2009, explained why these Crown lands were being evaluated. We also described how we would work and consult with others during this evaluation. Another newsletter, released in November of 2010, summarized what we heard during preliminary consultation with interested parties and individuals.

In this third newsletter, we are sharing boundaries of the two proposed wilderness areas (see pages 8 and 9) and outlining key factors that were considered in their selection.



Tell Us What You Think

We wish to ensure a variety of opportunities for public input. Here are several ways you can become informed and involved:

- Visit an information display in a local community
- Take part in a public open house meeting
- Mail or email your comments, or phone us
- Complete our comment sheet
- Contact us to arrange a meeting

For further details, see page 2.



The government's goal is to meet conservation objectives, while reducing impacts on other land uses. The proposed boundaries are not final. Changes can still be made. If you have an interest in this area, please participate in the consultation between May 11 and August 12, 2011.

Consultation Process

Government's goal is to carry out public consultation, finalize boundaries and make decisions on designating the proposed wilderness areas by later this year.

To learn more about the proposed wilderness areas, you can visit an information display between May 18 and June 15, 2011 at these locations:

- Advocate Harbour Library
- Amherst Four Fathers Library
- Parrsboro Fundy Geological Museum
- River Hebert Library
- Springhill Miners Memorial Library

You can also share your interests at one of our public open house meetings.

Open Houses

- Southampton Community Centre Sunday May 29, 1:30 - 5:00pm
- Joggins Joggins Fossil Centre Monday May 30, 3:00 - 7:00pm
- Halifax Saint Mary's University Burke Building Room 205, Wednesday June 1, 3:00 – 7:00pm
- Parrsboro Fundy Geological Museum – Saturday June 4, 11:00 – 3:00pm
- Advocate Harbour Fundy Tides Recreation Centre - Sunday June 5, 1:30 - 5:00pm
- Amherst Wandlyn Inn -Monday June 6, 4:00 - 7:00pm

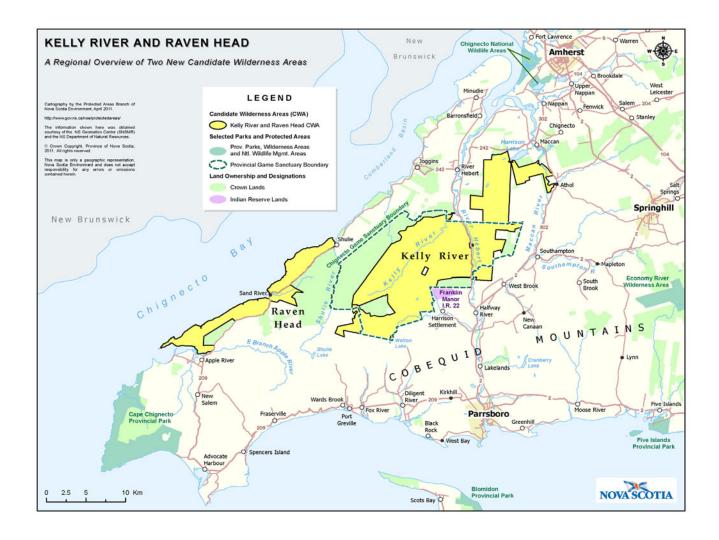


Please write us at any time between May 11 and August 12, 2011 to share your thoughts. A comment sheet is available on NSE's website (www.gov.ns.ca/nse/protectedareas/wa_chignectocrownlands.asp) and will also be available at local information displays, and at open house meetings. You may also send us a letter.

During the consultation, staff are available to meet directly with individuals and interested parties, including municipal, community, recreation, business, and environmental organizations. During this time, we will also continue to consult with the Nova Scotia Mi'kmaq to ensure that Mi'kmaq interests are appropriately considered.

If you would like to set up a meeting with government staff, please call 902-424-2117 or email us at: protectedareas@gov.ns.ca.

Please share your comments or plan to meet by August 12, 2011 to ensure that your views are considered. After this, we will prepare and release a summary of comments received.



Why New Wilderness Areas?

Wilderness areas legally protect some of our best, natural spaces. Designating these two proposed wilderness areas will help ensure that Cumberland County always has wild spaces for nature and people to enjoy.

The candidate wilderness areas have significant rivers and other waterways, old forests, species-at-risk habitats, and coastline. They include many natural features and ecosystems that are not represented elsewhere within Nova Scotia's parks and protected areas system.

As proposed, the new wilderness areas would contribute almost 0.5 per cent to the province's goal of protecting 12 per cent of Nova Scotia's landmass by 2015, as outlined in the province's *Environmental Goals and Sustainable Prosperity Act*. This additional 0.5

per cent would increase the amount of legally protected land in Nova Scotia to about 9.2 per cent.





Boundary Selection & Status

The candidate wilderness areas include Crown lands with significant ecological and wilderness recreation values. No private land is being proposed for protection (see maps on pages 8 and 9).

Both candidate wilderness areas are now treated as special areas of Crown land. They are not yet legally protected under the *Wilderness Areas Protection Act*.

Once they are legally designated, these wilderness area lands will be managed by NSE in cooperation with DNR. While land management goals change with wilderness area designation, DNR staff will continue to have an active role in monitoring, enforcement and other management responsibilities.

SOCIO-ECONOMIC ANALYSIS

WILDERNESS AREA VALUES

Natural features

Kelly River Candidate Wilderness Area includes most of the watershed of Kelly River and extends, northeast, to a tidal portion of Maccan River. The total area is 20,567 hectares, or about 50,820 acres. This is an area of extensive, mature and older forest; natural rivers and streams; and habitat for many species. Large patches of habitat have had little or no human disturbance over at least

the last 40 years.

At Chignecto Bay, Raven Head Candidate Wilderness Area extends 36 km along the Bay of Fundy coast, between Shulie River and Apple Head. The recently-purchased Apple Head property was not initially considered in the Crown land review. However, close to 80 per cent is included in the candidate wilderness area because of the significant opportunity to protect this part of the Fundy coast. Extensive coastal cliffs alternate with sheltered coves, beaches and salt marshes. The total area is 4,753 hectares, or about 11,745 acres. The length of coast and total size of the area is similar to Cape Chignecto Provincial Park.

Forest cover of the candidate wilderness areas is about two-thirds softwood and one-third hardwood. The more common species include red, black and white spruce; white, red and jack pine; larch; white and yellow birch; and red and sugar maple. One of three major jack pine concentrations in Nova Scotia occurs within Kelly River Candidate Wilderness Area. Fine stands of older yellow birch-red spruce; sugar maple-yellow birch; and red pine occur today. Much of the forest is 60-80 years old, following extensive forest fires in the 1930s and 1940s. As this forest ages, it should become more diverse and complex within the proposed wilderness areas, sustaining habitats that are suitable for many species.

Both of these candidate wilderness areas offer unique opportunities to protect large,





relatively natural areas of scenic Crown land within Cumberland County. They would also contribute to the regional and international protected areas network. Crown lands in this area have been identified as a top priority forest conservation area by a number of studies by The Nature Conservancy (US), Nature Conservancy of Canada, Two Counties One Forest, and researchers at Dalhousie University. Few large, relatively intact forest blocks remain in the Northern Appalachian/ Acadian Eco-region. The size and geographic location of these candidate wilderness areas near the Isthmus of Chignecto means these lands would play an important role in maintaining ecological connections between regions, provinces and countries.

Rare and Uncommon Species

Both candidate wilderness areas provide habitat for species at risk, including mainland moose, wood turtle, and Inner Bay of Fundy Atlantic salmon. Habitat is suitable for peregrine falcon, which is provincially listed as a vulnerable species. At least 12 other rare species have been recorded.

Landscape representation

Raven Head and most of Kelly River candidate wilderness areas lie within Nova Scotia's Chignecto Ridged Plain natural landscape. Establishing these proposed wilderness areas will protect important parts of this natural landscape. In addition, part of Kelly River Candidate Wilderness Area, near Welton

Lake, is within the Chignecto Slopes natural landscape.

Connected Waterways (Rivers, Lakes and Wetlands)

The undeveloped watercourses and wetlands within the proposed wilderness areas provide important habitat for fish, waterfowl and other water dependent species.

The proposed Kelly River Wilderness Area straddles a wild portion of River Hebert, along with major tributaries, including Kelly River, Atkinson Brook and the upper reaches of Halfway River. Impressive floodplain forests line parts of Kelly River and River Hebert. A few scattered, small lakes occur here too. The proposed Raven Head Wilderness Area includes the lower reaches of Sand River and numerous short streams which drain directly to the coast. Both proposed wilderness areas include a variety of freshwater wetlands, as well as some salt marshes.

Establishing the candidate wilderness areas will help maintain the ecological health of these important habitats.

The Coast

A small proportion of Nova Scotia's coast is provincially-owned, and little of our coast is currently protected.

The proposed Raven Head Wilderness Area would protect 36 km of undeveloped coast along the Bay of Fundy. Much of this coast is





exposed to the open ocean, and consists of cliffs, headlands and small coves. Sheltered shores at the estuaries of Apple River and the smaller Sand River are bordered by estuarine flats, salt marsh and beaches. Narrow bands of salt marsh also occur along Maccan River, at the northeastern extent of the proposed Kelly River Wilderness Area.

Natural Services

In addition to their role in conserving species and habitat, naturally functioning ecosystems support important natural processes such as atmospheric gas regulation, air quality, water quality and flow regulation, soil formation and waste treatment. Although the value of these natural services is difficult to quantify, they provide direct benefits to society. Establishing the proposed wilderness areas will help maintain and may enhance these natural services.

One natural service which is currently receiving much attention is carbon storage in natural ecosystems. Research suggests that more carbon is stored in protected forests than in forests managed for forest harvesting. A reasonable estimate, based on the scientific literature, is that the candidate wilderness areas have the potential to store 300,000 to 700,000 more tonnes of carbon if protected, than if managed for forestry. Such carbon storage has potential value to society by reducing expected climate change. While such benefits would primarily be global, this could

potentially result in direct financial benefit to the province through future carbon trading systems.

Recreation in a Wilderness Setting

Both candidate wilderness areas offer exceptional opportunities for recreation and nature-based tourism in a wilderness setting – connecting individuals and families with nature. With their scenic beauty, wildlife and natural setting, these areas are suited to activities such as hiking, camping, hunting, sport fishing, canoeing, sea kayaking, cross-country skiing, snowshoeing, bird watching and more. Hiking trails and other infrastructure may be developed, in time, to better support some of these activities. Designating the candidate wilderness areas will help maintain these opportunities over the long term.

See Vehicle Use for discussion of off-highway vehicle and other vehicle use (pages 13 and 14).

Game Sanctuary and Hunting Rules

Established in 1938, the Chignecto Game Sanctuary has been managed for many years for wildlife, forest harvesting and other uses. It is highly valued for long-bow hunting. Longgun and cross-bow hunting, and trapping are prohibited. These hunting regulations are under the *Wildlife Act*, which is administered by DNR.





About 70 per cent of Chignecto Game Sanctuary overlaps with Kelly River Candidate Wilderness Area. DNR's Game Sanctuary depot and immediately adjacent Crown lands at River Hebert will remain outside the boundaries of Kelly River Wilderness Area.

Establishing this wilderness area will not affect existing hunting regulations; although vehicle access vehicle access will be affected. As proposed, vehicles would only be permitted: (1) on roads outside the boundaries (e.g. Goodwin Road) or 2) on roads inside the boundaries that are managed under agreement with an organization (see Vehicle Use pages 13 and 14 and map on page 8).

Trapping, long gun hunting and crossbow hunting would be permitted within the proposed wilderness area lands, as before, where these do not overlap with the Sanctuary. However, bear-baiting will not be permitted within either of the proposed wilderness areas.

Cultural Heritage

Crown lands within both candidate wilderness areas have along history of human use and hold much meaning to local residents and others. Sites such as the Sugar Camp and Stewart MacDonald Memorial Grove are physical examples of this heritage. These can be maintained within a wilderness area. Many of the recreational uses of the candidate wilderness areas and adjacent Crown lands are also important to local cultural heritage.

Existence Values

People place value on knowing that protected lands exist in Nova Scotia or near where they live. Protecting natural spaces for the future helps give people a sense of place, maintains long-held connections to the land, and speaks to the kind of society that people value and support.

We have already heard from many people who care deeply about the Crown lands around Chignecto Game Sanctuary, including their use of these lands. Many would like these lands to be enjoyed by future generations, and some have worked for years, seeking conservation of this area.

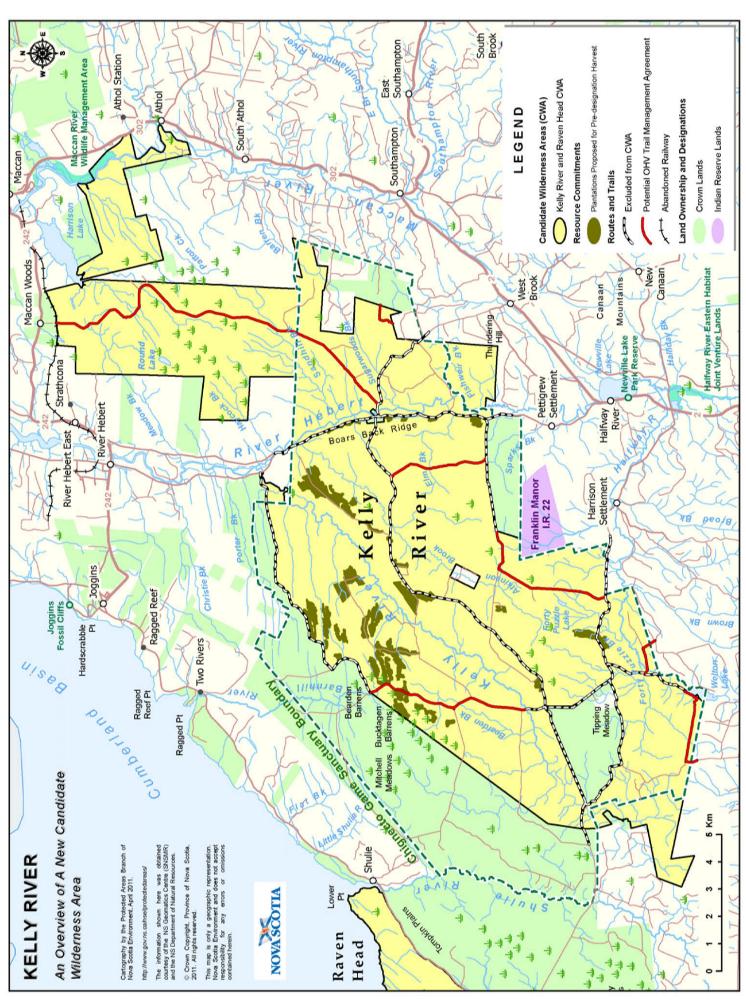
COMMERCIAL VALUES

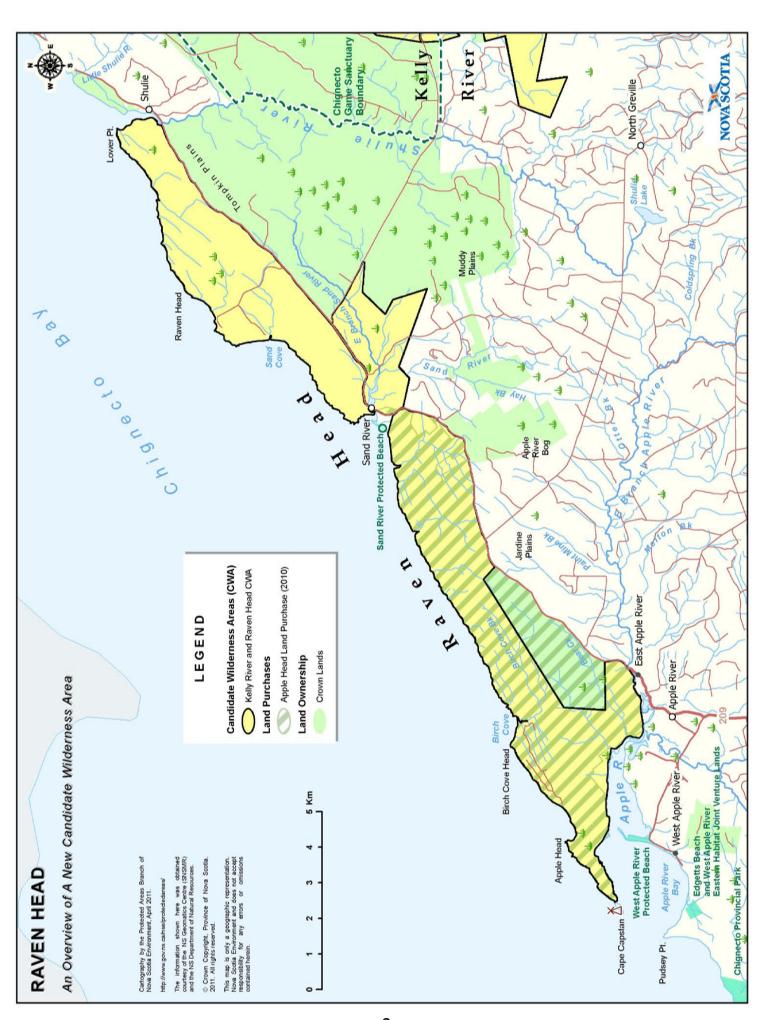
The candidate wilderness areas include forests with significant wood fiber and have potential for development of oil and gas, mineral resources and wind energy. They also have value for research, education and nature-based tourism.

Forestry Resources:

Both candidate wilderness areas have a long history of forest use and management. The province has commitments to supply wood to various sawmills, as well as legal obligations to provide wood to some forestry companies. The Crown lands in the vicinity of the









candidate wilderness areas are currently not licensed for forest harvesting (see ahead for discussion on Apple Head (page 10).

About 78 per cent of Kelly River Candidate Wilderness Area is classified as forest, as is about 88 per cent of Raven Head Candidate Wilderness Area. The forests are generally of good merchantable quality.

Commercial forest harvesting is not permitted within wilderness areas. The proposed candidate wilderness areas include 25,320 hectares of Crown lands, with about 2,100,000 cubic metres of merchantable wood volume. Under the province's existing old forest policy, about 400,000 cubic metres of that wood occurs in stands which are already off-limits to harvesting, meaning the actual volume affected by the new wilderness areas would be approximately 1,700,000 cubic metres, or about two per cent of available Crown land wood volume in Nova Scotia. In practice, this potentially available wood volume would be lower, as this figure does not reflect additional withdrawals for wildlife habitat and watercourse regulations (wildlife clumps and riparian buffer strips), and special management restrictions for operating in moose habitat.

Almost 10,000 hectares of Crown land was excluded from the proposed wilderness areas to help meet wood supply commitments and

provide flexibility for other land uses.

About 1,300 hectares of forest plantations occur within Kelly River Wilderness Area. The province is proposing a modified harvest of 500 hectares of these plantations before the area is protected. Many of these plantations have displaced and inhibit the growth of natural forests. Some also contain species such as Norway spruce or Scotch pine that are not native to this area. The modified harvest is being proposed to help restore the natural forest, while providing some wood supply. At least 25 per cent of trees will be kept to provide shade, habitat, and future woody debris on the forest floor. Only planted species will be targeted for cutting - natural regeneration of native species will not be harvested. No harvesting will occur in the Stewart McDonald Memorial Grove or within 300 metres of Kelly River or Atkinson Brook.

Harvesting at Apple Head

Figures noted above do not account for the large property between Apple Head and Sand River that was purchased in February 2010 from Wagner Forest Management Ltd. This property includes 22 km of undeveloped coast and has a long history of forestry activities.

A 2,365 hectare portion of this property is now part of Raven Head Candidate Wilderness Area. The purchase agreement for this property allows the former owner to harvest a defined amount of forest, including close to one-third of the area now within the





candidate wilderness area. No harvesting will occur within 200 metres of the coast. This harvest will help the former owner meet wood supply commitments to other companies. Consistent with the purchase agreement, wood harvesting must be completed no later than December 31, 2012. Some harvesting also occurred before the agreement was signed in 2010.

While this harvesting may seem at odds with land protection, this agreement allowed the province to buy the largest piece of privately owned ocean frontage in Nova Scotia at an affordable price. The Province's view of this is long term – these lands will recover to a more natural condition over time. This purchase and protection decision is an investment for future generations.

Wind Energy Resources:

Much of the best wind energy potential in Nova Scotia occurs in coastal areas. According to Nova Scotia's Wind Energy Atlas, wind energy potential along the entire Chignecto Bay – including at Raven Head Candidate Wilderness Area - is thought to be good to excellent, based on predicted average wind speeds. About 37 per cent of coastal frontage along Chignecto Bay, between Cape Chignecto and Minudie Marsh, is within Raven Head Candidate Wilderness Area. By comparison, most of Kelly River Candidate Wilderness Area has poor potential for wind energy development.

Currently, no wind farms have been developed along Chignecto Bay. In 2010, Cumberland Regional Economic Development Agency (CREDA) and the Municipality of the County of Cumberland released a Regional Energy Strategy for Cumberland County. As part of this strategy, CREDA and the Municipality hope to encourage wind energy development in promising areas. The most promising of these are near Joggins and further northeast due to proximity of existing transmission infrastructure. Other areas of the Chignecto Bay coast could attract wind energy development, if additional transmission infrastructure is developed.

Wind energy development is not permitted within wilderness areas. Establishing Raven Head Wilderness Area would mean that any future wind energy development along Chignecto Bay will be limited to coastal and near-coastal lands outside the Raven Head lands.

Petroleum Resources:

Parts of Nova Scotia have been identified to have good potential for discovery and development of onshore oil and gas resources. No commercial production has occurred to date; however, onshore oil and gas exploration licenses have been issued for large parts of Cumberland County and elsewhere in Nova Scotia. These licenses span all Crown lands in the vicinity of Chignecto Game Sanctuary, including both candidate wilderness areas.





Both candidate wilderness areas overlap, with about 10 per cent of the conventional onshore oil and gas exploration agreements held by Eastrock Resources Ltd. In addition, Stealth Ventures holds rights to develop coal bed methane in a large area that includes the north-eastern part of Kelly River Candidate Wilderness Area, or about 17 per cent of the company's license. Jointly, with Department of Energy, we have met with representatives of both companies to understand their interests.

Oil and gas exploration and development is generally prohibited in wilderness areas. However, pre-existing exploration and development rights can be honoured under the *Wilderness Areas Protection Act*, provided the activities do not degrade the wilderness area.

Mineral Resources:

Mineral resource potential of the two candidate wilderness areas is low to moderate, based on DNR's mineral resource potential mapping. There are no existing mineral exploration licenses within the two candidate wilderness areas.

Mineral exploration and development is generally prohibited in wilderness areas. Preexisting exploration and development rights can be honoured under the *Wilderness Areas Protection Act*, provided the activities do not degrade the wilderness area.

Overall, designation of the candidate wilderness areas is expected to have relatively

low impact on potential mineral development in Nova Scotia.

Tourism Values:

Wilderness areas secure a long-term, protected land base for wilderness recreation and nature-based tourism, including ecotourism.

Both candidate wilderness areas offer excellent opportunities for developing trails and other nature-based tourism-related infrastructure. The coast and river environments may be especially appealing. Tourism experiences here would complement those available at the nearby Fundy Geological Museum in Parrsboro, Cape Chignecto Provincial Park, and recently designated UNESCO World Heritage Site and museum at the Joggins fossil cliffs.

The Tourism Industry Association of Nova Scotia (TIANS) believes that protected lands in the Chignecto Sanctuary area will help ensure the long term sustainability of tourism in this part of Nova Scotia.

Research and Education:

Protected areas are important sites for research and education because the extent of human impacts is limited. These areas can serve as long-term reference sites for research activities. Use as field sites for education at all levels (elementary to post-secondary) can also increase public awareness of habitat management issues and natural heritage





values.

Current research efforts in the area include:

- Permanent sample plots maintained by DNR to provide information on forest growth and response to silviculture treatments;
- NSE water quality monitoring station on Kelly River, operated in cooperation with Environment Canada; and
- Monitoring of mainland moose movements and status by DNR.

These research programs may continue within a wilderness area, under terms of a research license. NSE actively encourages partnerships in support of ecological research in wilderness areas.

VEHICLE ACCESS

The province understands that vehicle access is important to many who use and enjoy the candidate wilderness areas and adjacent Crown lands. Through boundary design, major roads have been left outside the boundaries of both candidate wilderness areas.

Vehicle use on the following routes will be unaffected by the proposed new wilderness areas (see pages 8 and 9). This includes:

 The public highways along Boars Back Ridge (along River Hebert) and between Apple River and Shulie;

 The following Crown forest access roads: Goodwin / Thunderhill Road; and road connections from Goodwin Road:

 (1) to Welton Lake, (2) to Kelly River at 12
 Mile Bridge, and (3) to Harrison settlement via Tipping Meadow.

Vehicle access to Welton Lake and Kelly River at 12 Mile Bridge will remain available to all vehicle users.

A total of 83 km of roads on nearby Crown lands have been left outside of boundaries of the candidate wilderness areas.

The province is committed to maintaining essential off-highway vehicle (OHV) route connections between communities, and recognizes that this depends on use of some forest access roads which are now within Kelly River Candidate Wilderness Area. Vehicle access is generally prohibited in wilderness areas. However, some use can be authorized under the *Wilderness Areas Protection Act* in certain situations. In new wilderness areas, like these, certain routes can be designated for continued vehicle use through an agreement with a group or organization if the route is an essential link within a regional trail network.

Government will consider using agreements with OHV groups or other organizations to permit continued vehicle use on seven forest





access roads (37 km of road) within Kelly River Candidate Wilderness Area.

These agreements outline the responsibilities and conditions for maintaining and using these routes. They also promote stewardship by local vehicle users.

In addition, vehicle access licences can be issued for specific uses such as reaching private land in-holdings, accessing an existing legal interest, or maintaining a campsite lease.

Motorboats may be used in all wilderness areas, except Tobeatic Wilderness Area, for the purpose of sport fishing during fishing season by individuals with a valid fishing licence. Note that, in most cases, you are not permitted to use a vehicle to cross wilderness area lands to access a lake or watercourse.

The candidate wilderness areas offer few opportunities for motorboat use. Limited use occurs at Maccan River, within Kelly River Candidate Wilderness Area. While motorboats are used on Welton Lake, this lake is not within Kelly River Candidate Wilderness Area.

PRIVATE LAND

The proposed wilderness areas include only Crown lands. Boundaries have been designed to minimize any impacts on private land access. A private parcel on Atkinson Brook is surrounded by lands of Kelly River Candidate Wilderness Area. Under the Wilderness Areas Protection Act, the Minister of Environment must license access to such a property, subject to possible conditions. The province will work with private landowners on a case-by-case basis to resolve any access issues.

CAMPSITE LEASES

Five campsite leases are located within the northeastern portion of Kelly River Candidate Wilderness Area, at Harrison Lake and along Maccan River. No campsite leases occur within Raven Head Candidate Wilderness Area.

Existing campsite leases will be honoured as pre-existing interests, and renewed as wilderness camp licences under the *Wilderness Areas Protection Act*.

Continued boat access to these campsite leases will be permitted. Where applicable, OHV access to these camps can be licensed to support maintenance. Until a licensing program is developed, interim policy allows for continued vehicle access to campsite leases/licenses on a direct route.

Unauthorized (illegal) camps will be treated in the same way as they are on any Crown land, and may be subject to posting and removal.



For general information on wilderness areas, please refer to the Protected Areas website or contact us for copies of these publications:

- Nova Scotia Wilderness Areas: Questions and Answers
- Wilderness Areas Protection Act
- Protecting Wilderness: A Summary of Nova Scotia's Wilderness Areas Protection Act
- Keep it Wild: A Guide to Low Impact Recreation in Nova Scotia's Wilderness Areas

PLEASE TELL US WHAT YOU THINK

We have worked to develop candidate wilderness area boundaries that meet conservation goals while considering many interests. We would now like to hear from you.

Please participate in the consultation process for these two very significant wilderness area proposals. For details about the process, please refer to the first pages of this consultation newsletter.

CONTACT INFORMATION

Nova Scotia Environment
Protected Areas & Wetlands Branch
Box 442, 5151 Terminal Road
Halifax, NS B3J 2P8
Tel: 902-424-2117 Fax: 902-424-0501
Email: protectedareas@gov.ns.ca
Web: www.gov.ns.ca/nse/protectedareas

