HIGWAY #113 ASSESSMENT OF POTENTIAL IMPACT ON THE WILDERNESS RECREATIONAL POTENTIAL OF THE BLUE MOUNTAIN AREA

FINAL REPORT

Submitted To:

Nova Scotia Transportation and Public Works
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June 2004

Ref No. TV22101



June 29, 2004

TV22101

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Dear Ms. Margueratt:

Re: HIGWAY #113 - ASSESSMENT OF POTENTIAL IMPACT ON THE WILDERNESS RECREATIONAL POTENTIAL OF THE BLUE MOUNTAIN AREA – FINAL REPORT

AMEC Earth & Environmental (AMEC) is pleased to submit to you two hardcopies for the above-mentioned project.

If you have any questions, please do not hesitate to contact the undersigned.

Regards,

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EXECUTIVE SUMMARY

The Nova Scotia Department of Transportation and Public Works (NSTPW) is proposing that Highway 113 will be a 4-lane, 100-series highway connecting Highway 102 (near Exit 3) and Highway 103 (just North of Exit 4) in Halifax County.

The Blue Mountain Crown land area is approximately 1528 ha in size and in general terms is bounded by the Kingswood Subdivision development to the Northwest, Fraser and Maple Lakes to the Southwest, Lewis Lake, Ragged Lake and Kearney Lake to the Northeast, and Suzie Lake, and Quarry Lake to the Southeast. The proposed alignment will divide the Blue Mountain Crown block into two distinct portions (Figure 2). The northern portion will be approximately 327 ha in size and is characterized as being relatively fractured by existing privately owned properties, forestry operations, and residential neighbourhoods. The portion of the Crown block that is on the south of the proposed alignment contains a number of lakes and streams, is more contiguous in shape and size, and not as subjected to adjacent developments as the northern portion. This southern portion would be approximately 1201 ha in size.

To fully understand the potential impacts to existing and potential wilderness recreation areas, the current and proposed future development surrounding this crown block had to be fully considered. Current land uses identified included residential (e.g. Kingswood Subdivision, Blue Mountain Estates, etc.), commercial/industrial (e.g. Bayers Lake Business Park, and Lakeside Industrial Park), and transportation routes (e.g. Hammonds Plains Road, Highway 103, and Highway 102). Proposed future development identified during this study includes a majority of the current subdivisions in the area (e.g. Kingswood, Blue Mountain Estates, and Kearney Lake Estates), and Bayers Lake Business Park area.

The Blue Mountain Crown block area is considered to be a high quality resource area in terms of recreation and open space potential. Outdoor wilderness recreational activities do occur within the study area, including in the immediate area of the proposed alignment. These activities, which are participated in by residents and tourists alike, include recreational fishing, hunting and trapping, canoeing and kayaking, hiking and walking, cross-country skiing, and mountain biking.

The proposed Highway 113 alignment will create some minor impacts to the Blue Mountain Crown block in the following manner:

- Division of the block into two distinct areas, and
- Limit access across the proposed alignment.

With the proposed alignment being located near the fractured northern portion of the block and through two private parcels of property within the Crown block, the impacts to the block continuity has been minimized.

While access will be limited across the alignment, both areas of the Crown block will still be accessible from current locations. Additionally, with the construction of the overpass over the Maple-Fraser Lakes interconnect, and the addition of a multi-use underpass in the area of Kingswood subdivision will provide continuous trail access across the alignment.

Based on these findings, the potential impact of the Highway 113 alignment on the wilderness recreational activities of the Blue Mountain Crown property are not considered significant.



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1.0 INTRODUCTION

The Nova Scotia Department of Transportation and Public Works (NSTPW) is proposing that Highway 113 will be a 4-lane, 100-series highway connecting Highway 102 (near Exit 3) and Highway 103 (just North of Exit 4) in Halifax County. Figure 1 shows the existing area and the proposed Highway 113 alignment.

On 2 May 2001, an environmental assessment registration document for the project, dated April 2000, was filed by NSTPW with the Nova Scotia Department of the Environment and Labour (NSDEL). Additional information was issued by NSTPW to NSDEL in Addendum #1, dated April 2001.

Upon review of the registration document, the Minister of NSDEL informed NSTPW by letter, dated 25 May 2001, "Specific information is required regarding the impacts and mitigation strategies for the publicly proposed Blue Mountain-Birch Cove Lake wilderness area in regards towilderness recreation values". A copy of the Minister's letter is included in Appendix 1.

1.1 LOCATION AND DESCRIPTION

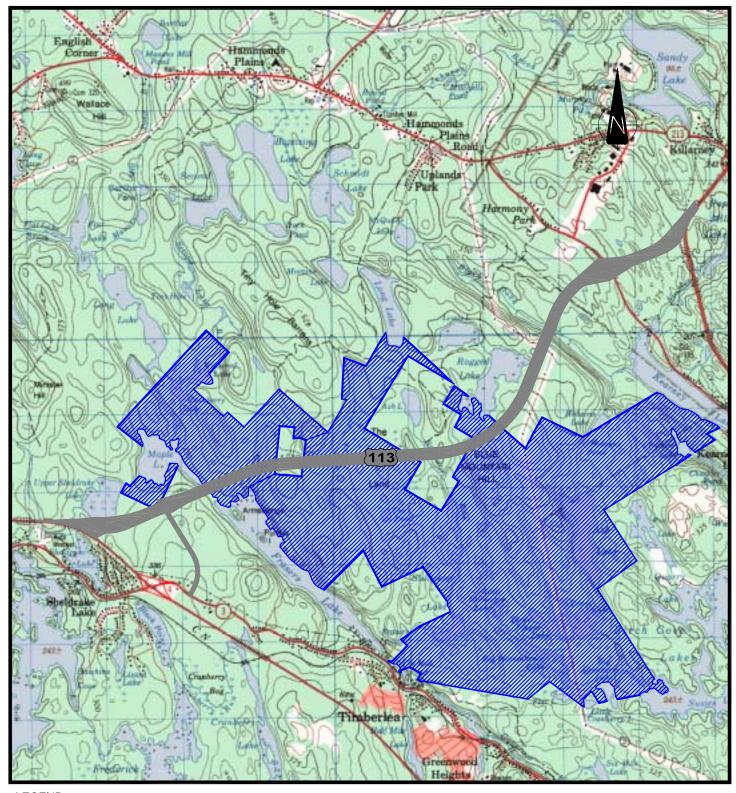
This section provides a general overview of the area as well as specific details for the Blue Mountain block of Crown Land. Further detailed descriptions of the area intersected by the proposed Highway 113 are described in Section 6 of the Environmental Assessment Registration Final Report (AGRA Earth & Environmental, 2000).

The Blue Mountain Crown land area is approximately 1528 ha in size and in general terms is bounded by the Kingswood Subdivision development to the Northwest, Fraser and Maple Lakes to the Southwest, Lewis Lake, Ragged Lake and Kearney Lake to the Northeast, and Suzie Lake, and Quarry Lake to the Southeast (see Figure 1).

The Blue Mountain Crown block is classified as the South Mountain division of the Granite Uplands district of the Atlantic Interior Region (NS Museum, 1997) and is considered a representation of the South Mountain Rolling Plain natural Nova Scotia landscape (Natural Landscape #7). This type of area is typified by the generally uniform topography with the underlying granite bedrock thinly covered with coarse granite till and large glacial boulders. The Blue Mountain block is characterized by a rounded landscape of shapeless ridges and depressions in which there are scattered hills and knolls. Numerous lakes, ponds and stillwaters occur within the area.

The proposed highway alignment is located along the northern edge of the Blue Mountain Crown land block, and will pass between Maple Lake and Fraser Lake and extend to south of Ragged Lake and Ash Lake and continue past the north end of Kearney Lake to Highway 102.





LEGEND

Blue Mountain/Birch Cove Area (Provincial)

FIGURE 1 **GENERAL SITE LOCATION**

SCALE 1:50 000

WILDERNESS RECREATION - STATUS, POTENTIAL IMPACTS AND MITIGATION CONSIDERATIONS OF PROPOSED HIGHWAY 113 HALIFAX, NS



The proposed alignment intersects two blocks of private property that are within this crown block. These properties are owned by private landowners and are approximately 21 ha and 151 ha in size. The larger of these two properties is owned by Barrett Lumber and has undergone extensive logging activities. The smaller property is privately owned and currently has no development activities underway.

The proposed alignment will divide the Blue Mountain Crown block into two distinct portions (Figure 2). The northern portion will be approximately 327 ha in size and is characterized as being relatively fractured by existing privately owned properties, forestry operations, and residential neighbourhoods. The portion of the Crown block that is on the south of the proposed alignment contains a number of lakes and streams, is more contiguous in shape and size, and not as subjected to adjacent developments as the northern portion. This southern portion would be approximately 1201 ha in size.

1.2 WILDERNESS RECREATION AND A REGIONAL CONTEXT

Nova Scotians have a long history of utilizing the province's wilderness areas for recreational pursuits. Wilderness recreation as a term has many different meanings to different members of society. In addition, it is also defined very differently across the various jurisdictions. In a general sense, wilderness recreation is by definition confined to those activities, which can be engaged in substantially on nature's terms and not at the expense of the resource. Human recreation in wilderness areas should reflect the nature and purpose of each of the wilderness areas being utilized.

The Nova Scotia *Wilderness Areas Protection Act* describes wilderness recreation activities as those, which have minimal environmental impact such as walking, hiking, canoeing, kayaking, and cross-country skiing. These actives are generally permitted in wilderness areas that are protected under the Act.

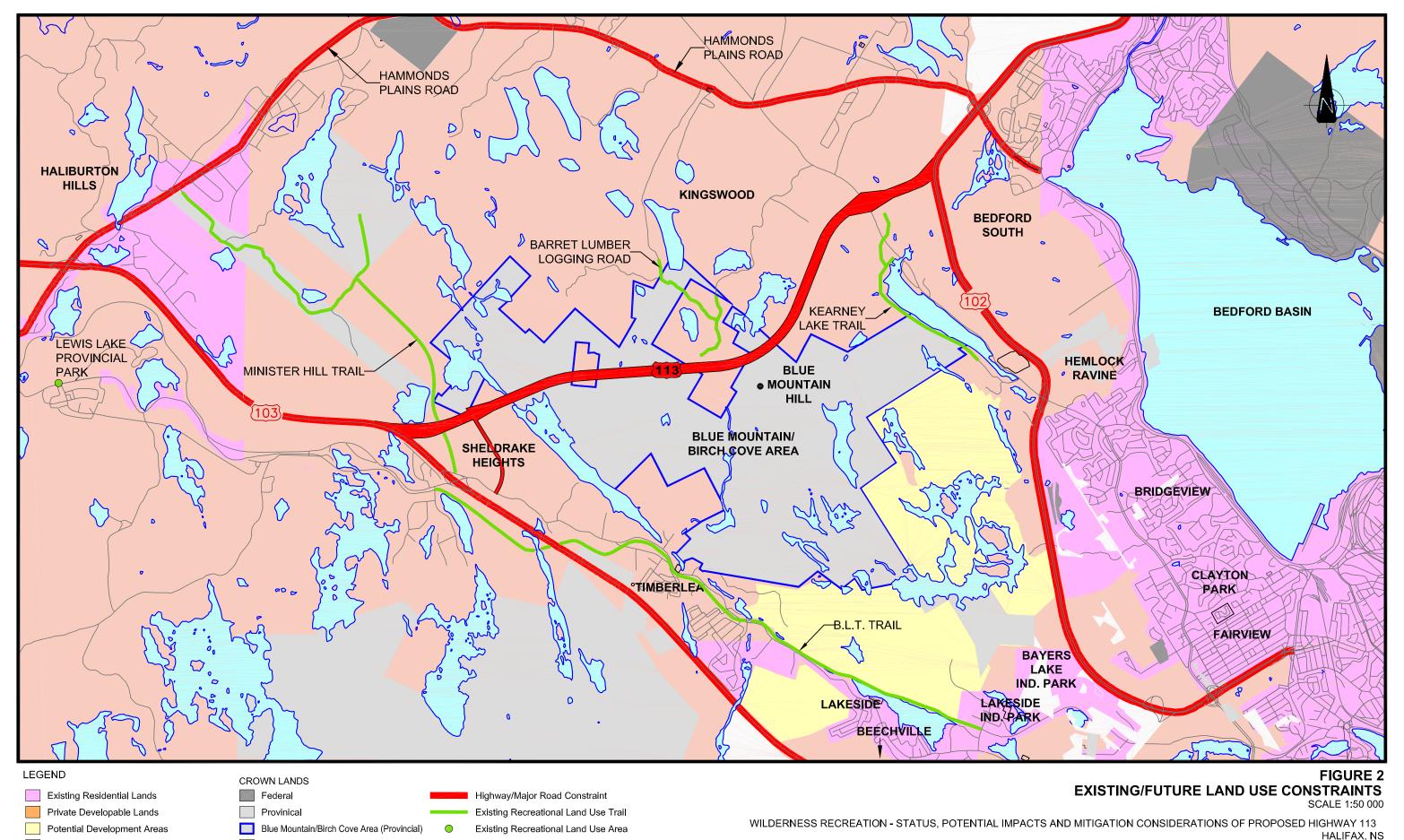
Passive and self-reliant wilderness recreational activities are those, which have minimal impact upon the natural environment and wildlife and upon the enjoyment and seclusion of other people. These typically depend solely upon the personal efforts and capability of the individual, without the aid of tracks, or mechanical transport, telecommunications, or other facilities. This level of wilderness recreation is generally confined to appropriate self-reliant activities such as bush-walking, approved climbing and caving, swimming, hiking, backpacking, cross-country skiing, horseback riding, semi-primitive camping, and hunting or fishing.

In urban settings, such as HRM, the term wilderness recreation tends to take on broader interpretation to accommodate the broader range of interests of its urban and sub-urban population. For example, constructed and groomed walking trails, off-road mountain biking trails, picnic areas, serviced camping sites, city parks and supervised swimming areas also tend to be considered under the category of wilderness recreation. For the purposes of this assessment, this definition is considered to be the most appropriate with respect to the location of the Blue Mountain area, as well as its context within the surrounding land-uses.

This report will assess the current recreational uses of the Blue Mountain area as well as its potential for recreational use and the potential impacts of the proposed Highway 113 development on these recreational uses. This assessment will also include a review of relevant legislation, as well as existing and planned land-use developments in the surrounding area.



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Municipal

All Other Lands - No Data



2.0 CONTACTS

Contact was made with several regulatory agencies, organizations and individuals that have knowledge of, or involvement with Blue Mountain area. The contacts that were made and the results of those consultations are outlined below.

Nova Scotia Department of Environment and Labour - David MacKinnon

Mr. MacKinnon works for the Protected Places Division of the Department of Environment and Labour. He indicated that when areas are evaluated for protection under the legislation, they typically need to meet specific criteria, which includes a contiguous area larger than 2000 ha, and to contain no roadways. While the Blue Mountain Crown area is less than the critical area that is typically considered for a protected wilderness area, Mr. MacKinnon indicated that this area could still be considered for evaluation in the future. Currently no evaluation has been conducted. Some limited information has been collected with aerial photography and mapping with respect to the environmental attributes of the area. This information is considered preliminary and has not been subjected to verification or ground truthing exercises.

HRM Parks Planning - Marcus Garnet and John Charles

Mr. Garnet and Mr. Charles were contacted regarding HRM plans or policies with regards to wilderness recreation in this area. While no specific plans or policies exist for this area, these gentlemen indicated that preserving this area for wilderness pursuits fits within HRM's general objectives of preserving greenspace areas within the HRM region. While development applications for the areas adjacent and within the Blue Mountain area are currently being reviewed by HRM, they indicated that they are being evaluated to look at options that limit encroachment on this area. HRM is also developing a regional strategy and implementation plan for greenspaces and recreational areas in HRM. This document is currently in draft.

Nova Scotia Department of Natural Resources - Tim Miller

Mr. Miller was contacted regarding information on wilderness recreation in the Blue Mountain area. While Mr. Miller had no specific information regarding wilderness recreation in the area, he did forward to us correspondence that indicated that NSDNR considered this area to have significant backcountry/wilderness recreational resources. Correspondence also indicated that is area is classified as Category 1 (C1) under the provincial Integrated Resource Management (IRM) planning process, and as such can be considered for a variety of land uses.

Nova Scotia Sport and Recreation Commission - Jody Conrad

Mr. Conrad indicated that there are a lot of canoeing areas in the Blue Mountain – Birch Cove Lake area as well as some informal camping in the area, particularly around Susie Lake. He also communicated that there are a number of trails in the area, which are used as biking, walking and cross-country ski trails. Mr. Conrad said most people access the area either along the Highway 102, or by going in behind the Kent Building Supplies store in Bayers Lake. There is also access to the trails through Kingswood.

Mr. Conrad characterized the recreational use in the area as "Informal", as it is not heavily marketed by tourism, no developed campgrounds exist, and it is mostly utilized by local people.



Canoe Kayak Nova Scotia - Rod Lake

Mr. Rod Lake is the Vice President of member services for Canoe Kayak Nova Scotia, as well as the Chairmen of the mapping committee for the same organization. He is an active naturalist and a long time resident of Timberlea.

Mr. Lake has explored a vast amount of the Blue Mountain – Birch Cove Lake area and is familiar with many of the watercourses, wetlands and trails in the area. Mr. Lake indicated that one of the canoe routes, primarily used by the local population (Haligonians and Nova Scotians), is in the path of the proposed Hwy 113. Where Maple Lake drains into Frasers Lake, there is a deep stream that connects the two lakes and this is a popular canoe route to local people. This stream is a part of a canoe route that stretches up into Long Lake (the one NOT surrounded by Kingswood Subdivision), into Flat Lake and into Coxs Lake; which is north of the proposed Hwy 113 alignment. Many of these areas are only accessible by canoe due to the dense underbrush and wet ground conditions of the area. Mr. Lake also indicated that Fishers Brook which is with the proposed Highway 113 alignment is of an intermittent/seasonal nature and typically dries up in the summer.

Mr. Lake indicated that most of the prime recreational area is located south of the proposed alignment and if a proper crossing of the stream connecting Frasers Lake and Maple Lake is constructed, there should be little impact to the recreational canoeing in this area.

3.0 APPLICABLE REGULATORY FRAMEWORKS

3.1 PROVINCIAL GUIDELINES AND EVALUATIONS

Crown lands in the Blue Mountain area are owned by the Nova Scotia Provincial government and hence governed by several pieces of legislation.

3.1.1 Nova Scotia Wilderness Areas Protection Act

The most applicable piece of legislation to the discussion or wilderness recreation in the Blue Mountain area is the Nova Scotia *Wilderness Areas Protection Act* (the Act). The Act protects and administers wilderness areas are provincially-significant protected areas designated under the Act and is jointly administered by the Department of Natural Resources and the Department of Environment and Labour. Wilderness Areas protect representative (typical) examples of Nova Scotia's natural landscapes, our native biological diversity, and outstanding natural features. The *Wilderness Areas Protection 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. The secondary objectives are use related. Activities such as wilderness recreation, environmental education and scientific research are encouraged. Sport fishing and traditional patterns of hunting and trapping are also generally permitted. The Act came into effect on December 3, 1998 for 31 Crown-owned areas as Wilderness Areas, consisting of about 5% of the provincial land-mass. These wilderness areas are

- Polletts Cove Aspy Fault
- Jim Campbells Barrens
- Sugarloaf Mountain
- North River
- Middle River Framboise

- Margaree River
- French River
- Middle River
- Trout Brook
- Gabarus



- Scartarie Island
- Bonnet Lake Barrens
- Liscomb River
- Alder Grounds
- Tangier Grand Lake
- Clattenburgh Brook
- Terrence Bay
- Portapique River
- McGill Lake
- Tobeatic
- Bowers Meadows

- Ogden Round Lake
- Canso Coastal Barrens
- The Big Bog
- Boggy Lake
- White Lake
- Waverly-Salmon River Long Lake
- Economy River
- Cloud Lake
- Lake Rossingnol
- Tidney River

While the primary purposes of wilderness areas are protection-oriented, they also provide significant opportunities for recreation in a wilderness setting. Wilderness recreation activities such as hiking, canoeing, skiing, birdwatching and kayaking are encouraged. Sport fishing, and traditional patterns of hunting and trapping are also generally permitted. Use of vehicles is restricted and must be authorized.

The Blue Mountain area is not a protected wilderness area under the Act. Discussions with representatives from the Protected Areas Branch of NSDEL have indicated that while this area is not currently being evaluated for protection, a full evaluation of the features of this area has not been conducted. Some geospatially referenced data has been collected for this area for future evaluation but has not been verified with ground truthing surveys.

3.1.2 Intergrated Resource Management (IRM)

The Province is currently engaged in an integrated resource management (IRM) planning process for provincially managed Crown lands. This process is coordinated by the Department of Natural Resources (NSDNR) and involves input from a number of provincial departments and stakeholder groups. IRM is defined by NSDNR as a process that:

"...coordinates resource use so that the long term sustainable benefits are optimized and conflicts among users are minimized. IRM brings together all resource groups rather than each working in isolation to balance the economic, environmental, and social requirements of society. IRM includes planning for minerals, forests, recreation, wilderness, energy, wildlife, and parks."

NSDNR has now completed a strategic plan for the Central Region (which encompasses the proposed alignment area) that is intended to take into account

- provincial goals and objectives
- the inventory of resource values
- an analysis of existing and potential resource utilization, and
- input from the public.

The IRM strategy assigns a category to all crown lands that represents it uses and potential concerns regarding future land use. These categories are:



Category 1 (C1) – Lands available for the full range of resource uses, and include lands for which a low level of conflict among competing uses is anticipated.

Category 2 (C2) - Lands with greater competing values and land use. Most land users are permitted, but greater planning or modification is necessary to enhance compatability. The purpose of this category is to ensure that all values are taken into account in the planning process in areas where land use conflicts have been identified.

Category 3 (C3) - Lands specifically allocated to special uses and where other resource activities may be limited, modified, or denied. C3 lands would include "Provincial Parks, Wilderness Areas, Nature Reserves, Protected Beaches, core habitat for endangered or threatened species and areas where there is consensus that the value or feature is truly unique and the impact of limitations use limitations is acceptable.

The Blue Mountain Crown Block has been designated as a C1 category. There is recognition of recreational use of the area in the form of hiking and canoeing, but also there is the potential for other land uses such as forest harvesting and mineral exploration.

3.2 HRM PLANNING

The Nova Scotia Provincial *Municipal Planning Act* provides governing authority to HRM and other Nova Scotia municipalities. Under this Act, HRM governs the future development of lands within the HRM boundaries through a number of mechanisms and approvals. A key tool in the planning for future developments within HRM is the Municipal Planning Strategy (MPS). The purpose of a municipal planning strategy is to provide statements of policy to guide the development and management of the municipality and, to further this purpose, to establish policies which address problems and opportunities concerning the development of land and the effects of the development, and which provide a framework for the environmental, social and economic development within a municipality.

A specific MPS is developed for each of the HRM subregions and covers specific issues within those areas such as regional context, land use policies, development control guidelines, environmental health services, transportation needs, and the provision of community services. The Blue Mountain area is covered by the Beaverbank, Hammonds Plains and Upper Sackville (15, 18, 19) MPS. Within this MPS, the Blue Mountain Crown block has been provided a land use classification as well a zoning code. These are discussed below:

<u>Generalized land uses</u> – The Blue Mountain area has a Rural Resource Designation. This is applied to "backlands" in HRM areas which are generally undeveloped and without public road access. Major use of these lands is for resource activities and the designation establishes resources uses and resources industries as the priority. This designation encourages and supports resource development, resource based economic growth, and recreation uses while supporting measures to protect the natural environment. Major residential development may expand into this area but will be monitored in terms of its effect on resource development and its impact on the existing communities. Some light industrial developments will also be permitted within these designated areas.

<u>Municipal zoning</u> – The Blue Mountain Crown block has a municipal zoning designation of MR-1 which is defined as a Mixed Resource Zone which permits resource use, resource industries, recreation uses, communication transmission stations, single unit dwellings, mobile dwellings and business activities.



Parkland Strategy

An additional component of the municipal planning, is the Halifax Parkland Strategy. This is a plan that was adopted by the former Halifax City Council in 1995. It focuses on taking a long-term vision for the parkland system in the municipality. A major initiative of this strategy is a proposed greenway system of trails and parkways to connect major parks, campuses and pedestrian nodes. While there has been limited implementation of the parkway recommendations, there has been some progress with respect to walking and biking trail linkages, such as the conversion of abandoned rail lines to trails.

4.0 CURRENT LAND USES

The following sections provide a description of the existing land uses in the surrounding area. These uses include those within the Blue Mountain block as well as those adjacent to the crown block.

4.1 RESIDENTIAL DEVELOPMENTS

The Halifax region has undergone a substantial population increase and an associated rapid expansion within the last ten years. As a result, there has been a significant increase in the level of development in rural areas, specifically in subdivisions and residential developments. Residential areas around the Blue Mountain crown block have been significantly expanded or have been newly created to address the increased need for housing. The residential areas adjacent to the Blue Mountain area include:

- Kingswood Subdivision,
- Blue Mountain Estates,
- The community of Timberlea,
- The Stillwater Lake community,
- The Sheldrake Lake community, and
- Kearney Lake.

Many of these areas share boundaries with the Blue Mountain Crown block and as a result, many of the residents these communities are also the most frequent users of the area.

4.2 COMMERCIAL/INDUSTRIAL

In addition to residential development, there has been a significant increase in the construction and utilization of commercial and industrial developments in the area. Two significant developments include:

- Bayers Lake Business Park, and
- Lakeside Industrial Park.

These Business/Industrial Parks, especially Bayers Lake, have had extreme growth within the last five years and are expected to continue this rate of expansion in the foreseeable future. The Bayers Lake Park caters to a mix of retail, services and commercial users and has had recent large growth in the retails and services sectors. The Lakeside Park is considered more of an industrial oriented area and has also undergone recent expansion and development.



In addition to these Business/Industrial Parks, there is a forestry operation within the confines of the Blue Mountain area. Barrett Lumber owns a 150.6 ha site within the main Blue Mountain area. This private parcel will be intersected by the proposed Highway 113 alignment.

This area has undergone extensive forestry activities and most commercial timber has been removed from the area. Logging roads have been constructed into this parcel by Barrett and are used by local residents for access to the Blue Mountain Crown block. The main logging road is accessible through Kingswood Subdivision and is barred from traffic by a locked gate. A key for the gate can be obtained by providing a donation to Scouts Canada. The logging roads are in relatively good shape and are easily accessed by either truck or passenger vehicle. There is also some evidence of ATV use in this areas as well. The future activities on or uses of this property by Barrett Lumber are unknown at this time.

4.3 TRANSPORTATION

Three major transportation routes surround the Blue Mountain Crown block:

- Hammonds Plains Road (Highway 213);
- Highway 103; and
- Highway 102.

This existing road infrastructure provides major access routes for commuters to the downtown areas from the outlying suburban residential area. Highway 102 and 103 are also truck routes for goods being delivered to the HRM and between the South Shore and northern parts of the Province

All three of these highways carry large volumes of traffic on daily basis, but only the Highway 102 and 103 are designed for this level of usage. The Hammonds Plains Road is a 200 series secondary highway that was intended only for a moderate level of rural traffic. This level has been exceeded due to the significant increase in residential developments and the associated commuting in communities such as Kingswood, White Birch Hills, Lucasville, Glen Arbour and Bedford. The concern with regards to this level of traffic is a major reason for the development of Highway 113.

5.0 PROPOSED FUTURE DEVELOPMENT

Pressures continue in the greater HRM area to provide housing solutions to a steadily increasing population. As a result, existing subdivisions are undergoing continuous expansion and new subdivisions are being planned for future development.

Specifically in the Blue Mountain area, the existing Kingswood subdivision presents the most direct expansion pressure to the Blue Mountain Crown block. Housing in this subdivision is either currently at the Crown property or in the planning stages for expansion into this area.

Expansion is also currently underway in both the Blue Mountain Estates Subdivision and the Kearny Lake Estates, which encroach on the Crown lands from the northeast, and a subdivision plan has been developed for the Timberlea/Fraser Lake area on the southwest portion of the Crown block.



Expansion of the Bayers Lake Industrial Park is continuing at a very rapid pace. It is anticipated that this expansion activity will continue over the next few years.

A number of potential housing communities in the immediate area have also been evaluated for future development. These potential developments have been given a further evaluation for development potential in the HRM Greenspace Study (CBCL 2002). These areas include the Bedford West/Bedford South, and Governors Lake/Birch Cove Lake areas.

6.0 EXISTING AND POTENTIAL USE OF THE BLUE MOUNTAIN AREA FOR WILDERNESS RECREATION

6.1 GENERAL

There is no officially designated recreational land use along the proposed alignment or within the Blue Mountain block. In addition there are no federal or provincial parks or park reserves in the immediate vicinity of the study area. However, there is one provincial park outside of the proposed alignment study area (Lewis Lake Provincial Park), which is approximately 3 kilometres south of the proposed alignment.

The Blue Mountain Crown block area is however considered to be a high quality resource area in terms of recreation and open space potential. Outdoor wilderness recreational activities do occur within the study area, including in the immediate area of the proposed alignment. These activities, which are participated in by residents and tourists alike, include recreational fishing, hunting and trapping, canoeing and kayaking, hiking and walking, cross-country skiing, and mountain biking (Figure 3).

During past public meetings sponsored by the Department of Natural Resources (DNR) to consider IRM issues on Crown lands, strong support was voiced by some members of the public, and stakeholder groups for legislative protection of the Blue Mountain Crown lands for wilderness recreation. The recreational value of the Blue Mountain block have been promoted in Halifax County (Canadian Hostelling Association - Nova Scotia, 1977) and Canoe Routes of Nova Scotia (Canoe Nova Scotia Association and Camping Association of Nova Scotia, 1983). The former describes a number of hiking trails in the area, while both describe up to 11 kilometres of canoe routes.

The economic activity generated by recreational activities is expected to contribute moderately to the local economy.

6.2 DAY HIKING, CROSS-COUNTRY SKIIING AND MULTI-PURPOSE TRAILS

BLT Trail

Local residents of Beechville, Lakeside and Timberlea (BLT) are actively involved in the development and promotion of a local trail system. A section of abandoned railroad track that runs through these communities was converted to a multi-use trial that forms part of the Trans-Canada Trail System. This is a maintained trail that used by hikers, bikers, ATV users and cross-country skiers, and has been surfaced with crush rock for most of its 9.5 km length. The trail is accessed from the Lakeside Industrial Park and follows the north side of Governors Lake and Trunk 3 before crossing the highway at Nine Mile River. The trail then proceeds along the south side of Trunk 3 until it veers south and crosses under the Highway 103 near Cranberry Lake. The trail continues southward until it ends at Silver Birch Drive in Hubley. This trail is



south of Highway 103 at Exit 4 and will not be impacted by the proposed Highway 113 development.

Kearney Lake Trail

A rough and challenging hiking trail exists along the south side of Kearney Lake. The trail begins at the Maskwa Canoe Club and follows the edge of the Lake around until it crosses over the Kearney Lake Road. This trail is intended for advanced and well-conditioned hikers or cross-country skiers. This trail is also described in Section 6.5 as it is used by local mountain bikers. The hiking portion of the trail as described by the Trails Nova Scotia website, will not be impacted by the proposed Highway 113 development.

Minister Hill Trail

The Minister Hill Trail is described as a multi-use trail that is primarily used by hikers, mountain bikers and cross-country skiers. The primary access point is off the Hammonds Plains Road near Stillwater Lake, and begins in the Haliburton Hills Subdivision, at a roadway that is blocked by a gate. The trail is approximately 16 km in length and continues around Ministers Hill towards Maple Lake. The trail continues on towards Sheldrake Heights where it terminates near the residences on Maple Lake Drive and Merganser Avenue. This trail also provides access to Maple Lake for Sheldrake Heights Subdivision residents. Highway 113 will sever this access to Maple Lake from Sheldrake Heights.

Logging Roads

In addition to trails systems described above, there is a secondary use of existing and abandoned logging roads in the local area. Specifically in the Blue Mountain area, there are logging roads that have been constructed by Barret Lumber Ltd. to conduct forest harvesting in the 2 private lots within the provincial Crown block. These roads have locked gates to restrict vehicle access but do provide access from Kingswood for hikers, mountain bikers and crosscountry skiiers. These roads lead into into the woodlots and terminate at the extents of these properties, which corresponds roughly with the proposed Highway 113 alignment. These roads also provide easy access to local residents and other users to Ash Lake (the smaller and more northerly of the two Ash Lakes) for fishing and canoeing activities.

6.3 FISHING

Some recreational angling by local residents has been reported in the lakes and streams of the Blue Mountain area, but no catch statistics are available. The recreational fish species present in the area include:

- Brook Trout (Salvelinus fontinalis);
- Brown Trout (Salmo trutta); and
- Yellow Perch (Perca flavescens).

Access to fishing locations is limited to those watercourses or lakes that are accessible via trails or by small boat.



6.4 CAMPING

Within the Blue Mountain area, there are no designated camping areas and there have been no reports of campers using this area. While some wilderness camping may occasionally occur in this area, it is more likely that, due to its limited size and multiple access points, this area is more conducive and suitable for day use, as opposed to overnight camping.

6.5 MOUNTAIN BIKING

Mountain biking as a recreation sport has increased dramatically over the last number of years. Mountain bikers require some form of trail for riding and due to its recent popularity, a number of developed and undeveloped trails in and around HRM are utilized on a seasonal basis by mountain bikers. These trails range from developed multi-use trails such as the Trans-Canada trail system for families and novice riders, to undeveloped rough single track trails that are used by more advanced off-road riders. While some concern has been raised about the impacts of mountain biking on the natural environment, it is generally accepted as a low impact recreational sport that utilizes wilderness areas for both aesthetics as well as riding challenges.

In the areas adjacent to the Blue Mountain crown lands, a few trails are currently utilized by mountain bikers. The following sections outline these trails:

BLT Trail - (see description in Section 6.2)

Kearney Lake trail (Mountain Bike Trails, Randy Gray, 2003) – This unmarked and undeveloped trail starts off Saskatoon Drive near the Maskwa Canoe Club on Kearney Lake. It is an approximately 10 km trail that requires some advanced riding ability. It proceeds westward along Kearney Lake before veering off towards Blue Mountain Estates. It then loops back to the starting point. Due to development along Kearney Lake and in the Blue Mountain Estates area, this trail has been shortened or diverted around private property. The proposed highway alignment will intersect a portion of this trail.

<u>Dan's Disaster Trail (Mountain Bike Trails, Randy Gray, 2003)</u> – This trail is an extension of the above described Kearney Lake Trail. It starts on the Kearney Lake trail just west of the Kearney Lake and proceeds southward along the powerline corridor to Raines Mill Drive in the Lakeside Industrial Park. It is again a technically difficult trail that is mostly overgrown from regenerating vegetation. From the Lakeside Industrial Park, the trail connects with other trails to the Bayers Lake Industrial Park. It is not anticipated that this trail will be interrupted by the proposed Highway alignment.

6.6 CANOEING

As previously described, NSDNR and Canoe/Kayak Nova Scotia both identified Maple Lake and Frasers Lake as a popular canoe route. The canoe route between Maple and Frasers Lake, which will be crossed by the proposed highway, makes up a section of the canoe route from Cox Lake off the Hammonds Plains Road to St. Andrews Anglican Church in Timberlea.

6.7 VISUAL AESTHETIC RESOURCES

Blue Mountain is promoted as a scenic vista. NSDNR states that Blue Mountain Hill, a 152 m promontory just south of Ragged Lake, is a popular destination for hikers (Brian Kinsman, NSDNR, personal communication, 1999). From Blue Mountain Hill, the area's highest



elevation, hikers can view Timberlea, Bedford and the Halifax region. The recreational values, including visual resources, of the Blue Mountain block of land have been promoted in <u>Hiking Trails and Canoe Routes in Halifax County</u> (Canadian Hostelling Association - Nova Scotia, 1977).

Additional scenic vistas also occur in the Blue Mountain area overlooking Fraser Lake with elevations of approximately 125 m in height.

6.8 RECREATIONAL OPPORTUNITIES IN ADJACENT AREAS

In addition to the current recreational activities that occur in the Blue Mountain area described above, a number of opportunities exist for recreational pursuits in the general HRM region and adjacent areas. These areas include

Parks	Uses		
Mount Uniacke Provincial Park	Hiking, camping		
Oakfield Provincial Park	Hiking, Swimming, Boating		
Laurie Provincial Park	Camping, Hiking, Swimming, Boating		
Queensland Beach Provincial Park	Swimming		
Hubbards Provincial Park	Day camping		
Lewis Lake Provincial Park	Hiking, swimming, day camping		
Cleveland Beach Provincial Park	Swimming		
Crystal Crescent Beach Provincial Park	Hiking, Swimming		
Rainbow Haven Beach Provincial Park	Swimming		
Lawrance Town Beach Provincial Park	Hiking, Swimming		
Long Lake Provincial Park	Hiking, Swimming		
2nd Lake Provincial Park	Hiking, Swimming		
Waverly/Long Lake Protexted Area	Hiking, canoeing		
Terrence Bay	Hiking, mountain biking		
Hemlock Ravean	Provincial leased to HRM, hiking, biking		
Campgrounds			
Colonial Camping	Hiking, Swimming		
Hatfield Farms	Hiking, other		
Woodhaven Park			
Shubie Municipal Campground	Hiking, Swimming		
Habbards Beach Campground	Hiking, Swimming		
Seaside Camping Grounds	Swimming		
Wayside Camping Grounds	Swimming		
King Neptune Campground	Swimming		
Other			
Jack Lake Trails	Cross-Country Skiing, hiking, biking		
Shubie Park	Cross-Country Skiing, hiking, biking		



7.0 POTENTIAL PROJECT IMPACTS TO WILDERNESS RECREATION AND RECOMMENDED MITIGATION

The following sections outline the potential impacts of the proposed Highway #113 development of wilderness recreation

7.1 BLOCK INTEGRITY AND CONTINUITY

The development of the proposed Highway 113 will divide the Blue Mountain Crown block into two distinct areas and interrupt the continuity of this area. The area north of the alignment will be the smaller of the two areas and will be only 327 ha in size as opposed to the larger southern portion, which will be approximately 1201 ha in size.

For the purposes of wilderness recreation it is advantageous to maintain as large and as contiguous a block of land as possible. While the proposed alignment will divide the Blue Mountain into two distinct areas, the smaller northern area is considered less desirable from a wilderness perspective because of adjacent residential development and the presence of two privately owned parcels (one which has been undergone forest harvesting activities) within the Crown block.

One of the criteria for selecting the location of the proposed alignment was to minimize the fragmentation of contiguous areas. This objective is met with the existing alignment and the impact to the integrity and continuity of the Blue Mountain Crown Block has been minimized.

7.2 ACCESS TO BLOCK FOR WILDERNESS RECREATION

Access points to the Blue Mountain area will not be impacted. While access across the proposed alignment will be limited, the blocks that are north and south of the proposed aligment will still be accessible from the areas they are currently accessed from, Kingswood and Susie's Lake respectively. Access to the Maple Lake from the Sheldrake Heights subdivision will also be maintained by the Highway 113 underpass.

7.3 CANOEING/KAYAKING

Both of the major canoe routes, Birch Cove Lakes and the Stillwater-Maple-Fraser-Governor Lakes, will be maintained with the implementation of the Highway 113 overpass over the interconnecting stream between Maple and Fraser Lakes.

7.4 HIKING/CROSS-COUNTRY SKIING

While hiking and cross-country activities will continue in each of the two blocks, there will be some interruption to these activities across the easement. Specifically, residents of Sheldrake Heights will not be able to access Maple Lake and the Ministers Hill Trail, and Kingswood residents will not be able to access trails to Blue Mountain and the southern portion of the Crown Block. Access to these areas will still be available from alternate access points. In order to maintain the current level of access to these areas for local residents, it is recommended that access across the highway easement be maintained via underpass structures. These structures will be required in the Maple Lake-Fraser Lake area, and in the vicinity of Blue Mountain.



7.5 SCENIC VANTAGE AREAS

The proposed alignment is located to the north of the two areas that provide the most potential for scenic vantage points. The Blue Mountain itself, is located just southwest of the proposed alignment with the other potential vantage point next to Fraser Lake is over 1 km to the south of the proposed alignment.

Previously submitted NSTPW documents have identified that Blue Mountain has potential for aggregate extraction. While this may be true, consultation with the agencies and organizations outlined in this report have indicated that Blue Mountain is an important hiking destination in the area and provides the best vantage point for the area. It is therefore recommended that Blue Mountain not be used for the purposes of aggregate extraction. If Blue Mountain is maintained as a vantage point, there will be no impacts to vantage areas other than to change the visual landscape to the north to include the proposed highway. There will be no interruption of visual sight lines to the south and east (towards Chain Lakes).

7.6 CAMPING

No established camping areas occur within the Blue Mountain Crown block, therefore there will be no impact on camping from the proposed Highway 113 development.

7.7 MOUNTAIN BIKING

While there will be some potential limitations to mountain biking by limiting the ability to cross the proposed alignment, the existing established mountain bike trails will not be impacted, as the main mountain bike trails are accessed from the Bayers Lake Business Park. As with previous highway alignments in the HRM, there is the potential for additional mountain biking trails to develop adjacent to the highway right-of-way.

8.0 CONCLUSIONS

The proposed Highway 113 alignment will create some minor impacts to the Blue Mountain Crown block in the following manner:

- Division of the block into two distinct areas, and
- Limit access across the proposed alignment.

With the proposed alignment being located near the fractured northern portion of the block and through two private parcels of property within the Crown block, the impacts to the block continuity has been minimized.

While access will be limited across the alignment, both areas of the Crown block will still be accessible from current locations. Additionally, with the possible construction of the overpass over the Maple-Fraser Lakes interconnect, and the addition of a multi-use underpass in the area of Kingswood subdivision will provide continuous trail access across the alignment.

Based on these findings, the potential impact of the Highway 113 alignment on the wilderness recreational activities of the Blue Mountain Crown property are not considered significant.

APPENDIX 1 LETTER FROM MINISTER OF NSDEL



MAY 2 5 2001

Howard Windsor
Deputy Minister
NS Department of Transportation
and Public Works
1969 Upper Water St., Purdy's Tower II
PO Box 186, Halifax,
Nova Scotia B3J 2N2

Dear Mr. Windsor:

The environmental assessment of the proposed Highway 113 Project has been completed.

This letter is to advise that, pursuant to Section 13 (1)(a) of the *Environmental Assessment Regulations*, I have determined the registration information is insufficient to allow me to make a decision and that I require additional information.

Insufficient information was provided on site-specific inventories of zoological species-at-risk. Information on zoological species-at-risk needs to reflect both National (COSEWIC) and Provincial conservation concerns (*NS Endangered Species Act* and General Status of Wild Species). The Nova Scotia Department of Transportation and Public Works is encouraged to contact the Nova Scotia Department of Natural Resources, Wildlife Division and the Nova Scotia Museum of Natural History to discuss information requirements. The information must be sufficient to predict impacts and identify mitigative strategies for zoological species-at-risk.

Specific information is required regarding the impacts and mitigation strategies for the publicly proposed Blue Mountain-Birch Cove Lakes wilderness area in regard to Moose populations and other species with large home-ranges in the Blue Mountain-Birch Cove area, and wilderness recreation values. While this area is not currently the subject of an evaluation of protected areas-related values, the parcel has been identified by the Protected Areas Program of the Nova Scotia Department of Environment and Labour as a potentially significant natural area based on its variety of ecological and wilderness recreational values, and its landscape ecological context. It has also been identified since 1989 as a potential provincial park candidate by the Nova Scotia Department of Natural Resources. The Nova Scotia Department of Transportation and Public Works is encouraged to contact the Environmental Assessment Branch and the Protected Areas Branch to discuss information requirements.

The Nova Scotia Department of Transportation and Public Works is also required to provide further explanation as to how the proposed highway will function "as an effective block to development toward the much larger area south of the Kingswood subdivision."

This information shall be submitted by the Nova Scotia Department of Transportation and Public Works, at their convenience, as an addendum to the original registration information. Upon submission of this information, I will have up to 25 days to make a decision pursuant to Section 13(1) of the *Environmental Assessment Regulations*. The Nova Scotia Department of Transportation and Public Works is also required to notify the public of the submitted addendum pursuant to Section 10 of the *Environmental Assessment Regulations*.

The Nova Scotia Department of Transportation and public works shall not commence the undertaking or any part thereof until the undertaking has been approved under Part IV of the Environment Act.

Yours truly,

Original Signed By

David Morse Minister