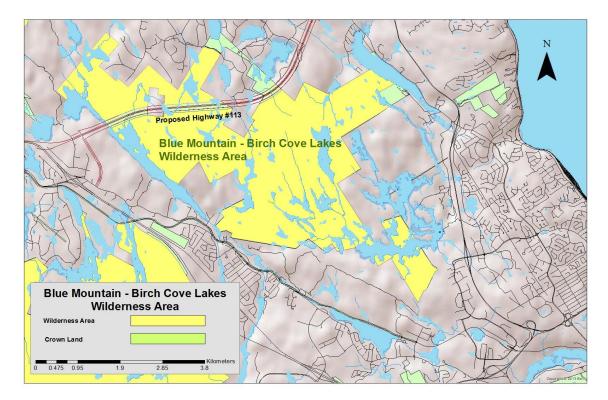
PROPOSED TRAIL PLAN

FOR BLUE MOUNTAIN - BIRCH COVE LAKES WILDERNESS AREA AND ADJACENT CROWN LANDS LEASED TO MASKWA AQUATIC CLUB

PREPARED FOR

HALIFAX NORTH WEST TRAILS ASSOCIATION (HNWTA), CANADIAN PARKS AND WILDERNESS SOCIETY (CPAWS), AND MASKWA AQUATIC CLUB

JULY 2015



Prepared by Cobequid Trail Consulting LTD 3361 Hwy 2



Economy, NS BOM1JO

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INTRODUCTION

This document is a plan for the development of trails within a portion of Blue Mountain Birch Cove Lakes (BMBCL) Wilderness Area and on 16 hectares of adjacent Crown land.

BMBCL Wilderness Area encompasses 1,767 hectares of forest, lakes and barrens, located within Halifax Regional Municipality. Most of this was designated as a wilderness area in April 2009, with an addition in 2015. These lands are administered by Nova Scotia Environment (NSE), in cooperation with Department of Natural Resources, and consistent with Nova Scotia's Wilderness Areas Protection Act.

The adjacent, 16 hectare Crown land area is under lease with Maskwa Aquatic Club. These lands are administered by Department of Natural Resources (DNR).

This trail plan provides only for non-motorized and non-vehicular uses, such as walking, hiking, running and snow-shoeing. This plan does not preclude the possibility of future development of additional recreational infrastructure in the wilderness area. Bicycle use, which is generally prohibited in wilderness areas but can be permitted on designated trails, is not contemplated in this trail plan.

This trail plan has been prepared on behalf of the BMBCL trail committee. This committee includes representation from the Canadian Parks and Wilderness Society (CPAWS), Halifax North West Trails Association (HNWTA), and the Maskwa Aquatic Cub (MAC). The BMBCL trail committee has worked in partnership with NSE and DNR. Members of the committee are as follows:

Chris Miller, Canadian Parks and Wilderness Area Society

Mark de Jonge, Maskwa Aquatic Club

John Moore, Maskwa Aquatic Club

Bob McDonald, Halifax North West Trails Association

Wendy McDonald, Halifax North West Trails Association

The mandate of the committee is:

To create trails within the Blue Mountain Birch Cove Lakes Wilderness Area and the adjacent Crown lands (located at Maskwa Aquatic Club) and to provide the public with access to this near urban wilderness areas while reducing the impact on the environment (this may include closing trails that were developed without approved trails planning).

This trail plan is designed to address this mandate. The trail plan takes into account that the site is within a highly populated area and there is already significant pressure from informal use. The

trail system must respond to these pressures by providing a corridor that will accommodate and support the interests of users while protecting the environmental integrity of the site. Within these criteria, the trail plan will create an outstanding recreation opportunity for outdoor activities including walking, hiking, trail running, snowshoeing, swimming etc.

The trail concept plan is organized as follows:

- description of the site
- overview of the trail planning process
- description of the public consultation process
- outline of the trail concept and detailed description of the trails
- summary of the technical components of trail development and costs

Figure 1: Ash Lake



SITE DESCRIPTION

The Blue Mountain-Birch Cove Lakes (BMBCL) area of Halifax Regional Municipality (HRM) is less than 10 km from downtown Halifax, located within Halifax Municipality, between the subdivisions of Clayton Park, Hammond Plains, and Timberlea. Most of provincial lands of this area are designated under the Wilderness Areas Protection Act. The total area of this nearurban wilderness area is 1,767 hectares (4,366 acres), or about the size of Halifax Peninsula. It protects valued wildlife habitat and a range of wilderness recreation opportunities, all within minutes of Atlantic Canada's largest urban centre.

The wilderness area includes forests, lakes, barrens, and wetlands. The forest is mixed, dominated by spruce, pine, birch, maple and stands of red oak. From east to west there is an abrupt transition in the landscape from closely aligned, angular, north-south quartzite ridges to smooth granite barrens.

Wilderness Area Designation

Designation of BMBCL Wilderness Area in 2009 followed more than a year of public and stakeholder consultations, socioeconomic analysis and consultation with the Mi'kmaq. Biodiversity protection, wilderness recreation, access and boundary issues were common themes raised during public and stakeholder consultation. None of the comments received during this process identified major concerns with establishing the Wilderness Area and generally there was strong support for Wilderness Area designation. *Note: more information and a public consultation summary is available at <u>www.novascotia.ca/nse/protectedareas</u>.*

The Maskwa Aquatic Club (MAC), located at Kearney Lake, currently holds a lease on a 16 hectare Crown parcel that borders the wilderness area.

INITIAL FIELD WORK AND OBSERVATIONS

An assessment of the site and BMBCL Wilderness Area environment was done through a series of site visits. During these visits, the consultants were able to inventory landscape and topographic features and the system of informal and unauthorized trails.

Existing Trails in the Vicinity of the Maskwa Aquatic Club

The Maskwa Aquatic Club (MAC) is situated on Kearney Lake at the eastern edge of the BMBCL and provides a suitable entry point into the Wilderness Area. It is accessible from the

Bicentennial Highway via Exit 2 and Saskatoon Ave. Two existing trails originate from the parking area at MAC. Both are well worn showing signs of significant traffic. One runs north, touching on the western edge of Kearney Lake (3-400 m of lake front trail), then towards Colins Road. Good lake edge alignment opportunities are only partly realized with the current alignment. The second existing trail runs towards Charlies Lake across a series of progressively higher ridges. *Note: Ascending the third ridge, there are significant signs of erosion resulting from existing use. The footprint of the existing trail has widened in that locations (to as much as 3 m) as users pick their way around wet and eroded sections.*



Figure 4: Degraded informal trail

Charlies Lake

Charlies Lake is relatively close to the entry point but is buffered somewhat from the sight and sounds of the urban environment by topography. The Lake is on an east-west axis and appears pristine with steep slopes on the east and west sides. At the north end, low rock ledges run into the water and signs of day use are evident. From Charlies Lake, there are trails leading in a number of directions including onto private land.

Colins Road

At the end of Colins Road is a cul-de-sac and turn circle, as well as an adjacent, undeveloped property owned by Halifax Regional Municipality (HRM). A very narrow strip of private land separates the end of Collins Road and HRM property from the wilderness area. An easement allows for public access from the HRM property, across the strip of private land. There is evidence of significant public access from this location; however, existing trails leading south (towards MAC) and west (towards Fox Lake) must be re-developed to create a safe and attractive entry point at this location. *Note: To reach Kearney Lake from Colins Road, the trail must descend a steep ridge. At the time this plan was prepared, there were steps in this location. However, these steps were poorly constructed and in need of replacement.*

Existing trails to Hobson, Fox and Ash Lakes

West of Colins Road, the terrain was gently sloping upwards and there were several trails in this area, one following the northeast property line. One of these trails leads onto private property at Hobson Lake. A trail leading to Fox Lake appeared to be well-used and probably has a history of use by people hiking into Fox Lake or Ash Lake for camping, fishing, swimming etc. Parts of this trail appeared to be in good condition. North of Fox Lake the existing trail runs along the property line. Fox Lake is attractive but is entirely outside the wilderness area. However, Ash Lake, also with attractive shoreline features and view-scapes is contained within the wilderness area. Existing trails between Fox Lake and Ash Lake are confusing. There is a portage route between these two lakes that must be retained.

Ash Lake and Beyond

The terrain around Ash Lake provides excellent trail development opportunities. There are existing trails, however in places they are in bad condition, poorly located and are in need of realignment. West of Ash Lake there is a major power-line corridor. This significantly impacts the natural and wilderness character of the hiking experience. The landscape to the west of Ash Lake has significant areas of open barrens.

North of Ash Lake is the Blue Mountain look-off, a popular destination. To reach the Blue Mountain look-off from the east, hikers would have to cross the power-line corridor.

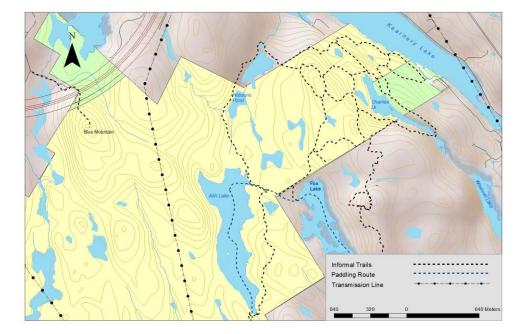


Figure 5: Informal trails inventory

TRAIL PLANNING WITHIN BMBCL

Nova Scotia Environment (and DNR) requires a formal planning and review process prior to development of trails in a wilderness area (and on crown land). The BMBCL Trail Planning process includes 6 distinct steps:

- 1. Trail Concept Proposal and support letter from Maskwa Aquatic Club (MAC)
- 2. Public Consultation #1
- 3. Proposed Trail Plan
- 4. NSE and DNR review of Proposed Trail Plan
- 5. Public consultation #2
- 6. Approval of Trail Plan, Trail Management Agreement (NSE) and Letter of Authority (DNR).

BMBCL trail committee is responsible for the preparation of a trail plan and ensuring that it conforms to the formal planning and review process. To initiate the planning process, the BMBCL trail committee issued an Expression of Interest to NS Environment and Department of Natural Resources to design, construct and maintain front-country and back-country trails from the vicinity of Kearney Lake to Ash Lake. Cobequid Trail Consulting (CTC) was awarded the contract to provide a trail concept plan. The CTC proposal was to adhere to the six-step process with the involvement of the volunteer trail committee and various levels of government.

Trail Development Constraints

Prior to initiating the trail planning process, the consultants met with the BMBCL trail committee and partners to determine criteria and constraints. The trail plan was to focus on recreation use, primarily walking and hiking with some possible allowance for non-vehicle winter use (snowshoeing for example). The trail plan does not provide an allowance of any form of motorized vehicle use. Mountain biking, which occurs (without authorization) in the wilderness area in some areas, requires NS Environment (NSE) approval and a separate planning process (which was beyond the scope of this project).

The trail system was specifically limited to the BMBCL wilderness area and the adjacent MAC crown land lease. NSE indicated that the trail concept should not encourage users to cross over onto adjacent private land holdings. It was inferred that the trail should avoid running along boundary lines except possibly in the vicinity of one of the two access points

The trail plan could potentially incorporate all parts of the wilderness area. However this was not a requirement and it was expected that the focus of trail planning would be on the east side of the BCBMLWA. The area adjacent to Bayers Lake Business Park and the south end of Susies Lake was excluded from the planning process because of complex land ownership issues that exist there and could not be resolved within the context of this plan. Similarly, access via Kingswood, (used informally to reach Blue Mountain) crosses private land which at the time of this report was affected by industrial forestry activity. Access via Kingwood also crosses the proposed corridor for highway 113. Consequently, the primary access area under review was in the vicinity of (or originating at) Kearney Lake with the main entry point at Maskwa Aquatic Club and a secondary site at the end of Colins Road. The MAC site has a large parking area and both locations are public property. The exact area and scope of the trail system was determined during the planning process.

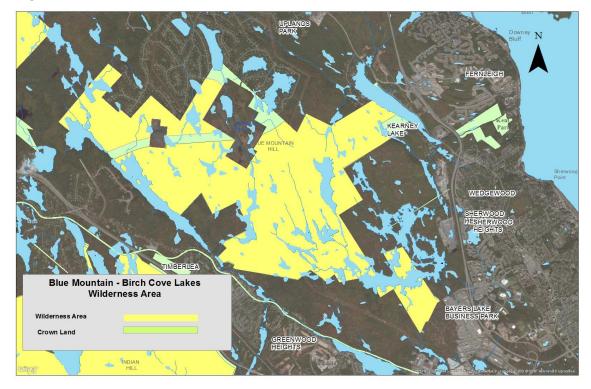


Figure 2: Aerial View of Blue Mountain Birch Cove Lakes Wilderness Area

STEP 2: PUBLIC CONSULTATION #1

As indicated in the 6-step process outlined above, a required step in trail planning within wilderness areas is public consultation and review. The first of these events was planned and organized in partnership with the consultants before the trail plan had been developed.

The public input session consisted of an open house event with maps and images of the wilderness area; user groups and the public were invited. A presentation by the consultants outlined the trail planning process and constraints (summarized above).

A public input survey was distributed at the meeting and online. The purpose of this survey was to determine preferred and expected patterns of use of the trail system. Almost 300 people filled out the survey (complete survey results are included in (Appendix A). The survey contained 10 questions addressing the following topics:

- Frequency of use
- Existing access points
- Current activities
- Motivations for using the BMBCL
- Trail type preference
- Support for running, fitness trail

Respondents were asked about their current and historic patterns of use on the existing trails. Most said they use the Wilderness Area trails a few times a year and 43 of the approximately 300 respondents said they use the existing trails more than once a week. Bayers Lake was the most popular access point, with 198 responses. The MAC access point had 134 responses and Colins Road had 70. Susies Lake, Blue Mountain, Kearney Lake, Charlies Lake and Ash Lake were all listed as popular destinations.

The most frequently mentioned existing uses were hiking and walking (a combined total of 355 responses). Swimming, canoeing and mountain biking ranked lower with approximately 80 responses each. A third tier of responses included dog walking, bird-watching and snowshoeing.

When asked how people would use the area once a formal and authorized trail system is in place, the survey indicated that the number of users and frequency of use would increase substantially. Notably, there were a significant number of respondents who said they would be interested in camping (109). We assume in this trail plan that camping will be informal and undesignated, however this may change if both NSE and the steering committee determine that designated camping areas will more appropriately meet their objectives

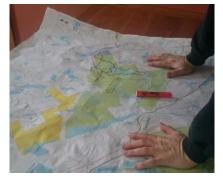
PREPARATION OF A PROPOSED TRAIL CONCEPT PLAN

Initial Project Organization

A series of meetings was held with the Halifax North West Trails Association (HNWTA), CPAWS, MAC and NS government (NSE and DNR) to clearly define the scope of the project. During this stage, the committee identified the stakeholders to engage for the first public consultations. The involvement of the community at large allows the committee and NSE and DNR to gauge the support for the project. The open house also provides an opportunity for potential competing interest groups to understand positions and/or resolve differences. It also helps to create ties between government, trail proponents and the communities at large.

Inventory and Data Collection

Background information was collected from the trail committee, NSE and DNR regarding the informal trail use, historic human use patterns throughout the area and parameters for the



project.

In addition, the partners provided topographic GIS data of the region. An analysis was conducted of aerial photos; bioblitz data, topographic maps and soil types defined the physical barriers and drainage patterns. The inventory was focused on the BMBCL Wilderness Area, the MAC Crown Lease and known access points. Five site visits were completed to inventory the informal trails, identify focal

points, landscape features, and limited development areas. The data was collected by GPS and photo documentation. This was input into a GIS database.

Analysis

Based on inventory and field analysis data, a conceptual trail route and supporting information was presented to the trail committee. Based on feedback from the committee, routing adjustments were implemented. The proposed trail routes represented a composite analysis of landscape features, hydrological, geological and topographic aspects, existing elements (where appropriate) and liability considerations. Due consideration was given to the existing level of informal trail use and anticipated growth in utilization once the trail system is constructed.

Conceptual Trail Plan/Implementation

Additional fieldwork was completed to adjust the routing as a result of feedback. The fieldwork also evaluated constraints on the proposed trail and assigned Class 'C' costing (based on similar projects). The completed trail plan provides both a front-country experience near MAC but also a back-country stacked looped trail system celebrating representative landscape features of the Blue Mountain Birch Coves Lake Wilderness Area. A spur trail to the popular look-off known as Blue Mountain was also identified.

After adoption of the trail plan, next steps will include seeking funding, detailed delineation of routes, training volunteers and engaging the public.



Figure 3: Filtered view of Ash Lake

TRAIL CONCEPT

Patterns of trail creation and use prior to the implementation of this plan have evolved without intentional trail planning and consist largely of access corridors to lakes with multiple side trails. This trail plan outlines a more coherent and functional 12 kilometre trail network, with a primary trail head at Maskwa Aquatic Club and secondary access at Colins Road. Where possible, the plan incorporates existing trails, especially where they represent traditional patterns, but others are not included.

The strategy of the trail plan (inventory map) is as follows:

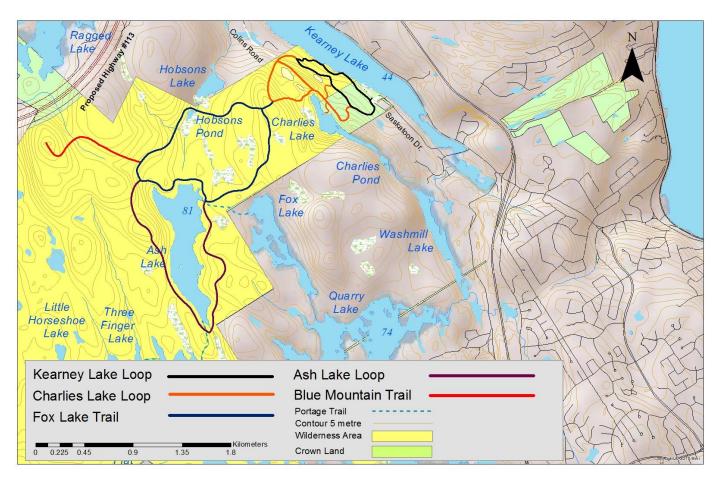
The Plan limits trail development (in the short term) to east of the power-line corridor that bisects the Wilderness Area from north to south. The power-line is a functional boundary since it represents large-scale human intervention creating a linear opening in the natural landscape. The exception will be a spur trail to the Blue Mountain look-off.

The Plan is designed to sustain intensive use within 1 km of MAC and Colins Road access points. The trail in this area will be designed for high accessibility and intensive use (front-country). Front country trails will be designed to have a right of way (ROW) and tread wide enough for two users to walk side by side. *Note: Front-country sections will be designed to accommodate entry level trail running in addition to walking and hiking.*

Further away from the MAC and Colins Road access points, the trails will have less traffic and are designated within this plan as back-country trail sections. ROW and tread width will be designed for single file use. However, even these sections will attract significant use due to the proximity to the urban centre and adjacent residential neighbourhoods and must be designed for sustainable use.

The trail network is designed as a stacked loop system to adapt to the needs of various user groups. It will include four loops, two front-country and two back-country. The proposed trail system is illustrated below. A detailed description of each loop within the proposed trail system is provided in the following sections.

Trail Concept



DETAILED TRAIL DESCRIPTIONS

KEARNEY LAKE LOOP



Figure 6: Forest type

Distance: 2030 m

Trail Standard: Front-Country

ROW: 6ft - 8ft

Tread Width: 4ft - 5ft

Overview:

This section consists of an elongated loop between MAC and Colins Rd. It features minor slopes and lakefront views.

Description

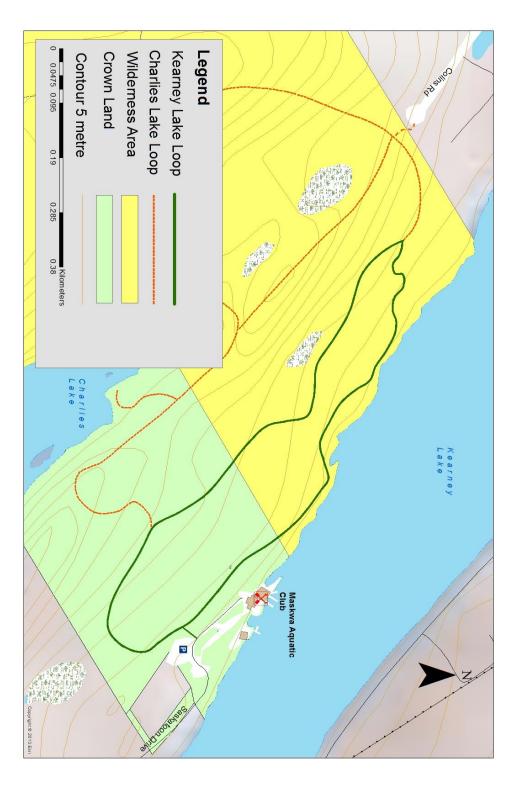
The proposed alignment uses the existing corridor, modified to improve tread condition and orientation. Realignment in key locations will increase shoreline views along Kearney Lake and the approach to Colins Road. Realignment and expansion within the Crown land area at the south end provides access to an attractive rolling forested landscape and will make better use of the Crown land area leased by MAC.

This loop includes the primary trail head, at the Maskwa Aquatic Club parking lot.

Justification:

This section is designed for high accessibility and traffic. It incorporates traditional patterns of use. It is an easy, relatively low slope trail (it does not ascend to higher ridge elevations) and provides access to lakefront views.

KEARNEY LAKE LOOP



CHARLIES LAKE LOOP

Distance: 2200 m

Trail Standard: Front-Country

ROW: 6ft - 8ft

Tread Width: 2ft - 5ft

Overview:

This section is a second loop of front-country trail development that incorporates additional features including increased elevation, slopes and additional lake frontage (Charlies Lake) with possible swimming options. It creates a front-country outer loop increasing the total front-country distance to approximately 3.5 km.



Figure 7: Stone fireplace

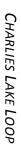
Description

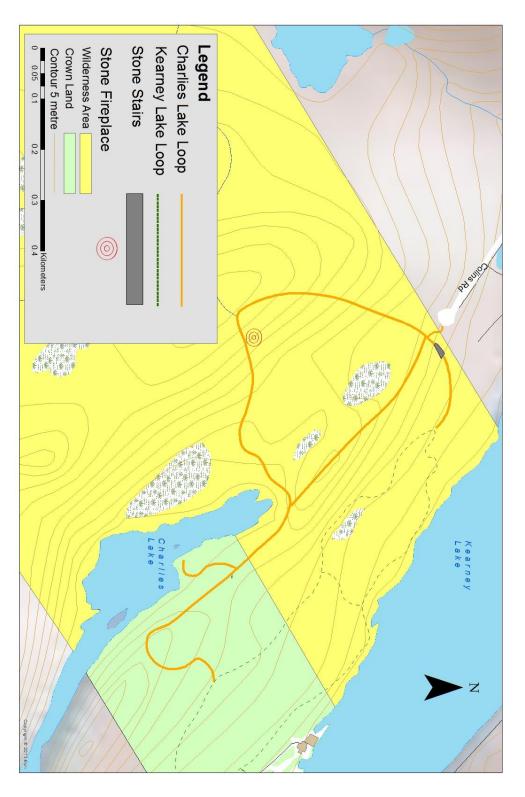
The existing trail to upper elevations and Charlies Lake will be significantly realigned and rerouted to improve orientation and slope. The realignment provides an attractive side slope ascent approaching Charlies Lake (that is more accessible and less prone to erosion). An existing trail from Charlies Lake to the existing corridor between Colins Road and Fox Lake will require minor modifications. From Colins Road, south, linking to the intersection with the Kearney Lake Loop, modification will be required to improve trail quality. Steps will be required (for approximately 15m) at one location replacing existing steps, where a low slope approach is not possible. Stone steps are recommended. From the Colins Rd parking area west in the direction of Ash Lake, the trail will be realigned as needed to reduce slopes. Development of a parking lot is recommended to accommodate expected use of this entry point.

There is an existing trail running along a significant ridge spine that bisects the Charlies Lake Loop (from Colins Road to Charlies Lake). This trail has outstanding landscape features, so should be maintained. Although this corridor will be within the designated front country area, trail development specifically of this section is challenging due to rocky terrain and slopes and it is recommended that it be developed to a back-country standard.

Justification

This section expands the front-country trail experience, providing a more challenging option when done in conjunction with Kearney Lake Loop. It also establishes a connection to Colins Road, a secondary access point to the trail system.





HOBSONS POND LOOP Distance: 4000 m Trail Standard: Back-Country ROW: 6ft wide, 8 ft high Tread Width: 18"-24"



Figure 8: Proposed look off

Overview

This section is a 4 km back-country loop that provides access to Ash Lake via an undulating woodland trail. Features include open views looking down the length of Ash Lake, links to Fox Lake and access to the wetland environment in the vicinity of Hobsons Pond.

Description

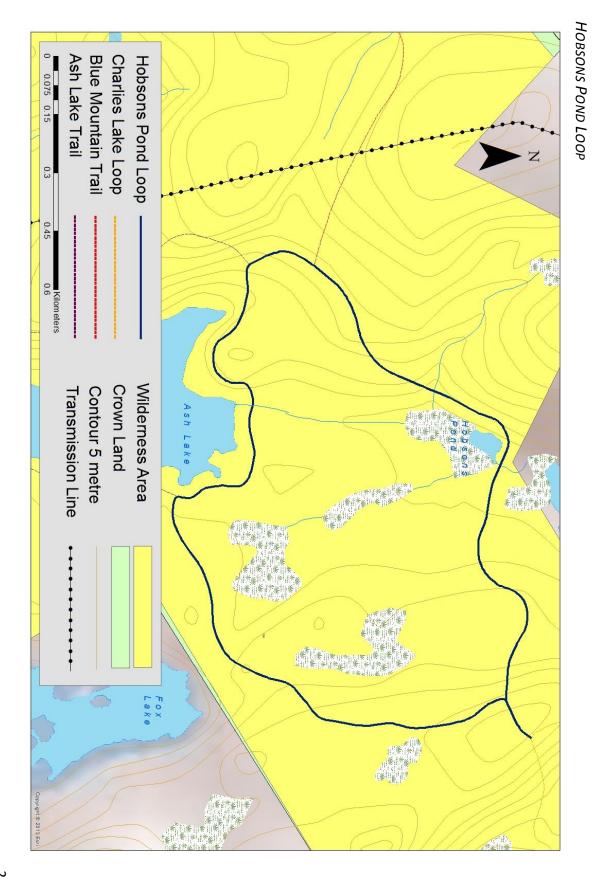
The trail largely incorporates the existing corridor to Ash Lake with modifications in the vicinity of Fox Lake to create separation from the property boundary and along the north end of Ash Lake. The alignment closely follows the north edge of Ash Lake, bypassing an area of wet terrain that impacts the existing trail corridor. It also includes sections of an existing trail from Ash Lake to Hobsons Pond. To stay within the boundary of the Wilderness Area and avoid entering adjacent private land, the alignment runs between Hobsons Lake and Hobsons Pond. This area is characterized by low, wet terrain including two small watercourses between the two lakes and areas of bog with intermittent rock ridges on the south side of Hobsons Lake. It then follows a central rock ridge that ascends toward the existing trail from Colins Road to Fox Lake.



Figure 9: Tributary stream

Justification

This section provides a longer trail experience with some wilderness characteristics and access to the north edge of Ash Lake. Together with the frontcountry loops, it creates a 7 km walk, a good intermediate day-hike distance. The existing trail from Colins Road to Fox Lake is a well-travelled corridor with an established pattern of use. It is an acceptable route, largely traveling over dry elevated terrain. The alignment would modify this pattern of use by bypassing Fox Lake (private land) and, instead, improving lake access at Ash Lake.



ASH LAKE LOOP

Wilderness section circumnavigating Ash Lake

Distance: 3000 m

Trail Standard: Back-Country

ROW: 6ft

Tread Width: 18"-24"

Overview



Figure 10: Ash Lake

Description

This section of the trail circumnavigates Ash Lake. It incorporates multiple views and shoreline access points around the lake. It creates an outer loop that combines with the Hobsons Pond Loop to create a 7 km wilderness component of the overall trail system.

The Ash Lake loop intersects with the Hobsons Pond trail at the northeast end of Ash Lake. In several places the trail runs along the shoreline with rock outcroppings that project into the water in several locations. The alignment runs through pure stands of oak east and west of the south end of the lake. These oak stands are young to mature, probably the result of post-fire regeneration and will continue to age over time. On the west side the alignment traverses upper slopes that taper down to the lake edge. The position of the trail alignment ensures that power lines several hundred meters to the west are not visible.

Justification

This is the most remote section of the trail system and offers what is closest to a wilderness experience. It offers multiple views of Ash Lake and it incorporates significant areas of oak dominated forest. These oak stands are mature and protected within the regime of wilderness designation, may continue over time to grow and develop into an oak-dominated old growth forest. In combination with Hobsons Pond Loop and front-country sections of the system, the concept creates a 10 km loop, a full day hiking experience.

ASH LAKE LOOP



BLUE MOUNTAIN TRAIL

Spur trail to Blue Mountain from Ash Lake

Distance: 1000 m

Trail Standard: Back-Country

ROW: 4ft - 6 ft

Tread Width: 18"-24"

Overview

This section is a spur trail from the vicinity of Ash Lake. The spur trail provides access to the popular Blue Mountain Look-off.

Description

The Blue Mountain Trail will be a linear pathway that connects to Blue Mountain Hill (elevation 150 m). The proposed alignment crosses a large transmission line corridor at a right angle to minimize its visual impact of the user's experience. The trail also crosses a small tributary stream requiring a footbridge.

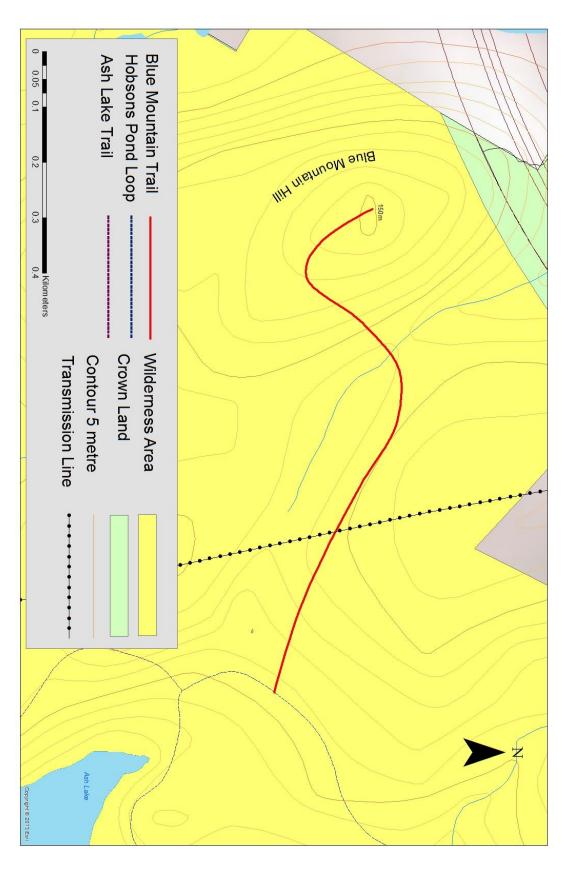
Justification

This is the most recognized landscape feature within the Wilderness Area. The summit of Blue Mountain has been a popular long established look-off for generations. The spur trail offers a safe, formal trail to access the look-off and view the surrounding landscapes.



Figure 11: Blue Mountain Look-off

BLUE MOUNTAIN TRAIL



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TRAIL CONSTRUCTION GUIDELINES

The proposed trail alignments will be developed to back-country and front-country standards as referred to in the "Developing Recreational Trails in Nova Scotia Manual". The front-country standard is wide enough for hiking, snowshoeing, and back-country skiing. The smooth surface will also accommodate limited mobility trail users. The back-country standard trail is a natural surface tread and the right-of-way is wide enough for hiking and snowshoeing. These standards comply with NSE and DNR standards for back-country and front-country trail construction

Front-Country Standard (FC)

Right-of-Way (ROW)

The ROW throughout the proposed trail should be a minimum of 6 ft (1.8 m) wide and 8 ft (2.5 m) high. The trail alignment is to be cleared of coarse woody debris with the cut ends facing away from the trail. Prior to trail clearing, the micro trail alignment planning is to be completed.

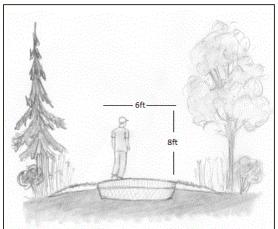
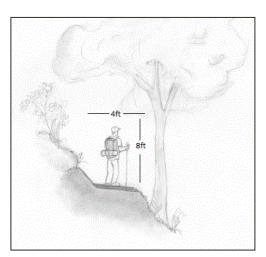


Figure 12: FC ROW

This will ensure that poorly drained areas are avoided, as are large trees, slopes are minimized and obstructions are avoided.

Tread Construction

It is recommended that the trail tread is cleared of debris. The trail tread is 2-5 ft and defined by lightly grubbing the stumps, roots and other organic materials. Wet areas will be addressed using grade dips, footbridges and puncheons on seasonally poor drainage areas. The finished trail tread is a ½" minus crushed gravel compacted and crowned or out sloped to ensure positive drainage of surface water.



Back-country Standard (BC)

Right-of-Way (ROW)

The ROW throughout the proposed trail should be a minimum of 4 ft (1.5 m) wide and 8 ft (2.5 m) high. The trail alignment is to be cleared of coarse woody debris with the cut ends facing away from the trail. Prior to trail clearing the micro trail alignment planning is to be completed. This will ensure that poorly drained areas are avoided, as are large trees, slopes are minimized and obstructions are avoided.

Figure 13: BC ROW

Tread Construction

It is recommended that the trail tread be cleared of debris. The trail tread is 18"-24" wide and defined by lightly raking and all stumps removed. Wet areas will be addressed using grade dips,

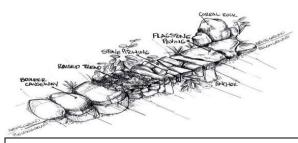


Figure 14: Rock Tread Hardening Technique 'IMBA Trail Solutions' stepping stones (locally sourced) and puncheon walk. Where the trail alignment travels along the side of steep slopes, a full bench cut is recommended. The trail tread width is slightly increased and should utilize grade dips for drainage. The trail tread is out sloped 3% to allow the water to sheet off the tread.

	Front-Country (FC)	Back-country (BC)
Trail Width	48"-60"	18"-24"
Tread Surface	Smooth gravel surface	Mostly stable with some variability
Average Trail Grade	5% or less	8% or less
Maximum Trail Grade	15%	15% or greater
Right-of-Way	6 ft (1.8 m) wide and 8 ft (2.5 m) high	4 ft (1.5 m) wide and 8 ft (2.5 m) high

COST ESTIMATES

Trail	Distance (m)	Cost
Kearney Lake Loop (FC)	2,030	\$126,030.00
Charlies Lake Loop (FC)	2,200	\$141,500.00
Hobsons Pond Loop (BC)	4,000	\$74,450.00
Ash Lake Loop (BC)	3,000	\$44,200.00
Blue Mountain Trail (BC)	1,000	\$18,700.00
Total	12,230	\$404,880.00

SIGNAGE

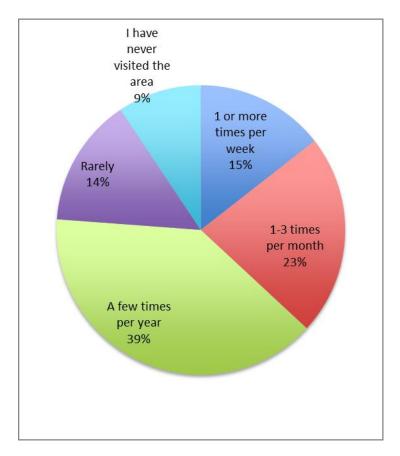
The proposed trail system will require a framework for communicating user guidelines and navigation. This will include orientation signs at trial heads, navigational signs at all trail intersections as well as a web site (with trail description, maps and user guidelines). The development of signage is not specifically included in the budget outlined above however; we would recommend that \$5,000 be allocated for the development and implantation of an appropriate signage program. This will include the creation of graphic maps, entry and orientation signs (2) and locator/map signs (10) at all intersections. Web site development and on line resources are outside the scope of this study.

APPENDIX

APPENDIX A-SURVEY RESULTS

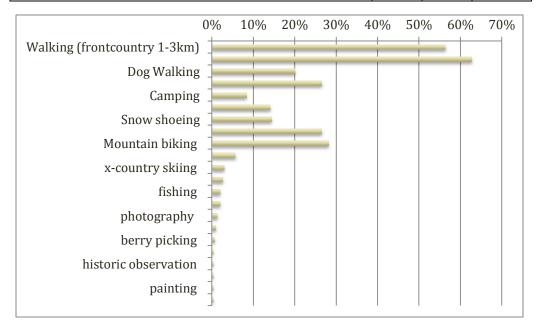
How often do you/did you visit the Blue Mountain - Birch Cove Lakes Wilderness Area and/or Maskwa-leased crown land?

1 or more times per week	43	14%
1-3 times per month	67	22%
A few times per year	117	39%
Rarely	43	14%
I have never visited the area	28	9%
n=	298	



Have you engaged in any of the following activities within the Blue
Mountain-Birch Cove Wilderness area? Check all that apply.

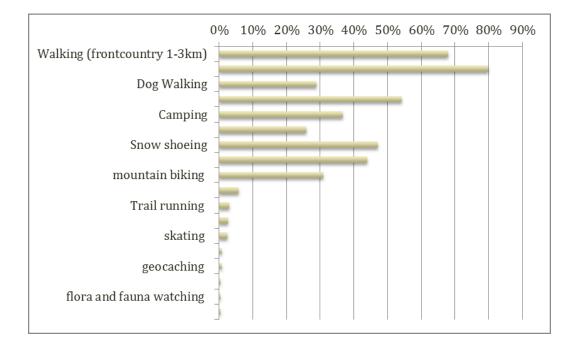
Walking (front-country 1-3km)	298	168	56%
Hiking (back-country >3km)	298	187	63%
Dog Walking	298	60	20%
Canoeing	298	79	27%
Camping	298	25	8%
Bird watching	298	42	14%
Snow shoeing	298	43	14%
Swimming	298	79	27%
Mountain biking	298	84	28%
running	298	17	6%
x-country skiing	298	9	3%
skating	298	8	3%
fishing	298	6	2%
geocaching	298	6	2%
photography	298	4	1%
hunting	298	3	1%
berry picking	298	2	1%
lichen and flower hunting	298	1	0%
historic observation	298	1	0%
relaxing	298	1	0%
painting	298	1	0%
picnicking	298	1	0%



30

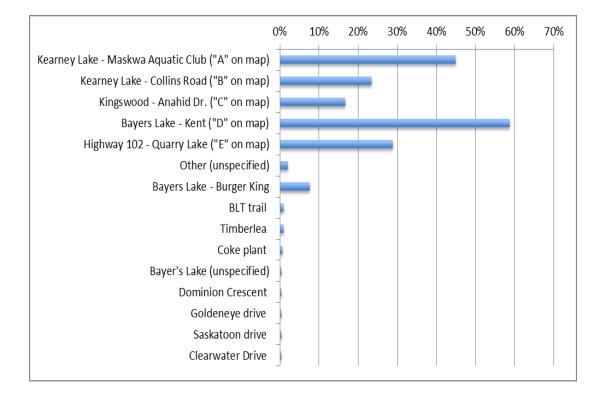
Walking (front-country 1-3km)	298	202	68%
Hiking (back-country >3km)	298	238	80%
Dog Walking	298	86	29%
Canoeing	298	161	54%
Camping	298	109	37%
Bird watching	298	77	26%
Snow shoeing	298	140	47%
Swimming	298	131	44%
mountain biking	298	92	31%
x-country skiing	298	17	6%
Trail running	298	9	3%
fishing	298	8	3%
skating	298	7	2%
hunting	298	2	1%
geocaching	298	2	1%
atv	298	1	0%
flora and fauna watching	298	1	0%
orienteering	298	1	0%

What activities would you like to engage in within the wilderness area? Check all that apply.



Kearney Lake - Maskwa Aquatic Club ("A" on map)	298	134	45%
Kearney Lake - Colins Road ("B" on map)	298	70	23%
Kingswood - Anahid Dr. ("C" on map)	298	50	17%
Bayers Lake - Kent ("D" on map)	298	175	59%
Highway 102 - Quarry Lake ("E" on map)	298	86	29%
Other (unspecified)	298	6	2%
Bayers Lake - Burger King	298	23	8%
BLT trail	298	3	1%
Timberlea	298	3	1%
Coke plant	298	2	1%
Bayer's Lake (unspecified)	298	1	0%
Dominion Crescent	298	1	0%
Goldeneye drive	298	1	0%
Saskatoon drive	298	1	0%
Clearwater Drive	298	1	0%

How do you access the wilderness area? Please refer to the map below. Check all that apply.



APPENDIX B-BMBCL TRAIL PLANNING STEPS

Trail Planning Steps provided by NSE and DNR

- 1. **Trail Concept Proposal and support letter from Maskwa**. This 2- page document will identify the vision of the group and include key types of changes or improvements that might be considered to the leased land (trail structures, trail signs, parking lot improvement, etc.). Maskwa letter is required because of the crown lease. The group will also clearly state the spatial scope of the project.
- 2. **Public Consultation #1**: (with support of a consultant). The group will share their vision with the public and key stakeholders. This consultation is intended to seek information and input that will feed into a detailed trail plan (does the public want hiking or running trails, or ski trails; do they want to be able to hike to Blue Mountain, etc.)
- 3. **Proposed Detailed Trail Development Plan**: Incorporating the information collected from the public consultation, discussions with NSE and DNR, and options from local experts, the group will prepare a Detailed Trail Development Plan. The plan will include specifics about the design, construction standards (bridges, stairs, etc.), materials, estimated costs, and relevant maps.
- 4. NSE and DNR Review of Proposed Trail Plan: Each department conducts its own review for the lands it administers.
- 5. **Public Consultation # 2**: Once any requested alterations by DNR and NSE are made, the group will hold a second public consultation. The group will ensure there are broad invitations to participate, including advertisement in the local media.
- 6. Approval of Detailed Trail Development Plan, Trail Management Agreement and Letter of Authority: Subject to public input, DNR and NSE will approve the proposed Detailed Trail Development Plan and enter into a Trail Management Agreement and Letter of Authority with the group for the trail system.