The McRae Property

1020 Phyllimar Lane, Brandy Lake
Planting plan created by The District Municipality of Muskoka

Survey Date: 08/16/2018

Funded by • Love Your Lake • Recreational Fisheries Conservation Partnerships Program of Fisheries and Oceans
Canada •





Fisheries and Oceans Canada Pêches et Océans Canada



Schedule A:

Plants & Property

Land Characteristics

This planting plan is designed based on the land characteristics identified during the day of the site visit. Plants are chosen according to the soil and light conditions on your property. The number of plants chosen for each planting compartment takes into account the square metre area of the space, as well as the amount of current vegetation cover. **Your property is part of ecoZone: 5a**

Land Characteristics by Compartment

	Length	Width	Area	рН	Soil	Moisture	Light	Height
Α	2m	2m	4m²	acidic	sandy, loamy	normal	partial sun	
В	5.5m	3.4m	18.7m²	acidic	loamy	normal	shade	
С	1.7m	3.2m	5.4m²	acidic	sandy, loamy	normal	shade	
D	10m	2.7m	27m²	acidic	loamy	normal	shade	
Е	9m	2.2m	19.8m²	acidic	loamy	normal	shade	
F	9.8m	10m	98m²	acidic	loamy	normal	partial sun, shade	
	38m	3.92m	172.9m²					



Plant Selection Summary

The following shrubs and trees are chosen for their suitability and survivability given the current soil and light conditions in each compartment on your property, as well as preferable features.

Plant Species	Α	В	С	D	Е	F	Potted	Bareroot	Wildflower
Nannyberry	1	2			2	1	6		
Narrow Leaved Meadowsweet	3	1					4		
Bracken Fern	6	10	2	3	5	15	41		
Witch Hazel		1	1	1			3		
Wintergreen			6				6		
Mountain Maple				3		1	4		
Canada Mayflower				11	12		23		
Subtotal	10	14	9	18	19	17	87	0	0
Totals			(87					

Plant Information

The following table summarizes key information about each plant selected for your property.



Nannyberry

Height: 3 m

Nannyberry is a large deciduous shrub species that typically grows about 3 m in height. The leaves are dark green, ovate shaped, oppositely arranged, have a pointed tip, and have finely toothed margins. The flowers are showy, white colored, appear in flat topped clusters, and bloom in May. These flowers produce blueish black berries, which are edible to humans and persist throughout the winter. The flowers are beneficial to pollinator species, like bees and butteries. The fruit is beneficial to wildlife species, including birds and small mammals. This shrub has attractive fall foliage. The root system is extensive, making this plant valuable for controlling erosion and stabilizing loose soil. This shrub can be pruned to have a single stem and grown as a small tree instead of a shrub.



Narrow Leaved Meadowsweet

Height: 1-2m

The Narrow Leaved Meadowsweet is an erect, deciduous shrub, which grows in the shape of a mound to a height of 1-2m. This species develops numerous branches and branchlets, giving it a sparse appearance. Leaves produced are simple and narrow with sharply toothed borders growing alternately along the branches. These bright, light green leaves appear crowded, as they grow close together on the stocks and branches. During the fall, leaves turn a yellow-red or yellow-orange colour. Small white to light pink flower clusters appear in the spring growing in a dense, narrow pyramid at the terminal ends of the branches. During late summer to early fall, these flowers produce smooth, papery seed pods.



Bracken Fern

Height: 1 m

The Bracken Fern is a large, hardy fern species that can grow up to 1 m in height. The leaves are large, triangular fronds, which are pinnately divided 2-3 times and have spores along the edge of leaves. The leaves emerge as fiddleheads between March and May. The fiddleheads can be edible for humans but may contain toxic, carcinogenic properties so should be carefully researched and prepared before consumption. This plant can grow aggressively and should be planted with lot's of space. Fossils of Bracken Fern have been found that are over 55 million years old.



Witch Hazel

Height: 4-9m

The Witch Hazel is a deciduous understory shrub, with a broad and rounded crown which typically grows 5-9m. This species can sometimes take on the form of a tree. Witch Hazel is most recognizable for its 2 cm long, spidery, bright yellow flowers, which bloom during late fall. Leaves produced are alternate, simple, 6-15 cm in length, and obovately shaped. These leaves are dark green on top with paler undersides and turn yellow during the autumn. Witch Hazel leaves produce hairs on their principal veins, are asymmetrical at their base, scalloped, and sometimes coarsely toothed. In addition, the leaves contain 5-7 straight, parallel, ascending veins per side. The twigs are slender, zigzagged, tawny, and smooth when mature. Witch Hazel fruiting bodies are short, thick, light brown capsules that become woody upon maturation. This species is typically multi-stemmed with two or more trunks, which are crooked and 10-15 cm in diameter.



Wintergreen

Height: 15 cm

Wintergreen is a medium-sized ground cover species that grows up to 15 cm in height. The leaves are glossy, dark-green, simple, oval shaped, and turn purple during the fall. Wintergreen is a visually appealing plant that produces small, white, bell-shaped flowers during the spring. This species yields edible, scarlet red berries during July, which persist throughout the winter months. These berries are a great food source for many song birds. squirrels, deer and a tasty treat for humans when added to pastries or salads. The name Wintergreen comes from the plants ability to keep it's leaves throughout the winter. Wintergreen is unique because their leaves emit a minty aroma when crushed. Wintergreen oil is commonly used in the flavoring of gum and toothpaste.



Mountain Maple

Height: 3-5m

The Mountain Maple is a mid-sized shrub and the smallest Maple species, ranging from 3-5 m tall. The leaves are a triangular shape with 3-5 lobes each and range from 6-12 cm long and wide in size. The upper side of the leaf is a yellowish green with a pubescent white underside. The leaves also have coarsely and irregularly toothed margins and the leaf petioles are red in colour. The flowers are small, pale yellow to green in colour, and form in dense upright clusters. Both male and female flowers may be found within the same cluster. Vibrant red fruit grows with wings that are about 2-3 cm long. This shrub is very important for riparian edges as it is great for preventing erosion on stream banks and steep slopes using its dense layered root system.



Canada Mayflower

Height: 20 cm

Canada Mayflower is a herbaceous perennial wildflower that grows up to 20 cm tall. This plant may also be known by the common name False Lily of the Valley. This species has 1-3 leaves that are large, smooth, alternately arranged, oval shaped with pointed tips, have prominent veins, and have entire margins. The flowers are small, creamy white colored, have 4 petals, 4 stamens, appear in spiked raceme clusters, and bloom between May and June. In late summer, the flowers are replaced with round speckled pale red berries that each contain two seeds. Canada Mayflower can form colonies along fibrous rhizomes. The flowers are beneficial for pollinator species, like bees.

Compartment A

Naturalization Area

Hemlock

₽₩: acidic

[™] DEPTH: potted

MOISTURE: normal

SOIL TYPE: sandy, loamy

🖒 LIGHT CONDITIONS: partial sun





Nannyberry

1



Narrow Leaved Meadowsweet

3



Bracken Fern



Compartment B

Naturalization Area

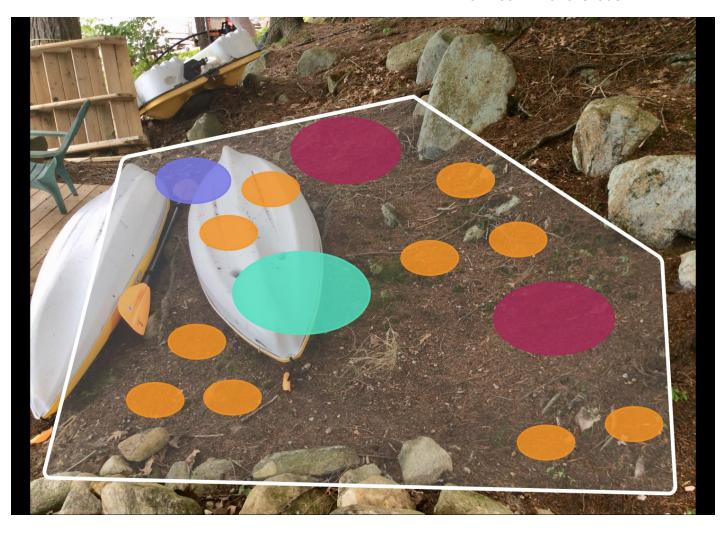
₽₩ PH: acidic

PDEPTH: potted

MOISTURE: normal

SOIL TYPE: loamy

🖒 LIGHT CONDITIONS: shade





Nannyberry

2



Bracken Fern

10



Narrow Leaved Meadowsweet

1



Witch Hazel

Compartment C

Naturalization Area

Under red oak

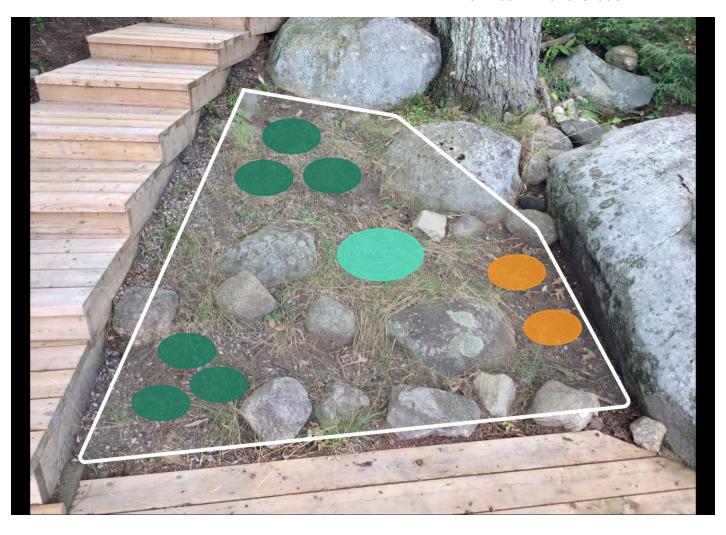
₽₩ PH: acidic

PDEPTH: potted

MOISTURE: normal

SOIL TYPE: sandy, loamy

🖒 LIGHT CONDITIONS: shade





Bracken Fern

2



Wintergreen

6



Witch Hazel

Compartment D

Naturalization Area

Under hemlock trees

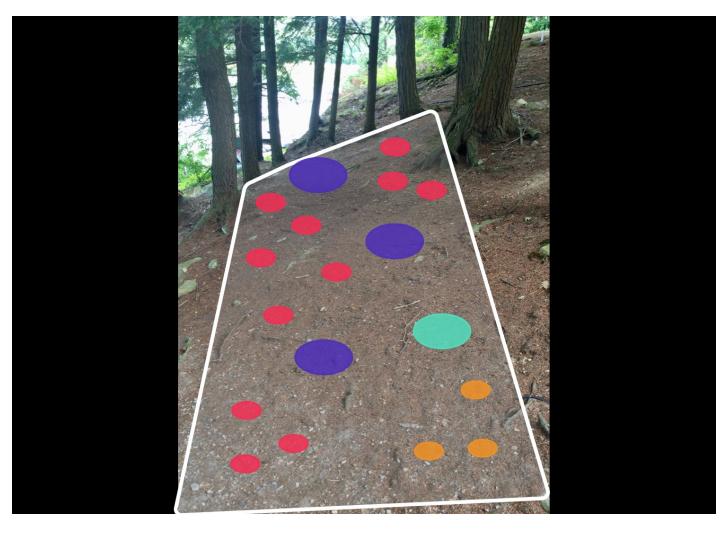
₽₩: acidic

☑ DEPTH: potted

MOISTURE: normal

SOIL TYPE: loamy

🖒 LIGHT CONDITIONS: shade





Bracken Fern

3



Mountain Maple

3

Witch Hazel

1



Canada Mayflower

Compartment E

Naturalization Area

Under hemlock trees

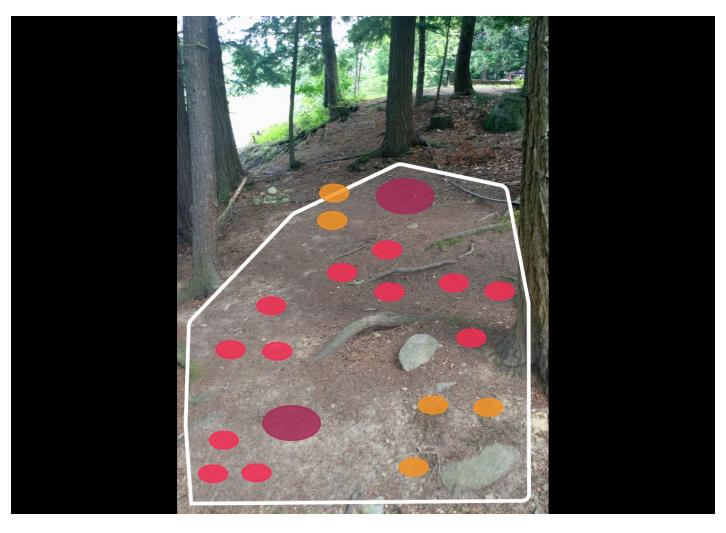
₽₩ PH: acidic

B DEPTH: potted

MOISTURE: normal

SOIL TYPE: loamy

🖒 LIGHT CONDITIONS: shade





Nannyberry

2



Bracken Fern

5



Canada Mayflower

Compartment F

Naturalization Area

Mossy, hemlock

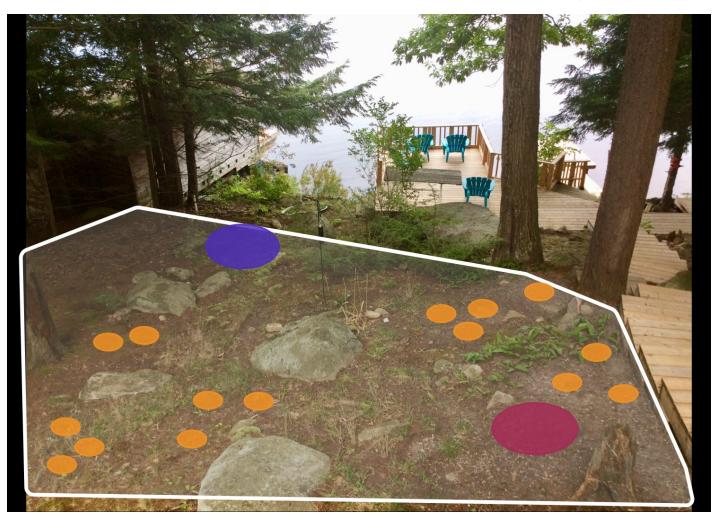
₽₩ PH: acidic

[™] DEPTH: potted

MOISTURE: normal

SOIL TYPE: loamy

🖒 LIGHT CONDITIONS: partial sun, shade





Nannyberry

1



Bracken Fern

15



Mountain Maple

Schedule B

Financial Summary Project by: The District Municipality of Muskoka

Shoreline Re-Naturalization Starter Kit includes: free site visit, customized re-naturalization planting plan for your shoreline property, native plants including free bare root (small) and potted (large) plants and wildflowers, coconut fibre pads to deter grass from growing around new plantings, tree guards for all deciduous trees, mulch for your wildflowers, Plant Care Guide with instructions on how to take care of your new plants, Habitat Creation Guide and a Wildflower Garden Guide.

Our planting plans are created onsite with you and provide detailed information and plans to re-naturalize your shoreline property. We take photos of areas for planting and overlay native plants that are well suited to your property based on site conditions such as soil type and sunlight availability.

We will work with you to create a plan that works for you including options for low growing plants in areas where views are important.

Item	Quantity	Cost/Item	Subtotal
Starter Kit fee			\$300
Free potted plants	20	\$0	\$0
Paid potted plants	67	12.00	804.00
Free bareroot plants	0	\$0	\$0
Free wildflowers	0	\$0	\$0
Total costs			1104.00

Schedule C

Project Agreement

Stewardship Agreement

Please indicate your agreement to this proposed plan by signing the following Stewardship Agreement and submitting it, along with your financial contribution, to:

The District Municipality of Muskoka

70 Pine Street Bracebridge, Ontario P1L 1N3

Plant Availability

Please note that plant species may need to be changed based on plant stock availability at the time of ordering.

Project Completion

Upon receiving your signed stewardship agreement and financial contribution, a date will be booked for you to pick up your Natural Edge Kit. The District Municipality of Muskoka will supply all plants and materials. If you are paying for the planting to be completed for you, a date will be arranged for The District Municipality of Muskoka to plant your shoreline, bringing the plants and materials with them. If there are particular dates that you would prefer, we will do our best to accommodate your requests.



The Natural Edge Stewardship Agreement with The District Municipality of Muskoka

Agreement made this Day of the Month of	of in the Year
BETWEEN Dale McRae 1020 Phyllimar Lane Ontario P0B 1J0 (Hereinafter called the OWNERS)	AND The District Municipality of Muskoka 70 Pine Street Bracebridge, Ontario P1L 1N3 (<i>Hereinafter called DMM</i>)
WHEREAS the Owners and DMM have met and discussed plans existing on the Owners' land; WHEREAS the Owners indicate approval of the project as propos WHEREAS the project is, or will be for the benefit of the Owners NOW THEREFORE THE PARTIES AGREE AS FOLLOWS:	

- 1. This Agreement shall be in effect for a period of 5 years, commencing with the date of this Agreement.
- 2. The Owners and DMM agree that the areas where the work is to be performed is as described in Schedule A.
- 3. The Owners agree to pick up their Natural Edge Starter Kit from DMM's office and plant their shoreline within two days of receipt. The Owners will provide "after" photos of the work completed to be used for reporting purposes. If the Owners wish to have the planting completed for them, then DMM or it's contractors, employees and agents will complete the planting at cost, as indicated in Schedule B.
- 4. If the planting is to be completed by DMM, then the Owners grant DMM, its contractors, employees and agents, the right to enter the property to perform the work agreed upon as outlined in Schedule A. In addition, DMM, its contractors, employees and agents may inspect the work performed for the purposes of monitoring the project and survival assessment, with prior agreement with Owners for date and time of inspection.
- 5. The Owners agree to contribute the "Landowner contribution" and pay the costs indicated in Schedule B.
- 6. In instances where the Owners are to pay DMM for work to be performed (outlined in Schedule A), the Owners agree to provide payments to DMM prior to the commencement of that operation. Failure of payment shall constitute a breach of this Agreement and the Owners agree that this Agreement will be terminated and thereupon the Owners agree to pay DMM the estimated costs of the operations of the project completed to date, if any.
- 7. The Owners agree, if necessary, to perform a reasonable amount of maintenance, which is described in the Native Plant Care Guide, available at naturaledge.watersheds.ca.

- 8. If a contractor is required to perform the work outlined in Schedule A, then the contractor carrying out the work on the land described will be required to take out and furnish evidence of a comprehensive policy of public liability and property damage coverage. The contractor and their workers will be required to be in good standing with the Workplace Safety and Insurance Board (WSIB) prior to performing the work.
- 9. The Owners agree not to remove, destroy or alter the project without prior consultation and approval of DMM. Pruning and trimming planted nursery stock, or adding replacement native nursery stock is exempt.
- 10. The Owners agree not to mow the planted area.
- 11. The Owners do acknowledge that DMM, its contractors, employees and agents, having performed said works, are not under further obligation with respect to survival of nursery stock, inspection, or maintenance.
- 12. The Owners, in the absence of negligence, hereby remise, release and forever discharge DMM, its contractors, employees and agents from all claims and demands for injuries, including death, loss, damages and costs in any way related to or connected with installation and maintenance of the work described or resulting from any deleterious effects of the work to the land or to the lands and buildings thereon retained by the Owners.

IN WITNESS WHEREOF the parties have agreed to the contents of this plan; SIGNED:

The District Municipality of Muskoka

Dale McRae

Representative Signature:

Owner Signature:



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About this program

About The District Municipality of Muskoka

The District of Muskoka is an upper-tier municipality that has monitored water quality in Muskoka area lakes since 1980. Since 2002, the Muskoka Water Strategy has provided integrated and strategic initiatives for the protection of Muskoka's water resources. The purpose of the strategy is to guide and minimize the impact of human activities on water resources; ensure human and environmental health; and preserve the guality of life in Muskoka.

This program was created by Watersheds Canada

We believe that every person has the right to access clean and healthy lakes and rivers in Canada. At Watersheds Canada, we work to keep these precious places naturally clean and healthy for people and wildlife to continue using for years to come. We love working with others to meet the needs of local communities, whether you're a concerned citizen, a landowner, a lake association looking for help, or a coalition of groups interested in activating your local community.

