The Armstrong Property

206 MacBeth Island, Wood Lake
Planting plan created by The District Municipality of Muskoka

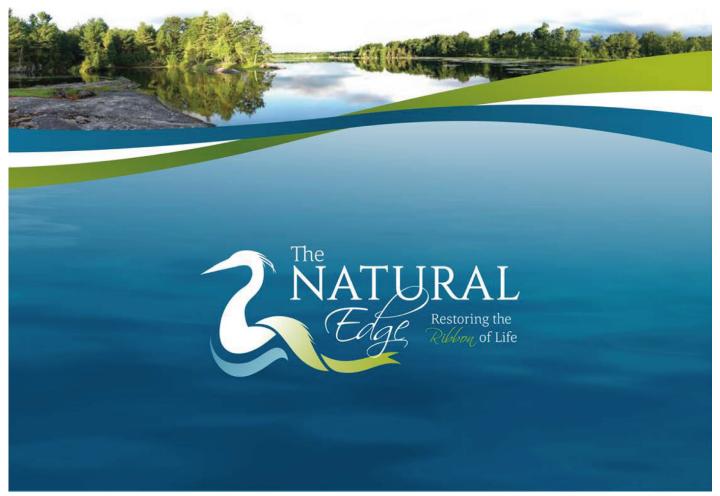
Survey Date: 03/08/2018

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



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: 4b**

Land Characteristics by Compartment

	Length	Width	Area	рН	Soil	Moisture	Light	Height
A	7.5m	4.4m	25.9m²	acidic	loamy	moist	full sun, partial sun	
В	5.2m	8.4m	43.7m ²	acidic	sandy, loamy	normal, moist	full sun	
С	8.8m	3m	26.4m²	acidic	sandy, loamy	normal, moist	full sun	
	21.5m	5.27m	96m²					



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	Potted	Bareroot	Wildflower
Tamarack	1			1		
Gray Dogwood	1			1		
Buttonbush	2			2		
Narrow Leaved Meadowsweet	6			6		
Sweet Gale	1			1		
Nannyberry	3			3		
Canadian Serviceberry		2		2		
Red Osier Dogwood		7		7		
Bush Honeysuckle		3		3		
Smooth Wild Rose			6	6		
Black-Eyed Susan			6			6
Wild Bergamot			6			6
Purple Coneflower			6			6
Subtotal	14	12	24	32	0	18
Totals		50				

Plant Information

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



Tamarack

Height: 20 m

Tamarack is a small to medium sized, deciduous coniferous tree species that grows up to 20 m tall. This plant may also be known by the common name American Larch. The bark is scaly and reddish brown coloured. The needles are delicate, 2-4 cm long, blueish-green coloured, grow in clusters of 15 to 25, and change golden yellow in the fall. This tree provides food and habitat for wildlife species, including birds and mammals. Tamarack is a fast-growing, long lived species that can live up to 150 years and is found across all of Canada. The wood from this tree is decay-resistant and has been used to make railway ties, posts, and crates. Tamarack is considered unique because it is the only conifer species to drop its needles in the fall.



Gray Dogwood

Height: 2-3m

The Gray Dogwood, also referred to as Northern Swamp Dogwood or Panicle Dogwood, is a mediumsized, deciduous shrub which typically grows 2-3m. This species is multi-stemmed, with a full, round form. The leaves are green and arranged alternately along the branches. During the fall, leaves turn a bright red to deep purple colour. Between May and June, showy clusters of small white flowers bloom. These flowers turn into white fleshy berries late in the summer. The reddish-pink stems hold the berries throughout the winter, creating an artful contrast to the gray bark and snowy scenery. The Gray Dogwood is tolerant of a variety of environmental conditions and its complex, fibrous root system make it an ideal plant to use for controlling erosion.



Buttonbush

Height: 2 m

Buttonbush is a small to medium-sized deciduous shrub species which typically grows about 2 m in height. This plant may also be known by the common name Button Willow. Twigs are slender to stout and dark red-brown in colour with white speckling. The leaves are bright green coloured. shiny, ovate shaped, oppositely arranged, and have entire margins. The flowers are tiny, tubular, white, fragrant, and appear densely on distinctive. spherical clusters in June. These flowers turn into a dense cluster of seeds, which remain on the plant throughout the winter. The flowers are beneficial for pollinator species, including hummingbirds and butterflies. This is a hardy, adaptable species and an excellent choice for planting on wet shoreline sites.



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.



Sweet Gale

Height: 1-2m

Sweet Gale is a medium-sized shrub which grows into a thick bush about 1-2 m tall. This species produces 1-8 cm long, oblong-lanceolate leaves which are finely toothed at the tip and are spirally arranged. When bruised, these leaves give off a pleasant aroma. Male and female catkins are produced on separate plants. The seeds are dispersed from the female plants via water, as they float on two corky bracts. This shrub also provides a good food source for bird species that eat the seeds including Grouse, Chickadees, and Bluebirds. Mammal species like Beavers and White-Tailed Deer also browse on the twigs and leaves of this plant.



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.



Canadian Serviceberry

Height: 3-5 m

The Canadian Serviceberry is a multi-stemmed shrub or small tree which grows from 3-5 m in a dense round form. This plant may also be known by the common names: Juneberry, Shadblow, or Shadbush. Early in the spring, prior to leaf development, clusters of fragrant, showy white flowers bloom along the branches. By July, these flowers give way to the fruiting bodies. The fruits are initially small, green berries, which grow to the size of blueberries and turn a deep purple-blue upon maturation during the fall. Leaves produced are finely toothed and spear-shaped. Throughout the summer, leaves are dark green and turn a dramatic orange-red during the fall.



Red Osier Dogwood

Height: 1.5-4m

The Red Osier Dogwood is a medium-sized, deciduous shrub native throughout Northern and Western North America which typically grows to 1.5-4m. This species is multi-stemmed with numerous erect and ascending bright red branches that create a loose and spreading form. Leaves produced are simple, two-toned with a dark green upper side and light green underside. They are arranged opposite each other along the branches. During the fall, the foliage turns a brilliant red to dark purple. Clusters of small, creamy white flowers form on the terminal ends of the branches between June and July. The Red Osier Dogwood produces blueish-white fruiting bodies during late summer, which may persist throughout the winter. This shrub's berries provide an important winter food source for numerous species, from large deer to small wintering birds.



Bush Honeysuckle

Height: 1m

The Bush Honeysuckle is a small, hardy, deciduous shrub that rarely grows taller than 1 m in height. The leaves are simple, oppositely arranged, ovate shaped, and have finely toothed margins. During the spring and summer, the leaves are dark green in colour, then in the fall they take on a variety of colours ranging from a deep purple to light yellow. The flowers are small, showy, yellow to orange colored, trumpet shaped, appear in clusters on the tips of branches, and bloom between June and July. The flowers are beneficial to pollinator species, including hummingbirds and butterflies. The roots of the Bush Honeysuckle are fibrous, giving it the ability to form thickets and making it an ideal shrub to plant for erosion control.



Smooth Wild Rose

Height: 1.5m

The Smooth Wild Rose is a shrub species that grows about 1.5 m tall. The name is derived from the fact that it is almost thornless with only a few sharp thorns present near its base. This native shrub is best known for producing beautiful pale pink flowers with five saucer-like petals surrounding a yellow center. The Smooth Wild Rose produces bright red rose hip fruiting bodies which develop during the summer and persist throughout the winter. Leaves produced are alternate and compound, consisting of 5-7 serrated, egg-shaped leaflets.



Black-Eyed Susan

Height: 1 m

Black-Eyed Susan is a popular biennial or a short-lived perennial wildflower species that typically grows about 1 m in height. Its leaves are green, alternately arranged, lance shaped, and covered with bristly hairs giving the leaf a grey/green colour. The flowers are daisy-like, have 8-20 yellow ray florets surrounding numerous dark brown disk florets, and blooms between June and September. The flowers are beneficial to pollinator species, like bees and butterflies. The seeds are also beneficial to wildlife species, like birds and small mammals. This flower blooms for long periods.



Wild Bergamot

Height: 1 m

Wild Bergamot is a perennial wildflower species that is member of the mint family and can grow about 1 m tall. Its stems are light green and smooth with abundant branching on the upper half. The leaves are oppositely arranged, broadly lanceolate shaped, 6-10 cm long, and have toothed edges. The also leaves emit a aromatic minty/oregano scent when crushed. The flowers are showy, pink/lavender coloured, appear on the ends of flowering stems, and bloom between July and September. The flowers bloom in the center of the head first. moving outwards creating a wreath. The flowers are beneficial to pollinator species, like bees and butterflies. This wildflower spreads well and can be used to naturalize un-vegetated areas. The roots can be useful for controlling erosion and stabilizing shorelines.



Purple Coneflower

Height: 1m

Purple Coneflower is a perennial wildflower that typically grows about 1 m tall. This plant may also be known by the common name Echinacea. The leaves are dark green coloured, alternately arranged, lance shaped with pointed tips, and have serrated margins. The flowers are showy, pale purple to pink, have 15-20 toothed petals, appear atop erect stems, and bloom between June and August. This wildflower spreads well and can be used to naturalize un-vegetated areas. The roots can be useful for controlling erosion and stabilizing shorelines. This flower blooms for long periods. The flowers are beneficial to pollinator species, like bees and butterflies. The seeds are also beneficial to wildlife species, like birds and small mammals.

Compartment A

Naturalization Area

₽₩ PH: acidic

B DEPTH: potted

MOISTURE: moist

SOIL TYPE: loamy

🖒 LIGHT CONDITIONS: full sun, partial sun







Compartment B

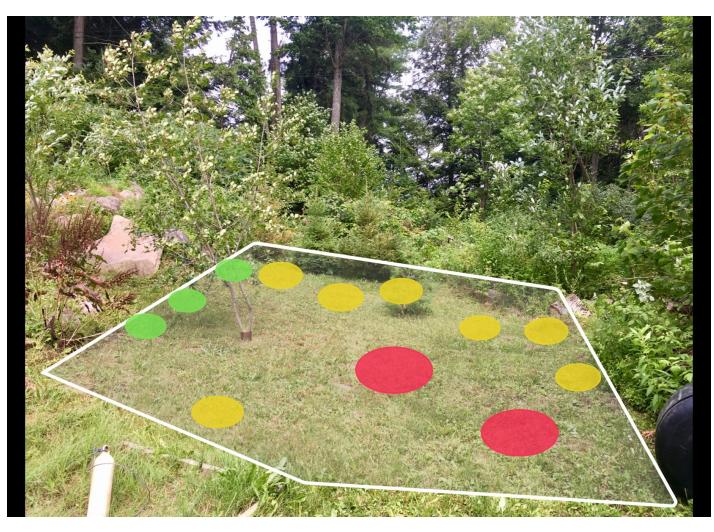
Naturalization Area

₽₩: acidic

P DEPTH: potted

MOISTURE: normal, moist

🖒 LIGHT CONDITIONS: full sun





Canadian Serviceberry

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Red Osier Dogwood

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Bush Honeysuckle

3



Compartment C

Naturalization Area

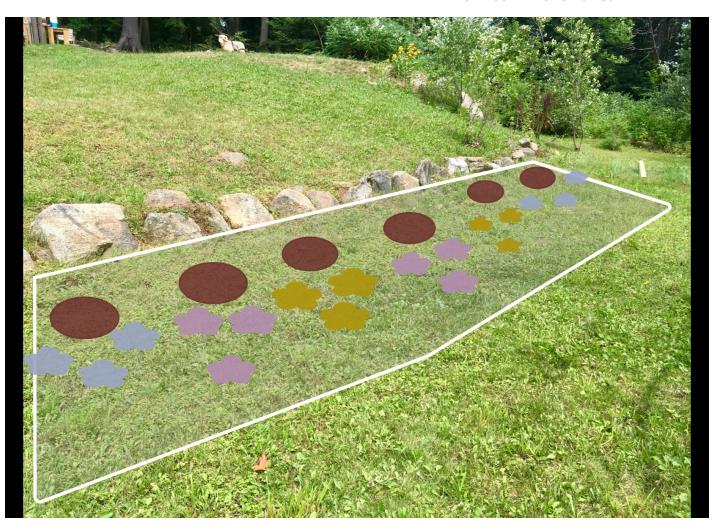
₽₩ PH: acidic

[™] DEPTH: potted

MOISTURE: normal, moist

 $\stackrel{ ext{@}}{\otimes}$ SOIL TYPE: sandy, loamy

🖒 LIGHT CONDITIONS: full sun





Smooth Wild Rose

6



Wild Bergamot

6



Black-Eyed Susan

6



Purple Coneflower

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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	12	12.00	144.00
Free bareroot plants	0	\$0	\$0
Free wildflowers	18	\$0	\$0
Total costs			444.00

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

in the Year

	
BETWEEN Dianna Armstrong 206 MacBeth Island Bracebridge	AND The District Municipality of Muskoka 70 Pine Stree
Ontario (Hereinafter called the OWNERS)	Bracebridge, Ontario P1L 1N3 (Hereinafter called DMM)

Day of the Month of

WHEREAS the Owners and DMM have met and discussed plans for shoreline naturalization on the specified area(s) in Schedule A existing on the Owners' land:

WHEREAS the Owners indicate approval of the project as proposed; and WHEREAS the project is, or will be for the benefit of the Owners and others; 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.

Agreement made this

- 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 Dianna Armstrong

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.

