

Hugh Byce (pasture)

282 Cahill Line, Stoqua Creek

Planting plan created by Muskrat Watershed Council

Survey Date: 10/25/2020





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	pH	Soil	Moisture	Light	Height
A	326m	6m	1956m ²	normal	sandy, clay	normal, moist, wet	full sun	
	326m	6m	1956m ²					

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	A	Potted	Bareroot	Wildflower
Bebb Willow	50		50	
Black Elderberry	50		50	
Bush Honeysuckle	50		50	
Buttonbush	50		50	
Fragrant Sumac	60		60	
Gray Dogwood	100		100	
Red Maple	20		20	
Red Osier Dogwood	200		200	
Smooth Wild Rose	100		100	
Speckled Alder	100		100	
Swamp Rose	100		100	
Yellow Birch	20		20	
Subtotal	900	0	900	0
Totals	900			

Plant Information

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



Bebb Willow

Height: 5 m

The Bebb Willow is a mid-sized deciduous shrub species that can grow up to 5 m in height. This plant may also be known by the common names Beaked Willow and Diamond Willow. The leaves are alternately arranged, dull green in colour, have wrinkled and hairy undersides, are narrow and elliptic in shape (but broad for willow), and have toothed margins. The bark is reddish or grayish-brown in colour and may have diamond-shaped patches along the main stems. The catkins are light green or yellow coloured and appear with the leaves between May and June. The roots can be useful for controlling erosion and stabilizing shorelines.



Black Elderberry

Height: 4 m

The Black Elderberry is a large, fast-growing, deciduous shrub or small tree. This species tolerates a variety of conditions and is commonly found in sunny locations with well-drained soils. Black Elderberry can be single or multi-stalked with numerous branches creating a full, round body. Leaves are compound, with 5-7 leaflets that grow opposite each other along the branch. During the fall, leaves tend to turn a pale yellow. During late May to early June, this species produces flowers that are ivory white and grow in flat topped clusters. By late August, flowers turn to glossy, deep purple fruit, which attracts a variety of wildlife like songbirds and small mammals. Ripe fruit is edible for humans and is commonly made into jams and jellies. The root system of this species is shallow, and can form colonies through suckering.



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.



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.



Fragrant Sumac

Height: 1-2m

The Fragrant Sumac is a medium-sized deciduous shrub within the Cashew family. This species grows between 1-2 meters in height, is multi-stemmed, and produces a round, dense crown composed of erect and spreading branches. Between March and April, small yellow flower clusters bloom on the terminal ends of the branches prior to leaf development. Fruit development begins during late summer. Small, red, hairy berries are produced and can remain on the plant throughout the winter. Male catkins develop on the plant in September. Fragrant Sumac leaves are simple and arranged alternately along the branch. Leaves produced are simple and trifoliate with a large center lobe, appearing similar to Poison Ivy. During the spring and summer, the leaves are light green to green-yellow in colour turning a bright yellow to red or dark purple in autumn. Crushed leaves and stems of the Fragrant Sumac produce a fragrant citrus aroma, hence the common name. The aroma of this shrub is attractive to butterfly species, making it the perfect addition to any butterfly garden. The roots of the Fragrant Sumac are shallow, fibrous, and spread rapidly, making it an ideal choice for stabilizing shorelines and mitigating erosion on steep slopes. Unlike other Sumac species, Fragrant Sumac is significantly less aggressive and easily maintained.



Gray Dogwood

Height: 2-3m

The Gray Dogwood, also referred to as Northern Swamp Dogwood or Panicle Dogwood, is a medium-sized, deciduous shrub. 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.



Red Maple

Height: 12-25m

The Red Maple is the most common and widespread deciduous tree of Eastern and Central North America. The trunk of this hardwood species is branch free from the base to about halfway up the trunk. When planted in an open area, the trunk can divide and branch out fairly close to the ground. As the tree matures, it develops a short, narrow crown consisting of horizontal and ascending branches. The leaves on the Red Maple grow opposite each other on the branches. During the summer, leaves are bright green on top with a whitish underside. During the fall, the leaves turn a bright red or scarlet colour, from which the name is derived. Prior to leaf development, tree flowers bloom in early May. Red Maple tree flowers are small and red to yellowish orange in colour, growing in clusters on a thin stalk. During June and July, tree flowers develop into reddish winged keys, which hold and disperse seeds. The Red Maple plays an important role in the lumber industry, as its wood is excellent for woodworking.



Red Osier Dogwood

Height: 1.5-4m

The Red Osier Dogwood is a medium-sized, deciduous shrub native throughout Northern and Western North America. 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.



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.



Speckled Alder

Height: 8m

The Speckled Alder is a shrub species which can grow to the size of a tree. This species produces alternate, egg-shaped, and double-toothed leaves with prominent veins. The stem initially begins reddish-brown and hairy, becoming dark brown and hairless with age. The bark also develops prominent orange-white speckles as it matures, hence the common name. The Speckled Alder produces male and female catkins on the same tree. Wingless nutlets drop from the female catkins during autumn. This species is ideal for rehabilitation applications because its roots contain nodules with nitrogen fixing bacteria, which converts nitrogen to a usable form and increases this nutrient in the soil. Speckled Alder requires moist soils and can usually be found in wet organic swamps, along shorelines, and in moist hardwood forests.



Swamp Rose

Height: 2m

The Swamp Rose is a beautiful perennial shrub species. It is visually appealing with large pink flowers that last about 6-8 weeks. These flowers have five pink petals, a yellow center, and a pleasant fragrance. This species produces oblong shaped, compound leaves comprised of seven leaflets with serrated edges. The Swamp Rose produces red, round, fleshy fruit called rose hips, which remain on the bush throughout winter. These fruiting bodies provide a winter food source for wildlife, such as Grouse, Black Bears, Deer, and Rabbits. Swamp Rose may be confused with Prickly Wild Rose, which has a similar appearance. However, Swamp Rose can easily be distinguished by the presence of curved thorns, which appear at the nodes of the twigs without any occurring between the nodes. Swamp Rose grows best in moist, rich soils such as swamps and marshy shorelines. However, this species can also tolerate drier, loamy soils.



Yellow Birch

Height: 25 m


Yellow Birch is a native deciduous tree species that can grow up to 25 m in height. The bark is thin, flaky, shiny, and can be brownish-yellow, bronze, or silvery colored. The leaves are deep greenish-yellow, simple, alternately arranged, oval shaped, have doubly serrated edges, and are about 8-11 cm long. This tree species produces catkins in April-May, which are slim, cylinder shaped, yellowish brown flower clusters. In the Fall, seed pods are produced that are brown colored, cone shaped, and break apart easily. Yellow Birch is a slow growing tree but can live up to 150 years. This tree species is beneficial to wildlife species like birds and mammals.


Compartment A


Naturalization Area

- ⚖️ PH: normal
- 🌿 DEPTH: potted
- 💧 MOISTURE: normal, moist, wet
- 🌱 SOIL TYPE: sandy, clay
- ☀️ LIGHT CONDITIONS: full sun




 Bebb Willow
50

 Bush Honeysuckle
50

 Fragrant Sumac
60

 Red Maple

 Black Elderberry
50

 Buttonbush
50

 Gray Dogwood
100

 Red Osier Dogwood



20



Smooth Wild Rose

100



Swamp Rose

100

200



Speckled Alder

100



Yellow Birch

20

Schedule B

Financial Summary

Project Partners: Watersheds Canada and Muskrat Watershed Council

The following section outlines the total cost of your project. It has been divided into 2 sections; 1- Plants and Material, 2- Services. It also includes the breakdown of the landowner contribution and the portion that will be paid by Watersheds Canada, as outlined in the Project Costs Total table.

The Natural Edge program has received generous funding to help support the costs of plants, materials, and project coordination and delivery, making this program possible.

Bareroot stock

Item	Quantity	Cost/Item	Subtotal
Bebb Willow	50	\$2.25	\$112.50
Black Elderberry	50	\$2.25	\$112.50
Bush Honeysuckle	50	\$2.25	\$112.50
Buttonbush	50	\$2.25	\$112.50
Fragrant Sumac	60	\$2.25	\$135.00
Gray Dogwood	100	\$2.25	\$225.00
Red Maple	20	\$2.25	\$45.00
Red Osier Dogwood	200	\$2.25	\$450.00
Smooth Wild Rose	100	\$2.25	\$225.00
Speckled Alder	100	\$2.25	\$225.00
Swamp Rose	100	\$2.25	\$225.00
Yellow Birch	20	\$2.25	\$45.00
Total Bareroot plant stock	900		\$2,025.00

Tending materials

Item	Quantity	Cost/Item	Subtotal
Mulch	900	\$1.00	\$900.00
Tree guards (deciduous only)	40	\$1.50	\$60.00
Total Tending materials			\$960.00

Totals

1-Plants and materials				
Bareroot plant stock			\$2,025.00	
Wildflower plant stock			\$0.00	
Tending materials			\$960.00	
Plants & Materials			\$2,985.00	
2-Services		Quantity	Cost/Item	Subtotal
Watersheds Canada's Site visit (<i>Site visit in-kind</i>)	1 on 10/25/2020	\$0.00	\$0.00	
Plant stocking	900	\$2.00	\$1,800.00	
Mulching & tree guard installation	900	\$1.50	\$1,350.00	
Shipping & handling of materials			\$25.00	
Planting plan			\$350.00	
Project management and delivery			\$400.00	
Administration fee			\$100.00	
Services total			\$4,025.00	
Total Project Costs			Subtotal	
Total project value (including in kind contributions)			\$5,720.00	
Total eligible costs (<i>excluding in kind contributions</i>)			\$7,010.00	
Muskrat Watershed Council's contribution (<i>100% of eligible costs</i>)			\$7,010.00	
Landowner contribution (<i>0% of eligible costs</i>)			\$0.00	



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:

Watersheds Canada

115-40 Sunset Blvd. Perth, ON, K7H 2Y4

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 to complete the project. Watersheds Canada will supply all plants, materials, and planting labour. If there are particular dates that you would prefer, we will do our best to accommodate your requests.



The Natural Edge Stewardship Agreement with Watersheds Canada

Agreement made this Day of the Month of in the Year .

BETWEEN Shirley and Hugh Byce, 282 Cahill Line, Ontario, K0J 1K0 (Hereinafter called the OWNERS)

AND Watersheds Canada, 115-40 Sunset Blvd, Perth, ON, K7H 2Y4 (Hereinafter called WC)

WHEREAS the Owners and WC 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;

1. This Agreement shall be in effect for a period of 5 years, commencing with the date of this Agreement.
2. The Owners and WC agree that the areas where the work is to be performed is as described in Schedule A.
3. The Owners grant WC, its contractors, employees and agents, the right to enter the property to perform the work agreed upon as outlined in Schedule A. In addition, WC, 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.
4. The Owners agree to contribute the "Landowner contribution (0% of eligible costs)" and pay the costs indicated in Schedule B.
5. In instances where the Owners are to pay WC for work to be performed (outlined in Schedule A), the Owners agree to provide payments to WC prior to the commencement of that operation. Failure of payment shall constitute a breach of this Agreement and the Owners agree this Agreement will be terminated and thereupon the Owners agree to pay WC the estimated costs of the operations of the project completed, if any.
6. The Owners agree, if necessary, to perform a reasonable amount of maintenance, which is described in the Native Plant Care Guide, available at watersheds.ca.
7. If the 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 prior to performing the work.
8. The Owners agree not to remove, destroy or alter the project without prior consultation and approval of WC. Pruning and trimming planted nursery stock, or adding replacement native nursery stock is exempt.
9. The Owners agree not to mow the planted area.
10. The Owners do acknowledge that WC, its contractors, employees and agents, having performed said works, are not under further obligation with respect to survival of nursery stock, inspection, or maintenance.
11. The Owners, in the absence of negligence, hereby remises, releases and forever discharges WC, 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:

Watersheds Canada

Representative Signature:

Shirley and Hugh Byce

Owner Signature:



About this program

This project is created as a co-partnership between
Watersheds Canada and Muskrat Watershed Council

About Muskrat Watershed Council

We are a volunteer, community-based, not-for-profit organization with the goal of improving water quality in the Muskrat Lake Watershed by using scientific and local based knowledge. We seek to engage and empower people and communities by promoting best management practices in an effort to identify and reduce nutrient loading from all sources in the Watershed. Through these objectives, we hope to foster economic, societal and environmental sustainability.

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.