

Sharp

541 Barcovan Beach Road, Carrying Place, Lake Ontario
Planting plan created by Watersheds Canada

Survey Date: 07/10/2019



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.

Land Characteristics by Compartment

	Length	Width	Area	pH	Soil	Moisture	Light	Height
A	9m	2m	18m ²	normal	sandy	dry, normal	full sun, partial sun	max 2m
B	10m	1.5m	15m ²	normal	sandy	dry, normal	full sun, partial sun	max 2m
C	15m	2m	30m ²	normal	sandy, loamy	dry, normal	full sun, partial sun	any
D	12m	2.5m	30m ²	normal	sandy, loamy	dry, normal	full sun, partial sun	any
E	20m	3m	60m ²	normal	sandy, loamy	dry, normal	partial sun	any
	66m	2.2m	153m 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	B	C	D	E	Potted	Bareroot	Wildflower
Black Elderberry	5					5		
Chokecherry	2			3		5		
Canadian Serviceberry	3			5		3	5	
Black Walnut	1					1		
Nannyberry	10		10			3	17	
Narrow Leaved Meadowsweet		10				3	7	
Fragrant Sumac		10				3	7	
Fly Honeysuckle		5				5		
Lance-Leaf Coreopsis		3						3
New England Aster		3						3
Highbush Cranberry			10			3	7	
Silver Maple			1	1		2		
Bush Honeysuckle			5			5		
Black Chokeberry				13		3	10	
Red Osier Dogwood				5	10		15	
Yellow Birch					1	1		
Witch Hazel					5	5		
Gray Dogwood					3	3		
Ninebark					8		8	
Subtotal	21	31	26	27	27	50	76	6



Totals	132		
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Plant Information

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



Black Elderberry

Height: 4 m

The Black Elderberry is a large, fast-growing, deciduous shrub or small tree, which typically grows to 4m. 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 attract 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.



Chokecherry

Height: 6-9 m

The Chokecherry is a large deciduous shrub or small tree which grows between 6 and 9 m tall and is a member of the Rose family. It produces a twisted or crooked trunk as well as a narrow, oval to round crown composed of many slender branches. Leaves are alternately arranged, simple, have a deep green upper surface, and light matte green undersides with tufts of hair at the vein axils. During the fall, foliage turns a vibrant deep red to fire yellow or orange. Between May and June, small showy white flowers grow in cylindrical clusters on the terminal ends of branches. By mid-August, flowers turn into shiny deep red or black cherries, which hang in elongated clusters. The fruit is ripe by September and provides a food source for birds and small mammals. The Chokecherry is often found as pure stands forming thickets, or mixed with other early succession shrub and tree species. This fast-growing plant can quickly invade logged land, abandoned farms, and exposed shorelines. The fibrous and wide-spreading root system of this shrub make it an ideal plant for erosion control and bank stabilization. This species possesses the ability to withstand moderate flooding and drought.



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.



Black Walnut

Height: 25-38m

The Black Walnut is a large deciduous tree species, reaching heights of 25-38m. It has a low, wide-spreading round crown composed of stout branches on a short trunk. This species produces a deep root system supported by lateral spreading secondary roots. It is an excellent tree for shoreline rehabilitation and erosion control. The chemical compound juglone is secreted from its roots and decaying leaves, which prevents many other plant species from establishing within the spread of its root system. The Black Walnut is naturally found along riparian zones of lakes and rivers within Southern Ontario. This species produces compound leaves which turn yellowish-green during autumn. Tiny, green, walnut-like flowers appear during the spring, turning into walnuts during the summer. Then in the fall, the walnuts ripen and drop. The Black Walnut is valued for its woodworking potential due to its attractive grain and pliability.



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 butterflies. 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.



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.



Fly Honeysuckle

Height: 1-2m

The Fly Honeysuckle is a medium-sized deciduous shrub that typically grows between 1-2m, and is naturally found throughout Ontario, Quebec, and Eastern Canada. This perennial shrub is multi-stemmed with thin, woody branches and can be grown so that it resembles a vine species. The Fly Honeysuckle's leaves are light green, simple, and oppositely arranged. Leaves are oval in shape and hairless, except at the margins where fine hairs are visible. This species produces flowers which are bell-shaped, white to yellow in colour, drooping in pairs of two, and bloom during late spring. Flowers give rise to large red-orange berries during late summer, which are a favorite to many songbird species.



Lance-Leaf Coreopsis

Height: 45-90 cm

Lance-Leaf Coreopsis is a hardy, perennial wildflower species that grows between 45-90 cm tall. The leaves are mostly basal, medium green, narrow and lance shaped, slightly hairy, oppositely arranged, and have entire margins. The flowers are showy, bright yellow with a dark yellow center, daisy like, have 8 toothed rays, appear solitary at the tip of a flowering stem, and bloom between May and July. The flowers are beneficial to pollinator species, like bees and butterflies. The Lance-Leaf Coreopsis is hardy, easy to grow, and spreads quickly so can be valuable for re-vegetating disturbed sites.



New England Aster

Height: 2m

New England Aster is a showy perennial wildflower with an average height of about 120 cm but can grow up to 2 m tall. It has a central stem with branching in the upper half covered in fine white hairs. Its leaves clasp these stems as they have no petioles. The basal leaves are spatula-shaped, while the stem leaves are alternate and lance-shaped. The leaves are also covered in soft white hairs. Its showy flowers are clustered at the ends of the central stem and surrounding branches. Each flower is composed of 30+ deep purple ray florets surrounding numerous golden disk florets. These plants excel in moist soils with lots of sun. It is often found along lake shorelines, forest edges, in wet meadows, or in marshes/swamps. New England Aster reproduces and spreads using both achenes, which are dispersed by wind and a rhizomatous root system, allowing this plant to colonize open areas. It is also known to easily colonize recently disturbed areas so could be considered for difficult sites that are hard to grow on. This wildflower species attracts lots of pollinators such as bees and butterflies but rarely attracts wildlife, such as wild turkey, deer, and rabbit.



Highbush Cranberry

Height: 3 m

Highbush Cranberry is a large deciduous shrub species that typically grows about 3 m in height. The branches on this shrub are dense with arching stems, creating a full form. The leaves are oppositely arranged, Maple leaf shaped, have 3 lobes, and have entire or toothed margins. The flowers are showy, creamy white coloured, appear in flat clusters with larger florets surrounding smaller ones, and bloom between May and June. These flowers change into drooping, bright red berry clusters that persist throughout the winter. While the berries are edible to humans, they are very tart when consumed raw so are typically cooked first. This shrub has very attractive fall foliage, changing a reddish purple colour. The flowers are beneficial to pollinator species, like bees and butterflies. The fruit is beneficial to wildlife species, including birds and small mammals. The root system is extensive, making this shrub valuable for controlling erosion and stabilizing loose soil. This species can be found across Canada from Newfoundland to British Columbia, but is most commonly found in Ontario and Quebec.



Silver Maple

Height: 30m

The Silver Maple is a fast growing, deciduous Maple tree famous for its majestic, mature form. This species has a broad, round crown that sits on top of a tall straight trunk reaching 30m in height. Its ascending branches give this tree a full, bushy appearance. Silver Maple leaves can be differentiated from other Maple leaves due to the deep notches on their lobes. It has a silvery white colour on its underside in contrast to bright, light green topside. During the fall, the leaves on the Silver Maple turn a reddish orange to bright golden yellow. Between late April and May, inconspicuous, small greenish red flowers bloom and by June turn to yellowish-green or brownish pairs of winged keys. The Silver Maple's shallow, spreading root system and ability to withstand flood and drought make it an excellent tree to utilize for erosion control and shoreline stabilization.



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.



Black Chokeberry

Height: 1-3m

The Black Chokeberry is a medium sized deciduous shrub that typically grows between 1-3m with edible fruit. This species requires full sun to partial shade and can tolerate soil conditions from loamy and moist to rocky and dry. Naturally, Black Chokeberry is found in wet wooded areas such as; swamps, along shorelines, and within forest understory. This species is multi-stemmed, and forms thickets from stems which arise from the roots. Leaves are simple, growing alternately along the branch turning a bold red to orange during the fall. During spring, clusters of showy, white flowers appear turning into dark purple berries by fall. This species is resistant to drought, insects, pollution, and disease. The Black Chokeberry is often cultivated as an ornamental plant and food product. Additionally, this species is useful for bank stabilization and erosion control applications.



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.



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.



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.



Gray Dogwood

Height: 2-3m

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



Ninebark

Height: 2-3m

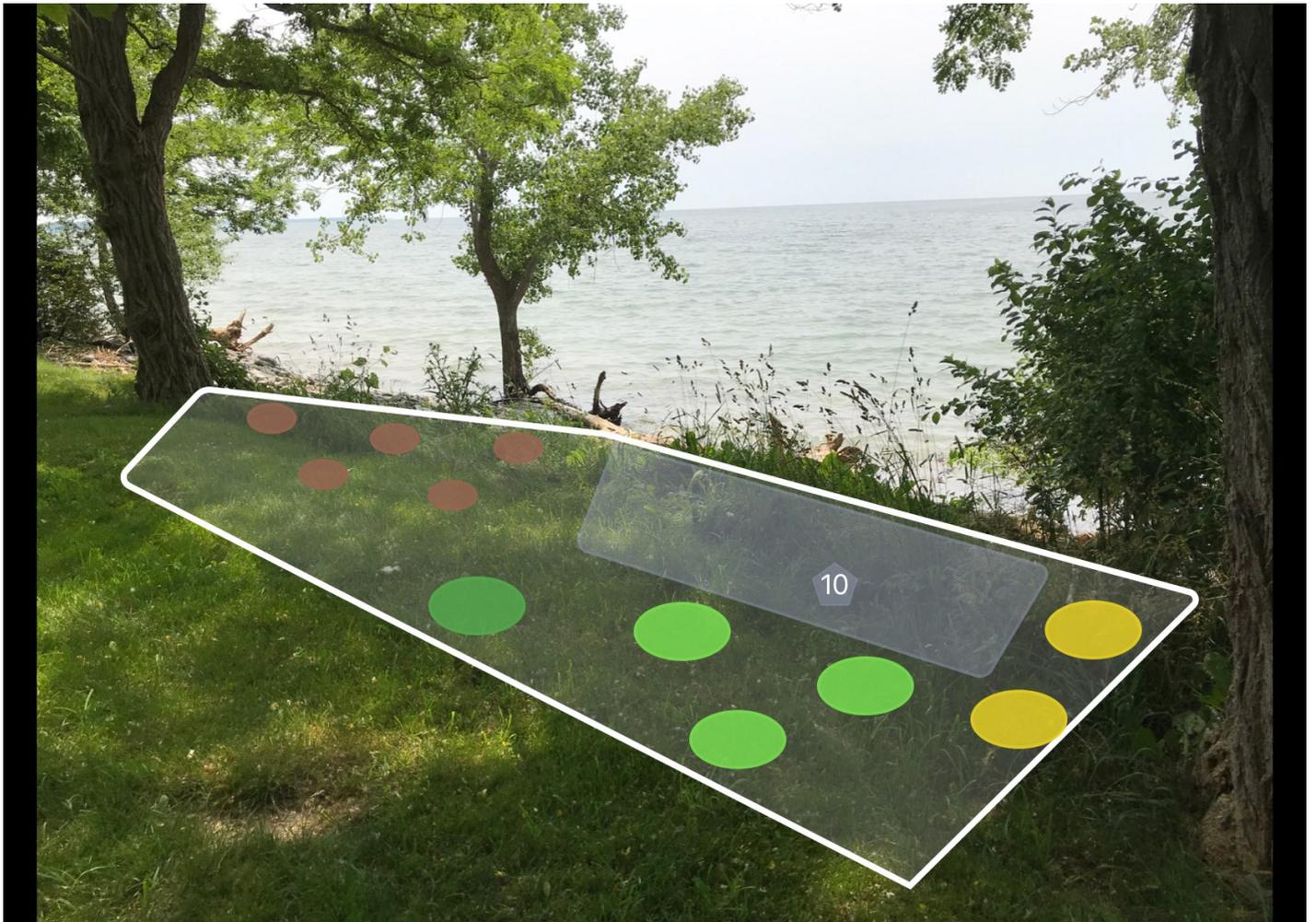
The Common Ninebark is a very hardy, large (2-3m in height), deciduous shrub naturally occurring within riparian zones. This species is often planted as an ornamental shrub for its exfoliating bark which reveals reddish-light brown inner bark. This shrub is multi-stemmed with numerous horizontal and ascending branches creating a full, round shape. The Common Ninebark produces dull green, ovate to round shaped leaves with three to five lobes per leaf. During the fall the leaves turn brilliant yellow or dark purple. Between May and June, showy, bell-shaped flowers bloom in clusters on the terminal ends of the branches. During the summer, these flowers give way to small green or green-yellow berries which turn a bright red upon ripening.

Compartment A

Naturalization Area

Walnut represents Butternut

- ⚖ PH: normal
- 🌱 DEPTH: potted, bareroot
- 💧 MOISTURE: dry, normal
- 🌍 SOIL TYPE: sandy
- 📏 PLANT HEIGHT: max 2m
- ☀️ LIGHT CONDITIONS: full sun, partial sun



● Black Elderberry
5

● Chokecherry
2

● Canadian Serviceberry
3

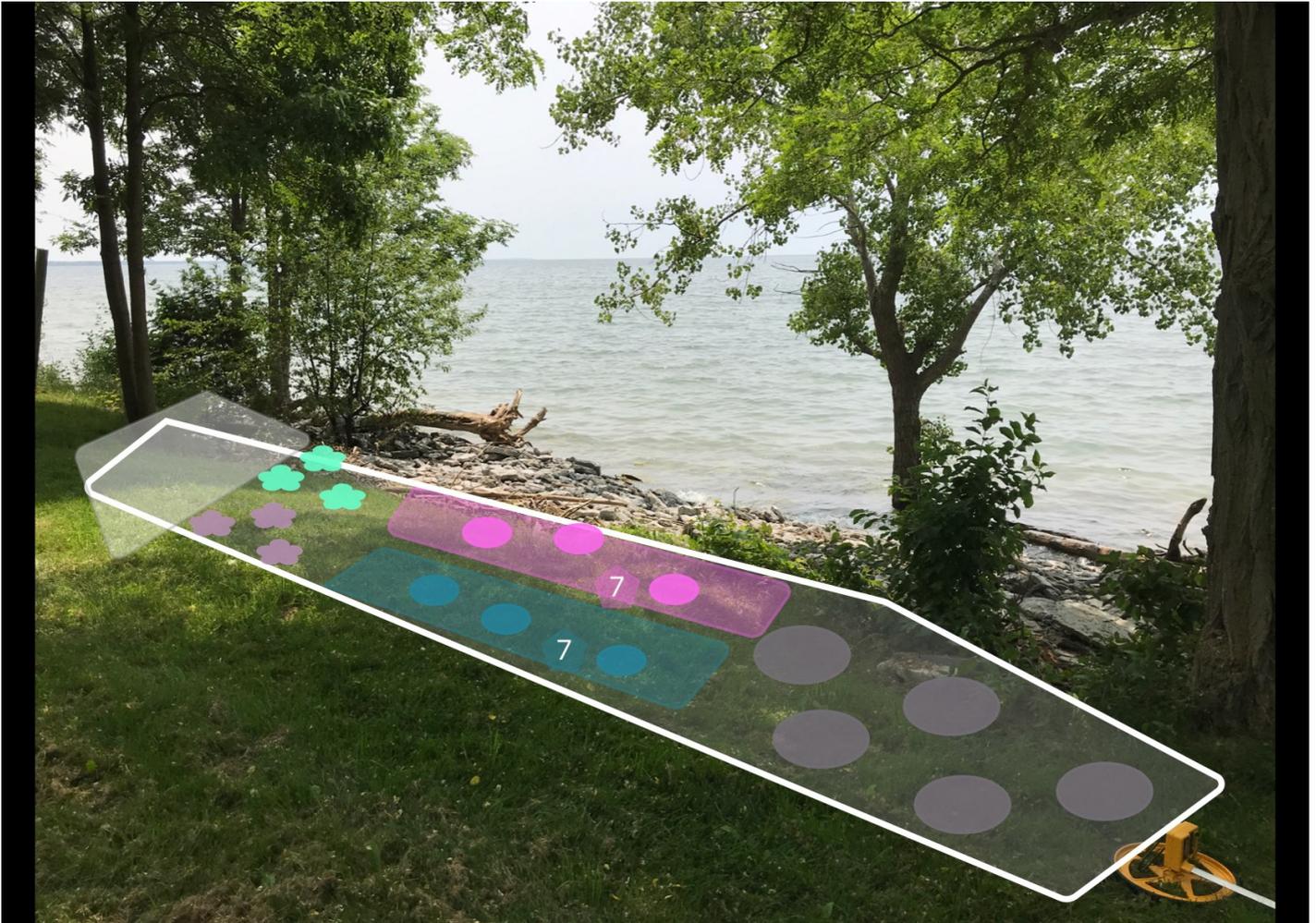
● Black Walnut
1

⬠ Nannyberry
10

Compartment B

Naturalization Area

- ⚖️ PH: normal
- 🌱 DEPTH: potted, bareroot
- 💧 MOISTURE: dry, normal
- 🌱 SOIL TYPE: sandy
- 📏 PLANT HEIGHT: max 2m
- ☀️ LIGHT CONDITIONS: full sun, partial sun





 Narrow Leaved Meadowsweet
 7 3



 Fragrant Sumac
 7 3


 Fly Honeysuckle
 5

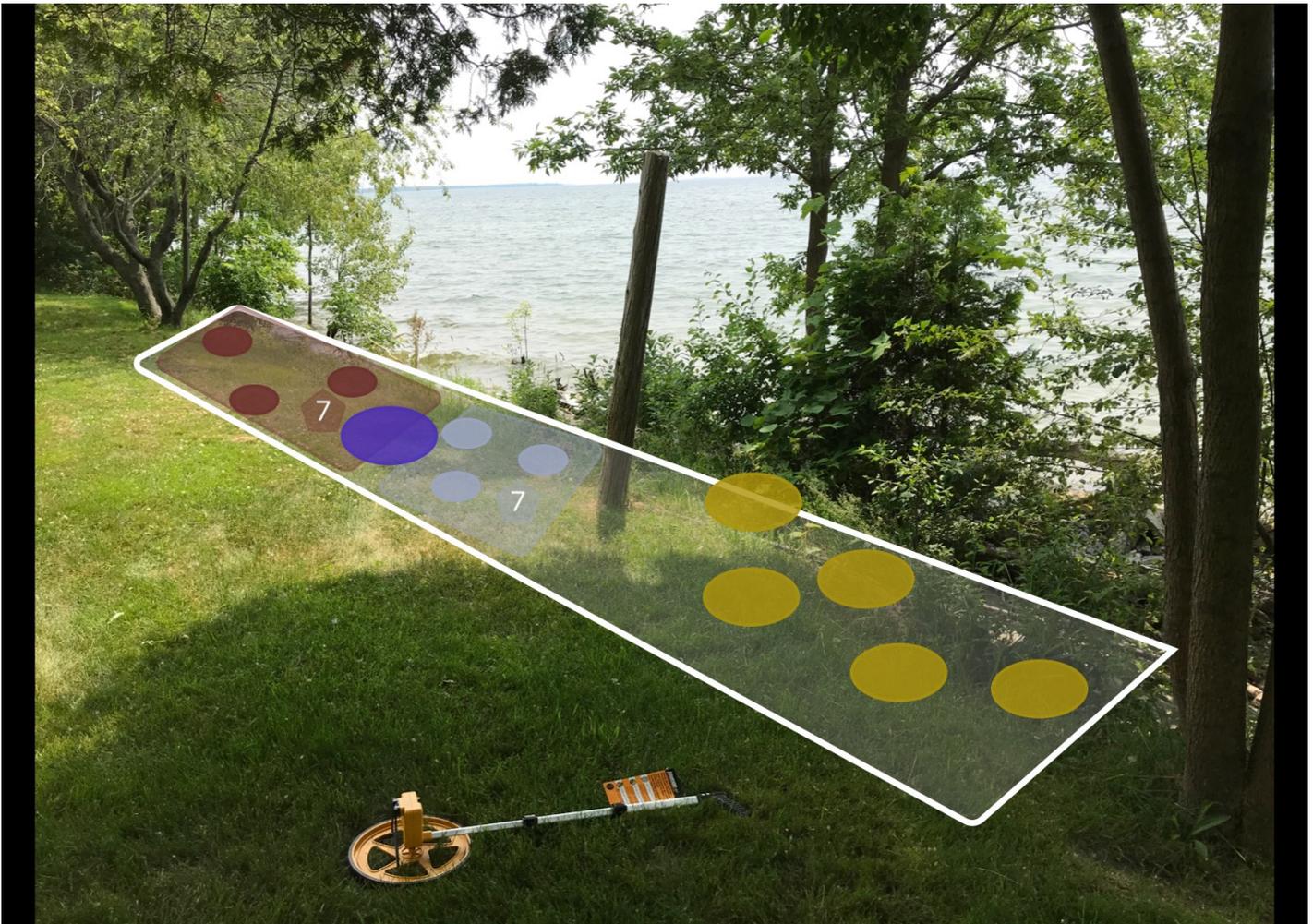

 Lance-Leaf Coreopsis
 3


 New England Aster
 3

Compartment C

Naturalization Area

- ⚖️ PH: normal
- 🌱 DEPTH: potted, bareroot
- 💧 MOISTURE: dry, normal
- 🌱 SOIL TYPE: sandy, loamy
- 📏 PLANT HEIGHT: any
- 🌞 LIGHT CONDITIONS: full sun, partial sun



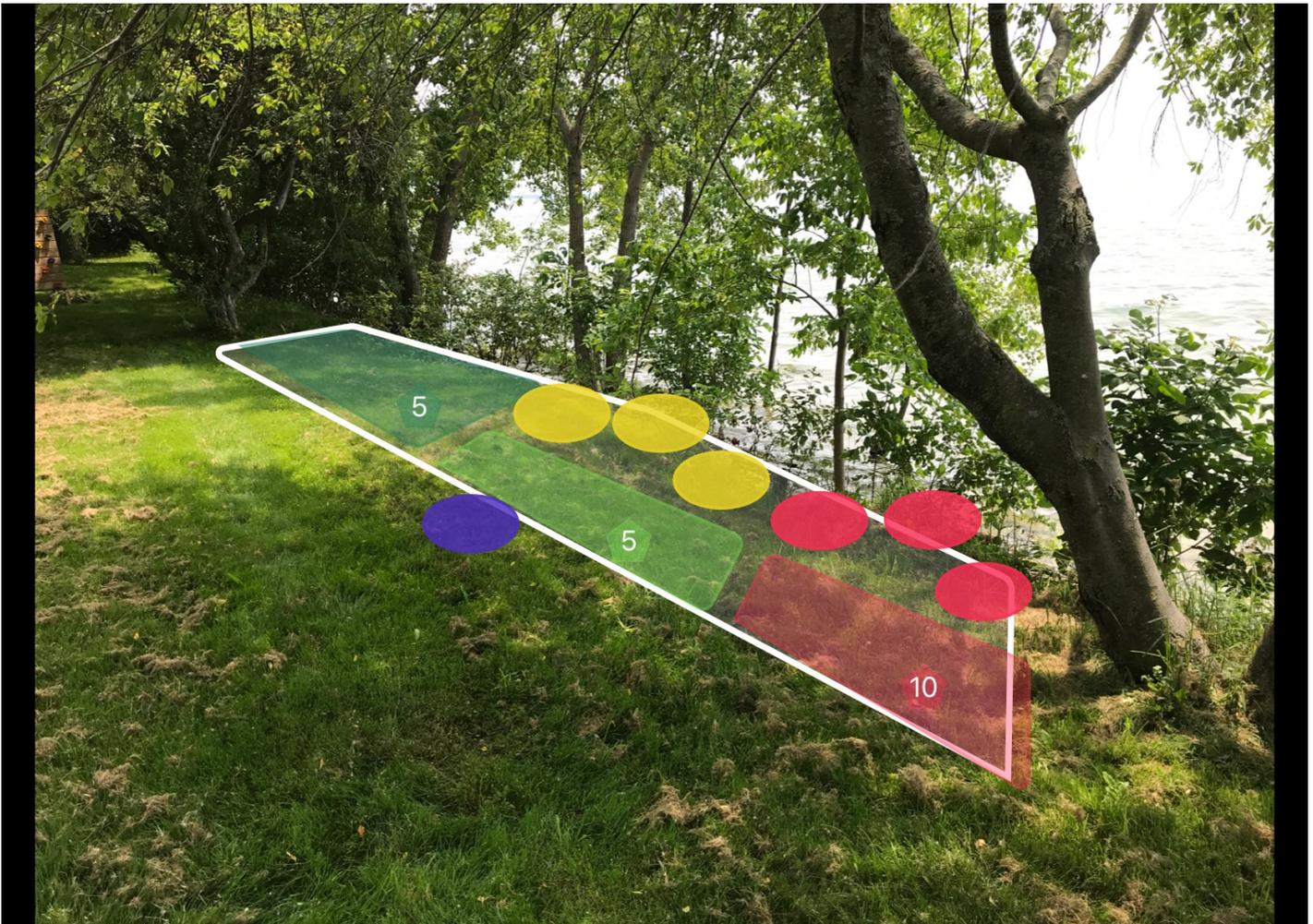
- 
 Nannyberry
 7 3
-  Silver Maple
 1

- 
 Highbush Cranberry
 7 3
-  Bush Honeysuckle
 5

Compartment D

Naturalization Area

- ⚖ PH: normal
- 🌱 DEPTH: potted, bareroot
- 💧 MOISTURE: dry, normal
- 🌍 SOIL TYPE: sandy, loamy
- 📏 PLANT HEIGHT: any
- ☀️ LIGHT CONDITIONS: full sun, partial sun



● Chokecherry
3

⬠ Canadian Serviceberry
5

● Silver Maple
1

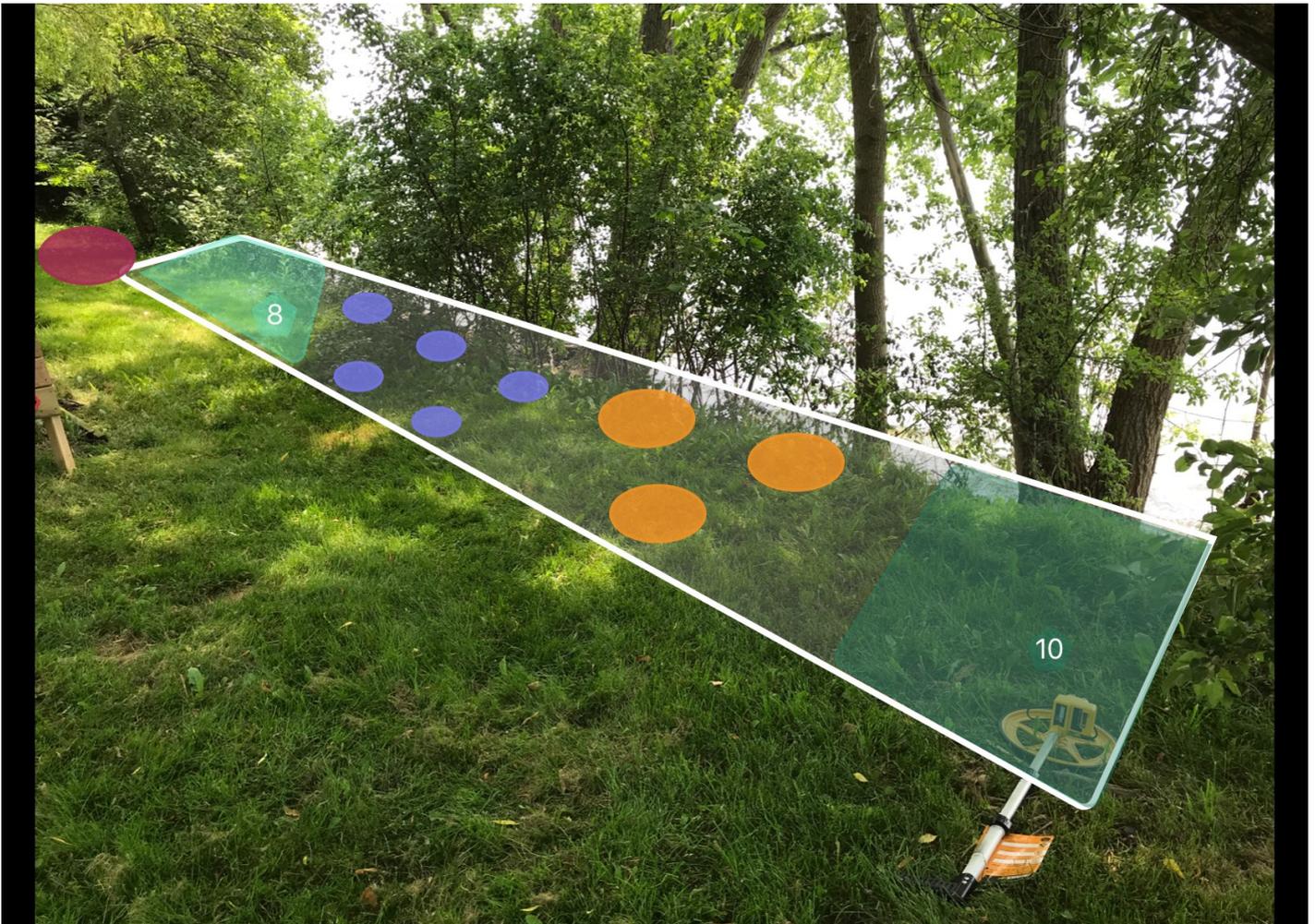
⬠ ● Black Chokeberry
10 3

⬠ Red Osier Dogwood
5

Compartment E

Naturalization Area

- ⚖️ PH: normal
- 🌱 DEPTH: potted, bareroot
- 💧 MOISTURE: dry, normal
- 🌍 SOIL TYPE: sandy, loamy
- 📏 PLANT HEIGHT: any
- ☀️ LIGHT CONDITIONS: partial sun



 Red Osier Dogwood
10

 Yellow Birch
1

 Witch Hazel
5

 Gray Dogwood
3

 Ninebark
8

Schedule B

Financial Summary

Project by: Watersheds Canada

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			\$395
Free potted plants	15	\$0	\$0
Paid potted plants	35	13.00	455.00
Free bareroot plants	35	\$0	\$0
Paid bareroot plants	41	2.25	92.25
Free wildflowers	6	\$0	\$0
Total costs			942.25



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 for you to pick up your Natural Edge Kit. Watersheds Canada will supply all plants and materials. If you are paying for the planting to be completed for you, a date will be arranged for Watersheds Canada 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 Watersheds Canada

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

BETWEEN Alexa & Tom Sharp 541 Barcovan Beach Road,
Carrying Place Ontario (*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;

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 WC 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 WC'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 WC 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 WC, then 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.
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 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 that this Agreement will be terminated and thereupon the Owners agree to pay WC 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 WC. 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 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.
12. The Owners, in the absence of negligence, hereby remise, release and forever discharge 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.

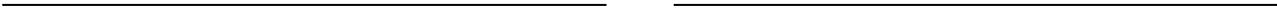
IN WITNESS WHEREOF the parties have agreed to the contents of this plan; SIGNED:

Watersheds Canada

Alexa & Tom Sharp

Representative Signature:

Owner Signature:





About this program

About Watersheds Canada

Watersheds Canada is a non-profit organization and registered Canadian charity committed to working with landowners, communities, and organizations to protect lakes and rivers through developing effective, transferable, and long-term solutions.

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.