Native Plants Protect Torch Lake

TRUE BLUE News

Do You Know?

Stormwater runoff carries excess nutrients into streams and Torch Lake.

Nutrients can lead to algae blooms which pose a threat to our clear, clean, blue water and aquatic creatures.

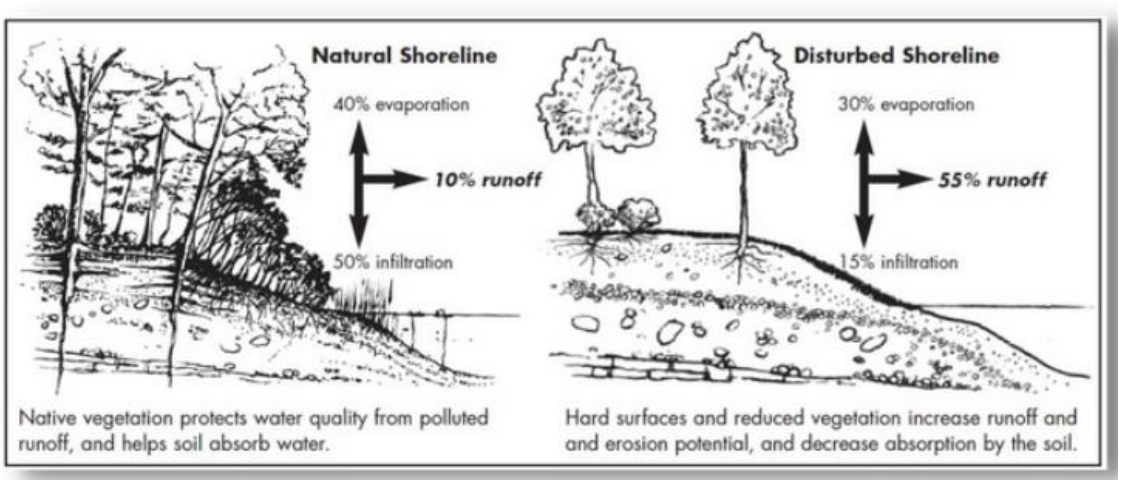
One relatively inexpensive way to manage the movement of stormwater runoff carrying nutrients is to install buffer gardens comprised of native plants.

A buffer garden with native plants keeps stormwater runoff on your property, so water can soak into the soil.

Knee high plants, shrubs and trees plus leaf litter and woody bits act as speed bumps, physically reducing the speed of stormwater runoff.

The deep roots of native plants create a more porous soil and promote greater absorption of stormwater runoff into the soil.

Deep-rooted native plants are more effective at protecting Torch Lake than shallow-rooted grass lawns.



Natural Shorelines decrease stormwater runoff and nutrient pollution.
Image: Rideau Valley Conservation Authority

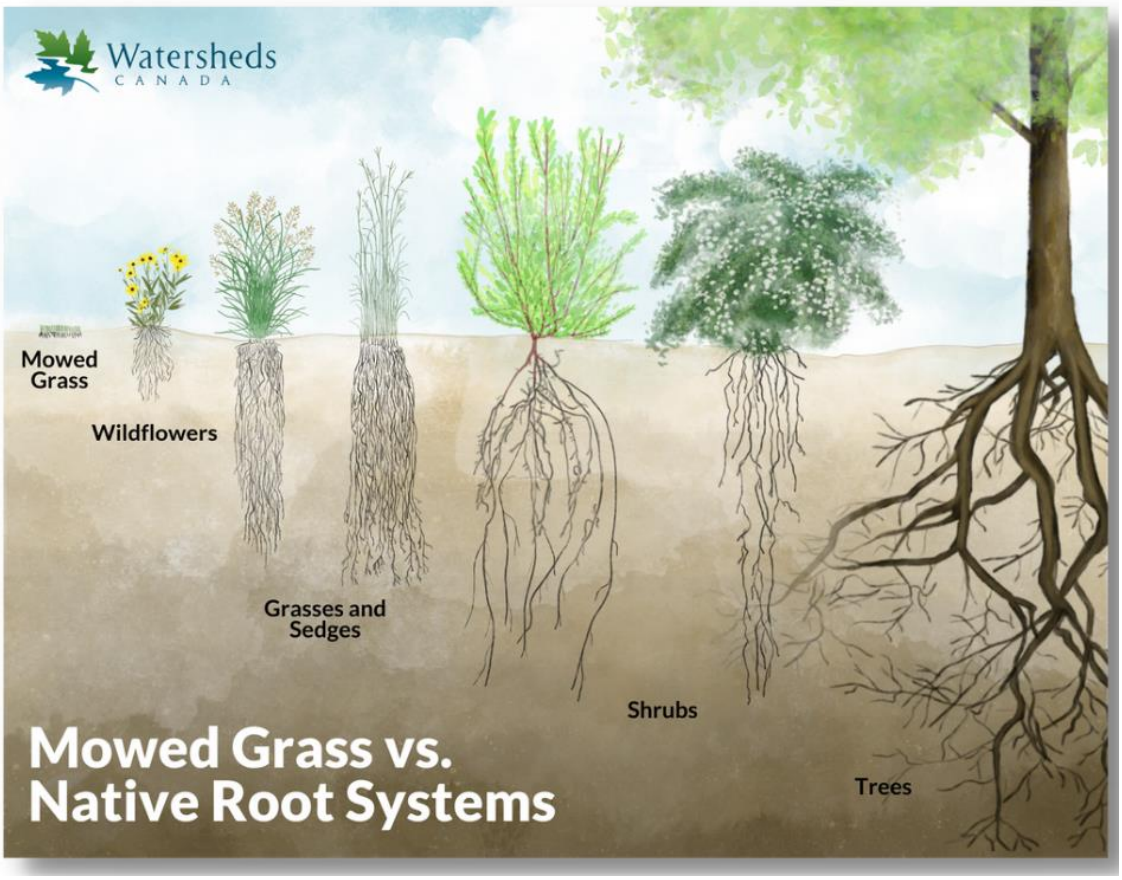
Key Facts:

Whether your property is located on the uplands or on the shore, native plants protect Torch Lake in several ways:

1. Slowing the flow rate of stormwater runoff by trapping sediment as it heads towards the lake or streams feeding the lake.

2. Capturing stormwater runoff, so it enters the soil, infiltrate it and allow nutrients to soak into the soil instead of the lake or stream (Prosser et al. 2020).

3. Using the trapped nutrients for plant growth, flowering and seed reproduction.



Root Systems of Shoreland Trees and Shrubs Compared to Grass Lawn
Image: Nicole Dubé. 2022. Watersheds Canada.

One of many factors impacting the effectiveness of a buffer garden is width.

The golden rule is ANY BUFFER IS BETTER THAN NO BUFFER AT ALL!

Buffers should be as wide and contain as many different plants as the property will allow.

Upland and Shoreland properties are as varied as the waters they surround and each property requires careful planning before being planting.

Torch Lake Buffer Garden featured in the 2023 Elk Rapids Garden Walk
Photo: Elk Rapids Garden Club

Show You Care!

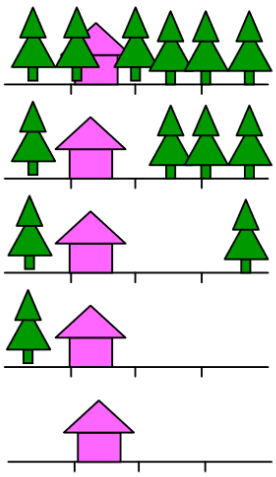
Step 1. Assess your property boundaries by using this Minnesota Department of Natural Resource Survey.

The higher the score the better your property protects water quality from pollution carried in stormwater runoff.

Really look at your property to match the diagrams as it is human nature to overestimate your vegetative cover.

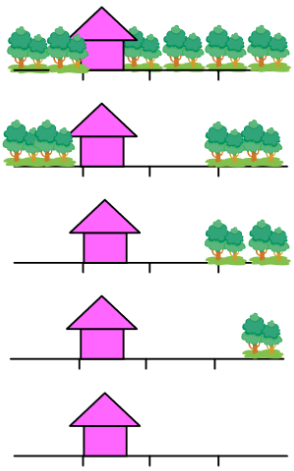
UPLAND PROPERTY

Upland Tree Cover



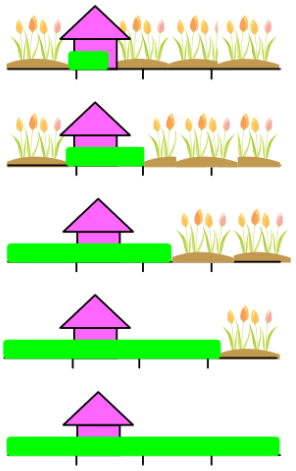
Percent of lot	Description	Points
75-100	Trees present along at least ¾'s of lot front, hiding at least part of house from view.	**25**
50-74	Trees cover at least ½ of lot; at least ¼ of lot has no trees; house may be fully visible	**18**
25-49	Trees cover at least ¼ but less than ½ of lot; lot is mostly open.	**13**
1-24	Trees cover less than ¼ of lot; only scattered yard trees present.	**9**
0	No trees present.	**0**

Upland Shrub Cover



Percent of lot	Description	Points
75-100	Shrubs present along at least ¾'s of lot front, hiding at least part of house from view.	**20**
50-74	Shrubs cover at least ½ of lot; at least ¼ of lot has no shrub layer.	**15**
25-49	Shrubs cover at least ¼ but less than ½ of lot; middle canopy layer mostly open.	**10**
1-24	Shrubs cover less than ¼ of lot; only a few scattered shrubs present.	**5**
0	No shrubs present.	**0**

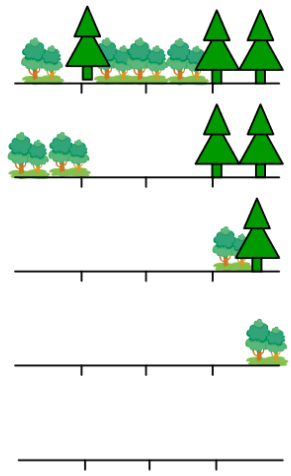
Upland Plant Cover



Percent of lot	Description	Points
75-100	Unmowed plants cover at least ¾ of lot; minimal lawn &/or impervious surface.	**20**
50-74	Unmowed plants cover at least ½ of lot; lawn &/or impervious surface covers up to ¼ lot.	**15**
25-49	Unmowed plants cover at least ¼ but less than ½ of lot; lawn &/or impervious surface at least ½ lot.	**10**
1-24	Unmowed plants cover less than ¼ of lot; lawn &/or impervious surface covers at least ¾ of lot.	**5**
0	Entire lot is mowed, bare and/or impervious surface.	**0**

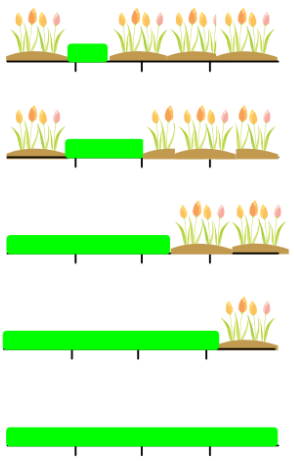
SHORELAND PROPERTY

Shoreland Tree and Shrub Cover



Percent of lot	description	points
75-100	Trees &/or shrubs present along at least ¾'s of shoreline.	**20**
50-74	Trees &/or shrubs cover at least ½ but less than ¾'s of shoreline.	**15**
25-49	Trees &/or shrubs cover at least ¼ but less than ½ of shoreline.	**10**
1-24	Trees &/or shrubs cover less than ¼ of shoreline.	**5**
0	No trees or shrubs present along shoreline.	**0**

Shoreland Plant Cover



Percent of lot	description	points
75-100	Unmowed plants cover at least ¾ of shoreline; minimal lawn &/or impervious surface.	**15**
50-74	Unmowed plants cover at least ½ of shoreline; lawn &/or impervious surface covers up to ¼ .	**12**
25-49	Unmowed plants cover at least ¼ but less than ½ of shoreline; lawn &/or impervious covers at least ½ .	**7**
1-24	Unmowed plants cover less than ¼ of shoreline; lawn &/or impervious surface covers at least ¾.	**4**
0	Entire shoreline is mowed, bare and/or impervious surface.	**0**

Shoreland Overhead Shady Habitat

description	points
Shoreline trees and/or shrubs hang over water.	**10**
No overhanging trees or shrubs.	**0**

Step 2. Determine the conditions of the location of the buffer garden

- sun or shade
- sandy or rocky
- steep or level
- size of your new buffer garden

Step 3. Determine what native trees, shrubs and plants you will add to your landscape.
To get you started, here is a list of 5 favorite Torch Lake Watershed trees, shrubs, sun loving and shade loving plants and native grasses.

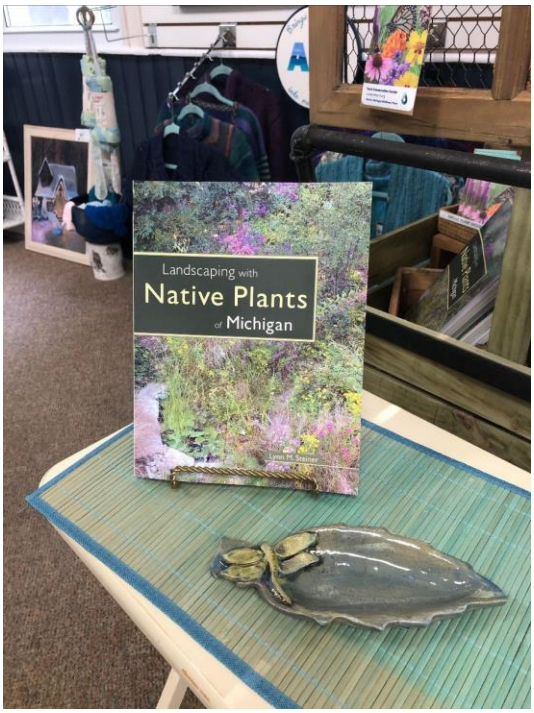
Native Trees	Native Shrubs	Native Sun-loving Plants	Native Shade-loving Plants	Native Grasses
1. Red Pine 2. White Pine 3. White Birch 4. Red Oak 5. Blue Beech	1. Low-grow Fragrant Sumac 2. Common Juniper 3. Ninebark 4. Nannyberry Viburnum 5. Sand Cherry	1. Purple Coneflower 2. Thread-leaf Coreopsis 3. Common Milkweed 4. Black-eyed Susan 5. Blue Vervain	1. Canada Anemone 2. Wild Bergamot 3. Blue Lobelia 4. Blazing Star 5. Blue Iris	1. Big Blue Stem 2. Little Blue Stem 3. Canada Wildrye 4. Switch Grass 5. Dune Grass

Click for a List of more native plants.

Step 4. To see how plants can be combined, click for Native Plant Buffer Garden Plans.

Step 5. To get more planting ideas, stop by the **TRUE BLUE Gallery** and check out the native plant gardens in front of the Gallery and on the west side of the walkway. Native plants are marked.

You can also purchase a great guide for native landscaping in Michigan at the **TRUE BLUE Gallery**. The summer hours are Tuesday-Saturday 10am-5pm.



Landscaping with Native Plants of Michigan by Lynn M. Steiner
Photo: Torch Conservation Center

Step 6. For even more planting ideas,
tour gardens on the Elk Rapids Garden Walk.
Tuesday, July 18, 2023, 10am-4pm.
Tickets are on sale at the TRUE BLUE Gallery until July 15.
Tickets cost $15.
Take photos of the gardens you like and copy what you see.

Sources:

Dennison, C. (2022). The Science Behind Vegetated Shoreland Buffers: Why the Ribbon of Life Matters. Edited by Darlene Coyle. (Watersheds Canada). Retrieved from: https://watersheds.ca/planning-for-our-shorelands

Mertz, L. (2013) Survey reveals why lawn trumps native shoreline and what to do about it. Breat Laks Echo.org August 6, 2013

Minnesota Department of Natural Resources. Shoreland management. Score your shore. Retrieved from: https://files.dnr.state.mn.us/assistance/backyard/shorelandmgmt/scoreyourshore/sys_quickguide.pdf

Prosser et al. (2020) A review of the effectiveness of vegetated buffers to mitigate pesticide and

nutrient transport into surface waters from agricultural areas. Journal of Environmental Management Vol. 261

Canadian Smoke Hanging Around Torch Lake
Photo: Brian Apley

At Torch Conservation Center, we **BELIEVE**
an informed Torch Lake Watershed community cares for Torch Lake
and keeps toxins, nutrients, sediments and invasive species out of the water.
Join us.
Donate now.
Helping Torch Lake is just a click away.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