

Step 1: Take a closer look at your site. **Step 2:** Note items circled in these two grey columns. **Step 3:** Consider the corresponding *Challenge(s)* in this column. **Step 4:** Go for it!

1	2		2		3	4						
In the Water From the water's edge lakeward	Circle your responses				If you circle items in these two columns, consider a <i>Challenge</i>	➔	In the Water <i>Challenge Menu</i>	Lake and Human Benefits	Relative Cost	Time-Effort	<i>I'll take this Challenge*</i>	
What is the width of the recreation area where aquatic plants have been removed?	No water use	About 10 feet	About 20 feet	About 30 feet	More than 40 feet	➔	➔	A Smaller Footprint Where aquatic plants were removed, allow them to grow back.	Fish, frogs, and other wildlife use plants for nesting, cover and food. Aquatic plants protect your shore from erosion. Native aquatic plants can minimize invasive plants.	0	None	
				➔			Go Fish! Replant aquatic plants (MN DNR no-fee permit required).	\$-\$\$		Some to Moderate		
Are there downed trees ("fish sticks") in the water?	Abundant fish sticks		Some fish sticks		No fish sticks	➔	➔	Fish Sticks Let fallen trees and branches remain along the shore and in the water.	Fish, turtles, water birds and mammals use downed trees for shelter, resting, hunting and food.	0	None	
How many accessories (docks+boats+other) are in the water?	0	1-2	3	4	More than 4	➔	➔	Ships Ahoy! Store on land the water accessories you don't often use.	Increase fish habitat (otherwise limited by water accessories).	0	None	

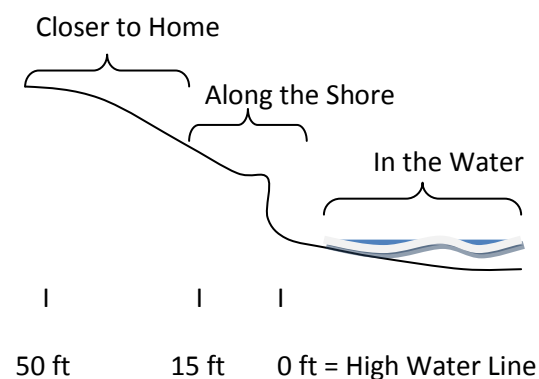
** or indicate if you've already met this challenge*

Along the Shore From water's edge to 15 ft landward of the high water line	Circle your responses				If you circle items in these two columns, consider a <i>Challenge</i>	➔	Along the Shore <i>Challenge Menu</i>	Lake and Human Benefits	Relative Cost	Time-Effort	<i>I'll take this Challenge*</i>	
What width of your shoreline has been altered for lake access, view, recreation, other?	Little or none	About 10 feet	About 20 feet	About 30 feet	More than 40 feet	➔	➔	A Smaller Footprint Reduce this area to a smaller footprint with the following option(s).	80 percent of wildlife in MN depends upon a shoreland of native plants for their survival.	0 - \$\$\$	None to Moderate	
Within this area:												
a. Describe the tree/shrub cover.	Dense	Many	Some	A few	None	➔	➔	Hedge Your Edge Plant native trees and shrubs along your shore.	Deep roots of native plants resist erosion from ice and wave action.	\$ - \$\$	Moderate	
b. What part is lawn or sand blanket?	None	About one quarter	About half	About three quarters	All or nearly all	➔	➔	Green Armor Your Shore Plant native grasses and grass-like plants.	Native plants also filter soil and pollutants from rainwater run-off.	\$ - \$\$	Moderate	
c. What part is mowed or weed-whipped?	None	Only enough for a path	Some	Most	All	➔	➔	Bye-Bye Geese Stop mowing and weed-whipping. Geese avoid tall plants where predators may be lurking.	1.5 pounds of poop per goose per day will not land on your lawn and wash into the lake.	Saves you \$\$	None	
d. What part is armored with rock?	None	About one quarter	About half	About three quarters	All or nearly all	➔	➔	Soft Rock Install native plants into existing rock.	Plants soften the appearance, filter run-off and provide wildlife habitat.	\$ - \$\$	Moderate	
e. What other hard surfaces exist? (Circle all that exist.)	None		Other?	Boat(s) Sidewalk Dirt path	Road Building Patio	➔	➔	Stop the Drop Remove unnecessary hard surfaces and replant or install pervious surfaces, berms, etc. to capture and filter rainwater.	Reduce rainwater run-off (carrying soil, nutrients and other pollutants) entering the lake by over 80%, and reduce algae in the lake, too!	\$ - \$\$	Moderate	
f. Is there a fire ring or area?	No				Yes	➔	➔	Ring of Fire Move fires and fire rings away from the lake (25 to 50 feet is recommended).	Reduce the phosphorous- and nitrogen-rich ashes carried into the lake by rainwater and wind.	0	Some	
g. What portion of the shore has an ice ridge?	All – Ridge not breeched	Part – Ridge not breeched	None – Natural slope	All/Part – Ridge breeched	All – Ridge regraded	➔	➔	No Water Over This Dam Leave ice ridge in place and create an access over it. Plant a rain garden behind it for added beauty and filter.	An ice ridge across your entire shoreline can capture and filter up to 100% of soil, nutrients and other pollutants in rainwater run-off.	0	None	
h. What length of shoreline is eroding? (continued on back side)	Little to none	About 10 feet	About 20 feet	About 30 feet	More than 40 feet	➔	➔	Shore Up Your Shore Consult with Itasca SWCD to determine which erosion control method is best for your shore. Permit may be required.	For a 100-ft lot, this can reduce the soil entering the lake by about 360 pounds per year and result in about 90 pounds less algae in the lake.	\$ - \$\$\$	Some to Great	

Closer to Home 50 feet landward of the high water line (excluding the Along the Shore area)	Circle your responses					If you circle items in these two columns, consider a <i>Challenge</i>	➔	Closer to Home Challenge Menu	Lake and Human Benefits	Relative Cost	Time-Effort	I'll take this Challenge*
What average width of this upland area has been altered for access, recreation, view, other?	Little to none	About 10 feet	About 20 feet	About 30 feet	More than 40 feet	➔	A Smaller Footprint Reduce this area to a smaller footprint with the following option(s).	80 percent of wildlife in MN depends upon a shoreland of native plants for their survival.	0 - \$\$\$	None to Great		
In this area	Dense	Many	Some	A few	None	➔	Super Filter Plant native trees, shrubs, ferns, vines, flowers, grasses and/or grass-like plants. They filter run-off, minimize erosion and provide food, shelter and nesting sites for songbirds and other wildlife.	For a 100-ft lot, replacing lawn with a 50-ft forested filter can reduce the soil entering the lake by about 360 pounds per year and result in about 90 pounds less algae in the lake.	\$ - \$\$\$	Some to Great		
a. Describe the amount of trees.	Dense	Many	Some	A few	None	➔						
b. Describe the amount of shrubs.	None	About one quarter	About half	About three quarters	All or nearly all	➔						
c. What part is covered by lawn or bare soil?	None	Only enough for a path	Some	Most	All	➔	No Mow-Let It Grow! Stop mowing and allow plants to grow back.	Taller grasses will better filter run-off from your property.	Saves you \$300/acre/yr	None		
d. What part is mowed or weed-whipped?							Set Your Sights High Raise the blade on your mower to 3 inches.	A longer lawn will also better tolerate stress and limit weeds.	0	None		
e. Is erosion or runoff related to the following? (Circle all that apply.)	Little or None	Stairs Lift	Other?	Sidewalk Path Steps	Road Building Patio/Deck Wall	➔	Step it Up! Modify your foot access to filter rather than funnel rainwater directly to the lake.	Reduce rainwater run-off (as well as the soil, nutrients and other pollutants it carries) entering the lake by over 80%. This will reduce the algae in the lake, too!	0 - \$\$\$	Some to Great		
							Get with the Flow! Modify hard surfaces with water bar, berm, etc. to redirect rainwater to filter into soil rather than flow directly into lake.		0 - \$\$\$	Some to Great		
							Who'll Stop the Rain? Install rain barrel, rain garden, drip trench, etc. to capture and use rainwater.		\$ - \$\$\$	Some to Great		

* or indicate if you've already met this challenge

Extra Credit Challenges	(Circle those that interest you.)				I'll take this Challenge*
Pass It On!	Help a neighbor with a Challenge Project Plant a filter, make a water bar, survey for frogs, etc.	Lake Cache Establish a control points around the lake for youth activity	Tell several neighbors about the Lake Challenge Host a boat tour or back yard party	Start a "Welcome Aboard" Program Tell new lake neighbors about the <i>Lake Challenge</i>	
Family Fun	Shoreland Scientist See what's in your rainwater run-off! <i>Equipment and training provided. Time: 15 min following each rain event. **</i>	Fish Count <i>Training provided. Time: 1 hour per year</i>	Frog and Toad Count <i>Training provided. Time: 1 hour per year</i>	Beachcomber Program Monitor your shore for aquatic invasive plants. <i>Training provided. Time: 5-15 minutes several times per year</i>	



To enroll or seek more information on the
Itasca Lake Challenge,
Contact: Mary Blickenderfer, University of MN Extension
blick002@umn.edu 218-244-7996

Notes: