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THE TOP TEN REASONS TO RESTORE YOUR LAKESHORE WITH NATIVE PLANTS

Minnesota is home to over 10,000 lakes, and each one of them is a treasure worth protecting. A key component to preserving and improving lake quality is to restore lakeshores with native plants. High-quality shoreline restorations are an economical tool to reduce erosion, create resilient habitats, add natural beauty to the landscape, and provide countless other benefits that are oftentimes overlooked as well.

Simply put, what we do on our lakeshores dramatically impacts our lakes. Having turf to the water's edge, misused rip-rap, timber seawalls, and oversized sand blankets all add to habitat loss and poor water quality. This sort of lakeshore management has been the norm for decades, but now, fortunately, the perception of how to properly take care of our shores is changing.

Natural shorelines with a diversity of native plants are now being thought of as smart and a win-win for individuals and lake communities. But, change doesn't happen overnight. To some, the thought of natural shores goes against the grain of "neat and tidy" or "well-kept landscapes". But over the last two decades, people have become more comfortable with natural landscapes and embracing the look. Helping folks understand the numerous benefits of natural shores is the key to widespread acceptance and unlocking this invaluable lake management tool.

We have put together this summary as a quick go-to educational reference. Here are the *top ten reasons to restore lakeshores with native plants*:

1. Preventing Erosion and Stabilizing Shores



Eroded Shoreline Before Restoration

Lakeshores are subject to a variety of erosion-causing factors, such as natural wave action, boat wakes, flooding, ice-heaves, muskrats, and foot traffic. Lakeshores throughout Minnesota, have been stripped of native vegetation in favor of the clean looking turf grass. From a soil stabilization standpoint, this is a horrible transition. You see, traditional turf lawns have shallow root systems, averaging 2" in depth, and cannot withstand even moderate wave action. Over time, the shores experience soil loss and cut bank (steep drops) formation. Soil particles end up in the lake and can cause "turbidity" or cloudy, brown tinted water. On a large scale, this can become a serious water quality concern.

When we restore lakeshores with native plants, we repair the damaged shoreline and introduce species that naturally anchor the base of the shore slope in place with their extensive root systems. These wetland shore species roots spread by "rhizomes" and create a dense, tough matrix of root material that can reach 2-3' in depth. We have a number of "workhorse" species that are especially well-suited for erosion control. Once established, these native plant species can withstand wave action, flooding, muskrats, and other erosion-causing stressors.

2. Reducing Costs



Native Shoreline Buffer Replacing RipRap

Living on a lake isn't cheap. Along with the million dollar views and water access comes hefty tax bills. So it's completely understandable that lakeshore owners are looking for ways to properly manage their shores at a reasonable cost. Natural shore restoration is much more economical than traditional shore stabilization. For instance, a standard rock rip-rap installation job ranges from \$300 to \$500 per linear foot, while installing and establishing a 10' natural shoreland buffer ranges from \$50 to \$150 per linear foot of shore. Not only do you gain shore stabilization and erosion control, there are a host of other benefits that are realized with a natural shore, which are detailed below.

3. Adding Beauty and Value



Beautiful Shoreline Restoration

Shoreline restoration with native plants dramatically improves the look of landscape while providing economic benefits to property owners. By replacing traditional lawns with native plants to restore lakeshores, property owners create natural and visually appealing landscapes that blend seamlessly with lake ecosystems. In addition to the visual appeal of native wildflowers and grasses, shoreland owners enjoy viewing birds, butterflies, and other pollinators within their natural landscapes. Compared to homes with turf lawns along their shoreline, studies have shown that homes that have restored shorelines are valued 3% to 13% higher [\[1\]](#). By investing in shoreline restoration, property owners enhance aesthetics and add value to their properties.

4. Creating Ecologically Diverse Habitats



Butterflies and Bees on Purple Coneflower

Traditional shoreline management wreaks havoc on some of the most ecologically diverse habitats that we have in Minnesota. The land-water interface is a hotbed of biological activity. Restoring your lakeshore with native plants reintroduces the foundation for this critical habitat. A wide variety of animals, such as fish, frogs, turtles, and wading birds are all dependent on this shoreland habitat. Establishing a diverse plant community is essential in promoting biodiversity and ecosystem resilience. For instance, some shoreland plant species will flourish in years that are hot and dry, and others will do better when we have cooler temperatures and high water levels. This ability to withstand environmental variability is paramount for local wildlife to survive with the ongoing threat of climate change [\[2\]](#).

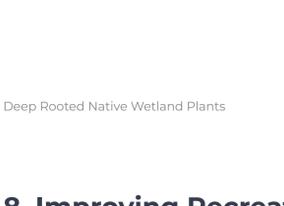
5. Reducing Nutrient & Chemical Runoff



Adding a Lake Buffer to Lawn

Traditional lawns do not do us any favors when it comes to protecting lake water quality. For instance, when it rains, pollution on land, such as excess nutrients (fertilizers), chemicals (weed killers), and yard waste can quickly wash into our lakes. Lawn area filters 9 times less phosphorus and 18 times less sediment [\[3\]](#) than natural or restored shorelines while also requiring frequent mowing, watering, fertilizers, and pesticides. The stem and leaf structures of native plants in natural shore buffers slows water flow and works to infiltrate runoff and associated pollutants. Ultimately, this function is important in preserving lake water quality.

6. Reducing the Need for Chemical Inputs



NST Staff Reducing Chemical Inputs

Turf grass is chemically dependent and requires water during dry periods. So, if you are concerned about lake water quality, eliminating the need for fertilizers and chemicals really makes a great deal of sense. The most effective way to eliminate the use of lawn chemicals is to introduce a natural shoreland buffer. Native plants do not require fertilizers to grow, broadcasting weed killers is not necessary [\[4\]](#), and watering during droughts is not needed [\[5\]](#). Planting a diversity of native plants to restore lakeshores adds resiliency to a wide range of environmental conditions. They are well-adapted to local conditions, so ditching turf will also save you valuable time and money; no more chemicals, watering, gas, and time behind the mower.

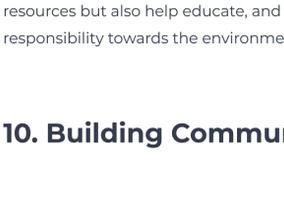
7. Battling Climate Change



Deep Rooted Native Wetland Plants

Reducing carbon dioxide in the atmosphere is one way to combat climate change. Wetland plants, like bulrush, sedges, rushes, and even wildflowers then store carbon through photosynthesis and then trap carbon in their biomass, including stems, leaves and root systems. When the plants die, the carbon is incorporated into the soil and can be stored for hundreds of years or even longer. Also, upland prairie buffer species, with their incredibly long root systems (up to 13' [\[6\]](#)) are an efficient below ground carbon sink. Having a diverse natural shoreland buffer with a variety of emergent, wetland, and upland species, all work to trap or "sequester" carbon. Collectively, we can all do our part to battle climate change.

8. Improving Recreation

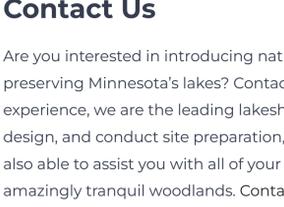


Lakeshore Restoration with Recreation in Mind

Natural shore restoration is also a vital opportunity to preserving and enhancing recreational opportunities. Creating healthy and stable shoreland ecosystems leads to more robust habitat and food chains. For instance, bulrush stands are excellent habitat for bluegill spawning and cover for a multitude of minnow species, and a variety of ducks feed around this emergent vegetation. This one species contributes to diverse and resilient fish and game populations.

Additionally, shoreland restoration efforts help to improve water quality by removing pollutants, and nutrients from runoff. Less available nutrients, like phosphorus and nitrogen leads to a reduction in algal blooms. Harmful algal blooms (mainly blue-green algae), can produce toxins, unpleasant odors, and scum that can seriously impact recreational activities.

9. Creating Outdoor Learning Opportunities



Learning about Lakeshore Restoration at Cedar Lake

Shoreline restoration projects also provide excellent educational opportunities for everyone in your family, young and old. For the students in your family, how about an outdoor learning laboratory that is living, dynamic, and attracting new specimens each day? The opportunities to observe and study plants and animals are seemingly endless. And just imagine, this type of incredible laboratory can be steps away from your backyard.

Large, public shoreland restoration projects have also been integral in environmental education and providing hands-on demonstrations. For instance, a successful shoreland restoration at Lake Phalen in St. Paul, Minnesota has hosted educational lessons for over 300 local school groups [\[7\]](#), civic groups and academic professionals. These projects not only improve the health and beauty of our natural resources but also help educate, and through this, create a lasting sense of stewardship and responsibility towards the environment.

10. Building Community Connections



Volunteer Shoreline Planting at Birch Lake

Shoreline restoration is a great opportunity for communities to engage in collaborative efforts to improve the health of their lakes. Many lakeshore associations have the ability to support community projects. If you don't have a lake association, start by coming together with other lakeshore property owners to share experiences and learn. Perhaps, start small by taking on a shoreland demonstration project. This will definitely help build a sense of shared ownership and stewardship towards the lake. It's powerful when people come together and implement a lake management practice that is so visual and has so many ecological benefits.

To get shoreland restoration projects like this off the ground, grant funding is available. By utilizing local cost-share resources (many of which are available here [\[8\]](#)), the price of a project can be cut in half or even more. These grant opportunities are definitely advantageous for the lakeshore owners, the lake users, and the agencies that manage our natural resources.

Contact Us

Are you interested in restoring native plants to restore your lakeshore and taking a crucial step in preserving Minnesota's lakes? Contact our experts at Natural Shore Technologies. With over 20 years of experience, we are the leading lakeshore restoration experts in the state. We can walk you through design, and conduct site preparation, installation, and maintenance of your restoration project. We are also able to assist you with all of your natural landscaping needs, from stunning prairie meadows to amazingly tranquil woodlands. Contact us today [\[9\]](#) to learn more about setting up your initial site consultation.

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