

Shoreline Planting Workshop – Forest Lake (April 13, 2010)

It is amazing how our understanding of a practice changes over time.



For example, in streams there were many misguided assumptions made by “professionals” in the field. Take this article printed in 1935. Crooked streams were seen as a “menace to life and crops in the areas bordering their banks.” Without straightening the river, “Floods result. Crops are ruined. Lives are lost. Banks are undermined, causing cave-ins that steal valuable acreage”. Straight streams were seen as better because they moved sediment “away” and prevented flooding on your land.

But best yet, it sold dynamite.

At the time, this was promoted as a good practice. The results were immediate and there was a visible change in the water. However, the results were rather short-sighted. Sure, it was good for you if you never had to go downstream to fish, swim, or drink the water. But what if every neighbor upstream of you was doing the same thing and sent all of the sediment and floodwater your way?

Nowadays, we are not too worried about shoreland owners blowing them up. But past misconceptions are still resulting in poor guidance for owners of shorelines that is having profound effects on our quality of life on our water resources.

There is a wide variety of what people think a shoreline should look like. Everything from native plantings to concrete walls in the water may fall under a person’s idea of how to stabilize a shoreline. So to clarify, today we are talking about shoreline restoration utilizing native plants.

Our goal is to restore shorelines so that they function naturally, provide a water quality benefit and wildlife habitat. We want to restore an ecologically functioning system.



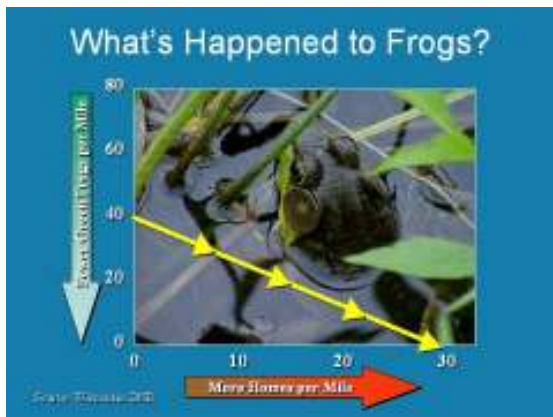
We want to protect the values that lake and stream shore line owners desire when they make an investment in their home on the water.

TIME Magazine 1973:

“Much of the mood in Minnesota has to do with the comparatively unspoiled land... Below the Canadian border stretch vast expanses of forests and lakes, a region of shaggy and pristine beauty. ... Such an abundance and accessibility of nature has much to do with the Minnesotans' sense of place and roots. More than almost any other Americans, they are outdoor people, and at least 50 percent of them customarily vacation within their own state.”



Each person who owns shoreline in Minnesota can help protect the value of our waters-fishing, swimming, wildlife, and clean water.



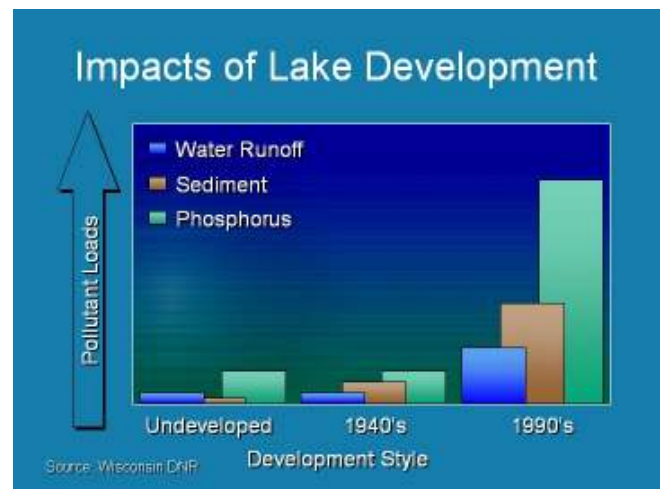
The Wisconsin DNR found the changing landscape and loss of native vegetation associate with lakeshore development resulted in a dramatic decrease in the population of frogs.

They also found a decreasing frequency of desirable uncommon bird species (such as warblers, vireos, and other songbirds) and an increase of common birds.

And an increase not only in the amount of water, but the sediment and phosphorous that was being carried by that water.

The loss of native vegetation on our shorelines and the increase of impervious surfaces draining to our lakes and rivers have a visible effect on our water.

Nutrients cause algae blooms, which can block light to beneficial aquatic plants and kill the plants. After the algae dies and decays, it uses a lot of oxygen, causing low dissolved oxygen levels in the water, which kills fish.





We now know that native plants on shorelines provide a critical link to the health of our lakes and streams fauna. For example, if you would like your shoreline yard to be full of monarch butterflies dancing on the summer breeze, you will need a species of milkweed for the caterpillars. Butterfly Milkweed is a 24” tall plant that looks great and will provide a critical food source for the caterpillars in May, June and July.

A lot of what we have seen in the past is taking the “conventional” suburban aesthetic – hard lines, defined edges and forcing that concept on the waters edge, trying to pin down a line along the shoreline. To give a more natural feel, we want curved edges that flow and blend in with the natural elements of the shoreline.

Making the transition from your yard to the native planting is easy to do. To help make the planting seem intentional, add a border. It gives the planting a defined edge makes it look intentional.



Many people are afraid to plant in the water because they are afraid that the plants will spread out and take over. While there are invasive plants like reed canary grass, narrow leaf cattail, curly leaf pondweed and Eurasian water milfoil, there are also beautiful native plants that help to keep these weeds at bay.

There are upland plants...



...transitional (lake bank) plants...



...and aquatic plants.



What materials are involved in a typical shoreline planting?



Erosion control blanket – a giant blanket that is rolled out over the top of the soil and prevents the soil from eroding as the plants establish. Most blankets used in shoreline projects are made out of shredded coconut fibers and are stitched together with a layer of netting on either side. The plants can grow through the blanket.

Biolog - a giant tube of shredded coconut fibers that is staked in place right at the water's edge. The biolog protects the planting from waves while the plants grow.



After an erosion control blanket and biolog are installed, live native plants are plugged into the planting areas. Sometimes larger aquatic plants are installed in the water just outside of the biolog. Most of the plants are available in six-packs from nurseries that specialize in natives and all of the plants are perennials, meaning they come back every year. Temporary goose or rabbit protection fences may be needed until the plants are established, usually after a year or two.

Getting Started:

1. Visit www.BlueThumb.org.

There is an entire section on shoreline stabilization with details about the benefits of shoreline stabilization, a how-to video, a planning packet for planning your shoreline, plant selector tool to help you pick the appropriate plants for your conditions, and a project cost calculator to help estimate the cost of completing a project on your property.

2. **Schedule a free site visit.**

A staff person will meet with you to survey your shoreline property, assess your needs and develop a planting plan.

Comfort Lake – Forest Lake Watershed District

Randy Anhorn – randy.anhorn@clflwd.org or 651-209-9753

Washington County

Comfort Lake – Forest Lake or Rice Creek Watershed Districts

PYoung@mnwcd.org or 651-275-1136 x.21

Chisago County

Casey Thiel – casey.thiel@mn.nacdnet.net or 651-674-2333

Anoka County

Nate Zwonitzer – nate.zwonitzer@anokaswcd.org or 763-434-2030 x.11

3. **Apply for cost-share funding.**

Local watershed districts will pay you to restore your shoreline property. Learn more about these grants during your site visit or visit your watershed's website.

East Metro Water Resource Education Program www.mnwcd.org/cleanwater

Comfort Lake – Forest Lake Watershed District www.clflwd.org

Rice Creek Watershed District www.ricecreek.org

