



**If you answer
yes to any of
the four following
questions, you may
need a permit.**

**1. Are you going to
use an herbicide in
or near the water?**

Yes No

If yes, contact the MN DNR
Division of Waters – Fisheries
serving the area where your
shoreline property is located.
The central office telephone
number is 651-296-6157.

Depending on the location and type of your shoreland project, one or more permits may be required from various units of government.

In summary, permits are not required for planting in your yard or for upland plantings. A permit is required for removing or planting aquatic plants and / or for dirt moving (i.e. re-grading the slope, adding fill, etc.).

Before you make contacts, know the details of your project. Will you be filling, excavating, removing or establishing vegetation? Will your work be taking place below the Ordinary High Water Level? What area will be disturbed in terms of square feet? How much excavation or fill will be done in terms of cubic yards? If you don't know the answers to these questions, complete this packet!

Additional Information:

There is a "Joint Notification Form" that can be used in applying for permits with other units of government.

Minnesota Pollution Control Agency – Stormwater Program, for construction activities that disturb one or more acres (43,560 sq. ft.). State-wide telephone: 800-657-3864.

Start the permit application process early – 60 days ahead of time is the safest. Permit fees range from \$0 to \$250.

2. Are you planting or removing plants below the ordinary high water* (OHW) level?

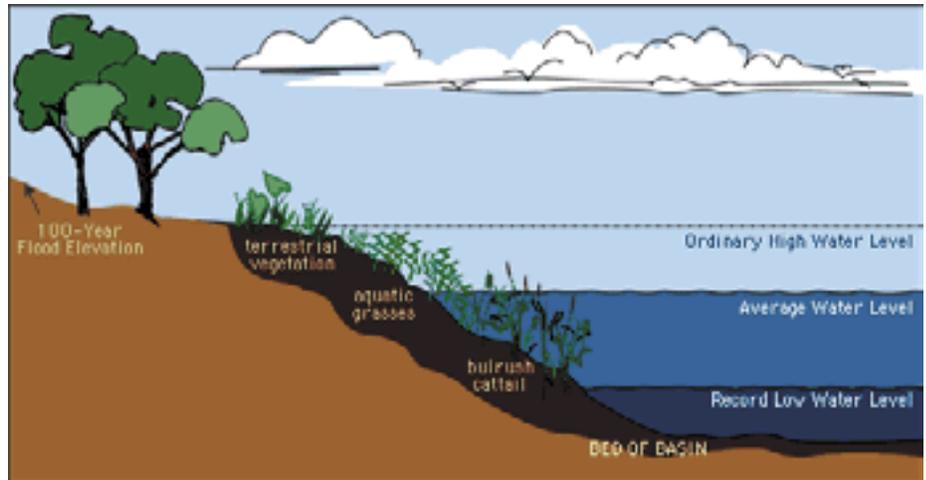
Yes No

If yes, contact the MN DNR Division of Fisheries – Aquatic Plant Management Program. Metro area telephone: 651-296-2835. Allow a 30-day processing time. They want to make sure that you are not removing beneficial plants. They will also want to know what you are planting and where you are getting the plants from. They want to ensure that native plants are planted not invasive non-natives.

3. Are you altering the shoreland (i.e. moving dirt, filling, re-grading the slope) below the ordinary high water level?

Yes No

If yes, contact MN DNR Division of Waters- Area Hydrologist. 651-772-7910.



(Illustration: Minnesota Shoreland Management website: www.shorelandmanagement.org)

***Ordinary High Water Level (OHW)**

The Ordinary High Water Level (OHW) is a term that is often misunderstood. The definition of OHW from Minnesota Statutes is provided below. It is very important to contact your local DNR Waters area hydrologist for a correct OHW location before attempting to alter your shoreline.

Minnesota Statutes 103G.005

Subd. 14. Ordinary high water level. "Ordinary high water level" means the boundary of waterbasins, watercourses, public waters, and public waters wetlands, and:

1. the ordinary high water level is an elevation delineating the highest water level that has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly the point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial;
2. for watercourses, the ordinary high water level is the elevation of the top of the bank of the channel; and
3. for reservoirs and flowages, the ordinary high water level is the operating elevation of the normal summer pool.

(Text from Minnesota DNR website: www.dnr.state.mn.us/waters/surfacewater_section/hydrographics/ohw.html)



4. Are you altering the shore (i.e. moving dirt, filling, re-grading the slope) above the ordinary high water mark?

Yes No

If yes, contact your local units of government. You will probably need to submit your plan for review. Upon review, it will be determined whether or not your project will need to be permitted.

The cities at least partially within the Rice Creek Watershed District are listed in the table to the right. You will need to go to:

www.ricecreek.org
Then go to the the permits tab and click on the "Do I need a permit" pdf under the Guidance Documents.

If you live in	contact...
Arden Hills	Rice Creek Watershed District (RCWD)
Birchwood	RCWD & City of White Bear Lake
Blaine	RCWD
Centerville	RCWD
Circle Pines	RCWD
Columbia Heights	RCWD
Columbus Twp.	RCWD & Columbus Twp.
Dellwood	RCWD & City of White Bear Lake
Falcon Heights	RCWD
Forest Lake	RCWD & City of Forest Lake
Fridley	RCWD
Grant	RCWD
Ham Lake	RCWD & City of Ham Lake
Hugo	RCWD
Lauderdale	RCWD
Lexington	RCWD
Lino Lakes	RCWD & City of Lino Lakes
Mahtomedi	RCWD & City of White Bear Lake
May Twp.	RCWD
Mounds View	RCWD
New Brighton	RCWD
New Scandia	RCWD
Roseville	RCWD
Shoreview	RCWD & City of Shoreview
Spring Lake Park	RCWD
St. Anthony	RCWD
White Bear Lake	RCWD & City of White Bear Lake
White Bear Twp.	RCWD & City of White Bear Lake
Willernie	RCWD

For cities outside of the Rice Creek Watershed District, make contacts in this order. However, if your project involves earthwork or structures, start with the DNR Public Water Work Permit (Step 5) and use it as your application with other units of government.

1. City or township. Inquire about shoreland ordinances.
2. Lake conservation district (only two in state; Lake Minnetonka and White Bear Lake).
3. County zoning. Inquire about shoreland ordinances.
4. Watershed district. To find out whether your project resides in a watershed district, the Minnesota Board of Water and Soil Resources at 651-296-3767. A 30-day processing time is typical.
5. Minnesota Department of Natural Resources - Division of Water, for Public Water Work Permits if your project involves earthwork or structures. Metro area telephone: 651-772-7910. Allow 60-days.

1. Describe the color and clarity of the water.

2. How steep is your slope?

- Nearly vertical Less than a 45° angle
 More than a 45° angle Relatively flat, gradual slope

3. What does your shoreline treatment look like?

- Riprap (large rocks) None
 Retaining wall Other

4. What is the condition of the shoreline treatment?

- Excellent Good Fair Poor Failing

5. Describe the waves on your shoreline:

- Severe Moderate Infrequent Minimal

6. What is the approximate distance to the shore on the opposite side of the lake? (This distance is called the "fetch".)

7. What is the source of the waves?

- Wind Boat traffic/jet skis Other _____

8. What are the record high and low water levels?

_____ This site will be helpful for finding this information
 _____ <http://www.dnr.state.mn.us/lakefind/index.html>

9. Is an ice ridge present

- No Yes If yes, how high _____



Lake Miltona, 2003 MN DNR

Ice damage to shoreline property is often caused by the "pushing" action of an ice sheet. The expanding ice sheet moves soil to create ice ridges (also know as "ice pushes" or "ramparts") five feet or more. The alternate warming and cooling of ice sheets causes additional pushing action that is powerful enough to move masonry bridge piers and push houses off of their foundations.

10. How much does water level fluctuate over the course of the summer?

- Highly variable Moderately variable Relatively stable

11. What are the reasons for water level change:

- Seasonal (high in spring, low in summer and fall)
- Control at the outlet
- Changes after most rains

12. Is there evidence (such as gullies or bareground) of run-off entering the lake?

- Yes No

If so, are there contributing factors to the run-off or erosion?

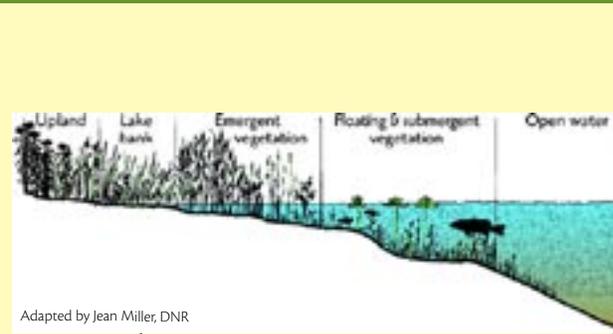
- | | |
|--|---|
| <input type="checkbox"/> Roof / downspout | <input type="checkbox"/> Waves |
| <input type="checkbox"/> Bare soil in garden/play area | <input type="checkbox"/> Path |
| <input type="checkbox"/> Compost/brush on steep hill | <input type="checkbox"/> Poor turf |
| <input type="checkbox"/> Failing retaining walls | <input type="checkbox"/> Construction on site |
| <input type="checkbox"/> Ice ridges | <input type="checkbox"/> Run-off from neighbor property |
| | <input type="checkbox"/> Flooding |

13. Are there excess nutrients running-off into the lake?

- | | |
|---|---|
| <input type="checkbox"/> Over-fertilize lawn/garden | <input type="checkbox"/> Fire ring near water |
| <input type="checkbox"/> Lawn clippings/ leaves | <input type="checkbox"/> Pet waste |
| <input type="checkbox"/> Run-off from driveway/sidewalk or roof | <input type="checkbox"/> Failing septic |
| | <input type="checkbox"/> Other _____ |

14. Describe land alterations such as fill, excavation, foundation.

15. Describe the type of development and density of development around the lake?



Adapted by Jean Miller, DNR

	Upland (moist to dry area within 25-50 feet from the waters edge)	Transitional (area of moist to saturated soil between the aquatic and upland zones)	Aquatic (plants in standing water; includes emergent, submergent & floating-leaved plants)
Area (Length x Width)			
Soil type (Sand, Loam, Silt/clay, Gravel (less than 2"), Rubble (2-10"), Boulders (more than 10"), Other _____)			bottom of the lake
Sun Exposure Full sun (6-8 hours) Partial sun (3-4 hours) Full shade (less than 3 hours)			
Describe existing vegetation Turf grass, mostly invasives, mix of invasives & natives, mostly natives (Don't know? See "Planning Worksheet 8: Additional Resources" to help you identify what you have)			
Special features, such as rare plants, high quality wildlife habitat or wildlife.			
Nuisance plants and/or animals (for example purple loosestrife, flowering rush, Canada geese, carp):			
How do you tend these areas?	Leave it natural _ Mowed _ Rock _ Wooded _ Garden _ Other _____	Leave it natural _ Mowed _ Rock _ Wooded _ Garden _ Other _____	Leave it natural _ Take plants out_ Put sand in _ Rock _ Other _____
Do you have erosion?	_ Severe _ Moderate _ Some _ None If so, please describe the situation (such as gullies, ground settling)	_ Severe _ Moderate _ Some _ None If so, please describe the situation (such as undercut banks)	



Planning Worksheet 3: What are Your Project Goals?

p. 1 of 2

1. Check-off the items you would like to include in your project.

- a path to the lake
- a place to store the canoe/boat in winter
- a place to store the dock and boat-lift in winter
- view of lake from house
- less lawn/less mowing
- swimming beach
- dock for fishing and/or swimming
- privacy
- a quiet place to sit
- a butterfly garden
- vehicle access to lakeshore (boat launch and/or maintenance)
- flower or vegetable gardens
- fire pit / grill
- shadey spot
- sunny spot
- remedy drainage problems
- fix erosion problem
- deter geese
- pet area
- lawn for recreation
- other needs:

2. Compare how you currently spend your time in your yard with how you would like to spend your time.

Put a star by the items above that would help you spend your time as you desire.

Currently		Ideally
<input type="checkbox"/>	Fishing	<input type="checkbox"/>
<input type="checkbox"/>	Wildlife viewing	<input type="checkbox"/>
<input type="checkbox"/>	Swimming	<input type="checkbox"/>
<input type="checkbox"/>	Boating	<input type="checkbox"/>
<input type="checkbox"/>	Mowing	<input type="checkbox"/>
<input type="checkbox"/>	"Weeding" your shoreline	<input type="checkbox"/>
<input type="checkbox"/>	Relaxation / viewing lake	<input type="checkbox"/>
<input type="checkbox"/>	Other:	<input type="checkbox"/>

3. Identify ...

...setback required for house and structures

...desired views. Which views do you wish to create or preserve?

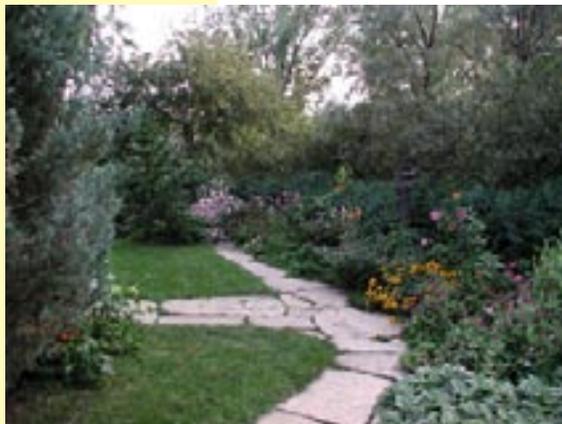
...features that will be highlighted.

...areas that need a visual screen.

...future building or site alteration plans.

...structures (docks, paths, steps, fences, beach, etc.) to be added relocated or removed to accomplish project goals.

... your preferred landscape style.



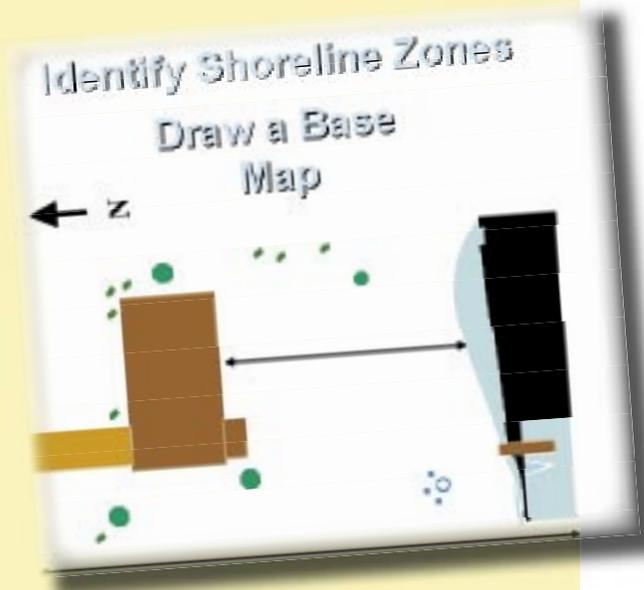
“country garden” or “English garden” – native plants in organized patches with a semi-natural appearance



“natural” – native plants randomly as they would occur in a natural setting

CREATE A BASE MAP

Start with a site sketch.

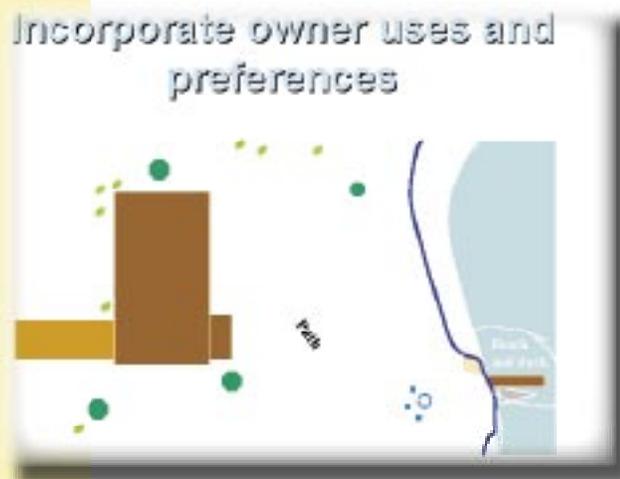


The sketch of your lakeshore area should include existing site conditions and measurements. House plans or plat maps may be helpful to get started.

Include all major existing features such as:

- House and sheds
- Patio/deck
- Property lines
- Shoreline
- Existing beach/access area/dock
- Existing vegetation - trees, shrubs, gardens, etc.
- Recreation areas - swimming, play
- Other

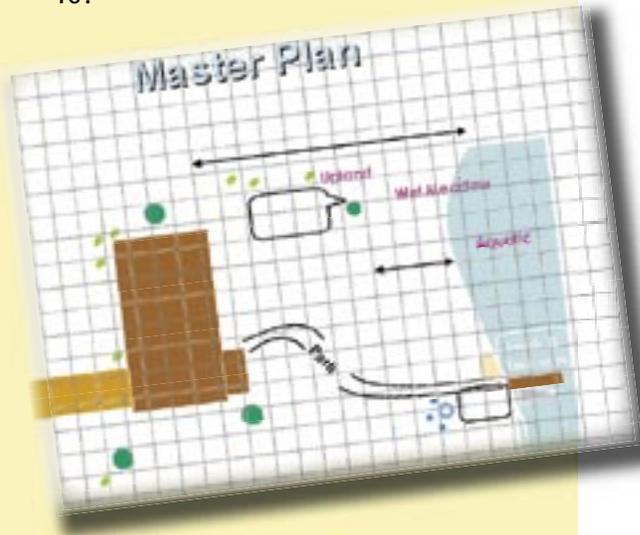
Draw “bubbles” incorporating your project goals based on your “Planning Worksheet 3: What are Your Project Goals?”



Next “bubble in” features you would like to add based on your project goals. Remember to highlight areas for preservation, identify the buffer setback zone, screening and other preferences and project goals.

Some people use a garden hose or rope to mark off different areas. Doing this may help you visualize the actual size and shape of your plans so you can sketch it in.

Transfer the information from your site sketch to a “to scale” base map on graph paper. Use a convenient scale like 1”= 10’.



You may want to include the following the important features you defined on your “Planning Worksheet 2: Assessing Your Site” so you keep them in mind as you plan.

- Water level history - ordinary high water (OHW) and record high/low water lines
- Shoreline zones (aquatic, transitional, and upland)
- Soil type (sand, clay, loam) in aquatic, transitional, and upland zones
- Soil moisture (areas excessively wet or excessively dry)
- Existing vegetation (trees, shrubs, grasses, wildflowers, invasive species)
- Sun exposure - sunny and shady areas
- Potential buffer setback (25’ from shore)
- Slopes, drainage patterns, eroding areas

DESIGN YOUR PLANTING

PLANT LISTS

To select your plants, use the Rice Creek Watershed District plant selector tool.

www.ricecreek.org

Height, color, time of bloom, soil type, sun exposure - there are so many things to consider when designing your garden that it can be overwhelming. To make the design process easier, use the plant selector on Rice Creek Watershed District’s website (www.ricecreek.org).



Simply go to the website, click on “Open the BMP browser” under Best Management Practices and then click on “plant list.” Then select your soil moisture, sun exposure, color and time of bloom preferences and a list of native plants will be pop up. The plants with the “RCWD” symbol next to them are part of the “One-Stop Shopping to Restore Your Yard & Shore” program and will be available at the four participating garden centers (Landscape Alternatives in Roseville, Lebens Floral Old Town Market in Hugo, Linder’s in St. Paul and Rice Creek Gardens in Blaine).

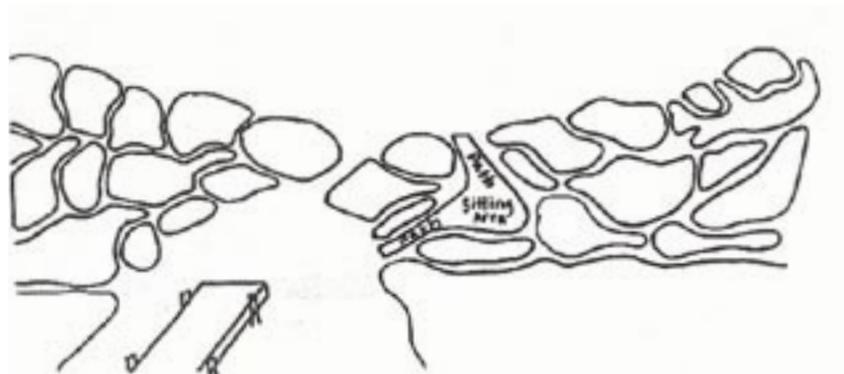
DESIGN YOUR PLANTING

If you are going for the “natural look,” there is no design needed. You will plant randomly.

If you would like an “English garden” look, use your plant lists you generated from the RCWD website to layout your garden design.

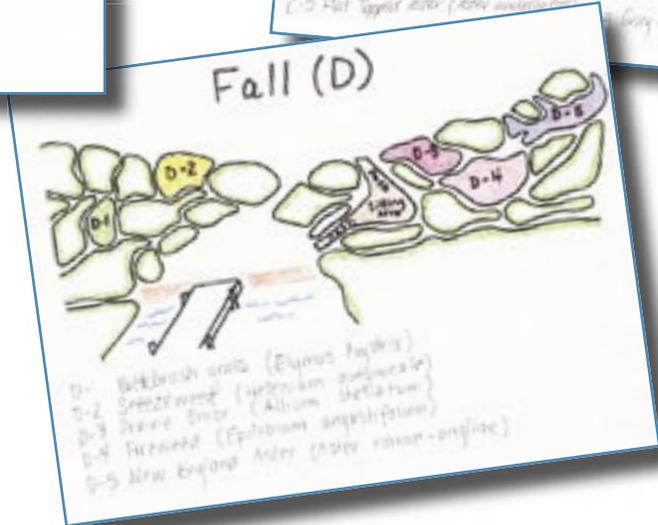
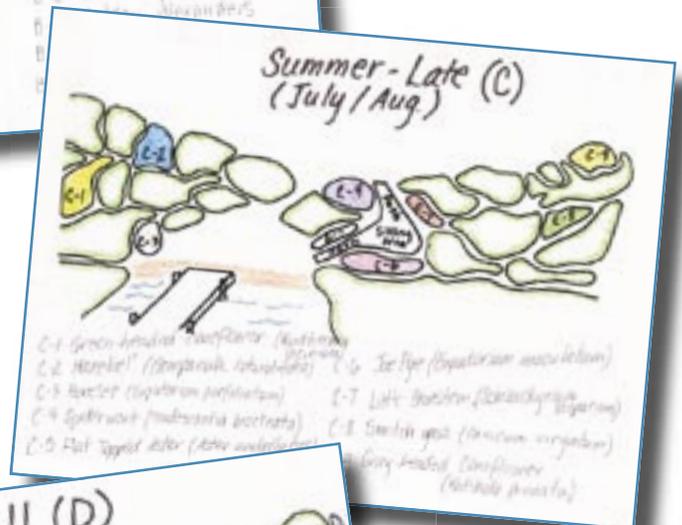
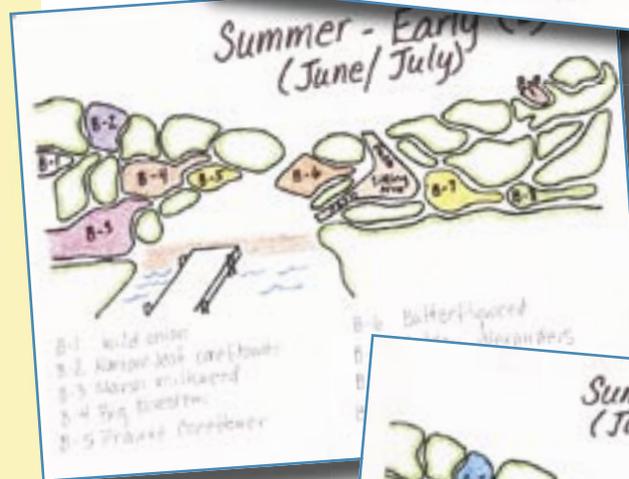
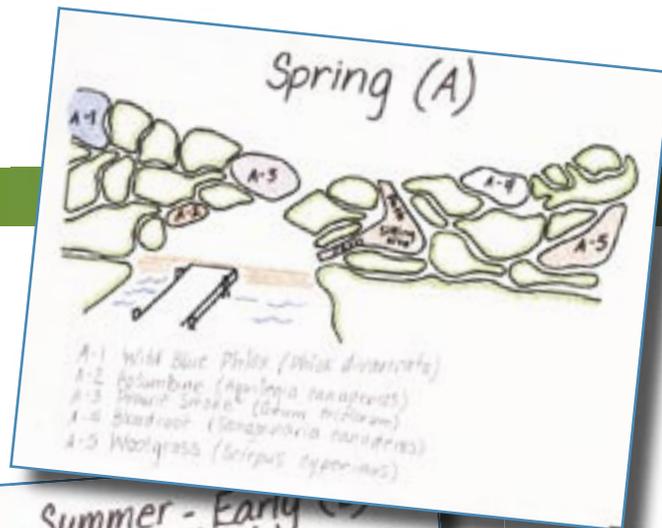
There are many ways to plan a planting. One way is to use overhead projector transparencies or tracing paper and do different layers. For example, do one layer for plants blooming in each month April through October. If that is too detailed, do a separate layer for each season - Spring bloomers, Summer, and Fall. Since there are so many summer bloomers, you may want to divide summer into early summer and late summer.

1. Draw the free-form shapes of the plant grouping and make several copies of it.



2. Divide the shapes up into different times of bloom. One layer will be spring blooming plants, the next will be summer blooming and another layer will be for fall blooming plants. Color in the shape with the bloom color. Number the shape and have a key with the numbers coordinating with the type of flower.

Most plants are 2-4' tall, but consider height as you plan and put the taller plants in the back or in the middle and the shorter plants on the edges.



Please note! You can run your cost estimates online by using the RCWD Cost Estimate Calculator. (www.ricecreek.org)

CALCULATING NUMBER OF PLANTS NEEDED

Multiply the spacing factor by the number of square feet to determine the number of plants needed. To determine how many plants are needed, you'll need to know how far apart to space the plants. For trees and shrubs, allow adequate room for them at maturity. A rule of thumb for most shoreline plants is to estimate a spacing of about 18 inches. Plants can be spaced 6 inches to 3 feet apart, depending on how quickly they spread and how large or densely they grow.

Example: 400 sq. ft. with a plant spacing of 2 feet using a factor of .29,
 $400 \times .29 = 116$ plants needed.

For a spacing of ...	6"	12"	18"	24"	30"	36"
Multiply by this Factor	4.5	1.1	.5	.29	.18	.13

Aquatic zone area:

Multiply _____sq ft x _____ Spacing factor = _____ number of plants needed

Transitional zone area:

Multiply _____sq ft x _____ Spacing factor = _____ number of plants needed

Upland zone area:

Multiply _____sq ft x _____ Spacing factor = _____ number of plants needed

Material	Amount / Quantity	x Cost/unit	= \$ Amount
Aquatic plants (3.5" pot recommended)	(use #s from above)		
Transitional plants	(use #s from above)		
Upland plants	(use #s from above)		
Coconut fiber Erosion Control Blanket (generally comes 6' rolls)	linear ft.		
Coconut fiber biologs 16"x10'=\$190 12"x20'=\$190	linear ft.		
Wooden Stakes (1"x1"x4') 4 per10' biolog 8 per 20' biolog			
Shredded wood mulch (use online calculator - http://www.gardenplace.com/content/calculator/mulch_calc.html#)	cu. yd.		
1.5" River Rock (optional - for anchoring aquatic vegetation)	cu. yd.		
		Total	



TOOLS

Cordless drill and battery rechargers	Buckets
Bulb planter auger bits	Flags or flagging
Wood bits (1.5"-2" diameter)	Loppers
Hand spades or trowels	Pruners
Shovels	Utility knives
Rakes	Sun screen!
Wheel barrow	

MARKING IT OUT

Transfer your design from "Planning Worksheet 4: Designing Your Project" to the shoreline by marking it out. A tape measure and a rope or garden hose can be used to transfer the lines from the plan onto the ground. First, mark the buffer edge. The edge can be marked with spray paint, flagging or stakes and twine. When it is time for planting, it will help you place the plants within the appropriate zone. Depending upon the planting method and the complexity of the planting plan, you may want to mark additional areas. For example, if you have designated a path or seating area, mark it on the ground so you do not accidentally plant within that area. Remember to mark off and protect areas that you've identified as an existing native plant community. In some cases you may find just a few remaining native plants that you want to flag and protect. In a more formally designed buffer, you can mark areas of plant groupings.

GETTING RID OF UNWANTED VEGETATION

Site preparation begins with eliminating non-natives and lawn in the areas where you are going to plant. Thoroughness and patience are essential for later success. You can prepare the site in several ways - some include the use of herbicides while others do not. Whichever technique you use, be sure to avoid using heavy equipment because it will compact the soil and make it difficult for new plants to grow.

There are many methods that can be used to eliminate unwanted vegetation.

- **No control** is needed on very weak turf or moss

- **Black plastic.** Using black plastic (at least 3.5 mil) or old carpet, tarps or other opaque material to smother plants is less labor intensive, but may require an entire growing season. Also, the weather must be sunny and hot for this

HERBICIDE

method to be effective. It is best to use this method one growing season prior to planting. After 5-6 months, it will be possible to plant directly through the dead sod (dead turf controls erosion). Do not cultivate or till deeper than 1-2 inches with this method to avoid bringing up weed seeds that will compete with the natives.

Herbicides containing Glyphosate such as Round-up are often the fastest way to kill unwanted vegetation such as vigorous turf, aggressive ground covers, exotict species and woody plants in upland areas. However, to eliminate tough invasive plants, such as reed canary grass, it can take nearly an entire growing season.

For turf, apply herbicide according to the directions 2-4 weeks before planting, leave dead turf in place to control erosion and plant into it. Remember, DNR permits are required for using herbicides on aquatic or shoreline plants. See "Planning Worksheet 1: Permits" for more information.



For aggressive weeds such as reed canary grass, poison ivy and smooth brome grass, multiple applications one or more years prior to planting may be necessary. A sprayer is recommended for large areas. For spot applications, use a spray bottle or dip a sponge in herbicide to apply to individual plants. Wear proper clothing and follow the directions on the bottle closely to prevent contact with the chemicals.

SOIL AMMENDMENTS

Soil amendments are generally *not necessary* for native plants. Where sterile soil conditions exist from fire or removal of topsoil, weed-free organic material (compost or mulch) may be incorporated into existing soil.

SITE ALTERATIONS

Re-contouring the site may include adding fill to erosion gullies and reshaping. Installation of hard goods may include irrigation or lighting systems, paths, patios, borders/edging, terraces, etc. In case of very slight erosion, recontouring is not necessary. The plantings should stabilize the shore.

EROSION CONTROL

Seawall / Retaining Wall
 or Rip Rap (large boulders)

Rip rap, seawalls/retaining walls are NOT RECOMMENDED ON MOST SHORELINES. Where they exist along shorelines, undercutting is often followed by wall failure. Rip rap or a wall may also deflect wave energy to adjacent shorelines resulting in increased erosion.



Erosion Control Fabrics
 & Cococut Fiber Rolls



For wet transition areas – bare soil or weak turf need protection from runoff and/or wave erosion while plants become established.

For shoreland projects, always use blankets and stakes that are completely biodegradable.

Erosion-control fabrics are available from commercial sources. See “Planning Worksheet 7: Additional Resources” for a list of vendors.

Cococut fiber rolls are a “soft armor” erosion control structure that is effective in areas of low to moderate shoreland erosion. It is a dense “log” of coconut fiber wapped in a coarse jute net and /or burlap. They come in 8”, 12” and 20” diameter rolls. When a roll is secured along the toe of an undercut/eroding shore, it provides protection from further wave erosion.

Fiber blankets are also a “soft armor” fabric that can be made from many different materials and of different weaves. Examples include a coarsely woven jute, coconut fiber sandwiched between a cotton net, coconut fiber sandwiched between photo-degradable plastic net, straw sandwiched between net, and excelsior (packing material made from wood shavings) sandwiched between net. Choose a 100% biodegradable material suited for the characteristics of your site (steepness, amount of runoff, etc.).

Coir (coconut fiber) is known for its longevity. Coir fabrics come in multiple brands and forms. For shoreline projects, there are two types that are more commonly used and that work in all three shoreline zones. The first is a loosely packed blanket of coir fibers within a biodegradable natural fiber net. It works especially well within the transitional zone. Plants can be easily

**EROSION CONTROL BLANKET
INSTALLATION**

installed through a cut in the fabric.

The second type is a coir fiber twine that looks more like woven netting. It is better for steeper slopes, stream banks and more severe conditions. It will stay in place for a longer period of time.

Jute, wood fiber and straw biodegrade faster. Wood fiber blankets are made of curled strands of wood fiber placed between photodegradable or biodegradable netting. These are good to use in stabilizing upland slopes that have been seeded. Wood fiber blankets are available in different weights depending upon conditions and are generally less expensive than coir.

Straw blankets are used for short-term needs. They degrade in 60 days to about 10 months depending upon the type chosen. They should be used in upland situations, for example over a seeded slope.

There are some situations where a nonbiodegradable erosion control material is needed, such as a turf reinforcement mat. They are used in more severe situations such as sites with very heavy wave action, high stream flow velocities, or heavy runoff.

Erosion control fabrics are installed with stakes. Biodegradable stakes or staples should be used wherever possible. There are several types of biodegradable stakes available:

- Hardwood stakes which are all natural but may take years to break down.
- Corn byproduct stakes which break down within a year
- Corn byproduct staples which completely degrade in three months but might not work as well in sandy soils.

**PROTECTION STRUCTURE:
 PROTECT PLANTINGS FROM
 WAVE AND CRITTER DAMAGE**

Wavebreaks



Wavebreaks are used in high energy shorelines to prevent waves from uprooting aquatic plants. Wavebreaks serve two purposes: protection of the shoreline and protection of vegetation from boat- and wind-created wave action. Newly planted aquatics are easily uprooted by wind and boat-induced wave action. A wavebreak provides a

calm, protected area for the plants to take root.

Wavebreaks are placed out in the water beyond the area where aquatics will be planted. The wavebreak device should be installed from the bottom of the lake extending above the water, ideally above the maximum wave height. It should be left in place for 1-2 growing seasons, and then removed. Wavebreaks are often removed for the winter to prevent damage from ice. Brush bundles, coconut fiber rolls, plastic fencing and plywood are commonly used as wavebreaks. Unless your property is located in a quiet bay, wave breaks are needed for successful aquatic plantings.

Remember, a DNR permit may be required to install wave breaks. See “Planning Worksheet 1: Permits.”

Enclosures

A fence placed around new plantings protect plants from critter damage until they become well established. Enclosures are used both in the water to keep fish (carp) and water fowl from damaging aquatic plantings and in the wet transition/upland areas to protect from human, dog, goose, deer, rabbit and other critter damage.

Fences can be temporary or permanent, but should be placed around a new planting to channel foot traffic around planting or along designated paths.

**MULCHING & PLANTING
THE UPLAND**

Mulch holds moisture, helps control weed problems and gives a more landscaped look for those who may have concerned neighbors. Landscape fabric is not recommended because it decreases soil aeration and may be detrimental to the new planting.

One convenient planting technique on upland, flat areas or shallow slopes, is to cover the dead grass with a thick layer of mulch. Shredded wood chips do not float away as much as regular wood chips. Manure and compost are not good selections since they deposit nutrients into the lake. Woodchips generally last 2-3 years - until the planting is established.



The mulch depth will depend on plant height – use 2 inches for small seedlings and up to 4 inches in depth for larger shrubs and trees. Apply after planting trees and shrubs and before planting plugs (move mulch aside before digging each hole and replace mulch around plant when finished).

Plant upland species in spring or fall during cooler weather. Summer plantings can be successful if regularly watered.

When planting large areas, a cordless drill equipped with a bulb auger can make the job easier and quicker. For each plant, simply clear away the mulch and drill a hole into the soil similar in depth to the plant plug. It works well to have one person do the drilling and others follow along and plant the plugs. Bulb augers can be purchased at your local nursery supply or home supply store. The cordless drill must be at least 12 volts. A hand trowel works well too.



PLUGS & CONTAINERIZED PLANTS



Native plants are often grown in packs like annuals. Keep plants watered and in the shade until planted. Soak thoroughly before removing from the container to plant. After planting, dry roots tend to reject water. Tap container upside down to remove plant, and then gently pry the roots apart.



Correct Planting Depth - Place plants at the correct depth in the soil so that the top of the root ball is level with the soil surface.

TRANSITIONAL ZONE PLANTING

Again, using the cordless drill with the bulb auger can speed up the process. In the transitional zone, plant within openings cut into erosion control fabric.





AQUATIC ZONE PLANTING

Plant in the spring after water levels have lowered and water temperatures are above 65 degrees Fahrenheit. Spring plantings allow time for root systems to establish.

Anchoring of plants is necessary if wave action threatens their establishment and a wavebreak will not be sufficient. Use a coir erosion control fabric cut into short lengths (6'-10'). Cut slits in the fabric and plant through the slit into lake soils using a hand trowel. Plant at a depth that allows at least 1/3 of the plant to protrude above the water surface. Anchor the blanket with river rock (sewer rock) or larger rocks. Additional river rock can be carefully placed around each plant to help keep it in place. Plants can also be planted without the erosion control blanket by anchoring them with the river rock around the base of the plant.

Watering

Deep soaking is necessary to reach the root system. During the first year, water upland plants once a week (unless there is rain). A good soaking (sprinkler for an hour) is better than frequent watering for briefer times.

Labeling

Label a few plants of each species to avoid mistaking them later for weeds. Labeling allows you to track the success of your planting program.

Signage

Signs educating passers-by about the benefits of your restoration may encourage people to respect the project. The Minnesota DNR sign wording available on their website. www.dnr.state.mn.us/sitetools/getacrob.html

Photos

Take pictures of your project and share your project with the RCWD and others.



A natural shoreline reduces maintenance time and costs when compared to conventional methods.

However, maintenance for the first several years until well established is crucial for a successful project. If left untended, invasive non-natives generally establish a foothold or take over.

To make watering easier, consider installing a pump in the lake.

Below is a table of anticipated maintenance details common to most projects:

Maintenance Item	Year 1	Year 2	Year 3
Watering (transitional and upland plants)	Daily-weekly	Only if drought	Only if drought
Fertilizing (this only encourages problem plants)	None	None	None
Weed control	Weekly-monthly	Monthly	Spot-treat weed monthly
Plant replacement (Replant and anchor uprooted aquatic plants. Once established, aquatics require little or no long-term maintenance.)	None	Spring or fall as necessary	Spring or fall as necessary
Erosion control structure repair	Ongoing inspection, repair as necessary	Inspect after storm, repair as necessary	Inspect after storm, repair as necessary
Wavebreak repair and removal	Ongoing inspection, repair as necessary, remove wave breaks prior to freeze-up.	Ongoing inspection, repair as necessary. Install wave breaks only if plants are not established.	Remove structures?
Fencing/exclosure	Critical if geese are a problem	Use as necessary	Use as necessary
Tree & shrub pruning	None	Remove dead/diseased branches in late winter	Remove dead/diseased branches in late winter, prune to shape

DISCLAIMER

The following list does not imply any endorsement or recommendation by the RCWD. This is not a complete list of resources. It is intended only to be an aid to those seeking initial guidance on native landscaping. It is strongly recommended that references be obtained before selecting a contractor. If you would like to add resources to this list, please contact the RCWD 763-398-3070 or ddubats@ricecreek.org.

PLANT IDENTIFICATION WEBSITES

<http://www.dnr.state.mn.us/shorelandmgmt/apg/index.html>
http://www.dnr.state.mn.us/ecological_services/pubs_plants.html

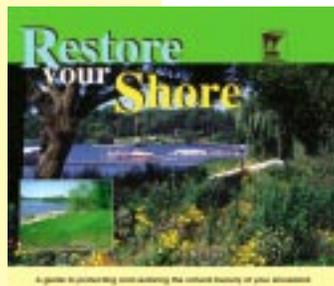
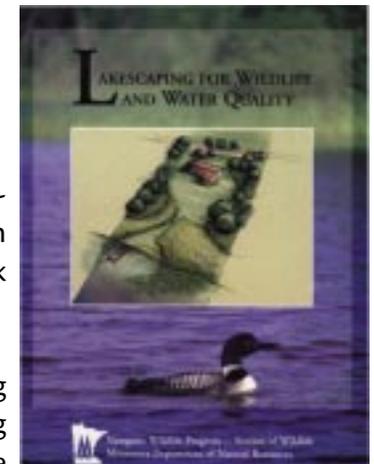
LAKE INFORMATION

The DNR “Lake Finder” can help you to access specific information about your lake.
<http://www.dnr.state.mn.us/lakefind/index.html>

**PLANNING GUIDES:
 BOOK AND CD-ROM**

Available at Minnesota’s Bookstore at 651-297-3000.

Lakescaping for Wildlife and Water Quality (C.L. Henderson, C.J. Dindorf, F.J. Rozumalski, 1999 MN DNR) is a book showing techniques to prevent shoreline erosion and restore wildlife, habitat, wildflowers and clean water. **Retail Price: 19.95** (Stock Number: 9-53)



Restore Your Shore (2002, MN DNR) is a sequel to the lakescaping book. This instructional CD-ROM presents ideas to use in protecting and restoring natural shorelands. 400 native plants on a searchable database. Visit the Restore Your Shore website at <http://www.dnr.state.mn.us/restoreyourshore/index.html> **Retail Price: 29.95** (Stock Number: 9-74)

SHORELAND HABITAT RESTORATION PROJECT SIGN

Download an example of the sign art to use in creating signs for your projects.
<http://www.dnr.state.mn.us/sitetools/getacrob.html>



	Retail	Wholesale	Trees & Shrubs	Upland / Transitional perennials	Aquatic perennials	Seeds	Products	Services
Ambergate Gardens 8015 Krey Ave. Waconia, MN 55387 612-443-2248 or 877-211-9769 mjhamber@aol.com								
Another Sun Nursery River Falls, WI 715-273-6179 ansun@spacestar.net								
Applied Ecological Services Inc. and Spring Lake Restoration Nurseries 21938 Mushtown Road Prior Lake, MN 55372 (952) 447-1919 (952)447-1920 fax kim@appliedeco.com jessica.paus@appliedeco.com				X	X		Local ecotype wild-flower and grass seeds and plants, MN	Ecological consulting and research, environmental design, restoration contracting, natural areas management.
Applied Ecology 4316 45th Ave. S. Minneapolis, MN 55406 612-724-8916 appliedecology@yahoo.com								
Bebergs Landscape Supply 13535 Grouse St. NW Andover Mn 55304 beberglandscape.com	X							Blue Thumb program participant
Blugardens 12975 32nd Street Watertown, MN 55388 952-955-3631 stevedan773@aol.com	X	X		plug 4" pot	plug 4" pot			



Planning Worksheet 8:
Additional Resources

	Retail	Wholesale	Trees & Shrubs	Upland / Transitional perennials	Aquatic perennials	Seeds	Products	Services
Bonestroo Rosene Anderlik & Assoc. 2335 Highway 36 W Roseville, MN 55113 (651) 636-4600 (651) 636-1311 Fax pboc@bonestroo.com								Consulting and installation of native plant communities; bio-engineering, non-native brush removal, and other management services
Cattail Corner, Inc Landsc. Design & Garden Center 520 Sixth St. Howard Lake, MN 55349 (320) 543-3511 cattailcorner@msn.com				X			some native perennials	Design and installation; retail nursery
Country Acres Gardens + Landscape 12975 32nd St. Watertown, MN 55388 (952) 955-3631 (952) 955-3981 fax					X			Consulting, design, installation. Lakeshore restoration, wetland restoration, water gardens and ponds.
Cross Nurseries, Inc. 19774 Kenwood Trail Lakeville, MN 55044-8912						X		
Deer Creek Seed Company PO Box 105 Ashland WI 54806 715-278-3200 715 278-3209 fax treefoil@win.bright.net						X		



	Retail	Wholesale	Trees & Shrubs	Upland / Transitional perennials	Aquatic perennials	Seeds	Products	Services
Feder's Prairie Seed Company 12871 380th Ave. Blue Earth MN 56013-9608 feder@blueearth.polaristel.net Mark E. Gullickson Route 2 Box 150A Fertile MN 56540 218-945-6894						X		
Fortin Consulting Inc. 215 Hamel Road Hamel, MN 55340 (763) 478-3606 (763) 478-3612 fci@iaxs.net								Environmental consulting, exotic species control, backyard conservation, habitat restoration, lake management, lakescaping, plant inventories, project management, runoff reduction, presentations, road salt reform, stream & lake monitoring, technical writing, water quality data analysis, school projects, newsletters & brochures
Go Native 1801 Grand St. NE Minneapolis, MN 55418 612-378-7060 ann@gonativemn.com								Consulting, design and installation
Glacial Ridge Growers 7140 Casey Parkway Prior Lake, MN 55372 952-447-6858 952-447-6863 fax GlacRidgeGrowers@aol.com				X	X		Mostly native wildflower and grass plants; some not-native to Minnesota	Wholesale nursery



	Retail	Wholesale	Trees & Shrubs	Upland / Transitional perennials	Aquatic perennials	Seeds	Products	Services
Great Lakes Nursery Co. Tim Gutsch 1002 Hamilton St. Wausau, WI 54403 715-845-7752			X	X		X		Offer 87 varieties of conifers, shrubs, deciduous trees
Great River Greening 35 West Water Street Suite 201 St. Paul, MN (651) 665-9500 (651) 665-9409 www.greatrivergreening.org								Consulting, design and installation
Green Leaf Nursery 15790 10th St SW Cokato, MN 55321 (320) 286-2762 Phone			X				Some native shrubs and trees	Retail nursery
Green Spirit 3000 East 26th Ln Minneapolis, MN 55406 (612) 726-7067 greenspirit@bitstream.net								Consulting and installation
Gustafson Design, Inc. 1845 Wisconsin Ave. N. Golden Valley, MN 55427 (763) 544-4215 www.gustafsondesign.com								Consulting and design services.
Halla Nursery, Inc. 10000 Great Plains Blvd. Chaska, MN 55318 (952) 445-6555 Phone (952) 445-6557 Fax			X				Some native shrubs and trees	Retail nursery



	Retail	Wholesale	Trees & Shrubs	Upland / Transitional perennials	Aquatic perennials	Seeds	Products	Services
Happy Land Tree Farms, Inc. Rt. 1 Box 128A Sandstone MN 55072 320-245-5135 800-860-7819			X					
Hauser's Superior View Farm Jim Hauser Rt. 1 Box 199 Bayfield WI 54814 715-779-5404				X				
Hayward Evergreens PO Box 607 Hayward, WI 54843 715-634-4511			X					
Hayland Woods Shelley Larson 6549 Keystone Road Milaca, MN 56353 Phone: (320) 983-6354 Fax: (320) 983-2151 erlarson@maxminn.net			X	X	X		Local ecotype woodland perennials, grasses, ferns, and shrubs, and wet meadow plants,	Consultant for lakeshore restoration.
Hild & Associates 326 Glover Road S River Falls, WI 54022 715-426-5131, 715-426-9887 or 800-790-9495 ghild@skypoint.com www.hildnatives.com		X		plug 2.25" pot 4" pot 6" pot ferns	2.25" pot 4" pot	X		



	Retail	Wholesale	Trees & Shrubs	Upland / Transitional perennials	Aquatic perennials	Seeds	Products	Services
Hilscher Design and Ecology Inc. 910 Oakgreen Ave. N Stillwater, MN 55082 (651) 436-3836								Consulting, design, and installation.
Hummingbird Habitat Nursery PO Box 102 Dassel, MN 55323 612-275-3208								
Intuition Logic 16020 4th Av N Minneapolis, MN 55447 (612) 845-4475 (866) 947-0332 fax bsripp@aol.com								Consulting and design, stream and lakeshore restoration.
Jackson's Native Landscape Management Milaca, MN 56353 (612) 490-4271 cell (763) 389-0808 fax								Prescribed burning, exotic species control and native seed installation.
J & J Tranzplant W4980 County Road Wild Rose, WI 54984 715-256-0059 800-622-5055 www.tranzplant.com			X	X	X	X		250 varieties of native plants, shrubs and seed for wetlands, woodlands and prairies



Planning Worksheet 8:
Additional Resources

	Retail	Wholesale	Trees & Shrubs	Upland / Transitional perennials	Aquatic perennials	Seeds	Products	Services
Lakedale Landscaping & Nursery P.O. Box 212 Hwy 169 N. Onamia, MN (320) 532-3594			X				Some native shrubs and trees	Consulting and installation of lakescaping projects
Landscape Alternatives, Inc. 25316 St. Croix Trail Shafer, MN 55074 (651) 257-4460 landscapealt@frontiernet.net, www.landscapealternatives.com	X	X	1 gal. shrubs	plug 2.5" pot 4" pot 6" pot			Local ecotype wildflower and grass seedlings; woodland flowers and ferns	Retail and wholesale nursery. Blue Thumb program partner.
Landscape Designs by Sherry 22423 Co. Rd. 15 Elk River, MN 55330 (763) 263-2205								Consulting and design
Lebens Floral & Old Town Market Garden Center 11615 Forest Lake Blvd. Hugo MN 55038	X			X				
Lilli Nursery 6895 Bailey Road Woodbury, MN 55125 (651) 459-9851			X				Some native shrubs and trees	Retail nursery
Linder's Greenhouses, Garden Center, Flower Marts & Landscaping 270 Larpenteur Ave. W. St. Paul MN 55113	X			X				Blue Thumb program partner.
Lodholz North Star Acres, Inc. 420 Highway A Tomahawk, WI 54487 715-43-2976			X	X				



Planning Worksheet 8:
Additional Resources

	Retail	Wholesale	Trees & Shrubs	Upland / Transitional perennials	Aquatic perennials	Seeds	Products	Services
Mickman Brothers, Inc. 14630 Hwy 65 NE Ham Lake, MN 55304 Garden Center: 763-413-3000 www.mickman.com	X							Blue Thumb program partner.
Mohn Frontier Seed & Nursery RR1 Box 152 Cottonwood, MN 56229				X		X		
Morning Sky Greenery Rt. 1 Box 17 Hancock, MN 56244 320-392-5282 mornsky@info-link.net				X	X			
ML Designs 617 Corrine Creek Sartell, MN 56377 (320) 251-4746 mjfreed@charter.net								Consulting, design, and project management.
Minnesota Native Landscapes, L.L.C. 14088 Highway 95 N.E. Foley, MN 56329 612-490-5988 cell (320) 968-4222 Phone (320) 968-4223 Fax www.mnnativelandscapes.com info@mnnativelandscapes.com				X				Contract installation of native seeds; prescribed burning; exotic species control;



Planning Worksheet 8:
Additional Resources

	Retail	Wholesale	Trees & Shrubs	Upland / Transitional perennials	Aquatic perennials	Seeds	Products	Services
Natural Resource Restoration, Inc. 2013 Walnut Avenue NW New Brighton, MN 55112 (651) 636-3462 Phone (651) 639-8097 Fax								Prescribed burning; exotic species control
Natural Shore Technologies, Inc 6275 Pagenkopf Road Maple Plain, MN 55359 (612) 703-7581 www.NaturalShore.com	X	X		plug (2") 4" pot	4" pot		Minnesota native aquatic, shoreland & some upland plants, wholesale & contract growing.	Consulting, design, and installation services for shoreland restoration, wetland restoration, aquatic landscape design. Wetland delineation and restoration planning.
North American Prairies 11745 Jarvis Avenue NW Annandale, MN 55302 320-274-3987 Phone/Fax info@northamericanprairies.com	X	X	1,2,3,5 & 10 gal.	plug 1 gal.	plug 1 gal.	X	Local ecotype grass and wildflower seedlings; native shrubs and trees	Consulting services; contract installation of native seed; prescribed burning; exotic species control; retail nursery
Orchid Gardens 2232 139th Ave. NW Andover, MN 55304				X				
Out Back Nursery Inc. 15280 110 Street South Hastings, MN 55033 (651) 438-2771 Phone (651) 438-3816 Fax 800-651-3626 www.outbacknursery.com			X	X			Wide selection of native shrubs and trees; native wildflowers and grasses, all potted	Consulting services; design/build, retail and wholesale nursery. Blue Thumb program partner.
Pike River Nusery 6689 Hwy. 21 Embarrass, MN 55732 218-749-2799			X					



	Retail	Wholesale	Trees & Shrubs	Upland / Transitional perennials	Aquatic perennials	Seeds	Products	Services
Prairie Future Seed Co. W255 N9286 Tomahawk Dr. Menomonee Falls, WI 53052-0644 262-820-0221 414-325-1228 fax				X	X	X		Consulting services, planting and installation services and management
Prairie Hill Wildflowers 8955 Lemond Rd. Ellendale, MN 56026 507-451-7791				X		X		
The Prairie Is My Garden, Seed Co. 13633 Ferman Ave. NW Clearwater, MN 55320 612-878-1694								
Prairie Moon Nursery Route 3 Box 163 Winona, MN 55987-9515 507-452-1362 www.prairiemoonnursery.com pmnrsy@luminet.net	X		Bare root	Bare root	Bare root	X		Over 400 prairie, wetland and woodland plant species native to MN, WI, IL and IA.
Prairie Restorations, Inc. P.O. Box 327 Princeton, MN 55371 (763) 389-4342 Phone (763) 389-4346 Fax www.prairieresto.com	X		2 & 5 gal. shrubs 2, 5, 7 & 10 gal. trees	1 gal.			Local ecotype wildflower and grass seed and seedlings; native grass mulch, several native trees and shrubs.	MCIA-certified vendor; seed cleaning, blending; contract installation; prescribed burning; exotic species control; other land management services; retail nursery



	Retail	Wholesale	Trees & Shrubs	Upland / Transitional perennials	Aquatic perennials	Seeds	Products	Services
Prairie Land Management PO Box 533 Hartland MN 56042 888-479-1760 eckermans@deskmedia.com www.habitatnow.com								
Raetz Scenic Nursery x Retail nursery 1325 Scenic Drive Sauk Rapids, MN 56379 (320) 252-8316 Phone (320) 252-8316 Phone/Fax Res.	x		X				Some native shrubs and trees	Retail nursery
Rice Creek Gardens Nursery Inc. 11506 Hwy. 65 NE Blaine MN 55434	X							Blue Thumb program partner.
Savanna Designs Inc. 3511 Lake Elmo Ave N. Lake Elmo, MN 55042 651-770-6910 651-770-1166fax s.designs@worldnet.att.net								Consulting, design, and installation
Shady Acres Nursery 5725 S. Martin Rd. New Berlin, WI 53146 262-679-1610				X				
Shady Oaks Nursery 700 19th Ave. NE Waseca, MN 56093 507-835-5033						X		

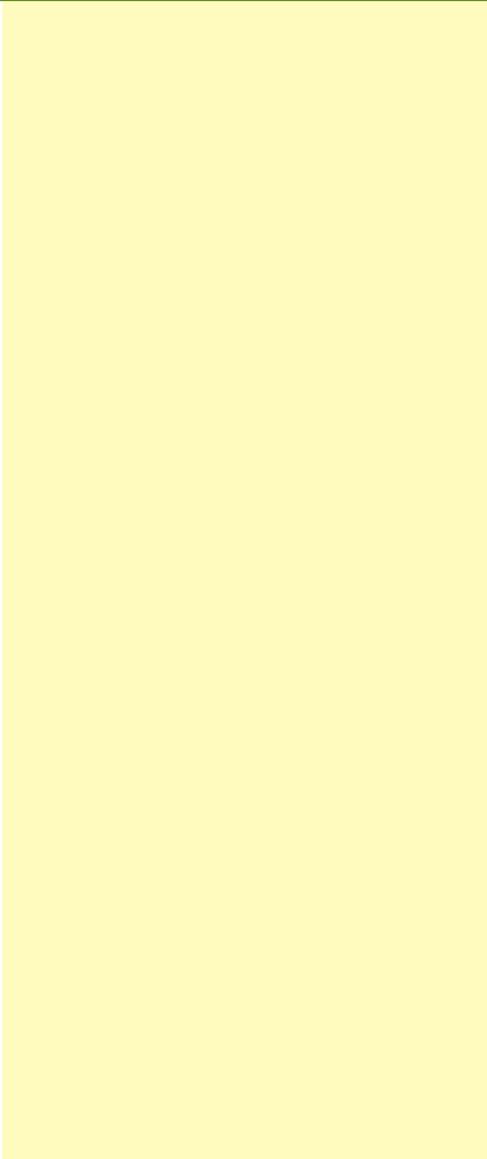


	Retail	Wholesale	Trees & Shrubs	Upland / Transitional perennials	Aquatic perennials	Seeds	Products	Services
Shooting Star Native Seed Rt. 2 Box 191 Spring Grove, MN 55974 507-498-3993		X						
Southview Garden Center Inc 50 East Crusader West St. Paul, MN 55118 (651) 455-6669 Phone (651) 455-7416 Fax	X		X				Some native shrubs and trees	Retail nursery
Spangle Creek Labs 21950 County Rd. 445 Bovey, MN 55709 www.uslink.net							propagated antive orchid seedlings	
Stoney Creek Gardens & Landscaping 7560 Poplar Dr. Niocqua, WI 54548 715-356-7311 715-356-4216 fax								Nursery, garden center and landscaping co. specializes in natvie northwoods species and non-natives hardy to area. Landscape design, installation, maintenance and consultation.
Taylor Creek Restoration Nursery Applied Ecological Services, Inc. 17921 Smith Rd. Brodhead, WI 53520 608-897-8641				X		X		Consulting services, ecologists on site, installation services
Top Notch Treecare 5505 n. Hwy 169 Plymouth, MN 55442 (763) 253-0027 (763) 253-2273 fax www.topnotchtree.com								Installation and maintenance of trees and shrubs. Wetland and shoreline restoration. Primarily use native plants.



**Planning Worksheet 8:
Additional Resources**

	Retail	Wholesale	Trees & Shrubs	Upland / Transitional perennials	Aquatic perennials	Seeds	Products	Services
Tree House, Inc. 12369 Point Douglas Dr. S. Hastings, MN 55033 (651) 437-7625			X				Some native woody plants.	Retail nursery
Wheeler's Laura Lane Nursery Patricia Wheeler Box 232 Plainfield, WI 54966 715-366-2477 715-366-8201 fax			X	X				
Whispering Gardens 11180 70th Street S., Cottage Grove, MN 55016 651-459-8080								Blue Thumb program partner.
Wild Orchid Native Gardens & Tree Care 192 George Street Excelsior, MN 55331 (612) 825-3251								Consulting, design, installation and maintenance; tree care
Wilson's Nursery Inc. 9150 Great Plains Boulevard Chanhasen, MN 55317 (612) 445-4088 Phone			X				Some native shrubs and trees	Retail nursery



Mulch & Compost

All Wood Products
551 Barge Channel Rd
St. Paul, MN 55107
651-224-7527

Ceres Wood Mulches
3825 85th Ave N.
Brooklyn Park, MN 55433
763-425-8822

Forestland Nurseries
20001 N Hwy 61
Forest Lake, MN 55025
651-464-7038

G & K Landscape
3101 Country Dr.
Little Canada, MN 55117
651-481-9331

Jackson Landscape
10906 162nd St W
Lakeville, MN 55044
952-435-6927

Mogren Bros
2582 White Bear Ave
St. Paul, MN 55109
651-777-2734

Rock Gardens
6074 Hodgson Rd
Shoreview, MN 55014
651-490-3058

NRG Processing Solutions
952-946-6999
Locations:
Anoka/Bunker Hills
Burnsville
Cottage Grove
Eagan
Empire
Lakeville
Lino Lakes/Rice Creek
Minnetrissa
Shakopee
St. Paul/Malcolm
St. Paul/Pierce Butler

Cities with free mulch or
compost (you pick up)

- Brooklyn Center:
763-569-3380
wood chips.
- Brooklyn Park:
763-493-8007
wood chips.
- Edina: 952-927-8861

compost

- Maple Grove:
763-420-4400
compost.
- Oakdale: 651-730-2740
wood chips.
- Plymouth: 763-509-5506
shredded wood mulch
- Roseville: 651-490-2310
compost and wood chips.
- St. Louis Park: 952-924-2565
shredded wood and compost.
- Woodbury: 651-430-6655
wood chips.

Scott County Nursery offers free
shredded wood for the cost of deliv-
ery. The fee ranges from \$140 for 10
cubic yards to \$280 for 30 cubic yards.
Call 651-484-9322. The nursery needs
about a week's



Biologs & Erosion- Control Blankets

Brock-White Company
2575 Kasota Ave
St. Paul, MN 55108
651-647-0950
Dan Larsen

Geo-synthetics, Inc.
W239 N428 Pewaukee Rd
Waukesha, WI 53188
800-444-5523
Larry Salzer

Jackson Landscape Supply
10906 162nd St W
Lakeville, MN 55044
952-435-6927
Jennifer Hildebrand

Prescribed Burning Consultants

Applied Ecology
4316 45th Ave S
Minneapolis, MN 55406
612-724-8916

Applied Ecological Services
4018 W 65th St, #16
Edina, MN 55435
952-925-3359
www.appliedeco.com

Minnesota Native Landscapes
14088 Hwy 95 NE
Foley, MN 55329
320-968-4222
www.mnnativelandscapes.com

Natural Resources Restoration
North American Prairies
11754 Jarvis Ave
Annandale, MN 55302
320-963-6817
www.northamericanprairies.com

Prairie Restorations
Box 327
Princeton, MN 55371
763-389-4342
www.prairieresto.com

Glyphosate-based Herbicides

Note: For use near the water's edge, 'Aquatic Killzall' & 'Aqua-Neat' are similar in formulation to Monsanto's 'Rodeo' Aquatic Herbicide. No local sources of quart-sized 'Rodeo' were found in the metro area during our research. (2.5 gallons seems to be the minimum size for 'Rodeo' that is available locally).

Note: For use out of drift-range from the water's edge (5-10' away), 'Killzall' & 'Cleanup Pro' are similar in formulation to Monsanto's 'Roundup' Herbicide. There are also other brands of generic glyphosate-based herbicides. Look on the label to make sure that "glyphosate" is the active ingredient. Try to get the concentrate form, rather than the Ready-to-Use (RTU) which is usually too watered-down.

Anoka Independent Grain & Feed
2315 2nd Ave N
Anoka, MN 55303
763-421-3160
'Killzall' 24oz RTU – 4.35

Bachman's
Multiple locations
'Roundup'

Beisswenger's Hardware
1360 Old Hwy 8
New Brighton, MN 55112
651-633-1271
'Killzall' Quart – 21.00
'Aquatic Killzall' Quart – 39.00

Dundee Nursery & Landscaping
16800 Hwy 55
Plymouth, MN 55446
763-559-8471
'Killzall'

Fair's Garden Center
9340 Fairway
Maple Grove, MN 55369
763-425-4212
'Killzall' Quart – 14.99
'Aquatic Killzall' Quart – 34.99

Home Depot
Multiple locations
'Roundup'

Lotus Lawn & Garden
78 W 78th St
Chanhassen, MN 55317
952-949-0726
'Killzall' Quart – 24.99

Menards
Multiple locations
'Roundup'

Mickman Bros
14630 Hwy 65
Ham Lake, MN 55304
763-434-0449
'Killzall'
'Aquatic Killzall'
Minnesota Valley Garden Center
3232 W 150th St
Shakopee, MN 55379
952-445-9160
'Killzall' Pint – 14.99 / Quart – 26.99

Otten Bros Nursery & Landscape
PO BOX 249
Long Lake, MN 55356

952-473-5425
'Killzall' 16oz – 12.95 / 24oz RTU

The Tree House
12369 Point Douglas
Hastings, MN 55033
651-437-7625
'Killzall' Quart – 21.95
'Aquatic Killzall' Quart – 32.95

UAP / Timberland / Verticon
4821 Xerxes Avenue N.
Minneapolis, MN
763-535-1030
'Roundup Pro' (2.5 gal) – 145.00
'Cleanup Pro' (2.5 gal) - 105.62 (35.00/gal)
'Rodeo' (2.5 gal) – 215.90
'AquaNeat' (2.5 gal) – 86.19 (28.54/gal)

Note: A permit is required from the DNR-Division of Fisheries for application of herbicide below the Ordinary High Water Mark (OHW) on wetlands, lakes & streams. Contact: 651-772-7956.



Herbicide Application Information

For use near the water's edge, use Monsanto's 'Rodeo' Aquatic Herbicide (or equivalent) - 41% Active Ingredient. For use out of drift-range from the water's edge (8-10' away), use Monsanto's 'Roundup-Pro' Herbicide (or equivalent) - 41% Active Ingredient.

For low-volume hand-held sprayers, recommend a 5-10% solution (6.5 - 13 ounces of herbicide per gallon of water). Spray coverage should be uniform with at least 50 percent of the foliage contacted. Coverage of the top one-half of the plant is important for best results.

Herbicide should be applied twice. After 1st spraying, wait two weeks then spray any remaining live undesirable vegetation. After final spraying, wait one week before planting live plants.

Consult manufacturer's Material Safety Data Sheet for more information.

Note: A permit is required from the DNR-Division of Fisheries for application of herbicide below the Ordinary High Water Mark (OHW) on wetlands, lakes & streams. Contact: 651-772-7956.

Excavation Contractors

Arnt Construction
Box 549
Hugo, MN 55038
651-426-3760

Buelow Excavating
13250 20th St N
Stillwater, MN 55082
651-436-5326

Dave Perkins Contracting
Box 277
Ramsey, MN 55303
763-427-3806

Doboszinski & Sons
6450 Pioneer Trail
Loretto, MN 55357
763-478-6945

Dryden Excavating
6700 Viking Blvd
Anoka, MN 55304
763-753-3343

Forest Lake Contracting
14777 Lake Drive
Forest Lake, MN 55025
651-464-4500

Frattalone Excavating
3066 Spruce St
Little Canada, MN 55117
651-484-0448
www.fmfrattalone.com

L-Pine Excavating
Ben Larson
21102 St. Francis Blvd NW
Anoka, MN 55303
763-753-2194

Lessard Nyren Utilities
17385 Forest Blvd N
Hugo, MN 55038
651-426-2068

Ryan Contracting
8700 13th Ave E
Shakopee, MN 55379
952-894-3200

Sunram Construction
20010 75th Ave N
Corcoran, MN 55340
763-420-2140

Veit & Company
14000 Veit Place
Rogers, MN 55374
763-428-2242
www.veitcompanies.com

W.B. Miller
6701 Norris Lake Rd NW
Elk River, MN 55330
763-241-0397



Watershed Districts & Management Organizations ...

may provide provide technical assistance and grant programs.

Rice Creek Watershed District
4325 Pheasant Ridge Dr. NE #611
Blaine, MN 55449-4539
763-398-3070
Fax: 763-398-3088
info@ricecreek.org

Rice Creek Watershed district has a cost-share program. For details go to click on grants on our website (www.ricecreek.org)

Brown's Creek Watershed District
c/o Washington Conservation District
1380 West Frontage Road, HWY 36
Stillwater, MN 55082
651-275-1136 ext. 26
Fax: 651-275-1254

Capitol Region Watershed District
1410 Energy Park Drive, Suite 4
St. Paul, MN 55108
651-644-8888

Carnelian-Marine Watershed District
Scandia Plaza II
21150 Ozark Ave.
P.O. Box 188
Scandia, MN 55073
CarMarWD@aol.com

Coon Creek Watershed District
12301 Central Ave. N.E., Suite 100,
Blaine, MN 55434
763-755-0975
Fax: 763-755-0283
tkelly@cooncreekwd.org

Minnehaha Creek Watershed District
18202 Minnetonka Blvd.
Deephaven, MN 55391
952-471-0590
Fax: 952-471-0682
admin@minnehahacreek.org

Ramsey Washington Metro Watershed District
2346 Helen Street
North St. Paul, MN 55109
651-704-2089
Fax: 651-704-2092
office@rwmwd.org

Sunrise River Watershed Management Organization
East Bethel City Hall
2241 - 221st Avenue
Cedar, MN 55011
763-434-9569

Vadnais Lake Area Water Management Organization
4701 Highway 61
White Bear Lake, MN 55110
Telephone and Fax 651-429-8522
office@vlawmo.org

Valley Branch Watershed District
P.O. Box 838, Lake Elmo, 55042
www.vbwd.org



Natural Resource Agencies

Agencies may also provide technical assistance and grant programs

Association of Metropolitan Soil and Water Conservation Districts

16015 Central Ave NE #103
Ham Lake, MN 55304
www.metroswcd.org

Gregg Thompson
Landscape Restoration Technician
763-434-2030 ext.15
metroswcd@isd.net

Anoka Conservation District

16015 Central Ave NE #103
Ham Lake, Mn 55304
763-434-2030
www.anokanaturalresources.com

Carver Soil and Water Conservation District

219 E Frontage Rd
Waconia, MN 55387
952-442-5101
www.co.carver.mn.us/swcd/swcd_main.asp

Dakota Soil and Water Conservation District

4100 220th St W, Suite 102
Farmington, MN 55024
651-480-7777
www.dakotacountyswcd.org

Hennepin Conservation District

1313 5th St SE
Minneapolis, MN 55414
612-379-3932
www.hcd.hennepin.mn.us

Ramsey Soil and Water Conservation District

2015 Rice St
Roseville, MN 55113
651-488-1476 www.ramseyconservation.org

Scott Soil and Water Conservation District

7151 West 190th St, Suite 125
Jordan, MN 55352
952-492-2636
www.scottswcd.org

Washington Conservation District

1380 W Frontage Rd, Hwy 36
Stillwater, MN 55082
651-275-1136
www.co.washington.mn.us/soilwater.htm

MN Department of Natural Resources Division of Waters / Division of Fisheries

1200 Warner Road
St. Paul, MN 55106
651-772-7910 / 651-772-7956
www.dnr.state.mn.us