

Species	Mature Size (height/width)	Light Needs	More about growth rate, soil preference, uses & edibility!
Ash, Mountain	20'/20'	Any	Slow growing, prefers rich soils but tolerates others, good for birds. <i>Sorbus americana</i>
Basswood (Am.Linden)	60-80'/75'	Shade	Tall, moderate growth rate, plant in moist, well-drained loamy soil. <i>Tilia americana</i>
Birch, Paper	50-70'/40'	Full	Rapid growth prefers well-drained sandy loam. <i>Betula papyrifera</i>
Cedar, Red	10'-40'/15'	Full	A juniper, aromatic wood, likes dry soils, not much browsed by deer. <i>Juniperus virginiana</i>
Cedar, White	40-50'/15'	Any	Slow to moderate growth rate, plant in clay loams, sandy loams. <i>Thuja occidentalis</i>
Cherry, Black	60-80'/	Full	Likes well-drained sandy or loam, hardwood for furniture, fruit for all! <i>Prunus serotina</i>
Cherry, Choke	25'/25'	Part	Fast growing, loamy well drained soil, tart fruit, & good for jelly, syrup. <i>Prunus virginiana</i>
Cherry, Pin	30'/5'	Full	Plant in full sun, could produce in 2 years, sour fruit for jelly. <i>Prunus pensylvanica</i>
Cherry, Sand	3-6'/3-6'	Full	Winter hardy, loamy soil, edible fruit, good for birds, deer browse. <i>Prunus besseyi</i>
Chokeberry, Black	3-6'/3-6'	Full	Red autumn leaves, white flowers, lasting fruit, adapts to most soils. <i>Aronia melanocarpa</i>
Cottonwood	80-100'/45'	Full	Massive, fast growing in floodplains, streambanks, lakeshores. <i>Populus deltoides</i>
Cranberry, Highbush	12'/12'	Part	Prefers moist well-drained soil, but not particular about type. <i>Viburnum trilobum</i>
Dogwood, Gray	6'/12'	Part	Not fussy about soil type, but prefers well drained. Has white flower. <i>Cornus racemosa</i>
Dogwood, Red-Osier	11'/12'	Any	Fast growing, prefers wet sites, red stems. Winter color, food for deer. <i>Cornus sericia</i>
Elderberry	9'/9'	Part	Prefers loamy moist soil, favorite of songbirds, make wine & jelly. <i>Sambucus canadensis</i>
Fir, Balsam	40-60'/20-35'	Shade	Fast growth, Christmas tree, good for birds, mammals, pulpwood. <i>Abies balsamea</i>
Grape, Riverbank	20-30'	Shade	Found along streams or damp cool woods. Sour, but good for jelly, juice. <i>Vitis riparia</i>
Hackberry	40-60'/25'	Full/Part	Floodplains, well-drained, loam non-acidic soils, drought resistant. <i>Celtis occidentalis</i>
Hazelnut	10'-20'	Full	Filberts edible, plant full sun, produces 2 nd year, shallow roots. <i>Corylus sp.</i>
Juneberry	8'/8'	Part	Suckers, grows in all well drained soils, edible fruit, good for wildlife. <i>Amelanchier alnifolia</i>
Maple, Red	50-70'/60'	Part	Moderate to fast growing. Prefers well-drained soil. Red, yellow in fall. <i>Acer rubrum</i>
Maple, Silver	60-90'/75'	Part	Grows in poor wetter soils, rapid growth rate. Yellow fall color. <i>Acer saccharinum</i>
Maple, Sugar	60-80'/80'	Any	Slow-moderate growth, best in well-drained loam. Syrup, bright fall colors. <i>Acer saccharum</i>
Nannyberry	15-20'/6-10'	Part	Most soils, edible fruit- date flavor after frost, good for birds. <i>Viburnum lentago</i>
Ninebark	10'/8'	Part	Blooms flower clusters, slow growing. Good for difficult sites. <i>Physocarpus opulifolius</i>
Oak, Bur	70-80'/80'	Part	Slow growing, likes moist well-drained soil, will grow in other areas. <i>Quercus macrocarpa</i>
Oak, Red	60-80'/50'	Part	Fast growing, prefers well-drained rich moist soils. <i>Quercus rubra</i>
Oak, White	80-100'/	Full/Part	Stately with purple fall leaves, likes deep, acidic, sandy loams. <i>Quercus alba</i>
Pine, Jack	30-80'/20-30'	Full	Needs full sun, fast growing at first, birds and animals food, sawlogs. <i>Pinus banksiana</i>
Pine, Norway	50-80'/30'	Full	aka Red Pine. Moderate/fast growth, likes sandy well-drained soil. <i>Pinus resinosa</i>
Pine, White	80-95'/80'	Part	Rapid growth rate. Prefers well-drained moist loam, silty loam. <i>Pinus strobus</i>
Plum, American	25'/20'	Full	Loam, sand, gravel well drained, rapid growing, edible red/yellow fruit. <i>Prunus Americana</i>
Spruce, White	40-80'/25'	Any	Rapid growing, plant in well drained med to fine soils, Christmas tree. <i>Picea glauca</i>
Sumac, Staghorn	5-15'/10-15'	Full	Fast growth rate, all soil types, good for wildlife, bank stabilization. <i>Rhus hirta</i>
Willow, Peach-Leaf	25-45'/30'	Full	Grows in moist, well-drained soils, good for riparian restoration. <i>Salix amygdaloides</i>
Willow, Sandbar	15'/4'	Full	Great in floodplains, spreads readily, colonizes, stabilizes soils. <i>Salix exigua interior</i>

*identified as native to St. Louis County, Minnesota and surrounding area, in Welby Smith's *Trees and Shrubs of Minnesota*, University of Minnesota Press, 2008.

Order Deadline April 18, 2014. Visit us at www.SouthStLouisSWCD.org or call (218) 723-4867 for more information.

Five new tree species for 2014 ~ and beyond

The 2014 Native Tree and Shrub sale will feature five new tree species common just to our south, and heading our way with gradual warming trends.

From grand-daddy white oaks and cottonwoods, to smaller hackberry trees, black cherry and red cedar, we're looking ahead to the

changing ecology of northern Minnesota.

Need to know more? The tree sale page on our website has links to detailed plant descriptions & color photos, planting tips, deer protection strategies, invasive species alerts, woodlot planning, and much more.

SIGN UP for our eNews Today! ~ helpful & timely tips

On our website: www.SouthStLouisSWCD.org

Want to split a tree order?

Sometimes a bundle of 25 seedlings is just too many plants for one site to hold (or for one person to plant!). Use Seedling Share on our Facebook page to help find a buying partner. Just post a message about which species you want, then check back to see who wants to split a bundle with you!

Facebook.com/southstlouisswcd 



CONSERVATION NEWS

For the good of the 'hood: watershed awareness begins with you

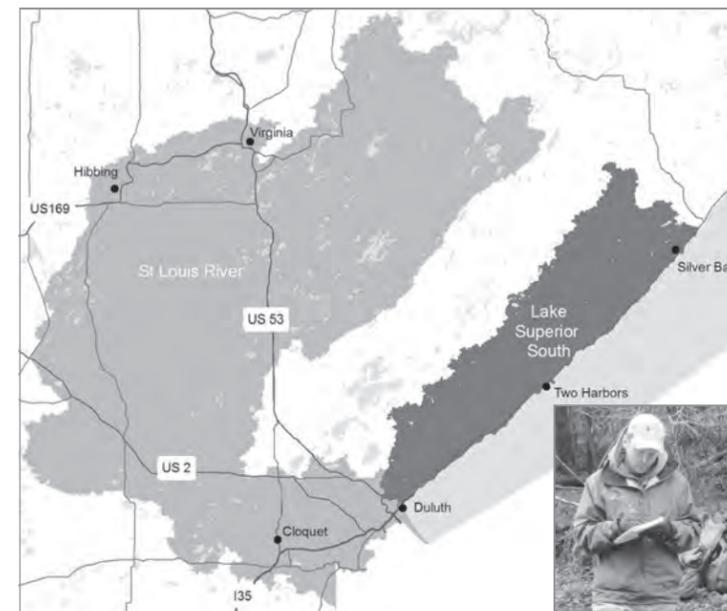
Does your favorite lake or pond grow green with algae each summer? Then its watershed is contributing more nutrients than the lake can process. Do you fish or swim in a certain river? Then you'll be interested to know the largest sources of harmful sediment and bacteria.

While most of us know which county and town we live in, not so many know the ragged border of their watershed, the area of land from which all water sheds into one river or lake.

If you care about a body of water, you need to learn what's happening up-stream and upland of it. Fortunately, watershed research and outreach are under way!

Major Watershed Approach

Our staff has been working with Minnesota Pollution Control Agency (MPCA) on their 'major watershed approach,' a system through which they work to assess and address water quality in the entire state. In the land of 10,000 lakes, this is no small task.



This map shows the two 'major watersheds' we're currently working on. St. Louis River Watershed (pale gray) includes bits of Wisconsin and Carlton County and extends into the Iron Range. Lake Superior South Watershed (dark gray) includes rivers flowing into Lake Superior from downtown Duluth up the shore to Silver Bay. Inset photo shows Tim Beaster collecting data at Talmadge River.

precise causes of the problems, we cannot design effective solutions.

You are part of the solution – Land of 10,000 water stewards!

We all live in a watershed - there's no getting around it! So, consider it part of your neighborhood watch to learn more about activities and issues in your watershed. "It will take a concerted effort between professionals, landowners, and concerned citizens to address Minnesota's water quality issues," says Kubiak. That's your cue!

This spring, we will hold public meetings throughout the region for those interested in learning more about two major watersheds and their impairment issues (see map). Individuals, families, businesses and community groups are all encouraged to participate.

To receive notice of watershed meetings, please email or call (contact info at left). View more maps, photos, and background info on our website! 

"There are already 3,000 impaired waterways identified in this state," explains our conservation specialist, Kate Kubiak, "and this is with only about 40 to 50 percent of our state waters assessed so far."

Field Research – Identifying the source of the problem

A stream or lake is 'impaired' if it fails to meet water quality standards set for it. Miller Creek, for instance, has been classified as brook trout habitat, but is impaired by water temperatures that are too warm. When you realize that its watershed includes all the black asphalt parking areas around our malls, you can imagine where some of that over-warmed water comes from after a summer storm.

It takes hundreds of hours of field work to determine the particular answer to why a watershed is impaired. Is it an excess of temperature, nutrients, turbidity, or toxicity? Is it altered hydrology or habitat? Staff from our office work nearly full-time collecting and analyzing data in all these categories. Without discovering the



South St. Louis
SOIL & WATER CONSERVATION DISTRICT

Visit us in Duluth's Old Central High
215 North 1st Avenue E, Room 301
Duluth, MN 55802
(218) 723-4867

email:
info@southstlouisswcd.org

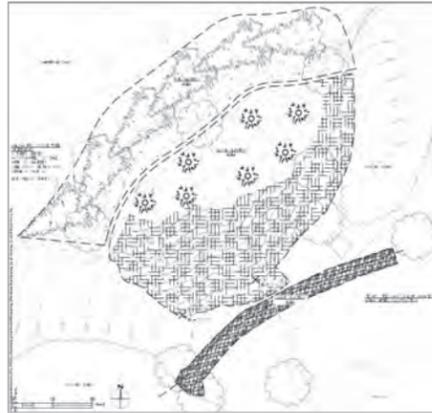
website:
www.southstlouisswcd.org

facebook:
www.facebook.com/southstlouisswcd

First year of flood restoration comes to a close

South St. Louis Soil and Water Conservation District continues to take a lead role in helping area landowners restore flood-damaged properties from the June 2012 rains. This past year, we prioritized critical situations where landslides and slumps jeopardized homes or other structures.

Over 20 property owners received reimbursements through our office in 2013 and dozens more have projects in the design phase.



There are no shortcuts to well-designed conservation projects. Each major erosion site requires a custom solution to avoid more problems in the future. We work closely with landowners, conservation engineers, and contractors to oversee this process.

To date we have received over \$4 million in flood recovery funds

allocated through the Board of Water and Soils Resources. Having identified more than 100 flood-caused erosion projects in our area, it means that actual work and reimbursements will likely extend into 2015.

Fortunately, most find that conservation projects are worth the wait! Here is what one recipient of our flood relief had to say:

"Our words will not adequately express how grateful we are for all your help in fixing the flood damage to our land. . . . Having lived in our home for 32 years, we never could have imagined that heavy rains could do such damage to the hillside. Thanks for caring about the safety and security of our yard and home and the homes of our neighbors."

Simple steps to protect your land

Concerned about the next big deluge? There are things you can do to control backyard erosion: stabilize steep slopes by planting trees and shrubs, or by terracing; replace some or all of your lawn with more deeply rooted plants, like native perennials and grasses; assess the impervious surfaces of your property (roofs, driveways, sidewalks), to see where you can collect and channel runoff into the earth through rain barrels, rain gardens, and pervious pavers. 🌲

What the Conservation District can do for you



Kate Kubiak (l) leads a June tour of urban projects

The South St. Louis Soil & Water Conservation District offers many programs to help landowners — both urban and rural — reach their land protection and management goals.

We have several different sources of financial assistance available, plus the technical capabilities and regulatory

knowledge to support these programs:

Erosion control and sediment reduction for landowners;

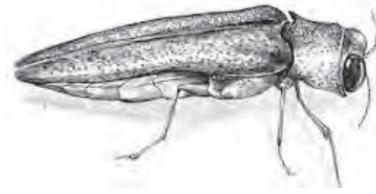
Wetland conservation assistance;

Forest stewardship assistance for landowners with parcels of all sizes;

Conservation education in classrooms, for community groups, at the zoo, and more;

Watershed protection and restoration projects, large and small.

Please feel free to contact us with your questions or concerns. Together, we can work to protect and enhance this region's invaluable lands and waters. 🌲



Emerald Ash Borer arrives

Last summer, the arrival of a destructive green beetle called emerald ash borer (EAB) was documented in Superior, Wisconsin. According to University of Minnesota Extension, in just 10 years, EAB has killed tens of millions of ash trees.

Northern Minnesota is forested in native black and green ash trees, and cultivated varieties of ash are popular urban plantings. The arrival of this bug across the harbor means it's likely to cause us trouble in the not-so-distant future.

While there's no need to panic, there are three things you can do to help slow and mitigate damage from emerald ash borer.

- 1) Don't transport firewood or other forest products, even within MN.
- 2) Learn to identify emerald ash borer and evidence of its presence, like woodpeckers!*
- 3) Consider planting replacement species. See chart below & prices at right!

*The U of M Extension has excellent resources for identifying ash trees, the ash borer itself, and insect damage. See their website or call their office. 🌲

Existing Ash	Alternate Species
Black ash growing in moist forest	tamarack red maple white cedar
Black ash in upland forest or woodland	basswood quaking aspen white spruce maples
Green ash growing along waterways	box elder native willows hackberry

2014 Tree & Shrub Order Form Order Deadline: April 18, 2014

Please save a copy for your reference



Plant Species	Start Size	Plants per Bundle	Cost*	# of Bndls	Total (Cost x Bundles)
Shrubs					
Sand Cherry	2-3 ft.	25	\$40		
Black Chokeberry	18-24"	25	\$40		
Highbush Cranberry	2-3 ft.	10	\$25		
Gray Dogwood	18-24"	25	\$40		
Red-Osier Dogwood	2-3 ft.	10	\$25		
Elderberry	2-3 ft.	25	\$40		
Nannyberry	12-18"	25	\$40		
Ninebark	18-24"	25	\$40		
Sandbar Willow	18-24"	25	\$40		
Small Trees					
Mountain Ash	18-24"	25	\$40		
Choke Cherry	18-24"	25	\$40		
Pin Cherry	18-24"	25	\$40		
Hazelnut	12-18"	25	\$40		
Juneberry	18-24"	25	\$40		
American Plum (Wild)	18-24"	25	\$40		
Staghorn Sumac	12-24"	25	\$40		
Tall Trees					
Basswood (Am.Linden)	18-24"	10	\$25		
Paper Birch	12-18"	25	\$40		
Black Cherry **NEW!	3-4 ft.	10	\$25		
Cottonwood **NEW!	18-24"	25	\$40		
Hackberry **NEW!	18-24"	25	\$40		
Red Maple	18-24"	25	\$40		
Silver Maple	4-5 ft.	10	\$25		
Sugar Maple	18-24"	25	\$40		
Bur Oak	2-3 ft.	10	\$25		
Red Oak	3-4 ft.	10	\$25		
White Oak **NEW!	18-24"	25	\$40		
Peach Leaf Willow	18-24"	25	\$40		
Evergreens					
Red Cedar **NEW! (4 year-old seedling)	8-14"	25	\$25		
White Cedar (4 y-o sdng)	8-14"	25	\$25		
Balsam Fir (4 y-o sdng)	8-16"	25	\$25		
Jack Pine (seedling)	6-12"	25	\$25		
Norway (Red) Pine (transplant)	8-24"	25	\$40		
White Pine (transplant)	8-16"	25	\$40		
White Spruce (transplant)	8-16"	25	\$40		
Evergreen Packet (5 each of Norway pine, white pine, white cedar, and white spruce!)		20	\$40		
Vines					
Riverbank Grape	10-24"	25	\$40		

*Prices include MN sales tax
Tax-exempt orders must have a certificate on file with our office. Multiply the total due by .927 to calculate pre-tax cost.

Total
Payment

Select your pick-up location!

Duluth (218) 723-4867 Two Harbors (218) 834-8370 Grand Marais (218) 387-3647

Name _____

Phone _____

Address _____

City _____ State _____ Zip _____

Email _____

Please print clearly

Tree Order Pick-Up

Please mark your calendar now! Dates for order pick-up at all locations are between **May 15th & May 17th, 2014**. We'll send an email reminder (or postcard) of pick-up details. If you do not hear from us by May 12th, check our website or phone your pick-up location.

Plants Are Perishable - Please Collect Your Order Promptly

Because of their perishable nature, the SWCD is not responsible for the condition of trees or shrubs after pick-up. Trees and shrubs offered are conservation-grade, bare-root stock. The SWCD does not guarantee survival and/or replacement of trees. Size is subject to change without notice. Refunds can only be made if stock is exhausted. Failure to pick up your order will result in the loss of your payment.

Warning: Tall trees and evergreens should not be planted near power lines. All shrubs and small trees are OK near lines.

Check Plant Availability Updates on our Website

Order early for best selection. After March 1, please check our website for stock status before ordering. Our website also features: tree and shrub descriptions; photos; planting instructions; & wildlife protection strategies.

Want to Split an Order?

Go to our Facebook page to find a Seedling Share buying partner!

Website: www.southstlouisswcd.org

Phone: (218) 723-4867

Email: info@southstlouisswcd.org

On [Facebook.com/southstlouisswcd](https://www.facebook.com/southstlouisswcd)

All orders must be paid in full prior to pick-up.
Check or money order only, please.

Send Order Form and Payment **by April 18 to:**

South St. Louis SWCD
215 North First Ave East, Room 301
Duluth, MN 55802