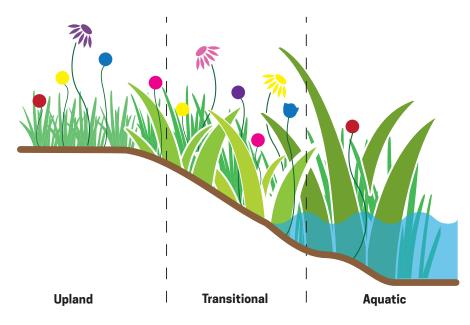
Nine Mile Creek Watershed District Plants for Shoreline Buffers



Shorelines heavily vegetated in native plants are essential for healthy water bodies. Well maintained buffers serve to: stabilize shoreland to reduce erosion, improve fish and wildlife habitat, filter nutrients and pollutants, and filter stormwater running to the waterbody. Shoreline buffer construction includes removal of existing vegetation or turf grass, installing native plants, installing erosion control measures such as erosion control blanket, sediment control log, or mulching.

The Buffer Zone Plant Lists below include both Minnesota and Midwest natives. The Midwest native often include cold tolerant (Max Zone 5) plants that have a history of successful growth in Minnesota as our ecology shifts and adapts to climate change. The plant list identifies aggressive plants, which are plants that quickly spread and can eventually dominate a planting. These plants may be beneficial because they quickly stabilize the shoreline and create a dense filter for water running down to the waterbody. Carefully consider the traits listed to select the right plants for your buffer. The plants in the list are commonly available at local nurseries. Size of plants to be installed can range from small plugs to one-gallon containers.

COST SHARE APPLICANTS: To qualify for cost share grant reimbursement, you must choose plants for your shoreline buffer project from this list. To submit this list with your cost share application, place a check next to the plants you will use in your shoreline buffer. Save the form and submit it with your cost share application. Learn more at: ninemilecreek.org/grants/applications



The shoreline buffer zone is comprised of three areas, **aquatic**, **transitional**, and **upland**. The **aquatic zone** contains plants that can withstand being in standing water. The **transitional zone** varies depending on slope and water level fluctuations, but typically the area extends from the edge of standing water to the Ordinary High Water (OHW) mark. Plants in the transitional zone are able to survive in moist and saturated soils. The **upland area** is the moist to dry area above the shoreline or OHW mark.



Shoreline Buffer Zones:

Understanding Our Urban Watershed

= Transitional Zone

= Aquatic Zone

= Upland

✓	Common Name (* = Midwest Native)	Scientific Name	Sun Exposure	Soil Moisture	Height	Spreads Willingly	Very Aggressive
	Sweet Flag	Acorus americanus	* *		3-5'		
	Fragrant (Anise) Hyssop	Agastache foeniculum	* *	\diamond \diamond	3-5'	х	
	Yellow Giant Hyssop	Agastache nepetoides	* *	$\widehat{}$	6'	х	
	Purple Giant Hyssop	Agastache scrophulariaefolia	* *	\diamond \diamond	6'	х	
	White Snakeroot	Ageratina altissima	* *	\diamond	2-3'	х	x
	Water Plantain	Alisma subcordatum	*		1-2'	х	
	Canada Anemone	Anemone canadensis	* *		1-2'	х	х
	Angelica	Angelica atropurpurea	* *		7'	х	x
	Spreading Dogbane	Apocynum androsaemifolium	* *		2-3'	х	x
	Dogbane	Apocynum cannabinum	* *		4'	х	x
	Clasping Dogbane	Apocynum sibiricum	* *		5'	х	x
	Wild Columbine	Aquilegia canadensis	* * *	\diamond \diamond	2'	х	
	Swamp Milkweed	Asclepias incarnata	* *		3-6'		
	Purple Milkweed	Asclepias purpurascens	* *		3'		
	Common Milkweed	Asclepias syriaca	* *		3-6'	х	x
	New York Aster	Aster novi-belgii	* *		4'		
	Canadian Milkvetch	Astragalus canadensis	* *		3'	х	
	White Wild Indigo	Baptisia alba	* *		3-4'		
	Swamp Marigold	Bidens aristosa	* *		4'		
	Nodding Bur Marigold	Bidens cernua	*		3'		
	Downy Wood Mint	Blephilia ciliata	* *		1'		
	False Aster	Boltonia asteroides	* *		4'	х	х
	Sweet Indian Plantain	Cacalia suaveolens	* * *		7'	х	x
	Marsh Marigold	Caltha palustris	* * *		1'		
	Tall Bellflower	Campanula americana			5'	х	х
	Fireweed	Chamaenerion angustifolium	* *		2-6'	х	
	Turtlehead	Chelone glabra	* *		1-4'	х	x
	Purple Prairie Clover	Dalea purpurea	*	۵ ۵	2-3'		
	Showy Tick Trefoil	Desmodium canadense	* *		5'		
	Flat-Topped Aster	Doellingeria umbellata	*		4-6'	х	

 \bigcirc = Transitional Zone \bigcirc = Upland

= Aquatic Zone

✓	Common Name (* = Midwest Native)	Scientific Name	Sun Exposure	Soil Moisture	Height	Spreads Willingly	Very Aggressive
	Narrow-Leaved Coneflower	Echinacea angustifolia	* *		1-2'	х	
	Willow Herb	Epilobium coloratum	* *		1-2'	х	
	Tall Boneset	Eupatorium altissimum	* *	$\mathbf{\hat{\mathbf{A}}}$	4'		
	Boneset	Eupatorium perfoliatum	* *	۵ ۵	3-5'	х	
	Big Leaf Aster	Eurybia macrophylla			1-4'	х	
	Grass-Leaved Goldenrod	Euthamia graminifolia	* *		2-5'	х	x
	Joe-Pye Weed	Eutrochium maculatum	* *		21⁄2-6'	х	x
	Sweet Joe Pye Weed	Eutrochium purpureum	* *	۵ ۵	7'	х	x
	Queen Of The Prairie	Filipendula rubra	* *		5'	х	x
	Cream Gentian	Gentiana alba	* *		1-2'		
	Bottle Gentian	Gentiana andrewsii	* *		1-2'		
	Fringed Gentian	Gentiana crinita	*		1'		
	Yellow Avens	Geum aleppicum			2-4'		
	Purple Avens	Geum rivale	* *		1-3'		
	Sneezeweed	Helenium autumnale	*		2-5'	х	
	Woodland Sunflower	Helianthus divaricatus			4'		
	Giant Sunflower	Helianthus giganteus	* *		5-8'	х	
	Maximilian's Sunflower	Helianthus maximiliani	* *		3-6'	х	x
	Stiff Sunflower	Helianthus pauciflorus	* *		2-5'	х	x
	Jerusalem Artichoke	Helianthus tuberosus	* *		7'	х	x
	Common Ox-Eye	Heliopsis helianthoides	* *		2-4'	х	x
	Great St. Johnswort	Hypericum pyramidatum	*		2-5'	х	x
	Marsh St. John's Wort	Hypericum virginicum	*	۵	2'	х	x
	Spotted Touch Me Not	Impatiens capensis	* * *		4'	х	x
	Yellow Jewelweed	Impatiens pallida	* *		4'	х	
	Blue Flag Iris	lris versicolor	*		2-4'		
	Round-Headed Bush Clover	Lespedeza capitata	* *		2-4'	х	
	Rough Blazing Star	Liatris aspera	*		2-3'		
	Meadow Blazing Star	Liatris ligulistylis	* *		2-5'		
	Prairie Blazing Star	Liatris pycnostachya	*		3-4'		

 \bigcirc = Transitional Zone \bigcirc = Upland

= Aquatic Zone

✓	Common Name (* = Midwest Native)	Scientific Name	Sun Exposure	Soil Moisture	Height	Spreads Willingly	Very Aggressive
	Dense Blazing Star	Liatris spicata	*		3-4'		
	Turk's Cap Lily	Lilium michiganense	* *		3-6'		
	Cardinal Flower	Lobelia cardinalis	* * *	• •	2-4'		
	Great Blue Lobelia	Lobelia siphilitica	* *		1-1½'	х	
	Wild Lupine	Lupinus perennis	* *	\diamond	1-1½'		
	Fringed Loosestrife	Lysimachia ciliata	* *		1-2'	х	
	River Loosestrife	Lysimachia hybrida	* *	• •	3'	х	
	Prairie Loosestrife	Lysimachia quadriflora	* *	• •	2'	х	
	Swamp Candles	Lysimachia terrestris	*	• •	3'	х	
	Wild Mint	Mentha arvensis	* * *		2'	х	
	Monkey Flower	Mimulus ringens	* *		1-2'		x
	Wild Bergamot	Monarda fistulosa	* *	♦ ♦	2-4'	х	
	Spotted Bee Balm	Monarda punctata	* *	♦ ◊	1-2'	х	x
	Common Evening Primrose	Oenothera biennis	* *	♦ ♦	6'	х	
	Stiff Goldenrod	Oligoneuron rigida	* *	♦ ◊		х	
	Golden Ragwort	Packera aurea	* *		1-3'	х	х
	Balsam Ragwort	Packera paupercula	* *		1-3'	х	
	Wood Betony	Pedicularis canadensis	* *	۵ 🌢	1'	х	
	Slender Penstemon	Penstemon gracilis	* *	0	1-2'		
	Prairie Phlox	Phlox pilosa	* *		1-2'	х	
	Obedient Plant	Physostegia virginiana	* * *		11⁄2-4'		х
	Marsh Cinquefoil	Potentilla palustris		٢	2'		
	Mountain Mint	Pycnanthemum virginianum	* *	۵	2-4'	х	
	Swamp Buttercup	Ranunculus hispidus	* *		1-1½'		х
	Bristly Buttercup	Ranunculus pensylvanicus	*		1'		
	Long-Headed Coneflower	Ratibida columnifera	*	۵ 🌢	2-3'	х	
	Yellow Coneflower	Ratibida pinnata	*	۵ ۵	3-6'	Х	
	Meadow Rose	Rosa blanda			3-5'	Х	
	Black Eyed Susan	Rudbeckia hirta	* *	۵ ۵	1-3'	Х	x
	Wild Golden Glow	Rudbeckia laciniata	* * *		5-6'	х	

 \bigcirc = Transitional Zone \bigcirc = Upland

= Aquatic Zone

✓	Common Name (* = Midwest Native)	Scientific Name	Sun Exposure	Soil Moisture	Height	Spreads Willingly	Very Aggressive
	Sweet Black-Eyed Susan	Rudbeckia subtementosa	* *		5'	х	x
	Brown-Eyed Susan	Rudbeckia triloba	* *	\bigcirc	5'	х	x
	Swamp Dock	Rumex verticillatus	* *		3'		x
	Arumleaf Arrowhead	Sagittaria cuneata	*		2'		
	Common Arrowhead	Sagittaria latifolia	* *		1-3'		
	Cup Plant	Silphium perfoliatum	* *		3-6'	х	
	Missouri Goldenrod	Solidago missouriensis	* *	♦ ◊	1-2'	х	x
	Gray Goldenrod	Solidago nemoralis	* *	♦ ♦	1-3'	х	x
	Showy Goldenrod	Solidago speciosa	*	۵ 🌢	2-3'	х	
	Great Bur Reed	Sparganium eurycarpum	* *		3-5'		x
	Heart-Leaved Aster	Symphyotrichum cordifolium	* *	♦ ◊		х	
	Heath Aster	Symphyotrichum ericoides	* *	۵ 🌢	1-3'	х	
	Smooth Aster	Symphyotrichum laeve	* *		2-5'	х	x
	Panicled Aster	Symphyotrichum lanceolatum	* *		2-5'	х	х
	New England Aster	Symphyotrichum novae-angliae	* *		4-5'	х	
	Aromatic Aster	Symphyotrichum oblongifolium	*	♦ ♦	1-2'	х	х
	Sky Blue Aster	Symphyotrichum oolentangiense	* *	۵ 🌢	2-4'	х	
	Crooked-Stemmed Aster	Symphyotrichum prenanthoides	* *	6	3'	х	х
	Red-Stalked Aster	Symphyotrichum puniceum	* * *		3-5'	х	х
	Germander	Teucrium canadense	* *		3'		х
	Prairie Spiderwort	Tradescantia bracteata	* *	۵ 🌢	1'	х	
	Western Spiderwort	Tradescantia occidentalis	* *	\diamond \diamond	1-1½'	х	х
	Ohio Spiderwort	Tradescantia ohiensis	* *	۵ 🌢	3'	х	х
	Blue Vervain	Verbena hastata	*		2-5'	х	х
	Hoary Vervain	Verbena stricta	* *		2-4'	х	
	Ironweed	Vernonia fasciculata	*		2-5'	х	
	Culver's Root	Veronicastrum virginicum	* *		3-5'	х	x
	White Camass	Zigadenus elegans	* *	\diamond	3'		
	Heart-Leaved Alexander	Zizia aptera	* *		1-3'	х	
	Golden Alexander	Zizia aurea	* *		1-3'	х	

Graminoids (Grasses, Rushes, and Sedges)

= Aquatic Zone

= Transitional Zone = Upland

<	Common Name (* = Midwest Native)	Scientific Name	Sun Exposure	Soil Moisture	Height	Spreads Willingly	Very Aggressive
	Big Bluestem	Andropogon gerardii	* *		4-8'	х	
	American Slough Grass	Beckmannia syzigachne	*		2'	х	x
	River Bulrush	Bolboschoenus fluviatilis	* *		4-6'	х	
	Fringed Brome	Bromus ciliatus	*		2-3'	х	
	Blue Joint Grass	Calamagrostis canadensis	* *		4-6'	х	x
	Golden-Fruited Sedge	Carex aurea	*		2'		
	Common Wood Sedge	Carex blanda	* * *		2'		
	Bottlebrush Sedge	Carex comosa	*		1-2'	х	
	Fringed Sedge	Carex crinita	* * *		2-3'		
	Awned Graceful Sedge	Carex davisii		• •	2'		
	Large-Fruited Star Sedge	Carex echinata	*		3'		
	Common Bur Sedge	Carex grayi	* * *	۵ ۵	3'	х	
	Porcupine Sedge	Carex hystericina	*		3'	х	
	Prairie Star Sedge	Carex interior	* * *	۵ ۵	2'		
	Lake Sedge	Carex lacustris	* * *		2-4'	х	x
	Long-Toothed Lake Sedge	Carex laeviconica	*	۵ ۵	4'	х	
	Slender Sedge	Carex leptalea	* * *		2'		
	Hop Sedge	Carex lupulina	* * *		2-3'		
	Palm Sedge	Carex muskingumensis	* * *	• •	3'	х	
	Pennsylvania Sedge	Carex pensylvanica	* * *		6-8"	х	x
	Straight-Styled Wood Sedge	Carex radiata	* *	• •	1'		
	Pointed Broom Sedge	Carex scoparia	* *		1-2'		
	Bur-Reed Sedge	Carex sparganioides	* *	• •	3'		
	Sprengel's Sedge	Carex sprengelii		۵ ۵	2-3'	х	
	Common Fox Sedge	Carex stipata	* * *		3'	х	
	Tussock Sedge	Carex stricta	*		1-3'	Х	х
	Awl-Fruited Oval Sedge	Carex tribuloides	* *	• •	3'		
	Tufted Lake Sedge	Carex vesicaria	* *		3'	х	
	Fox Sedge	Carex vulpinoidea	* *		1-3'	Х	
	Beak Grass	Diarrhena americana			2'	х	х

Graminoids (Grasses, Rushes, and Sedges)

= Aquatic Zone

= Transitional Zone = Upland

✓	Common Name (* = Midwest Native)	Scientific Name	Sun Exposure	Soil Moisture	Height	Spreads Willingly	Very Aggressive
	Spike Rush	Eleocharis acicularis	*		8"	х	
	Flatstem Spikerush	Eleocharis compressa	* *		3-16"		
	Bald Spikerush	Eleocharis erythropoda	*	۵ ۵	3'		
	Blunt Spike Rush	Eleocharis obtusa	*		1'		
	Spike-Rush	Eleocharis ovata	* *		1-2'	х	
	Great Spike Rush	Eleocharis palustris	*		1'	х	
	Canada Wild Rye	Elymus canadensis	* *	♦ ◊	3-4'	х	
	Bottlebrush Grass	Elymus hystrix		♦ ♦	2-3'	х	
	Riverbank Wild Rye	Elymus riparius	**		4'	х	
	Silky Wild Rye	Elymus villosus			3'	х	
	Virginia Wild Rye	Elymus virginicus	* * *		4'	х	
	Rattlesnake Manna Grass	Glyceria canadensis	* *		3'	х	х
	American Manna Grass	Glyceria grandis	* *		4-6'	х	х
	Fowl Manna Grass	Glyceria striata	* * *		1-3'	х	х
	Baltic Rush	Juncus balticus	*		3'		
	Canada Rush	Juncus canadensis	* *		2'		
	Dudley's Rush	Juncus dudleyi	*		2'		
	Soft Rush	Juncus effusus	*		1-2'		
	Path Rush	Juncus tenuis	* *		1'		
	Torrey's Rush	Juncus torreyi	*		1'		
	Rice Cut Grass	Leersia oryzoides	* *		4'	х	х
	Rough-Leaved Ricegrass	Oryzopsis asperifolia			1-2'	х	х
	Switch Grass	Panicum virgatum	* *		3-4'	х	
	Fowl Bluegrass	Poa palustris	* * *		2'	х	х
	Little Bluestem	Schizachyrium scoparium	* *	۵ 🌢	2-3'		
	Hardstem Bulrush	Schoenoplectus acutus	*		6'	Х	х
	Dark-Green Bulrush	Schoenoplectus atrovirens	*	٢	5'	х	х
	Soft-Stem Bulrush	Schoenoplectus tabernaemontani	*		3-6'	Х	х
	Wool Grass	Scirpus cyperinus	*		3-4'	Х	
	Indian Grass	Sorghastrum nutans	*		4-6'	х	

Graminoids (Grasses, Rushes, and Sedges)

= Transitional Zone	O = Upland	

Soil **Spreads** Very **Common Name** Sun \checkmark **Scientific Name** Height Exposure Moisture Willingly Aggressive (* = Midwest Native) \bigcirc Х 3-7' Х Cord Grass Spartina pectinata ٥ Purpletop Tridens flavus ۲ 4' Х \bigcirc ۲ 3' **River Oats*** Uniola latifolia

Shrubs

~	Common Name (* = Midwest Native)	Scientific Name	Sun Exposure	Soil Moisture	Height	Spreads Willingly	Very Aggressive
	Saskatoon Serviceberry	Amelanchier alnifolia	*		6'	х	
	Downy Serviceberry	Amelanchier arborea	* *		20'	х	
	Inland Serviceberry	Amelanchier interior	* * *	• •	15-35'	х	
	Roundleaf Serviceberry	Amelanchier sanguinea	* *		20-25'	х	
	Running Serviceberry	Amelanchier stolonifera	* *		6'	х	
	False Indigo	Amorpha fruticosa	*	• •	10'		
	Black Chokeberry	Aronia melanocarpa	* *		3-6'		
	Buttonbush	Cephalanthus occidentalis	* *		6'		
	Silky Dogwood	Cornus amomum	* *	• •	10'	х	x
	Gray Dogwood	Cornus racemosa	* *		15'	х	х
	Roundleaf Dogwood	Cornus rugosa	* *		8-10'	х	x
	Red Osier Dogwood	Cornus sericea	* *		6-12'	х	х
	American Hazelnut	Corylus americana	* *		8'	х	
	Lowbush Honeysuckle	Diervilla lonicera	* * *	♦ ♦	3'	х	
	Common Witch Hazel	Hamamelis virginiana	* *	\diamond	20'		
	Winterberry	llex verticillata	* *		10		
	Common Ninebark	Physocarpus opulifolius	* *		6'		
	Prickly Gooseberry	Ribes cynosbati	* *	♦ ♦	4'		
	Missouri Gooseberry	Ribes missouriense	* *		4'		
	Meadow Rose	Rosa blanda			1½-5'	х	х
	Pasture Rose	Rosa carolina	*		6'	х	х
	Thimbleberry	Rubus parviflorus			1-3'	х	х
	Peach-Leaved Willow	Salix amygdaloides	* *		60'	х	x

= Full Sun (>6 hours of daily sunlight) 糞 = Partial Sun (3 - 6 hours of daily sunlight) 🐞 = Shade (<3 hours of daily sunlight)

 Θ

= Aquatic Zone

\mathbf{a}	= Transitional Zone	\bigcirc = Upland

 Image: A start of the start of	Common Name (* = Midwest Native)	Scientific Name	Sun Exposure	Soil Moisture	Height	Spreads Willingly	Very Aggressive
	Pussy Willow	Salix discolor	* * *	• •	25'	х	х
	Sandbar Willow	Salix interior	*		15-20'	х	Х
	Shining Willow	Salix lucida	*	• •	10'	х	х
	Autumn Willow	Salix serissima	*	• •	5-6'	х	х
	American Elder	Sambucus canadensis	* *		12'	х	
	Red-Berried Elder	Sambucus racemosa	* *		15'	х	
	Meadow Sweet	Spiraea alba	* *	♦ ♦	4'	х	
	Steeplebush	Spiraea tomentosa	* *		4'	х	
	White Snowberry	Symphoricarpos albus	* *		5'	х	
	Coralberry	Symphoricarpos orbiculatus	* *	4	4'	х	
	Nannyberry	Viburnum lentago	* *		30'	х	х
	Downy Arrowwood	Viburnum rafinesquianum	* * *	♦ ♦	6'		
	American Cranberry	Viburnum trilobum	* *		10'		

Trees

Shrubs

✓	Common Name (* = Midwest Native)	Scientific Name	Sun Exposure	Soil Moisture	Height	Spreads Willingly
	Silver Maple	Acer saccharinum	* *	• •	100'	х
	Speckled Alder	Alnus rugosa	* *	۵ ۵	30'	Х
	Downy Serviceberry	Amelanchier arborea	* * *		25'	Х
	Shadblow Serviceberry	Amelanchier canadensis	*	6	25	Х
	Allegheny Serviceberry	Amelanchier laevis	* *	6	20-40'	Х
	Yellow Birch	Betula alleghaniensis	* *	۵ ۵	85'	
	River Birch	Betula nigra	*	• •	40-60'	Х
	Bitternut Hickory	Carya cordiformis	* *	• •	50-70'	
	Shagbark Hickory	Carya ovata	* * *	\diamond \diamond	80'	
	Common Hackberry	Celtis occidentalis	*	\diamond	40-60'	
	Large-Seeded Hawthorn	Crataegus flabellata	* * *		20'	
	Fleshy Hawthorn	Crataegus macracantha	*	♦ ♦	15-25'	
	Big-Fruit Hawthorn	Crataegus macrosperma	* * *	\diamond \diamond	15'	
	Downy Hawthorn	Crataegus mollis	*		15-25'	

 Image: A start of the start of	Common Name (* = Midwest Native)	Scientific Name	Sun Exposure	Soil Moisture	Height	Spreads Willingly
	Butternut	Juglans cinerea	*	• •	40-60'	
	Tamarack	Larix laricina	*	6	40-80'	
	Black Spruce	Picea mariana	* *		30-70'	
	Eastern Cottonwood	Populus delides	* *	۵ ۵	100'	х
	Bigtooth Aspen	Populus grandidentata	* *		40-60'	х
	Quaking Aspen	Populus tremuloides	*	۵ ا	40-60'	х
	American Plum	Prunus americana	* *	• •	15-25'	х
	Pin Cherry	Prunus pensylvanica	* *	۵ ا	20-40'	х
	Chokecherry	Prunus virginiana	* *	۵ 🌢	15-25'	х
	Swamp White Oak	Quercus bicolor	*		50-60'	
	Peachleaf Willow	Salix amygdaloides	*	۵ ۵	30-50'	
	Black Willow	Salix nigra	*	۵ ۵	30-50'	
	American Linden	Tilia americana	* *		50-70'	
	Canadian Hemlock	Tsuga canadensis	*		30-50'	