



SEED MIXES

SUITABLE FOR OUR WATERSHED

Conservation Halton

October 2020

Conservation Halton, in partnership with the Ontario Seed Company (OSC), developed a variety of seed mixes that are appropriate for use within our watershed. These seed mixes are suitable for restoration purposes and naturalization projects as well as for stormwater management facilities. These mixes are designed for use in a variety of soil and moisture conditions.

Conservation Halton does not endorse any specific company but simply developed these seed mixes to assist and provide a starting point. There may be many additional companies that will also carry the appropriate seed mixes and proponents can select any supplier to purchase their seed mixes. Conservation Halton recommends choosing a supplier who can obtain their seeds locally.

Conservation Halton Upland Dry Meadow Mix

Common Name	Botanical Name	Percentage of Mix (%)
Black Eyed Susan	*Rudbeckia hirta*	15
Big Bluestem	*Andropogon gerardii*	30
Blue Wood Aster	*Symphyotrichum cordifolius*	1
Canada Goldenrod	*Solidago canadensis*	2
Canada Anemone	*Anemone canadensis*	1
Common Milkweed	*Asclepias syriaca*	5
Evening Primrose	*Oenethera biennis*	2
Grass Leaved Goldenrod	*Euthamia graminifolia*	1
Little Bluestem	*Schizachyrium scoparium*	20
Meadow/Open Field Sedge	*Carex granularis*	12
New England Aster	*Symphyotrichum novae-angliae*	1
Virgins Bower	*Clematis virginiana*	5
Wild Bergamot	*Monarda fistulosa*	5

Conservation Halton Early Succession/Riparian Mix

Common Name	Botanical Name	Percentage of Mix (%)
Black Eyed Susan	*Rudbeckia hirta*	5
Blue Vervain	*Verbena hastata*	10
Canada Anemone	*Anemone canadensis*	1
Canada Blue-joint	*Calamagrostis canadensis*	2
Canada Goldenrod	*Solidago canadensis*	2
Little Bluestem	*Schizachyrium scoparuim*	10
Common Milkweed	*Asclepias syriaca*	5
Fowl Bluegrass	*Poa palustris*	25
Meadow/Open Field Sedge	*Carex granularis*	20
New England Aster	*Symphyotrichum novae-angliae*	1
Path Rush	*Juncus tenuis*	10
Purple Stemmed Aster	*Symphyotrichum puniceum*	1
Virgins Bower	*Clematis virginiana*	4
Wild Bergamot	*Monarda fistulosa*	4

Conservation Halton Meadow Marsh Mix

Common Name	Botanical Name	Percentage of Mix (%)
Bebbs Sedge	*Carex bebbi*	1
Blue Lobelia	*Lobelia siphilitica*	1
Blue Vervain	*Verbena hastata*	15
Boneset	*Eupatorium perfoliatum*	2
Dark Green Bulrush	*Scirpus atrovirens*	5
Fox Sedge	*Carex vulpinoidea*	25
Grass Leaved Goldenrod	*Euthamia graminifolia*	1
Meadow/Open Field Sedge	*Carex granularis*	10
Purple Stemmed Aster	*Symphyotrichum puniceum*	1
Soft Rush	*Juncus effusus*	5
Spotted Joe Pye Weed	*Eupatorium maculatum*	2
Monkey Flower	*Mimulus ringens*	1
Stalk Grain Sedge	*Carex stipata*	2
Tall Manna Grass	*Glyceria grandis*	2
Woolgrass	*Scirpus cyperinus*	2
Fowl Bluegrass	*Poa palustris*	25

Conservation Halton Temporary Stabilization Mix *

Common Name	Botanical Name	Percentage of Mix (%)
Canada Wild Rye	*Elymus canadensis*	25
Annual Oats	*Avena sativa*	25
Creeping Bent Grass	*Agrostis stolonifera*	25
Little Bluestem	*Schizachyrium scoparuim*	20
Meadow/Open Field Sedge	*Carex granularis*	5

*** To be used to stabilize short term exposed or disturbed soils such as interim condition stormwater management facilities, ditch lines, swales, and fill/soil piles.**

Seed Mix Application Rate:

Conservation Halton recommends an application rate of 25-30kg/ha.

Nurse Crop:
Each seed mix should include a nurse crop which creates short term erosion control and weed control, while allowing the native species to establish.

Conservation Halton does not support the use of Annual Rye (*Lolium multiflorum*) as a nurse crop. Recent research indicates that Annual Rye can inhibit the growth of other species thereby hindering the establishment of native vegetation. It can also be confused with and potentially hybridize with Perennial Rye (*Lolium perenne*).

Acceptable nurse crop species include:

Common Name	Botanical Name	Hardiness
Canada Wild Rye	*Elymus canadensis*	Winter Hardy
Virginia Wild Rye	*Elymus virginicus*	Winter Hardy
Annual Oats	*Avena sativa*	Winter Kill
Rye	*Secale cereale*	Winter Hardy
Barley	*Hordeum vulgare*	Winter Kill
Buckwheat	*Fagopyrum esculentum*	Winter Kill
White Millet	*Panicum miliaceum*	
Creeping Bent Grass	*Agrostis stolonifera*	Winter Hardy
Red Fescue	*Festuca rubra*	
Cosmos*	*Cosmos bipinnatus*	Winter Kill

*** can be used as a wildflower nurse crop for planting in public areas and supports pollinator species.**

It is important to note that some species can withstand winter temperatures (winter hardy) while others cannot and the plants die in freezing temperatures (winter kill). Utilizing a nurse crop which can bridge seasons will provide certainty that coverage and adequate stabilization will occur whatever the season.

While utilizing a single species as a nurse crop may be acceptable, a mix of two (2) or more species establishes quicker providing enhanced coverage and stabilization. A four-species nurse crop mix is provided below.

Conservation Halton Nurse Crop Mix

Common Name	Botanical Name	Percentage of Mix (%)
Canada Wild Rye	*Elymus canadensis*	35
Annual Oats	*Avena sativa*	25
Creeping Bent Grass	*Agrostis stolonifera*	20
Red Fescue	*Festuca rubra*	20

Nurse Crop Application Rate: We recommend an application rate of 25-30 kg/ha.