# WETLAND RESTORATION AREA – 398 CHAMBERLAIN HIGHWAY

# RESTORATION AND SEEDING NOTES TO BE IMPLMENTED UPON REMOVAL OF FILL MATERIAL WITH NEW GROUND ELEVATION TO MATCH ADJACENT WETLAND FOREST FLOOR ELEVATIONS

The wetland restoration area shall be backfilled with 1"-2" inch stone free of fines to the above water elevation, followed by the placement of a medium weight geotextile fabric over the stone, followed by compacted dense grade aggregate (DGA) to approximately 1-foot below the existing wetland grade and top dressed with approximately 12" of native wetland soil and/or prepared topsoil consisting of a 1:1 mixture or equal volumes of organic and minerals. To increase the carbon content clean leaf litter or commercially available compost can be used to amend the soil.

- 1. An erosion control barrier of entrenched fiber roll shall be installed within the wetland at the limits of disturbance to prevent movement of sediment from the proposed wetland restoration area into the undistrubed adjacent wetlands.
- 2. Seed areas per plan at the application rate recommended by the manufacturer. The seed shall be spread in the prepared soil, lightly raked to establish good soil contact after sowing, seed mix substitutes shall be equivalent to that specified in the restoration plan.
- 3. Wetland and embankment seed mixes to be applied with 50 LBS/AC of perennial ryegrass (*Lolium perenne*), and 60 LBS/AC of hard fescue (*Festuca trachphylla*) during the periods of March 1 to May 15 and August 1 to October 15.
- 4. Install type D woven coconut fiber matting within the inundation portion of the wetland to keep seed in place. In other areas apply small grain straw at a rate of 2 tons / ac and anchored with netting or tackifier. Erosion control blankets should be installed on slopes that are 3:1 or steeper.
- 5. Planting shall take place in the spring between April 15th and June 15th or early in the fall between September 1st and October 15th avoid seeding late June through August as portions of the seeding may fail due to drought and heat.
- 6. If seeding cannot occur due to seasonal and weather conditions, temporary seed disturbed wetland area with annual rye at a rate of 30 LBS per acre. Mulching without seeding may be used during the non-growing season in accordance with the Connecticut guidelines for soil erosion and sediment control.

**RECOMMENDED SHRUB PLANTINGS**, Type, Size and Quantity – To be placed under the auspices of the Wetland Scientist and or Town Wetland Agent. Total of 4 Trees and 40 shrubs are to be planted within the wetland restoration area. Plantings should be randomly placed in small groupings.

Highbush Blueberry – Vaccinum corymbosum 3-4' Tall, Qty 10

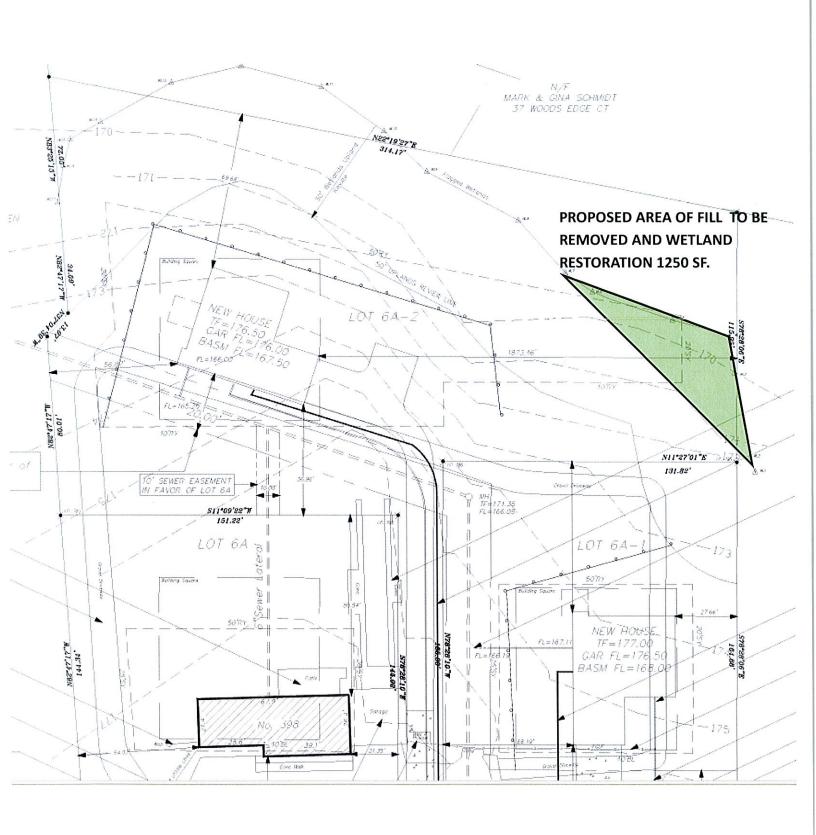
Sweet pepperbush - Clethra alnifolia 3-4' Tall, Qty 10

Silky dogwood - Cornus amomum, 3-4' Tall, Qty 10

Black Chokeberry – Aronia melanocarpa, 3-4' Tall, Qty 10

Red Maple - Acer rubrum min 3" caliber and 6' Tall, Qty 4

2 -Seed Mixes – Embankment zone & wetland floor / inundation zone – see manufacturer label.





## **Ernst Conservation Seeds**

8884 Mercer Pike Meadville, PA 16335 (800) 873-3321 Fax (814) 336-5191 www.ernstseed.com

Date: April 06, 2025

#### Conservation Shade Mix - ERNMX-129

	Botanical Name	Common Name	Price/Lb
30.00 %	Festuca rubra	Creeping Red Fescue	3.58
30.00 %	Festuca rubra ssp. commutata	Chewings Fescue	4.16
20.00 %	Lolium multiflorum	Annual Ryegrass	1.30
10.00 %	Poa pratensis, 'Maverick'	Kentucky Bluegrass, 'Maverick'	4.10
10.00 %	Poa trivialis	Rough Bluegrass	8.32
100.00 %		Mix Price/L	b Bulk: \$3.82

Seeding Rate: 100-200 lb per acre, or 3-5 lb per 1,000 sq ft

Grasses & Grass-like Species - Herbaceous Perennial; Lawn & Turfgrass Sites

While designed for deep-shaded areas, this mix requires at least 2 hours of sunlight daily. The fescues and bluegrasses are shade tolerant and blend very well together. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.



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Date: November 27, 2024

## **OBL Wetland Mix - ERNMX-131**

	Botanical Name	Common Name	Price/Lb
27.60 %	Carex lurida, PA Ecotype	Lurid Sedge, PA Ecotype	67.20
22.50 %	Carex scoparia, PA Ecotype	Blunt Broom Sedge, PA Ecotype	81.60
22.50 %	Carex vulpinoidea, PA Ecotype	Fox Sedge, PA Ecotype	28.80
6.00 %	Sparganium americanum	Eastern Bur Reed	168.00
5.00 %	Elymus virginicus, Madison-NY Ecotype	Virginia Wildrye, Madison-NY Ecotype	10.46
4.00 %	Verbena hastata, PA Ecotype	Blue Vervain, PA Ecotype	38.40
3.00 %	Juncus effusus	Soft Rush	48.00
2.00 %	Asclepias incarnata, PA Ecotype	Swamp Milkweed, PA Ecotype	177.60
1.50 %	Glyceria striata, PA Ecotype	Fowl Mannagrass, PA Ecotype	360.00
1.00 %	Aster lanceolatus	Lance Leaved Aster	432.00
1.00 %	Eupatorium perfoliatum, PA Ecotype	Boneset, PA Ecotype	192.00
1.00 %	Scirpus validus, PA Ecotype	Softstem Bulrush, PA Ecotype	432.00
0.70 %	Solidago rugosa, PA Ecotype	Wrinkleleaf Goldenrod, PA Ecotype	264.00
0.50 %	Carex stipata, PA Ecotype	Awl Sedge, PA Ecotype	288.00
0.50 %	Lycopus americanus, PA Ecotype	American Water Horehound, PA Ecotype	72.00
0.50 %	Scirpus cyperinus, PA Ecotype	Woolgrass, PA Ecotype	115.20
0.30 %	Mimulus ringens, PA Ecotype	Square Stemmed Monkeyflower, PA Ecotype	216.00
0.20 %	Alisma subcordatum	Mud Plantain	192.00
0.20 %	Carex stricta, PA Ecotype	Tussock Sedge, PA Ecotype	672.00

100.00 % Mix Price/Lb Bulk: \$83.08

**Seeding Rate:** 20 lb per acre, or 1/2 lb per 1,000 sq ft with a cover crop. For a cover crop use one of the following: grain rye (1 Sep to 30 Apr; 30 lbs/acre), Japanese millet (1 May to 31 Aug; 10 lbs/acre), or barnyard grass (1 May to 31 Aug; 10 lbs/acre).

Grasses & Grass-like Species - Herbaceous Perennial; Herbaceous Flowering Species - Herbaceous Perennial; Wet Meadows & Wetlands

Adapts to standing water during part or all of the year. Excellent for obligate wetland mitigation sites; provides nectar for pollinators. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.



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Date: November 27, 2024

#### FACW Wetland Meadow Mix - ERNMX-122

	Botanical Name	Common Name	Price/Lb
22.00 %	Carex lurida, PA Ecotype	Lurid Sedge, PA Ecotype	67.20
20.00 %	Carex vulpinoidea, PA Ecotype	Fox Sedge, PA Ecotype	28.80
20.00 %	Elymus virginicus, Madison-NY Ecotype	Virginia Wildrye, Madison-NY Ecotype	10.46
18.20 %	Carex scoparia, PA Ecotype	Blunt Broom Sedge, PA Ecotype	81.60
3.00 %	Juncus effusus	Soft Rush	48.00
3.00 %	Verbena hastata, PA Ecotype	Blue Vervain, PA Ecotype	38.40
2.00 %	Asclepias incarnata, PA Ecotype	Swamp Milkweed, PA Ecotype	177.60
2.00 %	Heliopsis helianthoides, PA Ecotype	Oxeye Sunflower, PA Ecotype	33.60
1.50 %	Verbena urticifolia, PA Ecotype	White Vervain, PA Ecotype	144.00
1.50 %	Zizia aurea, PA Ecotype	Golden Alexanders, PA Ecotype	72.00
1.00 %	Aster puniceus, PA Ecotype	Purplestem Aster, PA Ecotype	432.00
1.00 %	Juncus tenuis, PA Ecotype	Path Rush, PA Ecotype	48.00
1.00 %	Lycopus americanus, PA Ecotype	American Water Horehound, PA Ecotype	72.00
0.80 %	Solidago rugosa, PA Ecotype	Wrinkleleaf Goldenrod, PA Ecotype	264.00
0.70 %	Eupatorium perfoliatum, PA Ecotype	Boneset, PA Ecotype	192.00
0.70 %	Lobelia siphilitica, PA Ecotype	Great Blue Lobelia, PA Ecotype	384.00
0.70 %	Scirpus hattorianus	Northern Bulrush	144.00
0.50 %	Mimulus ringens, PA Ecotype	Square Stemmed Monkeyflower, PA Ecotype	216.00
0.30 %	Scirpus cyperinus, PA Ecotype	Woolgrass, PA Ecotype	115.20
0.10 %	Alisma subcordatum	Mud Plantain	192.00

100.00 % Mix Price/Lb Bulk: \$61.83

Seeding Rate: 20 lb per acre, or 1/2 lb per 1,000 sq ft with a

cover crop. For a cover crop use one of the following: grain rye (1 Sep to 30 Apr; 30 lbs/acre), Japanese millet (1 May to 31 Aug; 10 lbs/acre), or barnyard grass (1 May to 31 Aug;

10 lbs/acre).

Grasses & Grass-like Species - Herbaceous Perennial; Herbaceous Flowering Species - Herbaceous Perennial; Wet Meadows & Wetlands

The diverse species provide pollinator habitat and erosion control in wet meadows. Excellent for facultative wetland mitigation sites. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.