

Section 4.2.2 - Seed Mixes

Below is a list of seed mixes that will be planted on associated land use tracts, suitable plant growth material stockpiles, and other miscellaneous disturbance areas. Croplands will be planted with a temporary pre-crop grass/legume seed mixture, or planted directly with a small grain crop, depending on season, landowner preference and potential erosion problems. Road ditches will typically be seeded with the same seed mix that is used for the adjacent land use. If that land use is cropland, the pre-crop mix will typically be used. Cover crops of oats or rye will be used in place of or in conjunction with mulching and crimping to establish quick erosion control on all reclaimed areas. Locally grown straw is generally used as the primary mulch for reclaimed lands. Slough or native grassland hay may be used depending on price, origin, and quality of the hay. Wood chips may be used as a mulch and weed barrier in reclaimed tree plantings. In croplands, wetland edges will be planted with a seed mix beneficial to wildlife and valuable as a hay crop. In all other land uses, wetland basins will not be seeded, since flooded basins are quickly invaded by wetland vegetation. Wetland edges will be seeded with the surrounding land use. Varieties weren't specified in the following seed mixes since new varieties are regularly released. Varieties used will be those recommended by the NRCS or the NDSU Extension Service and must be suited to this region.

Seed Mix Summary

1. For reclaimed native grassland:

<u>Species</u>	<u>% Composition by</u>		
	<u>PLS Seeds/Ft²</u>	<u>PLS Pounds/Acre</u>	<u>PLS Seeds/Foot²</u>
Western wheatgrass	5%	1.00	3
Slender wheatgrass	3%	0.38	1
Green needlegrass	7%	1.05	4
Blue grama	18%	0.90	14
Sideoats grama	15%	2.25	9
Switchgrass	15%	1.31	11
Little bluestem	15%	1.50	9
Big bluestem	10%	1.50	6
Prairie sandreed	10%	1.00	6
Forbs	2%	0.24	1
TOTAL	100%	11	66

Forbs will consist of a mix that may vary, based on seed price and availability. However, typically the forb mix will consist of purple prairieclover, purple coneflower, and prairie (yellow) coneflower.

2. For haylands and croplands seeded to a pre-cropland hayland mix:

<u>Species</u>	<u>PLS Pounds/Acre</u>	<u>PLS Seeds/Foot²</u>
Switchgrass	4	8.4
Western wheatgrass	4	11.6
Alfalfa	<u>10</u>	<u>28.8</u>
TOTAL	18	57.2

3. For reclaimed tame pasturelands:

<u>Species</u>	<u>PLS Pounds/Acre</u>	<u>PLS Seeds/Foot²</u>
Pubescent wheatgrass	8.5	17.6
Alfalfa	<u>0.5</u>	<u>2.4</u>
TOTAL	9.0	20.0

4. For diversions, pond slopes, road slopes, ditches and early native grassland plantings, and occasionally topsoil and subsoil stockpiles:

<u>Species</u>	<u>PLS Pounds/Acre</u>	<u>PLS Seeds/Foot²</u>
Slender Wheatgrass	5	2
Western Wheatgrass	10	20
Sand Dropseed	<u>0.5</u>	<u>13</u>
Switchgrass	<u>4</u>	<u>26</u>
TOTAL	19.5	61

5. For topsoil and subsoil stockpiles, diversions, pond slopes, road slopes and ditches, etc.*:

<u>Species</u>	<u>PLS Pounds/Acre</u>	<u>PLS Seeds/Foot²</u>
Slender wheatgrass	5	18.4
Western wheatgrass	7	16.3
Tall wheatgrass	<u>7</u>	<u>12.7</u>
TOTAL	19	47.4

*Seed mix used only during the first term of the permit on features listed above.

6. Wildlife mix for seeding the perimeter of wetlands located in croplands:

<u>Species</u>	<u>PLS Pounds/Acre</u>	<u>PLS Seeds/Foot²</u>
Tall wheatgrass	10.0	18.0
Pubescent wheatgrass	4.0	8.4
Switchgrass	1.0	8.9
Big bluestem	5.0	14.9
Alfalfa	4.0	19.2
Yellow sweetclover	<u>0.5</u>	<u>3.0</u>
TOTAL	24.5	72.4