

SEED MIX GUIDELINE

The following seed mixes are recommended for opencut mine site reclamation on Montana's plains, foothills, intermountain valleys, and wetland areas. The use of one of the site-specific seed mixes listed below may be appropriate depending on site conditions, the postmining land use, compatibility with surrounding vegetation, or landowner preference. The drill rates given are based on 12 pounds of pure live grass seed per acre, with an additional 1 to 2 pounds of forbs. The use of the forbs is highly recommended as they will fill the niche usually occupied by noxious weeds and other weedy species. The use of highly competitive introduced grasses, particularly crested wheatgrass and smooth brome, is not recommended unless the area to be seeded is in, or next to, an area where such species are already established. A nurse crop is recommended on highly erodible sites and, if used, should be seeded at 10 lbs/acre. The use of wheat, oat, or barley (in order of preference) is recommended for cover crop and nurse crop seeding.

- The Operator must purchase certified seed on a pure live seed (PLS) basis.
- Contact your local county extension agent or the Natural Resource Conservation Service (NRCS) for assistance with formulating alternative seed mixes.
- The seeding rate must be doubled for broadcast seeding.

NATIVE GRAZING/PASTURE MIX - For general use throughout the state

<u>Species</u>	<u>Lbs PLS/Acre</u>
Slender wheatgrass	2
Western wheatgrass	3
Thickspike wheatgrass	2.5
Bluebunch wheatgrass	2.5
Green needlegrass	2
Western Yarrow*	0.5

NON-NATIVE GRAZING/PASTURE MIX - For general use throughout the state

<u>Species</u>	<u>Lbs PLS/Acre</u>
Intermediate wheatgrass	3
Orchardgrass	3
Timothy	2
Tall Fescue	2
Alfalfa	2

NATIVE RANGELAND MIX - For moist/riparian areas

<u>Species</u>	<u>Lbs PLS/Acre</u>
Mountain brome	2
Bluejoint reedgrass	1
Tufted hairgrass	1
Canada wild rye	2
Western wheatgrass	3
Bluebunch wheatgrass	2
Western yarrow*	1

NATIVE RANGELAND MIX - For arid regions

<u>Species</u>	<u>Lbs PLS/Acre</u>
Slender wheatgrass	1
Thickspike wheatgrass	5
Western wheatgrass	3
Sandbergs bluegrass	2
Prairie junegrass	1
Yellow prairie coneflower*	1

WETLAND SEED MIX - For pond edges throughout the state

<u>Species</u>	<u>Lbs PLS/Acre</u>
Slough grass	2
Basin Wildrye	2
Baltic rush	1
Nebraska sedge	2
Creeping spike rush	2
Beaked sedge	2
Bluejoint reedgrass	1

* - Listed forbs may be substituted for other forb species depending on availability/pricing. Alternative forbs include but are not limited to Purple Coneflower, Yellow Prairie Coneflower, Western Yarrow, Lewis Flax, Rocky Mountain Bee Plant, Scarlet Globemallow, Alfalfa and Prairie Sagewort.