



Summary of State Seed Mixes

Standard seed mixtures used by BWSR, Mn/DOT and some divisions of the DNR have been revised and consolidated into one list of State Seed Mixes. Standards for the mixes have also been combined, with both BWSR and Mn/DOT requiring that mixes be sold as pure live seed (PLS), Source Identified (Yellow Tag) when available, and specific labeling requirements. Requirements for local origin seed will vary depending on the project goals and seed availability.

Mixes are available to meet the most commonly encountered erosion control and restoration needs.* Seed mix numbers provide information about the use and content of the mix. This numbering system can be used to guide the user in choosing the right mix for a given project. A full list of the State Seed Mixes and guidelines about their function and intended planting areas will soon be available on the Mn/DOT website by searching for "Seed Mixes."

A substitution table has been developed for state mixes. The table provides suggested substitutions for species in state seed mixes to adjust for site conditions or unavailable species.

*If one of the standard mixes does not meet the requirements of a particular project, an upcoming manual, "Site Specific Native Grassland Seed Mix Design Methodology for Minnesota," will provide an easy method for creating a custom mix.

5-digit Numbering System for State Seed Mixes

The following table shows how seed mixes are numbered:

1st digit Native / Non-native	2nd digit Function	3rd digit Planting Area	4th digit Hydrology	5th digit Version
1: Hybrid	1: Cover Crop	1: Statewide	1: General	1: First version
2: Introduced	2: Mid-Term Stabilization	2: South 1/2 and West 1/3	2: Dry	2: Second version
3: Native	3: Stormwater Facilities	3: NE and North Central	3: Dry mesic	3: etc.
4: Custom	4: Wetland	4: NW*	4: Mesic	
	5: Grassland	5: SW*	5: Wet mesic	
	6: Woodland	6: SE*	6: Seasonally flooded	
		7: Central**	7: Saturated	
			8: Emergent	
			9: Submergent	

*Use a mix for Planting Area 2 (South 1/2 and West 1/3) if no regional mix is available for Planting Areas 4-6 (NW, SW or SE).

**Use a mix for Planting Area 2 or 3 if no regional mix is available for Planting Area 7 (Central).

Example Seed Mix Number: 33-262 contains native species (3), is used for stormwater facilities (3), may be planted in the southern half and western third of the state (2) in areas that are seasonally flooded (6), and it is the second version (2) of this seed mix. This mix could also be used in Planting Area 7 if no regional mix is available.

List of State Seed Mixes for BWSR Projects

Note: the following list excludes some state mixes that have been developed for stabilizing Mn/DOT road projects (see Mn/DOT website for full list). Cover species are included in each permanent seed mixes below. Additional cover species such as oats or winter wheat (up to 10-25 pounds per acre) may be needed when planting on steep slopes or in areas that may occasionally have flowing water.

Mix Number	Mix Name	Replaces
Cover Crop		
21-111	Oats Cover Crop	MNDOT 110, BWSR UT1
Use: Temporary cover crop for spring and summer plantings Range: Statewide		
21-112	Winter Wheat Cover Crop	MNDOT 100
Use: Temporary cover crop for fall plantings Range: Statewide		
21-113	Soil Building Cover Crop	MNDOT 130
Use: Temporary cover crop with soil building function Range: Statewide		
Mid-term Stabilization Native		
32-241	Native Construction	BWSR U12, BWSR U11
Use: Mid-term soil stabilization using native species. Also suitable for sides of agricultural drainage ditches or low-diversity mesic prairie plantings. Range: Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces.		
Stormwater Facilities		
33-261	Stormwater South and West	MNDOT 310, MNDOT 328, KESTREL TF
Use: Stormwater pond edges, temporarily flooded dry ponds, and temporarily flooded ditch bottoms. Range: Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces.		
33-262	Dry Swale / Pond	BWSR W4
Use: Temporarily flooded swales in agricultural settings. Range: Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces.		
33-361	Stormwater Northeast	BWSR W7
Use: Stormwater pond edges, temporarily flooded dry ponds, and temporarily flooded ditch bottoms. Range: Laurentian Mixed Forest Province.		
Wetland		
34-171	Wetland Rehabilitation	BWSR WT3
Use: Inter-seeding into establishing wetlands after weed control spraying. Also suitable for two to five year short term soil stabilization for areas with saturated soils. Range: Statewide		
34-181	Emergent Wetland	BWSR W1
Use: Emergent wetland restoration for use in wetland mitigation, shoreline restoration, wet stormwater ponds where emergent vegetation is desired. Usually used in a 10 ft. band around open water Range: Statewide		
34-261	Riparian South & West	BWSR R1
Use: Native riparian and floodplain plantings for wetland mitigation, ecological restoration, or general permanent cover. Tolerates partial shade. Range: Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces.		
34-262	Wet Prairie	BWSR W3, MNDOT 325
Use: Wet prairie reconstruction for wetland mitigation or ecological restoration. Range: Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces.		
34-271	Wet Meadow South & West	BWSR W2
Use: Wet meadow / Sedge meadow reconstruction for wetland mitigation or ecological restoration projects Range: Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces.		
34-361	Riparian Northeast	BWSR R1
Use: Native riparian and floodplain plantings for wetland mitigation, ecological restoration, or general permanent cover. Tolerates partial shade. Range: Laurentian Mixed Forest Province.		

Wetland (continued)		
34-361	Riparian Northeast	BWSR R1
Use: Native riparian and floodplain plantings for wetland mitigation, ecological restoration, or general permanent cover. Tolerates partial shade. Range: Laurentian Mixed Forest Province.		
34-371	Wet Meadow Northeast	BWSR W2N
Use: Wet meadow / Sedge meadow reconstruction for wetland mitigation or ecological restoration. Range: Laurentian Mixed Forest Province.		
Native Grassland		
35-221	Dry Prairie General	MNDOT 330
Use: General dry prairie mix for native roadsides, ecological restoration, or conservation program plantings. Range: Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces.		
35-241	Mesic Prairie General	MNDOT 350
Use: General mesic prairie mix for native roadsides, ecological restoration, or conservation program plantings. Range: Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces.		
35-421	Dry Prairie Northwest	BWSR U2
Use: Regional dry prairie reconstruction for wetland mitigation, ecological restoration, or conservation program plantings. Range: Tallgrass Aspen Parklands Province, Red River Prairie Section, Hardwood Hills subsection of the MN & NE IA Morainal Section, may extend into the far western portions of the Laurentian Mixed Forest Province.		
35-441	Mesic Prairie Northwest	BWSR U1
Use: Regional mesic prairie reconstruction for wetland mitigation, ecological restoration, or conservation program plantings. Range: Tallgrass Aspen Parklands Province, Red River Prairie Section, Hardwood Hills subsection of the MN & NE IA Morainal Section, may extend into the far western portions of the Laurentian Mixed Forest Province.		
35-521	Dry Prairie Southwest	BWSR U4
Use: Regional dry prairie reconstruction for wetland mitigation, ecological restoration, or conservation program plantings. Range: North-Central Glaciated Plains Section.		
35-541	Mesic Prairie Southwest	BWSR U3
Use: Regional mesic prairie reconstruction for wetland mitigation, ecological restoration, or conservation program plantings. Range: North-Central Glaciated Plains Section.		
35-621	Dry Prairie Southeast	BWSR U6
Use: Regional dry prairie reconstruction for wetland mitigation, ecological restoration, or conservation program plantings. Range: Eastern Broadleaf Forest Province excluding Hardwood Hills subsection.		
35-641	Mesic Prairie Southeast	BWSR U5
Use: Regional mesic prairie reconstruction for wetland mitigation, ecological restoration, or conservation program plantings. Range: Eastern Broadleaf Forest Province excluding Hardwood Hills subsection.		
Woodland		
36-211	Woodland Edge South & West	BWSR U7, KESTREL WES
Use: Partly shaded grassland planting for native roadsides, reclamation, etc in southern and western MN. Range: Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces.		
36-311	Woodland Edge Northeast	BWSR U13, BWSR U14, KESTREL WEN
Use: Partly shaded grassland planting for native roadsides, reclamation, etc in north-central and northeast MN. Increase cover crop in more erosion prone situations according to the chart. Range: Laurentian Mixed Forest Province excluding Chippewa Plains, Pine Moraines & Outwash Plains, and Mille Lacs Uplands subsections.		
36-411	Woodland Edge Northwest	KESTREL WEW
Use: Partly shaded grassland planting for native roadsides, reclamation, etc in far northwest MN. Range: Tallgrass Aspen Parklands Province.		
36-711	Woodland Edge Central	KESTREL WEC
Use: Partly shaded grassland planting for native roadsides, reclamation, etc in central MN. Range: Chippewa Plains, Pine Moraines & Outwash Plains, and Mille Lacs Uplands subsections.		