Appendix B

Seed Selection Tables

Instructions for Species and Mix Selection Chart

- 1. Select region of state based on map (Fig. 16-B-1. Do not be overly concerned about where the site is in relation to boundaries. At that point, it is a judgment call.
- 2. Select the best guess for the soil moisture conditions over the site.
- Select the soil based on the Unified Classification System. Coarse-grained soils are denoted by (G) gravel and (S) sand. Five gravel soils are denoted by (C) and (M) clays and silts, (O) organic, and (Pt) Peat or Muck. Suffixes used are (W) well graded, (P) poorly graded, (L) Low plasticity, (H) high plasticity.
- 4. Select at least two entries labeled "1". These should account for between 80% and 100% of the seed mix. If the project tends to be uniform with regard to soil conditions, a two to three species mix can suffice. When uniform conditions exist, a mix of "category 1" species can suffice and the mix will be 100% "category 1" species. Conversely, if there is a broad range of soil conditions, "category 1" species should comprise the lower end of the percent range. All entries are listed in order of preference. For example, a project in the southcentral region with average soil moisture and SW soils Norcoast Bering Hairgrass should be at least 60% of the "category 1" portion of the mix. The other category 1 species could be selected in order to form 100% of the mix or a portion equaling 80%. If the lower range is selected, category 2 species and possibly category 3 would be used to form a complete mix. Wainwright Slender Wheatgrass would be the perfect category 2 species followed by Boreal Red Fescue. The preference listing allows the designer to select species based on local preference, availability and cost (cost being the least important). "Category 2" species are used to give variability to the mix allowing the designer to cover a broad range of conditions. "Category 3" on the other hand, usually includes species in short supply or of high cost. The category 3 material adds a high degree of variability to the mix. Category 3 species may also be

recommended when special concerns about environmental issues such as stream crossings are encountered. It is strongly suggested that at least one selection be made from the entries labeled "2". This portion will supplement the "1"s so that the total mix equals 100%. If the engineer or designer really wants to add more species, select any category "3" species or cultivar. The category 3 should not exceed 5% of the total mix. It should also come from the category 1 percentages.

- 5. Seeding rates for the entire mix are listed in the column "Seeding Rate". This number represents either pounds per acre or kilograms per hectare. They are close enough to be of little consequence. Annual ryegrass provides a quick growing component to the seed mix. The resulting grass cover will prevent erosion until the perennial grasses emerge. Annual ryegrass also gives the appearance of a complete job (the seeding contractor can be paid).
- 6. If the site is determined to be an erosion hazard add 10% annual rye grass to the previously developed mix. For example, a 30 lb./acre seed mix will have 3 lb. of annual ryegrass added. Annual rye tends to use the fertilizer intended for the perennial grasses. The species, while giving temporary erosion protection, does, to some extent compete with the long-term perennial species. Also annual ryegrass is a highly palatable and attractive forage species that can attract herbivores (i.e.; moose and deer)



Modified from Wright 1988

Figure 16-B-1 Alaska Vegetation Regions

Soil Moisture	Soil Group	Species/Cultivar Selections		
Very Wet (Hydric)	GM, GC	 Arctared Red Fescue Alyeska Polargrass Tundra Glaucous Bluegrass Norcoast Bering Hairgrass Slougrass 	3 Egan American 3 Boreal Red Fescue	30
	SW, SP, SM, SC	 Arctared Red Fescue Alyeska Polargrass Tundra Glaucous Bluegrass Gruening Alpine Bluegrass 	2 Nortran Tufted Hairgrass3 Norcoast Bering Hairgrass3 Caiggluk Tilesy Sagebrush	40
	ML, CL, OL, MH, CH, OH	 Arctared Red Fescue Alyeska Polargrass Tundra Glaucous Bluegrass 	2 Norcoast Bering Hairgrass 3 Egan American Sloughgrass	
Average (Mesic)	GM, GC	 Arctared Red Fescue Alyeska Polargrass Tundra Glaucous Bluegrass 	2 Nortran Tufted Hairgrass 2 Gruening Alpine Bluegrass	30
	SW, SP, SM, SC, ML, CL, OL	 Arctared Red Fescue Alyeska Polargrass Tundra Glaucous Bluegrass Gruening Alpine Bluegrass 	2 Nortran Tufted Hairgrass3 Norcoast Bering Hairgrass3 Caiggluk Tilesy Sagebrush	
	MH, CH, OH	1 Arctared Red Fescue 1 Alyeska Polargrass 2 Tundra Glaucous Bluegrass	2 Norcoast Bering Hairgrass 3 Egan American Sloughgrass	40
Very Dry (Xeric)	GM, GC	1 Arctared Red Fescue 1 Alyeska Polargrass	1 Tundra Glaucous Bluegrass 2 Gruening Alpine Bluegrass	30
	SW, SP, SM, SC, ML, CL, OL	SAME AS MESIC		40
	MH, CH, OH	SAME AS MESIC		30
 Notes: 1. PT soils are not highly erodible. Recommend no seeding, only fertilizer application. If seeding is recommended use either Mesic or Xeric schedule. 2. GW and GP soils are not highly erodible. Recommend fertilizer and scarification only. If seeding is recommended use GM, GC schedule for appropriate moisture. 				

SEEDING SCHEDULE FOR ARCTIC ALASKA

Soil Moisture	Soil Group	Species/Cultivar Selections		Seeding Rate lb./ac.
Very Wet (Hydric)	GM, GC	 Norcoast Bering Hairgrass Arctared Red Fescue Egan American Slougrass Nortran Tufted Hairgrass 	2 Boreal Red Fescue2 Alyeska Polargrass2 Caiggluk Tilesy Sagebrush	30
	SW, SP, SM, SC	 Arctared Red Fescue Norcoast Bering Hairgrass Nortran Tufted Hairgrass Gruening Alpine Bluegrass 	2 Alyeska Polargrass2 Kenai Polargrass2 Tundra Glaucous Bluegrass3 Sourdough Bluejoint Grass	40
Average (Mesic)	ML, CL, OL, MH, CH, OH GM, GC	 1 Norcoast Bering Hairgrass 1 Egan American Sloughgrass 1 Arctared Red Fescue 1 Arctared Red Fescue 1 Norcoast Bering Hairgrass 	 2 Alyeska Polargrass 2 Boreal Red Fescue 3 Caiggluk Tilesy Sagebrush 2 Alyeska Polargrass 2 Nortran Tufted Hairgrass 	30
		1 Tundra Glaucous Bluegrass 2 Boreal Red Fescue	2 Gruening Alpine Bluegrass 3 Caiggluk Tilesy Sagebrush	
	SW, SP, SM, SC, ML, CL, OL, MH, CH, OH	 Arctared Red Fescue Norcoast Bering Hairgrass Nortran Tufted Hairgrass Gruening Alpine Bluegrass 	2 Alyeska Polargrass2 Kenai Polargrass2 Tundra Glaucous Bluegrass3 Sourdough Bluejoint Grass	40
Very Dry (Xeric)	GM, GC	 Arctared Red Fescue Norcoast Bering Hairgrass Gruening Alpine Bluegrass Nortran Tufted Hairgrass 	2 Tundra Glaucous Bluegrass2 Boreal Red Fescue3 Sourdough Bluejoint Grass	30
	SW, SP, SM, SC, ML, CL, OL, MH, CH, OH	SAME AS AVERAGE (MESIC	C) FOR SOIL GROUP	40
 Notes: 1. PT soils are not highly erodible. Recommend no seeding, only fertilizer application. If seeding is recommended use either Hydric schedule for MH, CH, OH. 2. GW and GP soils are not highly erodible. Recommend fertilizer and scarification only. If seeding is recommended use SW, SP, SM, SC schedule for appropriate moisture. 3. If the area to be revegetated is adjacent to a coastline_consider using Beach Wildrye transplants. 				

SEEDING SCHEDULE FOR WESTERN ALASKA

Soil Moisture	Soil Group	Species/Cultivar Selections		Seeding Rate lb./ac.
Very Wet (Hydric)	GM, GC SW, SP, SM, SC, ML, CL, OL	 Norcoast Bering Hairgrass Arctared Red Fescue Egan American Slougrass Nortran Tufted Hairgrass 	2 Boreal Red Fescue2 Alyeska Polargrass2 Caiggluk Tilesy Sagebrush3 Sourdough Bluejoint Grass	30
	МН, СН, ОН	 Arctared Red Fescue Norcoast Bering Hairgrass Nortran Tufted Hairgrass Gruening Alpine Bluegrass 	2 Alyeska Polargrass2 Kenai Polargrass2 Tundra Glaucous Bluegrass3 Sourdough Bluejoint Grass	30
Average (Mesic)	GM, GC	 Arctared Red Fescue Wainwright Slender Wheatgrass Norcoast Bering Hairgrass 	2 Nortran Tufted Hairgrass2 Boreal Red Fescue3 Tundra Glaucous Bluegrass3 Caiggluk Tilesy Sagebrush	
	SW, SP, SM, SC, ML, CL, OL, MH, CH, OH	 Arctared Red Fescue Wainwright Slender Wheatgrass Norcoast Bering Hairgrass Gruening Alpine Bluegrass Boreal Red Fescue 	2 Alyeska Polargrass2 Nortran Tufted Hairgrass2 Tundra Glaucous Bluegrass3 Caiggluk Tilesy Sagebrush	40
Very Dry (Xeric)	GM, GC	1 Arctared Red Fescue 1 Norcoast Bering Hairgrass 1 Gruening Alpine Bluegrass 2 Nortran Tufted Hairgrass	2 Tundra Glaucous Bluegrass2 Boreal Red Fescue3 Sourdough Bluejoint Grass	30
	SW, SP, SM, SC, ML, CL, OL, MH, CH, OH	SAME AS AVERAGE (MESIC) F	OR SOIL GROUP	40
 Notes: 1. PT Soils are not highly erodible. Recommend no seeding, only fertilizer application. If seeding is recommended use MH, CH, OH Mesic or Xeric depending on site. 2. GW, GP soils are not highly erodible. Recommend scarification and fertilization only. If seeding is recommended use GM, GC specifications. 				

SEEDING SCHEDULE FOR INTERIOR ALASKA

Soil Moisture	Soil Group	Species/Cultivar Selection		Seeding Rate
-				lb./ac.
Very Wet	GM, GC,	1 Norcoast Bering Hairgrass	3 Sourdough Bluejoint Grass	20 GM,
(Hydric)	SW, SP, SM,	1 Egan American Sloughgrass		GC
	SC, ML, CL,	1 Kenai Polargrass		
	OL	2 Nortran Tufted Hairgrass		40 Others
		2 Boreal Red Fescue		
		2 Alyeska Polargrass		
	MH, CH, OH	1 Norcoast Bering Hairgrass	2 Alyeska Polargrass	
		1 Arctared Red Fescue	2 Gruening Alpine Bluegrass	30
		1 Egan American Sloughgrass		
Average	All	1 Norcoast Bering Hairgrass	2 Kenai Polargrass	
(Mesic)		1 Arctared Red Fescue	2 Nortran Tufted Hairgrass	
		1 Gruening Alpine Bluegrass	3 Caiggluk Tilesy Sagebrush	40
		2 Wainwright Slender Wheatgrass	3 Sourdough Bluejoint Grass	
		2 Boreal Red Fescue		
Very Dry	All	1 Arctared Red Fescue	1 Gruening Alpine Bluegrass	
(Xeric)		1 Wainwright Slender Wheatgrass	2 Norcoast Bering Hairgrass	30
		1 Nortran Tufted Hairgrass	2 Boreal Red Fescue	
Notes: 1. PT soils are not highly erodible. Recommend no seeding, only fertilizer application. If seeding is				
recommended use either Mesic or Xeric schedule.				
2. (GW and GP soils	are not highly erodible. Recommend	fertilizer and scarification only.	If seeding is
recommended use GM, GC schedule for appropriate moisture.				

SEEDING SCHEDULE FOR SOUTHCENTRAL ALASKA

SEEDING SCHEDULE FOR SOUTHWESTERN ALASKA

Soil Moisture	Soil Group	Species/Cultivar Selections	Seeding Rate	
			lb./ac.	
		1 Norcoast Bering Hairgrass		
		1 Boreal Red Fescue		
All	All	2 Arctared Red Fescue	40	
		2 Nortran Tufted Hairgrass		
		2 Caiggluk Tilesy Sagebrush		
		3 Sourdough Bluejoint Grass		
		3 Pennlawn Red Fescue		
Notes: 1.	. PT soils are not highly erodible. Recommend no seeding, only fertilizer application. If seeding is			
	recommended, use standard southwest schedule.			
2.	GW and GP soils are not highly erodible. Recommend fertilizer and scarification only. If seeding is			
	recommended, use southwest schedule.			
3.	If the area to be revegetated is adjacent to a coastline, consider using Beach Wildrye transplants.			

Soil Moistu	re	Soil Group	Species/Cultivar Selections		
			1 Norcoast Bering Hairgrass		
			1 Boreal Red Fescue		
All		All	2 Arctared Red Fescue	30	
			2 Nortran Tufted Hairgrass		
			2 Caiggluk Tilesy Sagebrush		
			3 Gruening Alpine Bluegrass		
			3 Sourdough Bluejoint Grass		
Notes:	1.	. Pt soils are not highly erodible. Recommend no seeding, only fertilizer application. If seeding is			
	recommended, use standard southwest schedule.				
	2.	GW and GP soils are not highly erodible. Recommend fertilizer and scarification only. If seeding is			
		recommended, use southwest schedule.			
	3.	If the area to be revegetated is adjacent to a coastline, consider using Beach Wildrye transplants.			

SEEDING SCHEDULE FOR SOUTHEAST ALASKA