



Construction, Inc. 1850 E. 1<sup>st</sup>. Street, Craig, CO 81625 Phone & Fax (970) 824-2709 WagnerCorp@q.com

#### RECEIVED

JUN 0 5 2017

DIVISION OF RECLAMATION MINING & SAFETY

June 1, 2017

Any Yeldell Environmental Protection Specialist Department of Natural Resources Division of Reclamation, Mining and Safety 1313 Sherman # 215 80203

#### RE: Wagner Rock Pit, Permit No. M-1999-018, 112c Application Adequacy Review #1 – Revision 1 Exhibits A, B, C, and D

Dear Ms. Yeldel,

Please find attached the Revision 1 of the Exhibits A, B, C, and D in response to Adequacy Review #1. Identified below are the items addressed in by the items included;

6.4.1 Exhibit A – Legal Description (Items 1 and 2)
6.4.2 Exhibit B – Index Map (Item 1)
6.4.3 Exhibit C – Mining Plan Map (Items a, c, d, e, f, g, and h)
6.4.4 Exhibit D – Mining Plan (Items a, c, d, e, and f)

Thank you,

Jay Wagner Wagner Construction



#### M-1999-018 WAGNER ROCK PIT EXHIBIT A – LEGAL TOPOGRAPHICAL MAP



## WAGNER ROCK PIT M-1999-018 CURRENT PERMIT MAP W/DISTURBED AREA

8.1



#### WAGNER ROCK PIT M-199-018 EXHIBIT B- INDEX MAP





#### **WAGNER ROCK PIT M-1999-018** EXHIBIT C – MINING PLAN MAP TOPOGRAPHY MAP WITH DISTURBANCE AND SLOPES



#### WAGNER ROCK PIT M-1999-018 EXHIBIT C – MINING PLAN MAP VEGETATION & SOILS MAP



### WAGNER ROCK PIT M-1999-018 EXHIBIT C – MINING PLAN MAP VEGETATION & SOILS MAP LEGEND PAGE 1

Rangeland Productivity and Plant Composition----Moffat County Area, Colorado

New\_Shapefile

# Report—Rangeland Productivity and Plant Composition

Map unit symbol and soil name	Ecological site	Total	Total dry-weight production	iction	Characteristic vegetation	Rangeland
		Favorable year	Normal year	Unfavorable year		composition
		Lb/ac	Lb/ac	Lb/ac		Pct
2—Abor silty clay loam, 25 to 65 percent slopes						
Abor	Clayey Foothills	1,200	006	600	600 Western wheatgrass	40
					Wyoming big sagebrush	15
					Miscellaneous perennial forbs	10
					Miscellaneous perennial grasses	10
					Miscellaneous shrubs	10
					Yellow rabbitbrush	5
		_			Bottlebrush squirreltail	5
					Sandberg bluegrass	5
22—Bulkley sity clay, 3 to 12 percent slopes						
Bulkiey	Clayey Foothills	1,200	006	600	Western wheatgrass	40
					Wyoming big sagebrush	15
					Bottlebrush squirreltail	5
					Prairie junegrass	5
					Miscellaneous perennial forbs	5
					Miscellaneous perennial grasses	5
23—Bulkley silty clay, 12 to 25 percent slopes						
Bulkley	Clayey Foothilts	1,200	006	600	600 Western wheatgrass	40
		200			Wyoming big sagebrush	15

WAGNER ROCK PIT M-1999-018 EXHIBIT C – MINING PLAN MAP VEGETATION & SOILS MAP LEGEND PAGE 2

Rangeland Productivity and Plant Composition----Moffat County Area, Colorado

New\_Shapefile

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Map unit symbol and soil name       Ecological site         77-Forelle loam, 3 to 12 percent       2000000000000000000000000000000000000		Rangeland Productivity and Plant Composition-Moffat County Area, Colorado	vity and Plant Com	position-Moffat (	county Area, Colo	orado	
ant Rolling Loam Brushy Loam	ip unit symbol and soil name		Total	Total dry-weight production	iction	Characteristic vegetation	Rangeland
ant Rolling Loam Brushy Loam			Favorable year	Normal year	Unfavorable year		composition
tte la			Lb/ac	Lb/ac	Lb/ac		Pct
						Bottlebrush squirreltail	22
art						Prairie junegrass	5
te						Miscellaneous perennial forbs	2J
te						Miscellaneous perennial grasses	2
	-Forelle loam, 3 to 12 percent opes						
	relle	Rolling Loam	1,000	800	500	500 Western wheatgrass	15
						Wyoming big sagebrush	15
						Needleandthread	10
						Prairie junegrass	10
						Sandberg bluegrass	10
			-			Bluebunch wheatgrass	5
						Indian ricegrass	2
	—Hesperus loam, 15 to 50 ercent slopes						
	sperus	Brushy Loam	3,000	2,500	1,500	Saskatoon serviceberry	10
						Mountain brome	10
						Elk sedge	10
						Gambel oak	10
				1		Mountain snowberry	Ω.
						Slender wheatgrass	S
						Nodding brome	5
						Miscellaneous perennial forbs	5
						Miscellaneous perennial grasses	5
						Letterman's neediegrass	5

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Web Soil Survey National Cooperative Soil Survey

USDA Natural Resources Conservation Service

#### WAGNER ROCK PIT M-1999-018 EXHIBIT C – MINING PLAN MAP WATER CONTROL FEATURES

Wagner Rock Pit Erosion Control Features

Retention Pond #1
 Retention Pond #2
 Erosion Control Ditch

M1999-018 112C Permit







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#### EXHIBIT D (6.4.4) - Mining Plan

Wagner Construction Inc. (operators) will adhere to the same mining plan offered under the 110 Permit M-99-018 with expansion revision noted below in Subsection H.

a) Mining will commence upon approval of this permit, and end when necessary excavation has been completed and the requirements for agricultural improvements by landowner are satisfied.
 Open pit mining will result in approximately 928 linear feet of 2 to 1 north facing slopes. The pit floor will be graded to drain with exposed aggregate. The north pit boundary will be day lighted without slope.

Methods are consistent throughout all stages.

Methods include: Track hoe excavating all materials Articulated Dump Truck hauling materials to the surface to the screening plant.

b) Mining Management – excavators, crushers, dozers, loaders, dump trucks Present topsoil depth in this rock area is approximately six (6) inches in depth and is suitable as a plant growth medium. The topsoil will be salvaged for use in the landscaping, backfilling, and structural fill process. Topsoil from the mine excavation will be stockpiled for reclamation activities and stored at the highest point along the perimeter of the excavation. Topsoil piles will be sloped to a 2 to 1 angle and revegetated with the same pastureland seed mix as is referenced in the reclamation plan as recommended by the USDA. (Reference: Seed Mix attachment for Exhibit D. Topsoil removal will run concurrent with mining efforts. Limited areas will be stripped upon need. Seed bed preparation consisting of discing to eliminate compacted conditions, drill seeding and fertilizing of topsoil will be conducted annually as mining operations progress.

a. Top Soil Management – excavators, dump trucks, loaders The depth of the excavation of deposit will not exceed 60 (sixty) feet without technical revision.

- c) Dry pit mining methods are used for extraction. No water will be used for mining. The excavation site is located at the highest point of a rock ledge and is considered a dry basalt operation at an expected depth of sixty (60) feet. Site surveys and existing excavations do not indicate the presence of ground water within the permit boundaries. If ground water is encountered backfill will be installed 2 feet above the encountered level and the office of the state engineer and the Division will be notified.
- d) No runoff, impoundment, or groundwater can affect the excavation or affect the hydrologic balance, pre or post mine. Measures will be taken to minimize



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disturbance to the hydrologic balance. No fuels or other hazardous products will be stored on site.

A perimeter ditch is located along the south permit boundary that directs runoff to two small impoundment sediment containment features.

The pit self contains all runoffs and no runoff or ground water can affect hydrologic balance pre or post mining.

- e) Permit area is being increased to 27.91 acres to provide additional acreage for material stockpiling, equipment storage, as well as accommodate future phases with 17 acres as the maximum amount disturbed within the permit area at any given time
- f) Future mining is not anticipated to increase to more than 17 acres over a 20-year period. Mining operations over the last 16 years have resulted in the excavation of four (4) acres with a maximum .25-acre per year pit growth. Current 4+/\_ acre pit floor will be excavated until a 60ft depth is reached. Mining will then extend to the north until northern limits of excavation (60ft) are attained resulting in the daylighting of the northern slope. Current access roads will be maintained and the only portable structure will remain in place for the permit life.
- g) The general post-mined area will be leveled and graded with the existing rock insitu to accommodate anticipated construction and agricultural building activities.
   2:1 slope construction occurs during the mining process.

All materials with exception to topsoil are market products therefore overburden is not considered in this permit.

No waste material is anticipated as all primary product will be extracted and removed from the site.

The mined deposit is basalt with a thickness and depth that extends beyond the 60ft depth. The 60ft depth includes 4-6 inches of existing topsoil and mined material.

The nature of the stratum immediately beneath the material to be mined remains basalt to an indeterminate depth.

There are no permanent buildings used for mining. Temporary structures include: Weighscales (see map) Pit Road accessing excavation (see map)

- h) Sand and gravel are the primary commodities to be mined.
- i) The topsoil will be salvaged for use in the landscaping, backfilling, and structural fill process. Topsoil from the mine excavation will be stockpiled for reclamation activities and stored at the highest point along the perimeter of the excavation.
- j) No explosives will be used in mining operations.



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#### ATTACHMENT – USDA SEED MIX

OSDA ONRCS	G	irass Seeding Planned	l and Applied Works	heet		
Grass Seeding PART I - Pla	nn	ed				
Cooperator		Jay Gardner	Date		5/18/2019	
Tract/Field No			Acres		27.9	
	_					
Contract No.			CIN			
Seeding dates		Oct. 1st - Nov. 15th	Purpose	9	Other	
Seedbed preparation		No Till	Seed rate	<b>`</b>	n-irrigated drill	
Drill type		no-till grass	Acres to be seeded		20 seeds/sq ft 27.90	)
Planting depth-Drill spacing (in)						
		N P2O5	K <sub>2</sub> O A Nutrie	ent Management F	Plan is not require	d for the
lanned fertilizer application (lb/ac)			establis	hment of vegetativ	e conservation p	ractices.
Planned weed				WIN-PST Soil-Pe		
control activities		Date(s) when	needed Repo	ort for all chemical	suppression activ	/ities
	An	Amount (lb/ac) plication method				
Common name	·	•	Recommended Cultivar	% of seed mix	(PLS = Pure Total Pounds PLS	Live Seed) Pounds PLS per acre
Common name N=native, l=introduced	·				Total Pounds	Pounds PLS
Common name N=native, l=introduced Grasses, forbs	†‡				Total Pounds	Pounds PLS
Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike	†‡	Genus, species		mix	Total Pounds PLS	Pounds PLS per acre
Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western	†‡	Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii		<b>mix</b>	Total Pounds PLS 15.90	Pounds PLS per acre
Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass	N N N	Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii		mix 10.0 30.0	Total Pounds PLS 15.90 66.96	Pounds PLS per acre 0.57 2.40
Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass	N N N	Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii Poa fendleriana		mix 10.0 30.0 5.0	Total Pounds PLS 15.90 66.96 0.70	Pounds PLS per acre 0.57 2.40 0.03
Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass Needleandthread Bluegrass, Sandberg	N N N N N	Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii Poa fendleriana Koelaria macrantha Hesperostipa comata Poa secunda		mix 10.0 30.0 5.0 10.0	Total Pounds PLS 15.90 66.96 0.70 1.12	Pounds PLS per acre 0.57 2.40 0.03 0.04
Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass Needleandthread Bluegrass, Sandberg ndian ricegrass - Nezpar, Rimrock	N N N N N N N N N	Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii Poa fandleriana Koelaria macrantha Hesperostipa comata Poa secunda Achnatherum hymenoides		mix 10.0 30.0 5.0 10.0 5.0	Total Pounds PLS 15.90 66.96 0.70 1.12 7.53	Pounds PLS per acre 0.57 2.40 0.03 0.04 0.27
Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass Needleandthread Bluegrass, Sandberg Indian ricegrass - Nezpar, Rimrock Silvery lupine	N N N N N N N N N N N	Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii Poa fandleriana Koelaria macrantha Hesperostipa comata Poa secunda Achnatherum hymenoides Lupinus argenteus		mix 10.0 30.0 5.0 10.0 5.0 20.0 5.0 1.0	Total Pounds PLS 15.90 66.96 0.70 1.12 7.53 5.58 5.16 15.62	Pounds PLS per acre 0.57 2.40 0.03 0.04 0.27 0.22 0.15 0.56
Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass Needleandthread Bluegrass, Sandberg Indian ricegrass - Nezpar, Rimrock Silvery lupine Utah sweetvetch	N N N N N N N N N N N	Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii Poa fendleriana Koelaria macrantha Hesperostipa comata Poa secunda Achnatherum hymenoides Lupinus argenteus Hedysarum boreale		mix 10.0 30.0 5.0 10.0 5.0 20.0 5.0	Total Pounds PLS 15.90 66.96 0.70 1.12 7.53 5.58 5.16	Pounds PLS per acre 0.57 2.40 0.03 0.04 0.27 0.20 0.15
Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass Needleandthread Bluegrass, Sandberg Indian ricegrass - Nezpar, Rimrock Silvery lupine Utah sweetvetch Flax, lewis - Maple Grove	N N N N N N N N N N N N N N N N N N N	Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii Poa fendleriana Koelaria macrantha Hesperostipa comata Poa secunda Achnatherum hymenoides Lupinus argenteus Hedysarum boreale Linum lewisii		mix 10.0 30.0 5.0 10.0 5.0 20.0 5.0 1.0	Total Pounds PLS 15.90 66.96 0.70 1.12 7.53 5.58 5.16 15.62	Pounds PLS per acre 0.57 2.40 0.03 0.04 0.27 0.22 0.15 0.56
Common name N=native, l=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass Prairie junegrass Needleandthread Bluegrass, Sandberg ndian ricegrass - Nezpar, Rimrock Silvery lupine Jtah sweetvetch Tlax, lewis - Maple Grove Penstemon, Palmer		Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii Poa fendleriana Koelaria macrantha Hesperostipa comata Poa secunda Achnatherum hymenoides Lupinus argenteus Hedysarum boreale Linum lewisii Penstemon palmeri		mix 10.0 30.0 5.0 10.0 5.0 20.0 5.0 1.0 2.0 2.0 2.0	Total Pounds PLS 15.90 66.96 0.70 1.12 7.53 5.58 5.16 15.62 6.08 1.73 0.95	Pounds PLS per acre 0.57 2.40 0.03 0.04 0.27 0.20 0.15 0.56 0.22 0.06 0.03
Common name N=native, l=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass Prairie junegrass Needleandthread Bluegrass, Sandberg Indian ricegrass - Nezpar, Rimrock Silvery lupine Utah sweetvetch Flax, lewis - Maple Grove Penstemon, Palmer	N N N N N N N N N N N N N N N N N N N	Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii Poa fendleriana Koelaria macrantha Hesperostipa comata Poa secunda Achnatherum hymenoides Lupinus argenteus Hedysarum boreale Linum lewisii		mix 10.0 30.0 5.0 10.0 5.0 20.0 5.0 1.0 2.0 2.0 2.0 2.0 2.0	Total Pounds PLS 15.90 66.96 0.70 1.12 7.53 5.58 5.16 15.62 6.08 1.73	Pounds PLS per acre 0.57 2.40 0.03 0.04 0.27 0.20 0.15 0.56 0.22 0.06
Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass Veedleandthread Bluegrass, Sandberg Indian ricegrass - Nezpar, Rimrock Silvery lupine Jtah sweetvetch Flax, lewis - Maple Grove Penstemon, Palmer Prairie clover, purple	N N N N N N N N N N N N N N N N N N N	Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii Poa fendleriana Koelaria macrantha Hesperostipa comata Poa secunda Achnatherum hymenoides Lupinus argenteus Hedysarum boreale Linum lewisii Penstemon palmeri Dalea purpurea		mix 10.0 30.0 5.0 10.0 5.0 20.0 5.0 1.0 2.0 2.0 2.0	Total Pounds PLS 15.90 66.96 0.70 1.12 7.53 5.58 5.16 15.62 6.08 1.73 0.95	Pounds PLS per acre 0.57 2.40 0.03 0.04 0.27 0.20 0.15 0.56 0.22 0.06 0.03
Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass Needleandthread Bluegrass, Sandberg Indian ricegrass - Nezpar, Rimrock Silvery lupine Jtah sweetvetch Flax, lewis - Maple Grove Penstemon, Palmer Prairie clover, purple	N N N N N N N N N N N N N N N N N N N	Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii Poa fendleriana Koelaria macrantha Hesperostipa comata Poa secunda Achnatherum hymenoides Lupinus argenteus Hedysarum boreale Linum lewisii Penstemon palmeri Dalea purpurea	Recommended Cultivar	mix 10.0 30.0 5.0 10.0 5.0 20.0 5.0 1.0 2.0 2.0 2.0 2.0 2.0	Total Pounds PLS 15.90 66.96 0.70 1.12 7.53 5.58 5.16 15.62 6.08 1.73 0.95 1.79	Pounds PLS per acre 0.57 2.40 0.03 0.04 0.27 0.20 0.15 0.56 0.22 0.06 0.03 0.06
Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass Needleandthread Bluegrass, Sandberg Indian ricegrass - Nezpar, Rimrock Bilvery lupine Utah sweetvetch Flax, lewis - Maple Grove Penstemon, Palmer Prairie clover, purple Shrubs (add shrub seed to grass Service Derry, Saskatoon (M	N N N N N N N N N N N N N N N N N N N	Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii Poa fendleriana Koelaria macrantha Hesperostipa comata Poa secunda Achnatherum hymenoides Lupinus argenteus Hedysarum boreale Linum lewisii Penstemon palmeri Dalea purpurea Torb seed mix)	Recommended Cultivar	mix 10.0 30.0 5.0 10.0 5.0 20.0 5.0 1.0 2.0 2.0 2.0 2.0 94.0	Total Pounds PLS 15.90 66.96 0.70 1.12 7.53 5.58 5.16 15.62 6.08 1.73 0.95 1.79	Pounds PLS per acre 0.57 2.40 0.03 0.04 0.27 0.20 0.15 0.56 0.22 0.06 0.03 0.06 0.03 0.06 0.03 0.06 0.03 0.06 0.57 0.22 0.05 0.57 0.22 0.05 0.57 0.22 0.05 0.57 0.22 0.05 0.57 0.22 0.05 0.05 0.05 0.22 0.05 0.05 0.05 0.22 0.05 0.05 0.05 0.05 0.05 0.22 0.05 0
Seed Mix Recommendation, Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass Needleandthread Bluegrass, Sandberg Indian ricegrass - Nezpar, Rimrock Silvery lupine Utah sweetvetch Flax, lewis - Maple Grove Penstemon, Palmer Prairie clover, purple Shrubs (add shrub seed to grass Serviceberry, Saskatoon (M Dioom) Sagebrush, Mountain Big Rabbitbrush, Rubber		Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii Poa fendleriana Koelaria macrantha Hesperostipa comata Poa secunda Achnatherum hymenoides Lupinus argenteus Hedysarum boreale Linum lewisii Penstemon palmeri Dalea purpurea Forb seed mix) Amelanchier alnifolia	Recommended Cultivar	mix 10.0 30.0 5.0 10.0 5.0 20.0 5.0 1.0 2.0 2.0 2.0 2.0 94.0	Total Pounds PLS 15.90 66.96 0.70 1.12 7.53 5.58 5.16 15.62 6.08 1.73 0.95 1.79	Pounds PLS per acre 0.57 2.40 0.03 0.04 0.27 0.20 0.15 0.56 0.22 0.06 0.03 0.06 0.03 0.06 0.03 0.06 0.03 0.06 0.05 0.22 0.06 0.05 0.22 0.05 0.05 0.22 0.05 0.22 0.05 0.05 0.22 0.05 0.05 0.05 0.22 0.05 0.05 0.05 0.05 0.22 0.05 0.05 0.05 0.05 0.05 0.22 0.05 0
Common name N=native, I=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass Needleandthread Bluegrass, Sandberg Indian ricegrass - Nezpar, Rimrock Silvery lupine Utah sweetvetch Flax, lewis - Maple Grove Penstemon, Palmer Prairie clover, purple Shrubs (add shrub seed to grass Serviceberry, Saskatoon (M Doom) Sagebrush, Mountain Big		Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithii Poa fendleriana Koelaria macrantha Hesperostipa comata Poa secunda Achnatherum hymenoides Lupinus argenteus Hedysarum boreale Linum lewisii Penstemon palmeri Dalea purpurea Forb seed mix) Amelanchier alnifolia Artemisia tridentata vaseyana	Recommended Cultivar         Image: state sta	mix 10.0 30.0 5.0 10.0 5.0 20.0 5.0 1.0 2.0 2.0 2.0 2.0 94.0	Total Pounds PLS 15.90 66.96 0.70 1.12 7.53 5.58 5.16 15.62 6.08 1.73 0.95 1.79 0.56 2.79 0.70	Pounds PLS per acre 0.57 2.40 0.03 0.04 0.27 0.20 0.19 0.56 0.22 0.06 0.03 0.06 0.02 0.05 0.02 0.05 0.02 0.05 0.22 0.05 0.05 0.22 0.05 0.05 0.22 0.05 0.5 0.
Common name N=native, l=introduced Grasses, forbs Wheatgrass, Thickspike Wheatgrass, Western Muttongrass Prairie junegrass Needleandthread Bluegrass, Sandberg Indian ricegrass - Nezpar, Rimrock Bilvery lupine Utah sweetvetch Flax, lewis - Maple Grove Penstemon, Palmer Prairie clover, purple Shrubs (add shrub seed to grass Serviceperry, Saskatoon (M) Sagebrush, Mountain Big		Genus, species Elymus lanceolatus lanceolatus Pascopyrum smithil Poa fendleriana Koelaria macrantha Hesperostipa comata Poa secunda Achnatherum hymenoides Lupinus argenteus Hedysarum boreale Linum lewisii Penstemon palmeri Dalea purpurea Forb seed mix) Amelanchier alnifolia Artemisia tridentata vaseyana Ericameria nauseosa	Recommended Cultivar	mix 10.0 30.0 5.0 10.0 5.0 20.0 5.0 1.0 2.0 2.0 2.0 2.0 94.0	Total Pounds PLS 15.90 66.96 0.70 1.12 7.53 5.58 5.16 15.62 6.08 1.73 0.95 1.79	Pounds PLS per acre 0.57 2.40 0.03 0.04 0.27 0.20 0.19 0.56 0.22 0.06 0.03 0.06 0.02 0.05 0.02 0.05 0.02 0.05 0.22 0.05 0.05 0.22 0.05 0.05 0.22 0.05 0.5 0.

