

Appendix D: Rangeland Ecological Sites and Plant Associations

Range Ecological Sites and Plant Associations
Sedimentary Plains, East (MLRA 58AE)

Ecological Site Types	Plant Associations Found Within Different Precipitation Zones	
	10 to 14 inch	15 to 19 inch
Riparian Subirrigated	<ul style="list-style-type: none"> • <i>Salix exigua</i> Temporarily Flooded 	<ul style="list-style-type: none"> • <i>Populus deltoides</i> / <i>Symphoricarpos</i>
Riparian Meadow	<ul style="list-style-type: none"> • <i>Spartina pectinata</i> Western Herbaceous Vegetation 	
Riparian Emergent	<ul style="list-style-type: none"> • <i>Schoenoplectus pungens</i> Herbaceous Vegetation • <i>Phalaris arundinacea</i> Herbaceous Vegetation¹ 	<ul style="list-style-type: none"> • <i>Phalaris arundinacea</i> Herbaceous Vegetation¹
Subirrigated	<ul style="list-style-type: none"> • <i>Eleocharis palustris</i> Herbaceous Vegetation¹ • <i>Symphoricarpos occidentalis</i> Shrubland¹ • <i>Pacopyrum smithii</i> - <i>Hordeum jubatum</i> Herbaceous Vegetation¹ 	<ul style="list-style-type: none"> • <i>Eleocharis palustris</i> Herbaceous Vegetation¹ • <i>Symphoricarpos occidentalis</i> Shrubland¹ • <i>Pacopyrum smithii</i> - <i>Hordeum jubatum</i> Herbaceous Vegetation¹
Saline Lowland	<ul style="list-style-type: none"> • <i>Sarcobatus vermiculatus</i> / <i>Pacopyrum smithii</i> (<i>Elymus lanceolatus</i>) Shrub Herbaceous Vegetation 	
Saline Upland	<ul style="list-style-type: none"> • <i>Sarcobatus vermiculatus</i> / <i>Pseudoroegneria spicata</i> Shrubland • <i>Sarcobatus vermiculatus</i> - <i>Artemisia tridentata</i> Shrubland¹ 	<ul style="list-style-type: none"> • <i>Sarcobatus vermiculatus</i> / <i>Pseudoroegneria spicata</i> Shrubland • <i>Sarcobatus vermiculatus</i> - <i>Artemisia tridentata</i> Shrubland¹
Wet Meadow	<ul style="list-style-type: none"> • <i>Carex nebrascensis</i> Herbaceous Vegetation¹ • <i>Carex lanuginosa</i> - <i>Calamagrostis stricta</i> Herbaceous Vegetation¹ • <i>Juncus balticus</i> Herbaceous Vegetation¹ 	<ul style="list-style-type: none"> • <i>Carex nebrascensis</i> Herbaceous Vegetation¹ • <i>Carex lanuginosa</i> - <i>Calamagrostis stricta</i> Herbaceous Vegetation¹ • <i>Juncus balticus</i> Herbaceous Vegetation¹
Closed Depression	<ul style="list-style-type: none"> • <i>Eleocharis palustris</i> Herbaceous Vegetation¹ • <i>Pacopyrum smithii</i> - <i>Hordeum jubatum</i> Herbaceous Vegetation¹ • <i>Pacopyrum smithii</i> Herbaceous Vegetation¹ 	<ul style="list-style-type: none"> • <i>Eleocharis palustris</i> Herbaceous Vegetation¹ • <i>Pacopyrum smithii</i> - <i>Hordeum jubatum</i> Herbaceous Vegetation¹ • <i>Pacopyrum smithii</i> Herbaceous Vegetation¹

Ecological Site Types	Plant Associations Found Within Different Precipitation Zones	
	10 to 14 inch	15 to 19 inch
Overflow	<ul style="list-style-type: none"> • <i>Artemisia cana</i> / <i>Pascopyrum smithii</i> Shrubland • <i>Artemisia cana</i> ssp. <i>cana</i> / <i>Pascopyrum smithii</i> Shrub Herbaceous¹ • <i>Symphoricarpos occidentalis</i> Shrubland¹ 	<ul style="list-style-type: none"> • <i>Fraxinus pennsylvanica</i> / <i>Prunus virginiana</i> Forest • <i>Pinus ponderosa</i> / <i>Prunus virginiana</i> Forest • <i>Artemisia cana</i> / <i>Pascopyrum smithii</i> Shrubland • <i>Artemisia cana</i> ssp. <i>cana</i> / <i>Pascopyrum smithii</i> Shrub Herbaceous¹ • <i>Symphoricarpos occidentalis</i> Shrubland¹
Sandy	<ul style="list-style-type: none"> • <i>Pinus ponderosa</i> / <i>Pseudoroegneria spicata</i> Woodland • <i>Andropogon hallii</i> - <i>Calamovilfa longifolia</i> Herbaceous Vegetation • <i>Calamovilfa longifolia</i> - <i>Hesperostipa comata</i> Herbaceous Vegetation • <i>Schizachyrium scoparium</i> - <i>Bouteloua (curtipendula, gracilis)</i> / <i>Carex filifolia</i> Herbaceous Vegetation • <i>Schizachyrium scoparium</i> - <i>Carex inops</i> ssp. <i>heliophila</i> Herbaceous Vegetation • <i>Hesperostipa comata</i> - <i>Bouteloua gracilis</i> - <i>Carex filifolia</i> Herbaceous Vegetation • <i>Calamovilfa longifolia</i> - <i>Carex inops</i> ssp. <i>heliophila</i> Herbaceous Vegetation¹ • <i>Krascheninnikovia lanata</i> / <i>Hesperostipa comata</i> Dwarf-shrubland¹ 	<ul style="list-style-type: none"> • <i>Pinus ponderosa</i> / <i>Carex inops</i> ssp. <i>heliophila</i> Woodland • <i>Pinus ponderosa</i> / <i>Festuca idahoensis</i> Woodland • <i>Pinus ponderosa</i> / <i>Pseudoroegneria spicata</i> Woodland • <i>Andropogon hallii</i> - <i>Calamovilfa longifolia</i> Herbaceous Vegetation • <i>Festuca idahoensis</i> - <i>Carex inops</i> ssp. <i>heliophila</i> Herbaceous Vegetation • <i>Schizachyrium scoparium</i> - <i>Carex inops</i> ssp. <i>heliophila</i> Herbaceous Vegetation • <i>Hesperostipa comata</i> - <i>Bouteloua gracilis</i> - <i>Carex filifolia</i> Herbaceous Vegetation • <i>Hesperostipa comata</i> - <i>Carex inops</i> ssp. <i>heliophila</i> Herbaceous Vegetation • <i>Calamovilfa longifolia</i> - <i>Carex inops</i> ssp. <i>heliophila</i> Herbaceous Vegetation¹ • <i>Krascheninnikovia lanata</i> / <i>Hesperostipa comata</i> Dwarf-shrubland¹
Sands	<ul style="list-style-type: none"> • <i>Andropogon hallii</i> - <i>Calamovilfa longifolia</i> Herbaceous Vegetation 	

Ecological Site Types	Plant Associations Found Within Different Precipitation Zones	
	10 to 14 inch	15 to 19 inch
Silty	<ul style="list-style-type: none"> • <i>Juniperus scopulorum</i> / <i>Piptatherum micranthum</i> Woodland • <i>Pinus ponderosa</i> / <i>Pseudoroegneria spicata</i> Woodland • <i>Pinus ponderosa</i> / <i>Juniperus horizontalis</i> Woodland¹ • <i>Pascopyrum smithii</i> - <i>Bouteloua gracilis</i> - <i>Carex filifolia</i> Herbaceous Vegetation • <i>Pseudoroegneria spicata</i> - <i>Carex filifolia</i> Herbaceous Vegetation • <i>Pseudoroegneria spicata</i> - <i>Pascopyrum smithii</i> Herbaceous Vegetation¹ • <i>Artemisia tridentata</i> ssp. <i>wyomingensis</i> / <i>Pascopyrum smithii</i> Shrubland¹ 	<ul style="list-style-type: none"> • <i>Pinus ponderosa</i> / <i>Carex inops</i> ssp. <i>heliophila</i> Woodland • <i>Pinus ponderosa</i> / <i>Pseudoroegneria spicata</i> Woodland • <i>Pinus ponderosa</i> / <i>Juniperus horizontalis</i> Woodland¹ • <i>Pascopyrum smithii</i> - <i>Bouteloua gracilis</i> - <i>Carex filifolia</i> Herbaceous Vegetation • <i>Festuca idahoensis</i> - <i>Carex inops</i> ssp. <i>heliophila</i> Herbaceous Vegetation • <i>Pseudoroegneria spicata</i> - <i>Carex filifolia</i> Herbaceous Vegetation • <i>Pseudoroegneria spicata</i> - <i>Pascopyrum smithii</i> Herbaceous Vegetation¹ • <i>Artemisia tridentata</i> ssp. <i>wyomingensis</i> / <i>Pascopyrum smithii</i> Shrubland¹
Clayey	<ul style="list-style-type: none"> • <i>Artemisia tridentata</i> ssp. <i>wyomingensis</i> / <i>Pascopyrum smithii</i> Shrubland¹ • <i>Pascopyrum smithii</i> - <i>Bouteloua gracilis</i> - <i>Carex filifolia</i> Herbaceous Vegetation • <i>Atriplex gardnerii</i> / <i>Pascopyrum smithii</i> Dwarf-shrubland¹ • <i>Pascopyrum smithii</i> Herbaceous Vegetation¹ 	<ul style="list-style-type: none"> • <i>Juniperus scopulorum</i> / <i>Pseudoroegneria spicata</i> Woodland • <i>Artemisia tridentata</i> ssp. <i>wyomingensis</i> / <i>Pascopyrum smithii</i> Shrubland¹ • <i>Pascopyrum smithii</i> - <i>Bouteloua gracilis</i> - <i>Carex filifolia</i> Herbaceous Vegetation • <i>Atriplex gardnerii</i> / <i>Pascopyrum smithii</i> Dwarf-shrubland¹ • <i>Pascopyrum smithii</i> Herbaceous Vegetation¹
Thin Hilly		
Pan Spots	<ul style="list-style-type: none"> • <i>Carex lanuginosa</i> - <i>Calamagrostis stricta</i> Herbaceous Vegetation • <i>Eriogonum pauciflorum</i> - <i>Gutierrezia sarothrae</i> Badlands Sparse Vegetation 	
Badlands		

Ecological Site Types	Plant Associations Found Within Different Precipitation Zones	
	10 to 14 inch	15 to 19 inch
Shallow to Gravel	<ul style="list-style-type: none"> • <i>Pinus ponderosa</i> / <i>Pseudoroegneria spicata</i> Woodland • <i>Schizachyrium scoparium</i> - <i>Bouteloua (curtipendula gracilis)</i> / <i>Carex filifolia</i> Herbaceous Vegetation 	<ul style="list-style-type: none"> • <i>Pinus ponderosa</i> / <i>Pseudoroegneria spicata</i> Woodland
Thin Silty	<ul style="list-style-type: none"> • <i>Artemisia tridentata ssp wyomingensis</i> / <i>Pascopyrum smithii</i> Shrub Herbaceous Vegetation • <i>Pseudoroegneria spicata</i> - <i>Bouteloua curtipendula</i> Herbaceous Vegetation 	<ul style="list-style-type: none"> • <i>Artemisia tridentata ssp wyomingensis</i> / <i>Pascopyrum smithii</i> Shrub Herbaceous Vegetation • <i>Pseudoroegneria spicata</i> - <i>Bouteloua curtipendula</i> Herbaceous Vegetation
Thin Sandy	<ul style="list-style-type: none"> • <i>Hesperostipacomata</i> - <i>Carex filifolia</i> Herbaceous Vegetation • <i>Rhus trilobata</i> / <i>Pseudoroegneria spicata</i> Shrub Herbaceous Vegetation 	<ul style="list-style-type: none"> • <i>Hesperostipacomata</i> - <i>Carex filifolia</i> Herbaceous Vegetation • <i>Rhus trilobata</i> / <i>Pseudoroegneria spicata</i> Shrub Herbaceous Vegetation
Very Shallow	<ul style="list-style-type: none"> • <i>Artemisia tridentata ssp. wyomingensis</i> / <i>Pseudoroegneria spicata</i> Shrubland • <i>Rhus trilobata</i> / <i>Pseudoroegneria spicata</i> Shrub Herbaceous Vegetation 	<ul style="list-style-type: none"> • <i>Artemisia tridentata ssp. wyomingensis</i> / <i>Pseudoroegneria spicata</i> Shrubland • <i>Rhus trilobata</i> / <i>Pseudoroegneria spicata</i> Shrub Herbaceous Vegetation
Shale	<ul style="list-style-type: none"> • <i>Atriplex confertifolia</i> - <i>Artemisia tridentata</i> Shrubland 	<ul style="list-style-type: none"> • <i>Atriplex confertifolia</i> - <i>Artemisia tridentata</i> Shrubland

¹ Plant association provisionally assigned to this Ecological Site (and both precipitation zones); more information needed to confirm placement.