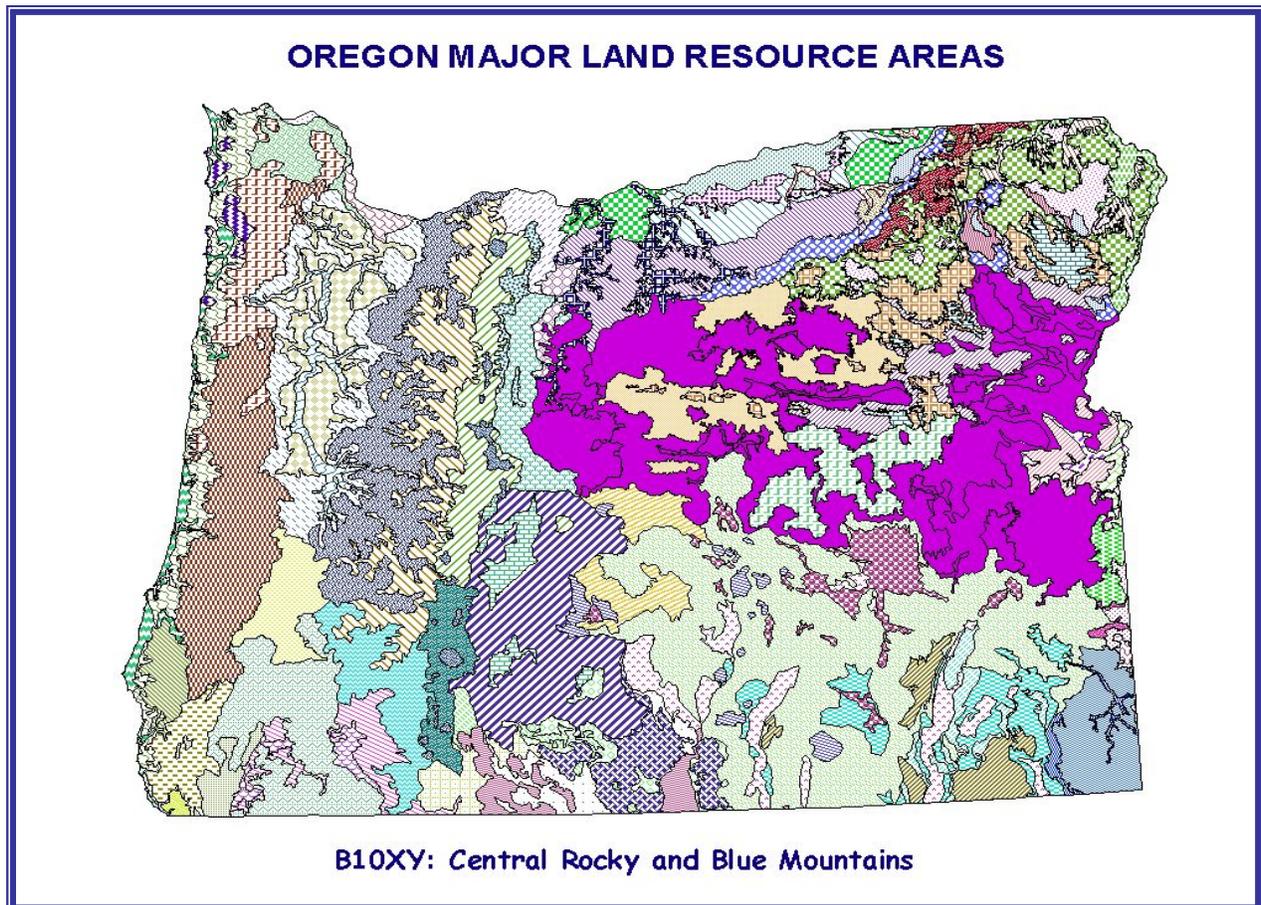


# MLRA B10XY

## Central Rocky and Blue Mountains: General

Ecological Site Descriptions - Historic Climax Plant  
Communities  
(for determining Rangeland Similarity Index,  
Production, and Rangeland Health)



## USING ECOLOGICAL SITE DESCRIPTION FIELD SHEETS

The ESD field sheets are condensations of ecological site descriptions. They are designed to contain the necessary information for conducting rangeland inventory (see 190-NRPH, Amendment OR-2, 5-2004; 600.0401a **Oregon Protocols for Rangeland and Pasture / Hayland Inventory and Evaluation**). The information is provided for the following parts of rangeland inventory protocols:

### First Page:

- ✚ Ecological site name, number, plant association, and normal pounds per acre (air-dry) productivity in high seral condition.
- ✚ The Historic Climax Plant Community (HCPC) description including listing by common name, scientific name, NRCS national plant code, and functional grouping (see functional groupings list). Plants are grouped by grasses/grasslikes, forbs, shrubs, and trees.
- ✚ Percent composition by weight of each species in the HCPC (expected low to high range of composition in the plant community).
- ✚ Weight of each species in the HCPC (expected low to high range of weights in the plant community by pounds per acre; based on the percent composition times the normal pounds per acre (air-dry) productivity in high seral condition). These plant species weights are used for completing Rangeland Similarity Index. Enter the weight from the guide into **column J**, Pounds in Reference State, in the Rangeland Inventory Worksheet, Exhibit 4-11. Use the figures from either the Low or High columns (but not both). Be consistent, if you use the figures from the Low column, continue using these for the entire rangeland unit evaluation.
- ✚ The subtotal percentage and weight of each plant type appears in the shaded bars above each plant type grouping. The total percentages and weights (for low and high ranges) appear in the shaded bar at the bottom of the sheet. These total weights are used for completing Rangeland Similarity Index. Enter the total weight into **block L**, Total normal annual production in reference vegetative state (HCPC), in the Rangeland Inventory Worksheet, Exhibit 4-11. Use the total that corresponds to the species values used; if Low range values were used, use the Low total, if the High values were used, use the High total; do not compare values across columns.

### Second Page:

- ✚ Initial stocking rates for general seral conditions are provided in the first block. These are based on the normal pounds per acre (air-dry) productivity in high seral condition and are adjusted downwards for decreasing ecological condition. These values are conservative and may not reflect the actual productivity of the site; they can be used to develop forage inventories and consequently prescribed grazing plans but generally will not be as accurate as on-site estimations of productivity.
- ✚ The remainder of the sheet contains the seventeen indicators (and weights) of Rangeland Health and a brief description of potentials of each for this ecological site. Use these with the Rangeland Health Indicator Matrix, Exhibit 4-12 to complete the Rangeland Health Assessment on the Oregon Rangeland Inventory Worksheet, Exhibit 4-11.

## FUNCTIONAL GROUPINGS FOR RANGEGLAND ECOLOGICAL SITES IN OREGON

TYPE	I	II	III*	GROUP
GRASS/GRASSLIKE	Perennial	Deep-rooted (to 3+ feet)	Dominant	1
			Sub-dominant	2
	Perennial	Shallow-rooted (< 2 feet)	Dominant	3
			Sub-dominant	4
	Perennial	Others (PPGG)	All	5
	Annual	All	All	6
FORBS	Perennial	All	Dominant	7
			Sub-dominant	8
	Perennial	Others (PPFF)	All	9
	Annual	All	All	10
SHRUBS	Perennial	Evergreen	Dominant	11
			Sub-dominant	12
	Perennial	Deciduous (or 1/2 shrubs)	Dominant	13
			Sub-dominant	14
	Perennial	Others (SSSS)	All	15
	TREES	Perennial	Evergreen	Dominant
Sub-dominant				17
Perennial		Deciduous	Dominant	18
			Sub-dominant	19

* Category III	
<b>Dominant:</b>	Species with the highest percent composition. If another species has at least 1/2 the percent composition in the high column as the clearly dominant species has in the low column, then it too is dominant.
<b>Sub Dominant:</b>	Less than 1/2 the percent composition of the clearly dominant species in the high column as the clearly dominant species has in the low column.
<b>All:</b>	"Other" species are grouped as aggregates and may or may not be present. They are always sub dominant to other species with individual percentages of composition.

## Oregon Ecological Site Description Legend

Site Number	Name	HCPC Plant Association	Soil Temp	Production: Favorable	Production: Normal	Production: Unfavorable	NASIS Plants
R010XY001OR	WET MOUNTAIN MEADOW	CAREX-DECA18-JUNCU	Frigid/Cryic	3500	2500	2000	CAREX (70) JUNCUS (5) DECA18 (20)
R010XY002OR	MOUNTAIN MEADOW	DECA18-CAREX-JUNCU	Frigid/Cryic	4000	3000	2000	DECA18 (70) CAREX (20) JUNCUS (5) POA SP. (5)
R010XY003OR	WET MEADOW	CAREX-DECA18-JUNCU	Mesic	3500	3000	2500	CAREX (80) JUNCUS (5) DECA18 (8)
R010XY004OR	MEADOW	DECA5-CAREX-JUNCU	Mesic	5000	4000	3000	DECA18 (65) POA SP. (5) JUNCUS (8) CAREX (20)
R010XY005OR	LOAMY BOTTOM	LECI4	Mesic	7000	5000	4000	LECI4 (90) ARTRT (5)
R010XY006OR	MOUNTAIN LOAMY BOTTOM	LECI4	Frigid	5000	4000	3000	LECI4 (80) POA (5) FEID (5)
R010XY007OR	SODIC BOTTOM	LECI4-DISP/SAVE	Mesic	5000	4000	3000	LECI4 (80) SAVE4 (5) DISP (10)
R010XY008OR	SODIC MEADOW	DASP-PULE-JUNCU	Mesic	2500	1500	1000	PULE (30) LECI4 (5) SPGR (5) JUNCUS (8) SPAI (10) DISP (30)
R010XY009OR	SANDY BOTTOM	LECI4-HECO26-ELLAL	Mesic	5000	3000	2000	LECI4 (70) HECO26 (10) ELLAL (8) ARTRT (5)
R010XY010OR	WILLOW RIPARIAN (COYOTE WILLOW)	CAREX/SAEX	Mesic	4000	3000	2000	PHAR3 (30) CAREX (10) SAEX (80)
R010XY011OR	COTTONWOOD-WILLOW RIPARIAN	LECI4/POPUL-SALIX	Mesic	5000	4000	3000	JUNCUS (5) ROSA (5) CRATA (5) CAREX (8) ALNUS (8) POPUL (20) LECI4 (20) SALIX (25)
R010XY012OR	WILLOW RIPARIAN (BOOTH-YELLOW WILLOW)	CAREX/SABO2-SALU2	Frigid/Cryic	3000	2000	1000	CAREX (10) SABO2 (30) SALU2 (15) SAGE (10) COSEO (5)
R010XY013OR	WILLOW RIPARIAN (BOOTH-GEYER WILLOW)	CAREX/SABO2-SAGE2	Cryic	3000	2000	1000	CAREX (20) SAEXE (10) SAGE2 (25) SABO2 (30)
R010XY014OR	CLAYEY BOTTOM	LECI4	Mesic	5000	4000	3000	PSSP6 (5) LECI4 (70)
R010XY015OR	BUCKWHEAT SCABLAND 9-12 PZ	POSE-PSSP6/ERUM	Mesic	500	400	200	ELEL5 (5) PSSP6 (5) ERIOG (30) POSE (40)



Site Name		WET MOUNTAIN MEADOW				
Site Number		010XY001OR				
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent	
	Low	0.08	0.23	0.39	0.54	
	High	0.12	0.37	0.62	0.87	
Rangeland Health Indicator [wt]	Potential for this Site					
1. Number and extent of rills [1.0]	None, moderate sheet & rill erosion hazard					
2. Presence of water flow patterns [1.0]	Very frequent flooding with seasonal high water table					
3. Number and height of erosional pedestals or terracettes [1.0]	None					
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	0-5%					
5. Number of gullies and erosion associated with gullies [1.0]	Very poor resistance to erosion when cover is lacking. Subject to incision and downcutting					
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, slight wind erosion hazard					
7. Amount of litter movement (size and distance of travel) [1.0]	Fine to moderately coarse - limited movement					
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately resistant to erosion with adequate cover: aggregate stability = 3-5					
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep, very deep, poorly drained with a silt loam surface about 12" thick: moderate to high OM (3-6%)					
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Significant ground cover (90-100%) and very gentle slopes (0-3%) effectively limit rainfall impact and overland flow					
11. Presence and thickness of compaction layer [1.0]	None					
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Sedges > tufted hairgrass > rush > forbs > shrubs = other grasses					
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected					
14. Average percent litter cover and depth (inches) [1.0]	20-40% (0.5-1.5")					
15. Expected annual production (total above-ground) [1.0]	Favorable: 3500, Normal: 2500, Unfavorable: 2000 lbs/acre/year at high RSI (HCPC)					
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Perennial forb and brush species will increase with deterioration of plant community. Reed canarygrass and meadow foxtail invade sites that have lost deep rooted native perennial grass functional groups.					
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually					



Site Name <b>MOUNTAIN MEADOW</b>					
Site Number <b>010XY002OR</b>					
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent
	Low	0.09	0.28	0.46	0.65
	High	0.17	0.52	0.87	1.22
Rangeland Health Indicator [wt]	Potential for this Site				
1. Number and extent of rills [1.0]	None, moderate sheet & rill erosion hazard				
2. Presence of water flow patterns [1.0]	Frequent flooding with seasonal high water table				
3. Number and height of erosional pedestals or terracettes [1.0]	None				
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	0-5%				
5. Number of gullies and erosion associated with gullies [1.0]	Very poor resistance to erosion when cover is lacking. Subject to incision and downcutting				
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, slight wind erosion hazard				
7. Amount of litter movement (size and distance of travel) [1.0]	Fine to moderately coarse - limited movement				
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately resistant to erosion with adequate cover: aggregate stability = 3-5				
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep, very deep, somewhat poorly drained with a silt loam surface about 12" thick: moderate to high OM (3-6%)				
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Significant ground cover (90-100%) and very gentle slopes (0-3%) effectively limit rainfall impact and overland flow				
11. Presence and thickness of compaction layer [1.0]	None				
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Tufted hairgrass > sedges > rush > forbs > other grasses > shrubs				
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected				
14. Average percent litter cover and depth (inches) [1.0]	20-40% (0.5-1.5")				
15. Expected annual production (total above-ground) [1.0]	Favorable: 4000, Normal: 3000, Unfavorable: 2000 lbs/acre/year at high RSI (HCPC)				
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Perennial forb and brush species will increase with deterioration of plant community. Reed canarygrass and meadow foxtail invade sites that have lost deep rooted native perennial grass functional groups.				
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually				



Site Name <b>WET MEADOW</b>					
Site Number <b>010XY003OR</b>					
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent
	Low	0.10	0.31	0.52	0.73
	High	0.15	0.45	0.75	1.05
Rangeland Health Indicator [wt]	Potential for this Site				
1. Number and extent of rills [1.0]	None, moderate sheet & rill erosion hazard				
2. Presence of water flow patterns [1.0]	Very frequent flooding with seasonal high water table				
3. Number and height of erosional pedestals or terracettes [1.0]	None				
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	0-5%				
5. Number of gullies and erosion associated with gullies [1.0]	Very poor resistance to erosion when cover is lacking. Subject to incision and downcutting				
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, slight wind erosion hazard				
7. Amount of litter movement (size and distance of travel) [1.0]	Fine to moderately coarse - limited movement				
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately to significantly resistant to erosion with adequate cover: aggregate stability = 3-6				
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep, very deep, poorly drained with a silt loam to silty clay loam surface about 20" thick: moderate to high OM (3-6%)				
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Significant ground cover (90-100%) and very gentle slopes (0-3%) effectively limit rainfall impact and overland flow				
11. Presence and thickness of compaction layer [1.0]	None				
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Sedges > tufted hairgrass > rush > forbs > shrubs = other grasses				
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected				
14. Average percent litter cover and depth (inches) [1.0]	20-40% (0.5-1.5")				
15. Expected annual production (total above-ground) [1.0]	Favorable: 3500, Normal: 3000, Unfavorable: 2500 lbs/acre/year at high RSI (HCPC)				
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Perennial forb and brush species will increase with deterioration of plant community. Reed canarygrass and meadow foxtail invade sites that have lost deep rooted native perennial grass functional groups.				
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually				



Site Name <b>MEADOW</b>					
Site Number <b>010XY004OR</b>					
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent
	Low	0.12	0.36	0.59	0.83
	High	0.21	0.64	1.07	1.50
Rangeland Health Indicator [wt]	Potential for this Site				
1. Number and extent of rills [1.0]	None, moderate sheet & rill erosion hazard				
2. Presence of water flow patterns [1.0]	Frequent flooding with seasonal high water table				
3. Number and height of erosional pedestals or terracettes [1.0]	None				
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	0-5%				
5. Number of gullies and erosion associated with gullies [1.0]	Very poor resistance to erosion when cover is lacking. Subject to incision and downcutting				
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, slight wind erosion hazard				
7. Amount of litter movement (size and distance of travel) [1.0]	Fine to moderately coarse - limited movement				
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately resistant to erosion with adequate cover: aggregate stability = 3-5				
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep, very deep, somewhat poorly drained with a silt loam surface about 18" thick: moderate to high OM (3-6%)				
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Significant ground cover (90-100%) and very gentle slopes (0-3%) effectively limit rainfall impact and overland flow				
11. Presence and thickness of compaction layer [1.0]	None				
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Tufted hairgrass > sedges > rush > forbs = other grasses				
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected				
14. Average percent litter cover and depth (inches) [1.0]	20-40% (0.5-1.5")				
15. Expected annual production (total above-ground) [1.0]	Favorable: 5000, Normal: 4000, Unfavorable: 3000 lbs/acre/year at high RSI (HCPC)				
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Perennial forb and brush species will increase with deterioration of plant community. Kentucky bluegrass and meadow foxtail invade sites that have lost deep rooted native perennial grass functional groups.				
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually				



Site Name <b>LOAMY BOTTOM</b>					
Site Number <b>010XY005OR</b>					
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent
	Low	0.20	0.59	0.98	1.37
	High	0.27	0.81	1.35	1.90
Rangeland Health Indicator [wt]	Potential for this Site				
1. Number and extent of rills [1.0]	None, moderate sheet & rill erosion hazard				
2. Presence of water flow patterns [1.0]	Occasional flooding with seasonal high water table				
3. Number and height of erosional pedestals or terracettes [1.0]	None				
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	0-10%				
5. Number of gullies and erosion associated with gullies [1.0]	None				
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, slight wind erosion hazard				
7. Amount of litter movement (size and distance of travel) [1.0]	Fine to moderately coarse - limited movement				
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately to significantly resistant to erosion: aggregate stability = 3-6				
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep, very deep, well drained with a loam, silt loam, or clay loam surface about 24" thick: moderate to high OM (3-6%)				
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Significant ground cover (90-100%) and very gentle slopes (0-3%) effectively limit rainfall impact and overland flow				
11. Presence and thickness of compaction layer [1.0]	None				
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Basin wildrye > other grasses > willow > basin big sagebrush > other shrubs > forbs				
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected				
14. Average percent litter cover and depth (inches) [1.0]	20-40% (0.5-1.5")				
15. Expected annual production (total above-ground) [1.0]	Favorable: 7000, Normal: 5000, Unfavorable: 4000 lbs/acre/year at high RSI (HCPC)				
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Perennial forb and brush species will increase with deterioration of plant community. Kentucky bluegrass and quackgrass invade sites that have lost deep rooted native perennial grass functional groups.				
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually				



Site Name <b>MOUNTAIN LOAMY BOTTOM</b>					
Site Number <b>010XY006OR</b>					
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent
	Low	0.15	0.44	0.74	1.03
	High	0.24	0.73	1.21	1.69
Rangeland Health Indicator [wt]	Potential for this Site				
1. Number and extent of rills [1.0]	None, moderate sheet & rill erosion hazard				
2. Presence of water flow patterns [1.0]	Occasional flooding with seasonal high water table				
3. Number and height of erosional pedestals or terracettes [1.0]	None				
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	0-10%				
5. Number of gullies and erosion associated with gullies [1.0]	None				
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, slight wind erosion hazard				
7. Amount of litter movement (size and distance of travel) [1.0]	Fine to moderately coarse - limited movement				
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately to significantly resistant to erosion: aggregate stability = 3-6				
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep, very deep, well drained with a loam, silt loam surface about 12" thick: moderate to high OM (3-6%)				
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Significant ground cover (80-90%) and very gentle slopes (0-3%) effectively limit rainfall impact and overland flow				
11. Presence and thickness of compaction layer [1.0]	None				
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Basin wildrye > willow > other grasses > other shrubs > forbs				
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected				
14. Average percent litter cover and depth (inches) [1.0]	15-35% (0.5-1.5")				
15. Expected annual production (total above-ground) [1.0]	Favorable: 5000, Normal: 4000, Unfavorable: 3000 lbs/acre/year at high RSI (HCPC)				
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Perennial forb and brush species will increase with deterioration of plant community. Kentucky bluegrass and quackgrass invade sites that have lost deep rooted native perennial grass functional groups.				
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually				



Site Name <b>SODIC BOTTOM</b>					
Site Number <b>010XY007OR</b>					
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent
	Low	0.14	0.41	0.68	0.95
	High	0.21	0.64	1.07	1.50
Rangeland Health Indicator [wt]	Potential for this Site				
1. Number and extent of rills [1.0]	None to some, severe sheet & rill erosion hazard				
2. Presence of water flow patterns [1.0]	Occasional flooding with seasonal high water table				
3. Number and height of erosional pedestals or terracettes [1.0]	None to some				
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	0-10%				
5. Number of gullies and erosion associated with gullies [1.0]	None				
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, slight wind erosion hazard				
7. Amount of litter movement (size and distance of travel) [1.0]	Fine to moderately coarse - limited movement				
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately resistant to erosion: aggregate stability = 3-4				
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep, very deep, somewhat poorly drained with a silt loam surface about 12" thick - upper 30" of soil is moderately to very strongly alkaline (pH 8.4 - 9.6); moderate OM (2-4%)				
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Significant ground cover (80-90%) and very gentle slopes (0-3%) effectively limit rainfall impact and overland flow				
11. Presence and thickness of compaction layer [1.0]	None				
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Basin wildrye > inland saltgrass > other grasses > black greasewood > other shrubs > forbs				
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected				
14. Average percent litter cover and depth (inches) [1.0]	15-35% (0.5-1.5")				
15. Expected annual production (total above-ground) [1.0]	Favorable: 5000, Normal: 4000, Unfavorable: 3000 lbs/acre/year at high RSI (HCPC)				
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Black greasewood will increase with deterioration of plant community. Inland saltgrass strongly increases on sites that have lost deep rooted perennial grass functional groups. Bare alkali areas will increase with loss of vegetation.				
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually				



Site Name <b>SODIC MEADOW</b>					
Site Number <b>010XY008OR</b>					
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent
	Low	0.05	0.14	0.23	0.32
	High	0.08	0.24	0.40	0.56
Rangeland Health Indicator [wt]	Potential for this Site				
1. Number and extent of rills [1.0]	None to some, severe sheet & rill erosion hazard				
2. Presence of water flow patterns [1.0]	Frequent flooding with seasonal high water table and ponding				
3. Number and height of erosional pedestals or terracettes [1.0]	None to some				
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	0-10%				
5. Number of gullies and erosion associated with gullies [1.0]	None				
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, slight wind erosion hazard				
7. Amount of litter movement (size and distance of travel) [1.0]	Fine to moderately coarse - limited movement				
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately resistant to erosion: aggregate stability = 3-4				
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep, very deep, somewhat poorly drained with a silt loam surface about 9" thick - upper 30" of soil is moderately to very strongly alkaline (pH 8.2 - 9.9); moderate OM (2-4%)				
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Significant ground cover (80-90%) and very gentle slopes (0-3%) effectively limit rainfall impact and overland flow				
11. Presence and thickness of compaction layer [1.0]	None				
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Inland saltgrass > Lemon alkaligrass > alkali sacaton > rush > alkali cordgrass > basin wildrye > other grasses > black greasewood > forbs				
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected				
14. Average percent litter cover and depth (inches) [1.0]	15-35% (0.5-1.5")				
15. Expected annual production (total above-ground) [1.0]	Favorable: 2500, Normal: 1500, Unfavorable: 1000 lbs/acre/year at high RSI (HCPC)				
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Black greasewood will increase with deterioration of plant community. Inland saltgrass strongly increases on sites that have lost deep rooted perennial grass functional groups. Bare alkali areas will increase with loss of vegetation.				
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually				



Site Name <b>SANDY BOTTOM</b>					
Site Number <b>010XY009OR</b>					
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent
	Low	0.09	0.28	0.47	0.66
	High	0.16	0.47	0.79	1.10
Rangeland Health Indicator [wt]	Potential for this Site				
1. Number and extent of rills [1.0]	None, moderate sheet & rill erosion hazard				
2. Presence of water flow patterns [1.0]	Occasional flooding with seasonal high water table				
3. Number and height of erosional pedestals or terracettes [1.0]	None				
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	0-10%				
5. Number of gullies and erosion associated with gullies [1.0]	None				
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, moderate wind erosion hazard				
7. Amount of litter movement (size and distance of travel) [1.0]	Fine to moderately coarse - limited movement				
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately resistant to erosion: aggregate stability = 2-4				
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep, well drained with a fine sandy loam to a sandy loam surface: low to moderate OM (1-4%)				
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Significant ground cover (90-100%) and gentle slopes (0-10%) effectively limit rainfall impact and overland flow				
11. Presence and thickness of compaction layer [1.0]	None				
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Basin wildrye > needle and thread = thickspike wheatgrass > other grasses > shrubs > forbs				
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected				
14. Average percent litter cover and depth (inches) [1.0]	10-25% (0.5-1.0")				
15. Expected annual production (total above-ground) [1.0]	Favorable: 3000, Normal: 2000, Unfavorable: 1000 lbs/acre/year at high RSI (HCPC)				
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Perennial forb and brush species will increase with deterioration of plant community. Cheatgrass invades sites that have lost deep rooted perennial grass functional groups.				
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually				



Site Name		WILLOW RIPARIAN (NARROWLEAF WILLOW)				
Site Number		010XY010OR draft				
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent	
	Low	0.10	0.29	0.49	0.68	
	High	0.18	0.53	0.88	1.23	
Rangeland Health Indicator [wt]	Potential for this Site					
1. Number and extent of rills [1.0]	None, moderate sheet & rill erosion hazard					
2. Presence of water flow patterns [1.0]	Very frequent flooding with seasonal high water table					
3. Number and height of erosional pedestals or terracettes [1.0]	None					
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	0-10%					
5. Number of gullies and erosion associated with gullies [1.0]	Very poor resistance to erosion when cover is lacking. Subject to incision and downcutting					
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, slight wind erosion hazard					
7. Amount of litter movement (size and distance of travel) [1.0]	Fine to moderately coarse - limited movement					
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately resistant to erosion with adequate cover: aggregate stability = 3-4					
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep, well drained with a fine sandy loam to a silt loam surface: low to moderate OM (2-5%)					
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Significant ground cover (80-90%) and very gentle slopes (0-3%) effectively limit rainfall impact and overland flow					
11. Presence and thickness of compaction layer [1.0]	None					
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Narrowleaf willow > sedges > other grasses > forbs > shrubs					
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected					
14. Average percent litter cover and depth (inches) [1.0]	15-35% (0.5-1.5")					
15. Expected annual production (total above-ground) [1.0]	Favorable: 4000, Normal: 3000, Unfavorable: 2000 lbs/acre/year at high RSI (HCPC)					
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Grass, grass-like, and perennial forb species will increase with deterioration of plant community. Reed canarygrass and meadow foxtail invade sites that have lost deep rooted perennial grass functional groups.					
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually					



Site Name		COTTONWOOD-WILLOW RIPARIAN				
Site Number		010XY011OR draft				
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent	
	Low	0.14	0.42	0.70	0.97	
	High	0.31	0.94	1.57	2.20	
Rangeland Health Indicator [wt]	Potential for this Site					
1. Number and extent of rills [1.0]	None to some, moderate to severe sheet & rill erosion hazard					
2. Presence of water flow patterns [1.0]	Very frequent flooding with seasonal high water table					
3. Number and height of erosional pedestals or terracettes [1.0]	None					
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	0-10%					
5. Number of gullies and erosion associated with gullies [1.0]	Very poor resistance to erosion when cover is lacking. Subject to incision and downcutting					
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, slight wind erosion hazard					
7. Amount of litter movement (size and distance of travel) [1.0]	Fine to moderately coarse - limited movement					
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately resistant to erosion with adequate cover: aggregate stability = 3-4					
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep, well drained, with a silt loam to a gravelly silt loam surface about 8" thick: low to moderate OM (2-5%)					
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Significant ground cover (90-100%) and very gentle slopes (0-3%) effectively limit rainfall impact and overland flow					
11. Presence and thickness of compaction layer [1.0]	None					
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Willow = basin wildrye > cottonwood > alder = hawthorn = sedge > other shrubs > other grasses > forbs					
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected					
14. Average percent litter cover and depth (inches) [1.0]	15-35% (0.5-1.5")					
15. Expected annual production (total above-ground) [1.0]	Favorable: 5000, Normal: 4000, Unfavorable: 3000 lbs/acre/year at high RSI (HCPC)					
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Grass, grass-like, and perennial forb species will increase with deterioration of plant community. Reed canarygrass and meadow foxtail invade sites that have lost deep rooted perennial grass functional groups.					
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually					



Site Name		WILLOW RIPARIAN (BOOTH-YELLOW WILLOW)				
Site Number		010XY012OR draft				
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent	
	Low	0.07	0.21	0.34	0.48	
	High	0.15	0.44	0.73	1.02	
Rangeland Health Indicator [wt]	Potential for this Site					
1. Number and extent of rills [1.0]	None to some, moderate sheet & rill erosion hazard					
2. Presence of water flow patterns [1.0]	Very frequent flooding with seasonal high water table					
3. Number and height of erosional pedestals or terracettes [1.0]	None					
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	5-15%					
5. Number of gullies and erosion associated with gullies [1.0]	Very poor resistance to erosion when cover is lacking. Subject to incision and downcutting					
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, slight wind erosion hazard					
7. Amount of litter movement (size and distance of travel) [1.0]	Fine to moderately coarse - limited movement					
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately to slightly resistant to erosion with adequate cover: aggregate stability = 2-4					
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep, well drained, with a silt loam to fine sandy loam surface about 32" thick: low to moderate OM (2-5%)					
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Significant ground cover (70-80%) and very gentle slopes (0-3%) effectively limit rainfall impact and overland flow					
11. Presence and thickness of compaction layer [1.0]	None					
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Booth willow > yellow willow > narrowleaf willow > sedges > western dogwood > other grasses > other shrubs > forbs					
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected					
14. Average percent litter cover and depth (inches) [1.0]	10-30% (0.5-1.5")					
15. Expected annual production (total above-ground) [1.0]	Favorable: 3000, Normal: 2000, Unfavorable: 1000 lbs/acre/year at high RSI (HCPC)					
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Grass, grass-like, and perennial forb species will increase with deterioration of plant community. Reed canarygrass and meadow foxtail invade sites that have lost deep rooted perennial grass functional groups.					
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually					



Site Name <b>CLAYEY BOTTOM</b>					
Site Number <b>010XY014OR</b>					
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent
	Low	0.11	0.34	0.56	0.79
	High	0.21	0.62	1.03	1.44
Rangeland Health Indicator [wt]	Potential for this Site				
1. Number and extent of rills [1.0]	None, slight sheet & rill erosion hazard				
2. Presence of water flow patterns [1.0]	Occasional flooding with seasonal high water table				
3. Number and height of erosional pedestals or terracettes [1.0]	None				
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	0-5%				
5. Number of gullies and erosion associated with gullies [1.0]	None				
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, slight wind erosion hazard				
7. Amount of litter movement (size and distance of travel) [1.0]	Fine - limited movement				
8. Soil surface resistance to erosion (average stability values) [1.0]	Significantly resistant to erosion: aggregate stability = 4-6				
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep, well drained with a clayey surface: Moderate OM (2-5%)				
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Significant ground cover (100+%) and gentle slopes (0-3%) effectively limit rainfall impact and overland flow				
11. Presence and thickness of compaction layer [1.0]	None				
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Basin wildrye > other grasses > shrubs > forbs				
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected				
14. Average percent litter cover and depth (inches) [1.0]	20-40% (0.5-1.5")				
15. Expected annual production (total above-ground) [1.0]	Favorable: 6000, Normal: 4000, Unfavorable: 3000 lbs/acre/year at high RSI (HCPC)				
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Perennial forb and brush species will increase with deterioration of plant community. Kentucky bluegrass and quackgrass invade sites that have lost deep rooted native perennial grass functional groups.				
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually				



Site Name		BUCKWHEAT SCABLAND 9-12 PZ				
Site Number		010XY015OR				
Initial Stocking Rates by General Seral Condition (AUMs/Acre/Year with normal production) Use with caution - only when field determination is not practical or possible	Class	Poor	Fair	Good	Excellent	
	Low	0.01	0.04	0.07	0.10	
	High	0.03	0.08	0.13	0.18	
Rangeland Health Indicator [wt]	Potential for this Site					
1. Number and extent of rills [1.0]	None, slight sheet & rill erosion hazard					
2. Presence of water flow patterns [1.0]	None					
3. Number and height of erosional pedestals or terracettes [1.0]	None					
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	0-5%					
5. Number of gullies and erosion associated with gullies [1.0]	None					
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None, slight wind erosion hazard					
7. Amount of litter movement (size and distance of travel) [1.0]	Fine - limited movement					
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately resistant to erosion: aggregate stability = 3-4					
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Shallow, well drained, very stony, with a silt loam surface: low OM (1-3%)					
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Sparse ground cover (30-40%) and gentle to moderate slopes (0-15%) only moderately limit rainfall impact and overland flow					
11. Presence and thickness of compaction layer [1.0]	None					
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Sandberg bluegrass >					
13. Amount of plant mortality and decadence [1.0]	Normal decadence and mortality expected					
14. Average percent litter cover and depth (inches) [1.0]	5-10% (0.5")					
15. Expected annual production (total above-ground) [1.0]	Favorable: 500, Normal: 400, Unfavorable: 200 lbs/acre/year at high RSI (HCPC)					
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Perennial brush species will increase with deterioration of plant community. Western Juniper readily invades the site. Cheatgrass and Medusahead invade sites that have lost deep rooted perennial grass functional groups					
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually					