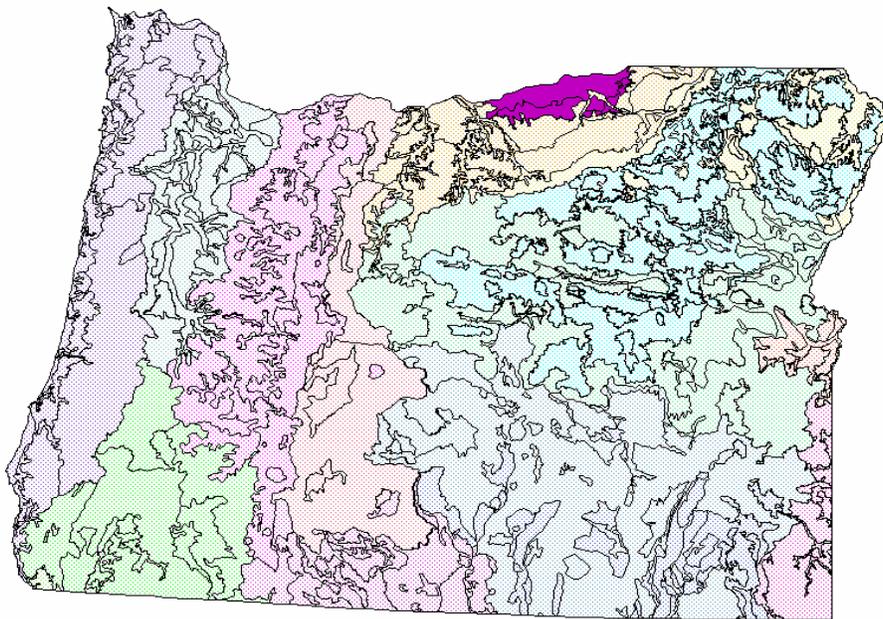


MLRA B7 Columbia Basin

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

OREGON MAJOR LAND RESOURCE AREAS



B7: Columbia Basin

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

PLANT 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	
Dominant:	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.
Sub Dominant:	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.
All:	"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.

Site Number	Name	HGPC Plant Association	Soil Temp	Production: Favorable	Production: Normal	Production: Unfavorable	NASIS Plants
007XY010OR	SANDY BOTTOM 8-10 PZ	LECI4-HECO26-PSSP6	Mesic	5000	3000	2000	LECI4 (65) LETR5 (5) ARTRT (5) HECO26 (10)
007XY011OR	SANDS 8-10 PZ	HECO26-ACHY/PUTR2	Mesic	700	500	400	HECO26 (60) ACHY (10) PUTR2 (15) ELMA7 (5)
007XY012OR	SANDY 8-10 PZ	HECO26-POSE	Mesic	900	600	400	POSE (5) HECO26 (80)
007XY013OR	SANDY LOAM 8-10 PZ	HECO26-PSSP6-POSE	Mesic	800	500	300	HECO26 (50) POSE (10) PSSP6 (25)
007XY014OR	LOAMY 8-10 PZ	PSSP6-POSE/ARTRT	Mesic	800	600	500	PSSP6 (70) HECO26 (5) ARTRT (5) POSE (10)
007XY015OR	SHALLOW LOAM 8-10 PZ	PSSP6-POSE/ARTRW	Mesic	500	300	200	PSSP6 (70) ARTRW (5) ACTH7 (5) HECO26 (10) POSE (10)
007XY020OR	SOUTH 8-10 PZ	PSSP6-HECO26-POSE	Mesic	700	400	300	PSSP6 (60) POSE (10) HECO26 (20)
007XY025OR	SANDY NORTH 8-10 PZ	HECO26-PSSP6-POSE	Mesic	1100	800	500	POSE (5) FEID (5) PSSP6 (35) HECO26 (50)

Site Name		SANDY BOTTOM 8-10 PZ				
Site Number		007XY010OR				
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	0.27	0.45	0.63
		High	0.14	0.41	0.68	0.95
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]	5-12%					
5. Number of gullies and erosion associated with gullies [1.0]	None to few					
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	None to few, moderate 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 = 2-3					
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep fine sandy loam and loam surface textures, mollisols, low OM (1-2%)					
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Relatively high ground cover (50-70%) and low (0-3%) slopes should reduce 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 > creeping wildrye > other perennial grasses > basin big sagebrush >= perennial forbs > other 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]	5-15% (<2.0") cover of mostly herbaceous and limited woody litter scattered throughout site					
15. Expected annual production (total above-ground) [1.0]	Favorable: 5000, Normal: 3000, Unfavorable: 2000 lbs/acre/year at high RSI (HCPC)					
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Rabbitbrush, broom snakeweed and sage brush may increase and reduce cover of herbaceous plants. Cheatgrass and Medusahead invade sites that have lost shallow rooted perennial grass functional groups					
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually					

Site Name	SANDS 8-10 PZ							
Site Number	007XY011OR							
Plant Association	HECO26-ACHY/PUTR2							
Normal Lbs./Ac.	500							
Range of composition and weight of species in HCPC with normal production:					% Comp. by Wt.		Lbs./Acre	
Common Name	Scientific Name	Symbol	Group	Low	High	Low	High	
Grasses & Grass-like Plants					78%	70%	270	515
needle and thread	Hesperostipa comata	HECO26	1	40	70	200	350	
Indian ricegrass	Achnatherum hymenoides	ACHY	2	10	20	50	100	
thickspike wheatgrass	Elymus macrourus	ELMA7	2	2	8	10	40	
Sandberg bluegrass	Poa secunda	POSE	4	1	2	5	10	
Other Perennial Grasses	N/A	PPGG	5	1	3	5	15	
yellow wildrye	Leymus flavescens	LEFL4				0	0	
bottlebrush squirreltail	Elymus elymoides	ELEL5				0	0	
prairie Junegrass	Koeleria macrantha	KOMA				0	0	
						0	0	
						0	0	
						0	0	
						0	0	
Forbs					6%	7%	20	50
snow buckwheat	Eriogonum niveum	ERNI2	7	2	5	10	25	
Other Perennial Forbs	N/A	PPFF	9	2	5	10	25	
scurfpea	Psoraleidium	PSORA2				0	0	
hairy false goldenaster	Heterotheca villosa	HEVI4				0	0	
Carey's balsamroot	Balsamorhiza careyana	BACA3				0	0	
lomatium (gen.)	Lomatium	LOMAT				0	0	
milkvetch	Astragalus	ASTRA				0	0	
phacelia	Phacelia	PHACE				0	0	
pale evening-primrose	Oenothera pallida	OEPA				0	0	
common yarrow	Achillea millefolium	ACMI2				0	0	
Douglas' dustymaiden	Chaenactis douglasii	CHDO				0	0	
pricklypear	Opuntia	OPUNT				0	0	
naked mariposa lily	Calochortus nudus	CANU2				0	0	
woolly plantain	Plantago patagonica	PLPA2				0	0	
						0	0	
						0	0	
						0	0	
						0	0	
						0	0	
						0	0	
Shrubs					16%	24%	55	175
antelope bitterbrush	Purshia tridentata	PUTR2	11	10	30	50	150	
Other Shrubs	N/A	SSSS	15	1	5	5	25	
basin big sagebrush	Artemisia tridentata ssp. tridentata	ARTRT				0	0	
gray rabbitbrush	Ericameria nauseosa	ERNA10				0	0	
green rabbitbrush	Chrysothamnun viscidiflorus	CHVI8				0	0	
broom snakeweed	Gutierrezia sarothrae	GUSA2				0	0	
						0	0	
						0	0	
						0	0	
						0	0	
Trees					0%	0%	0	0
						0	0	
						0	0	
						0	0	
Totals					100%	100%	345	740

Site Name		SANDS 8-10 PZ				
Site Number		007XY011OR				
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	0.09	0.15	0.20
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]	10-20%					
5. Number of gullies and erosion associated with gullies [1.0]	Few					
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	Few to many; may be directional low dunes present; severe wind erosion hazard					
7. Amount of litter movement (size and distance of travel) [1.0]	Fine - some movement expected (wind) over short distances					
8. Soil surface resistance to erosion (average stability values) [1.0]	Slightly resistant to erosion; aggregate stability = 2-3					
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Moderately deep to very deep sands and loamy fine sands; low OM (1-2%)					
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Moderate ground cover (30-40%) and low (0-3%) slopes should reduce rainfall impact and overland flow; increased flow possible on steeper slopes (up to 20%)					
11. Presence and thickness of compaction layer [1.0]	None					
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Needle and thread > antelope bitterbrush > indian ricegrass > Thickspike wheatgrass > forbs > shallow rooted perennial grasses > other 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]	2-5% (< 0.5") in areas with adequate plant cover					
15. Expected annual production (total above-ground) [1.0]	Favorable: 700, Normal: 500, Unfavorable: 400 lbs/acre/year at high RSI (HCPC)					
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Rabbitbrush, sage brush and broom snakeweed may increase and reduce cover of herbaceous plants. Cheatgrass and annual forbs invade sites that have lost shallow rooted perennial grass functional groups					
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually					

Site Name SANDY 8-10 PZ					
Site Number 007XY012OR					
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	0.02	0.06	0.09	0.13
	High	0.03	0.09	0.14	0.20
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]	Few				
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]	Few				
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	Few - should not be prevalent or extensive; severe 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]	Slightly resistant to erosion; aggregate stability = 2-3				
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Moderately deep to very deep loamy fine sand surface textures; low OM (1-2%)				
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Moderate ground cover (30-40%) and low (0-5%) slopes should reduce rainfall impact and overland flow; slightly increased flow possible on steeper slopes (up to 12%)				
11. Presence and thickness of compaction layer [1.0]	None				
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Needle and thread > sandberg bluegrass > indian ricegrass > other shrubs > other grasses > other 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]	3-6% (< 0.5") in areas with adequate plant cover				
15. Expected annual production (total above-ground) [1.0]	Favorable: 900, Normal: 600, Unfavorable: 400 lbs/acre/year at high RSI (HCPC)				
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Rabbitbrush, sage brush and broom snakeweed may increase and reduce cover of herbaceous plants. Cheatgrass and annual forbs invade sites that have lost shallow rooted perennial grass functional groups				
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually				

Site Name SANDY LOAM 8-10 PZ					
Site Number 007XY013OR					
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	0.09
	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]	2-10%				
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 to few; moderate to severe 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]	Slightly to moderately resistant to erosion; aggregate stability = 3-4				
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Moderately deep to very deep fine sandy loam surface textures; low OM (1-2%)				
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Moderate ground cover (30-50%) and gentle (5-12%) slopes should reduce rainfall impact and overland flow; slightly increased flow possible on steeper slopes (up to 20%)				
11. Presence and thickness of compaction layer [1.0]	None				
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Needle and thread > bluebunch wheatgrass > sandberg bluegrass > dominant forbs > basin big sagebrush > other shrubs > other grasses > other 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]	2-5% (< 0.5") in areas with adequate plant cover				
15. Expected annual production (total above-ground) [1.0]	Favorable: 800, Normal: 500, Unfavorable: 300 lbs/acre/year at high RSI (HCPC)				
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Rabbitbrush, sage brush and broom snakeweed may increase and reduce cover of herbaceous plants. Cheatgrass and annual forbs invade sites that have lost shallow rooted perennial grass functional groups				
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually				

Site Name		LOAMY 8-10 PZ				
Site Number		007XY014OR				
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	0.02	0.06	0.10	0.14	
	High	0.03	0.10	0.16	0.22	
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]	2-10%					
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 - limited movement					
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately to strongly resistant to erosion; aggregate stability = 5-6					
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Moderately deep to very deep, well drained silt loams; Low OM (2-3%)					
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Moderate ground cover (30-50%) and slopes (0-20%) should limit rainfall impact and overland flow; slightly increased flow possible on steeper slopes (up to 20%)					
11. Presence and thickness of compaction layer [1.0]	None					
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Needle and thread > Bluebunch wheatgrass > basin big sagebrush > sandberg bluegrass > dominant forbs > other grasses = other forbs = other 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]	5-8% (< 0.5") in areas with adequate plant cover					
15. Expected annual production (total above-ground) [1.0]	Favorable: 800, Normal: 600, Unfavorable: 500 lbs/acre/year at high RSI (HCPC)					
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Rabbitbrush, sage brush and broom snakeweed may increase and reduce cover of herbaceous plants. Cheatgrass and annual forbs invade sites that have lost shallow rooted perennial grass functional groups					
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually					

Site Name		SHALLOW LOAM 8-10 PZ				
Site Number		007XY015OR				
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	0.03	0.05	0.07	
	High	0.02	0.05	0.09	0.12	
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]	Few, in interspaces					
3. Number and height of erosional pedestals or terracettes [1.0]	None to few					
4. Bare ground (rock, litter, lichen, moss, plant canopy are <i>not</i> bare ground) [1.0]	2-10%					
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 - limited to moderate movement					
8. Soil surface resistance to erosion (average stability values) [1.0]	Moderately to strongly resistant to erosion; aggregate stability = 5-6					
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Shallow loams, gravelly loams, or very fine sandy loams, low OM (1%)					
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Moderately limited ground cover (25-50%) and slopes (0-20%) should slightly limit rainfall impact and overland flow; slightly increased flow possible on steeper slopes (up to 20%)					
11. Presence and thickness of compaction layer [1.0]	None					
12. Functional / structural groups (listed in order of descending dominance) [1.0]	bluebunch wheatgrass > sandberg bluegrass > needle and thread > thurber needlegrass = wyoming big sagebrush > dominant forbs > other forbs = gray rabbitbrush = other 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]	1-3% (< 0.5") in areas with adequate plant cover					
15. Expected annual production (total above-ground) [1.0]	Favorable: 500, Normal: 300, Unfavorable: 200 lbs/acre/year at high RSI (HCPC)					
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Rabbitbrush, sage brush and broom snakeweed may increase and reduce cover of herbaceous plants. Cheatgrass and annual forbs invade sites that have lost shallow rooted perennial grass functional groups					
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually					

Site Name		SOUTH 8-10 PZ				
Site Number		007XY0200R				
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	0.06	0.08	
	High	0.02	0.07	0.11	0.16	
Rangeland Health Indicator [wt]	Potential for this Site					
1. Number and extent of rills [1.0]	Few, moderate sheet & rill erosion hazard					
2. Presence of water flow patterns [1.0]	Few to many, depending on slope and plant cover					
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]	2-10%					
5. Number of gullies and erosion associated with gullies [1.0]	None					
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	Very few possible, moderate to severe 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 to slightly resistant to erosion; aggregate stability = 3-4					
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Moderately deep to very deep, well drained, fine sandy loams to gravelly silt loams; low OM (1-2%)					
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Moderate ground cover (30-50%) should limit rainfall impact and overland flow on lower slopes (12-20%); increased flow likely on steeper slopes (up to 40%)					
11. Presence and thickness of compaction layer [1.0]	None					
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Bluebunch wheatgrass > needle and thread > sandberg bluegrass > Thurber needlegrass = other grasses = dominant forbs = other forbs = basin big sagebrush >= gray rabbitbrush = other 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]	1-3% (< 0.5") in areas with adequate plant cover					
15. Expected annual production (total above-ground) [1.0]	Favorable: 700, Normal: 400, Unfavorable: 300 lbs/acre/year at high RSI (HCPC)					
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Rabbitbrush, sage brush and broom snakeweed may increase and reduce cover of herbaceous plants. Cheatgrass and annual forbs invade sites that have lost shallow rooted perennial grass functional groups					
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually					

Site Name		SANDY NORTH 8-10 PZ				
Site Number		007XY025OR				
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	0.03	0.08	0.13	0.18	
	High	0.04	0.13	0.22	0.31	
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]	2-8%					
5. Number of gullies and erosion associated with gullies [1.0]	None					
6. Extent of wind scoured, blowouts and/or depositional areas [1.0]	Very Few; moderate to high 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 = 3-5					
9. Soil surface structure and Soil Organic Matter (SOM) content [1.0]	Deep to very deep, well drained, very fine sandy loams to silt loams; low OM (1-3%)					
10. Effect of plant community composition and spatial distribution on infiltration & runoff [1.0]	Relatively high ground cover (50-70%) should effectively limit rainfall impact and overland flow; slightly increased flow possible on steeper slopes (up to 40%)					
11. Presence and thickness of compaction layer [1.0]	None					
12. Functional / structural groups (listed in order of descending dominance) [1.0]	Needle and thread > bluebunch wheatgrass > sandberg bluegrass = idaho fescue > other grasses > basin big sagebrush > dominant forbs = other forbs = other 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]	5-12% (< 1.0") in areas with adequate plant cover					
15. Expected annual production (total above-ground) [1.0]	Favorable: , Normal: , Unfavorable: lbs/acre/year at high RSI (HCPC)					
16. Potential invasive (including noxious) species (native and non-native) [1.0]	Rabbitbrush, sage brush and broom snakeweed may increase and reduce cover of herbaceous plants. Cheatgrass and annual forbs invade sites that have lost shallow rooted perennial grass functional groups					
17. Perennial plant reproductive capability [1.0]	All species should be capable of reproducing annually					