

Appendix C. Saskatchewan Grassland Range Health Assessment

VEGETATION STATUS

Question 1. What is the plant community?		
Plant community composition closely resembles the reference plant community for the site and alteration of the plant community by disturbances is minimal. Example: Dry Mixed Prairie, Loam Ecosite, Northern wheatgrass – western porcupine grass – needle-and-thread (Reference plant community)	40	
Compared to the reference plant community, the plant community shows minor alteration in plant species composition because of disturbances. Disturbance impact is light to moderate. Example: Dry Mixed Prairie, Loam Ecosite, Northern wheatgrass – needle-and-thread – June grass	30	
Compared to the reference plant community, the plant community shows moderate alteration, because of disturbances, compared to the reference plant community for the site. The impact of disturbance on plant community composition is moderate to heavy. Example Dry Mixed Prairie, Loam Ecosite, Needle-and-thread – June grass – blue grama – pasture sage	15	
Compared to the reference plant community, the plant community shows significant alterations due to disturbances. Disturbance impacts are heavy too very heavy. Plants are mostly native. Some tall-growing, non-native plants may be present. Example 1: Dry Mixed Prairie, Loam Ecosite, Blue grama – pasture sage – June grass Example 2: Kentucky bluegrass	7	
Compared to the reference plant community, the plant community shows extreme to severe alterations due to disturbances. Disturbance impacts are severe to very severe. Production is mostly from low-growing, non-native, disturbance induced plants. Example 1: Dandelion – Plantain	0	
Question 2. Are the expected vegetation layers present?		
The life form layers closely resemble the reference plant community.	10	
Compared to the reference, 1 life form layer is absent or considerably reduced.	7	
Compared to the reference, 2 life form layers are absent or considerably reduced.	3	
Compared to the reference, 3 life form layers are absent or considerably reduced.	0	
Question 3. Are invasive/noxious species present? Which species? _____		
Question 3.1 What is the cover of Invasive/Noxious species		
No invasive/noxious species	5	
Invasive/noxious species present but less than 1% cover	3	
Invasive/noxious weeds present with a total canopy cover over 1%	0	
Question 3.1 What is the distribution of Invasive/Noxious species		
No invasive/noxious species on the site	5	
Invasive/noxious species are present at a low level (density distribution class 1)	3	
Invasive/noxious species are present at a moderate to high level (density distribution classes 2 to 13)	0	
Total for vegetation status		

LISTS OF INVASIVE/NOXIOUS SPECIES FOR GRASSLAND HEALTH ASSESSMENT METHOD













Common Name	Latin name	Noxious Invasive	
Russian knapweed	<i>Acroptilon repens</i>	y	I
crested wheatgrass	<i>Agropyron cristatum</i>		I
smooth brome grass	<i>Bromus inermis</i>		I
nodding thistle	<i>Carduus nutans</i>	y	I
Canada thistle	<i>Cirsium arvense</i>	y	I
leafy spurge	<i>Euphorbia esula</i>	y	I
Kentucky bluegrass	<i>Poa pratensis</i>		I
common buckthorn	<i>Rhammus cathartica</i>		I

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HYDROLOGIC FUNCTION AND SOIL PROTECTION		
Question 4.1 Is there more soil erosion than expected for this site?		
No signs of soil erosion or not beyond the natural extent for the site (see workbook for more information on erosion features)	10	
Some evidence of soil erosion	7	
Moderate amounts of soil erosion	3	
Extreme amounts of soil erosion	0	
Question 4.2. Is there more bare soil than expected for this site?		
10% or less of exposed soil is human-caused	5	
Greater than 10 and up to 20% of exposed soil is human-caused	3	
Greater than 20 and up to 50% of exposed soil is human-caused.	2	
Greater than 50% of exposed soil is human-caused.	0	
Question 5. Is the expected amount of litter present?		
Litter amounts are more or less uniform across site litter standing crop (lb./ac.) is in the range of 65 to 100% of expected amounts under moderate disturbance.	25	
Litter amounts are somewhat patchy across the site and litter standing crop (lb./ac.) is in the range of 35 to 65% of expected amounts under moderate disturbance.	13	
The distribution of litter is not uniform across the site. Litter standing crop (lb./ac.) is in the range of less than 35% of amounts expected under moderate disturbance.	0	
Total for hydrologic function and soil protection		

RANGE HEALTH SCORES

Vegetation status		out of 60
Hydrologic function and soil protection		out of 40
Overall score		out of 100

Density Distribution			
Class	Description of abundance in polygon	Distribution	Score
0	None		5
1	Rare		3
2	A few sporadically occurring individual plants		0
3	A single patch		
4	A single patch plus a few sporadically occurring plants		
5	Several sporadically occurring plants		
6	A single patch plus several sporadically occurring plants		
7	A few patches		
8	A few patches plus several sporadically occurring plants		
9	Several well spaced patches		
10	Continuous uniform occurrences of well spaced plants		
11	Continuous occurrence of plants with a few gaps in the distribution		
12	Continuous dense occurrence of plants		
13	Continuous occurrence of plants with a distinct linear edge in the polygon		

Notes: