Pascopyrum smithii Herbaceous Vegetation [Provisional]

COMMON NAME	Western Wheatgrass Herbaceous Vegetation [Provisional]
SYNONYM	Western Wheatgrass Mixedgrass Prairie
PHYSIOGNOMIC CLASS	Herbaceous vegetation (V)
PHYSIOGNOMIC SUBCLASS	Perennial graminoid vegetation (V.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar grassland (V.A.5)
PHYSIOGNOMIC SUBGROUP	Natural/semi-natural (V.A.5.N)
FORMATION	Medium-tall sod temperate or subpolar grassland (includes sod or mixed sod-bunch graminoids) (V.A.5.N.c.)
ALLIANCE	*Pascopyrum smithii* Herbaceous Alliance

CLASSIFICATION CONFIDENCE LEVEL 3

USFWS WETLAND SYSTEM Upland

RANGE
Globally
This community is found in Montana, Wyoming, Colorado, Idaho, Utah, Nebraska, Saskatchewan, and possibly North Dakota.

Fort Laramie National Historic Site
This community occurs on the floodplain. This type includes the seeded stands east of the Fort Site.

ENVIRONMENTAL DESCRIPTION
Globally
This community occurs on flat to gently sloping topography. Soils are clay, clay loam, and silt loam. It is sometimes found on alluvial fans of small streams. The soils are deep (40-100 cm) and well developed (Godfread 1994).

Fort Laramie National Historic Site
This community occurs on level sites on alluvial soils of the floodplain. Many of the sites were disturbed in the recent past (less than 40 years). This community is occasional in drainage bottoms on Bureau of Land Management land south of the NHS.

MOST ABUNDANT SPECIES
Globally

Statum	Species
Herbaceous	*Pascopyrum smithii*

Fort Laramie National Historic Site

Statum	Species
Herbaceous	*Pascopyrum smithii, Bouteloua gracilis, Sporobolus cryptandrus, Calamovilfa longifolia*

DIAGNOSTIC SPECIES
Globally
Pascopyrum smithii

Fort Laramie National Historic Site
Pascopyrum smithii (as dominant or codominant)

VEGETATION DESCRIPTION
Globally
This is a midgrass community. Shrubs are rare. The dominant species grow to approximately 1 meter. *Pascopyrum smithii* is the only constant dominant species and may have 50% cover. Other species such as *Koeleria macrantha* and *Poa* spp. may be locally abundant. Many other species common in midgrass prairies are also found in this community. These include *Artemisia ludoviciana, Bouteloua gracilis, Nassella viridula*, and *Stipa comata* (Aldous 1924).

Fort Laramie National Historic Site
This community is dominated by *Pascopyrum smithii*. In some areas, few other species occur. The codominant grass species for this community vary. *Bouteloua gracilis* is probably the most common. Other locally dominant species include *Poa pratensis, Distichlis spicata* (in seepage areas north of the canal), and *Sporobolus airoides*, as well as those mentioned above. *Bromus tectorum* can be locally abundant. Herbaceous cover typically is in the 25-50% range, and occasionally greater. Height is generally less than 0.5 m. This type includes seeded stands east of the Fort Site, which are composed of *P. smithii* with and without *Bouteloua gracilis*.

OTHER NOTEWORTHY SPECIES Information not available.

CONSERVATION RANK G3G5Q

RANK JUSTIFICATION

DATABASE CODE CEGL001577

COMMENTS
Globally
This community is similar to several others that are dominated or co-dominated by *Pascopyrum smithii*. Further work needs to be done to refine the differences in composition and environmental characteristics.

Fort Laramie National Historic Site
P. smithii also occurs as a minor component in other grassland types.

REFERENCES
Aldous, A. E. 1924. Types of vegetation in the semiarid portion of the United States and their economic significance. Journal of Agricultural Research 28(2):99-123.

Godfread, C. 1994. The vegetation of the Little Missouri Badlands of North Dakota. Pp. 17-24 In C. H. Schmidt (ed.) Proceedings of the Leafy Spurge Strategic Planning Workshop, Dickinson, ND.