ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: *Muhlenbergia glomerata* / Marsh Muhly

Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	AD	Marsh muhly is sporadic and at the southern limits of the Rocky Mountain and Great Plains segments of its range in Region 2 in Wyoming and Nebraska. It is sparse in Wyoming where it is known from the Black Hills, Absaroka Range and a vague, historical record from the Eastern Plains. These are in the Black Hill and Shoshone national forests of Crook, Park, and historically, in Goshen counties. The Goshen County record is distant from national forest or national grassland. Previous reports from the Bighorn National Forest of the Bighorn Range are now thought to be erroneous. Additional information is needed from the two other states in the region to characterize its regionwide distribution. Marsh muhly is found in bogs, springs, and peaty or calcareous meadows, on floating mats, along stream edges, and shores (Fertig et al. 1994). In Wyoming, it is found at 4,700 to 6,600 feet. This habitat is highly isolated and patchy on the landscape. Specimens of the species recently collected in 2001 by botanists in Black Hills National Forest (South Dakota) and deposited at RM documented the species from upland habitats that are seasonally moist, including aspen groves and draws, in Ponderosa pine landscapes. These habitats are also discontinuous on the landscape. Confidence in Rank High	• Dorn 2001 • Fertig 2001 • Fertig et al. 1994 • Forest Service specimens. 2001. Submitted to RM. • Hallsten 1988 • Marriott 1994 • Mills and Fertig 1996 • USDA Forest Service 2001 • University of Wyoming 1998 • Welp et al. 2000
2 Distribution outside R2	C	Marsh Muhly is known from Newfoundland to the southern Yukon Territory and south to West Virginia, Iowa, Nebraska, Wyoming and Nevada. Elsewhere in Wyoming outside of Region 2, it is present in the Yellowstone Plateau, upper Green River Basin, and Jackson Hole areas of Sublette, and Teton counties. Confidence in Rank High	• Cronquist et al. 1977 • Fertig 1998a • Hitchcock et al. 1969 • NatureServe 2002
3 Dispersal Capability	D	Not known. Confidence in Rank High	• -

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4 Abundance in R2	AD	Marsh Muhly is known from 5 extant records (most recently observed in 2000) and 2 historical reports in Wyoming. Census data are lacking for most sites, but populations appear to be restricted to specialized habitats. Several thousand plants were observed on the National Elk Refuge in 1997. The late summer/early fall flowering period for this plant may help explain why it is infrequently collected (Jennifer Whipple, personal communication). This species is ranked “S1” in Wyoming, “S2” in Nebraska, and is present but not tracked in South Dakota. There are questions whether it occurs on Forest Service – administered lands in Nebraska, and whether it is present in Colorado on national grassland. Confidence in Rank High	• Fertig 2001 • NatureServe 2002
5 Population Trend in R2	D	Not known. Confidence in Rank High	• -
6 Habitat Trend in R2	D	Not known. Confidence in Rank High	• -
7 Habitat Vulnerability or Modification		Marsh Muhly may be threatened by changes in hydrology, grazing, or exotics. It occurs on Swamp Lake Botanical Area of Shoshone National Forest, as well as Yellowstone National Park and National Elk Refuge. The other populations are on multiple-use lands managed by Black Hills and possibly the BLM Pinedale Field Office. Confidence in Rank High	• Fertig 1995 • Fertig 2001
8 Life History and Demographics	D	Marsh muhly is a rhizomatous, perennial graminoid. Flowering and fruiting occur from July through September. Additional information on the species, including life history stages, population structure, longevity, mortality, and seed biology, are not available. Confidence in Rank High	• Hitchcock et al. 1969

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Initial Evaluator(s): Bonnie Heidel and Scott Laursen			Date: 29 May 2001

National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY(L)[1] to occur:

Colorado NF/NG	Known	Likely	**Kansas NF/NG**	Known	Likely	**Nebraska NF/NG**	Known	Likely	**South Dakota NF/NG**	Known	Likely	**Wyoming NF/NG**	Known	Likely
Arapaho-Roosevelt NF			Cimmaron NG			Samuel R.McKelvie NF	?		Black Hills NF			Shoshone NF	X	
White River NF						Halsey NF			Buffalo Gap NG			Bighorn NF		
Routt NF						Nebraska NF	?		Ft. Pierre NG			Black Hills NF	X	
Grand Mesa, Uncompahgre, Gunnison NF						Ogalala NG						Medicine Bow NF		
San Juan NF												Thunder Basin NG		
Rio Grande NF														
Pike-San Isabel NF														
Comanche NG	?													

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[1] Likely is defined as more likely to occur than not occur on the National Forest or Grassland. This generally can be thought of as having a 50% chance or greater of appearing on NFS lands.

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