

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: <i>Alisma gramineum</i> / Narrow-leaf Water-plantain (Scientific Name/Common Name)			
Criteria	Rank	Rationale	Literature Citations
<p>1 Distribution within R2</p>	CB	<p>In Region 2, Narrow-leaf Water-plantain is near the limits of its midcontinental range. It is a plant of low elevation wetlands and slow-moving watercourses, generally at lower elevations than the national forests of Region 2.</p> <p>The counties where it has been collected span three of the four corners of Wyoming, but are widely scattered and few per county. Known collection points do not overlap with any of the Region 2 national forests in Wyoming, though it is likely to occur in Thunder Basin National Grassland.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • Dorn 2001 • Great Plains Flora Association 1986 • University of Wyoming 2001 • Larson 1993 • NatureServe 2002 • University of Wyoming 1998
<p>2 Distribution outside R2</p>	C	<p>Narrow-leaf Water-plantain is a circumboreal species ranging from southwest British Columbia to Quebec and south to northern California, New Mexico, Nebraska, Missouri, and New York.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • Hitchcock et al. 1969 • Gleason 1991
<p>3 Dispersal Capability</p>	C	<p>The plant is often in settings where water levels drop by flowering time, so that seeds fall directly upon exposed soil or muck. The base of the plant is edible and animals that forage or travel through the species' habitat are likely dispersal agents, carrying seed-bearing mud. As such, the species disperses across unsuitable habitat. When water levels persist, the flat seeds float short distances on water, supported on the surface film.</p> <p>Confidence in Rank Medium</p>	<ul style="list-style-type: none"> • Hitchcock et al. 1969 • Personal observation

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4 Abundance in R2	CD	<p>The species is ranked as "S2" in Wyoming with at least 15 recent collection sites spanning most areas of the state. It is not tracked because of the number of records, their wide distribution, and no known threats. It is not tracked or ranked in Colorado and South Dakota, and is ranked "S4" (apparently secure) in Nebraska (NatureServe 2002).</p> <p>Low-elevation riparian habitat is typically privately owned and has been much less intensively sampled in Wyoming. Low numbers could reflect sampling bias to some degree.</p> <p>Colorado and South Dakota abundance data are needed.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> University of Wyoming 1998 Wyoming Natural Diversity Database 2001
5 Population Trend in R2	D	<p>Unknown. Population trend is likely to mirror habitat trend (discussed next).</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> -
6 Habitat Trend in R2	D	<p>Unknown. Narrow-leaf Water-plantain occupies both natural and man-made habitat, including impoundments and ditches. It also persists under some levels of grazing. The relative suitability of man-made habitat vs. natural wetland basins is important in determining effective habitat trend.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> University of Wyoming herbarium records
7 Habitat Vulnerability or Modification	D	<p>Unknown. The relative suitability of man-made habitat vs. natural wetland basins is important in determining habitat vulnerability.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> -

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8 Life History and Demographics	D	<p>Narrow-leaf Water-plantain is an herbaceous perennial that flowers in June-August depending on water levels. It flowers more than once in its life cycle. The relatively large bisexual flowers are characteristic of insect-pollinated plants. The relatively large number of ovaries represents potentially high fruit production. It has a bulb-like swelling at the base of the stem for storing reserves.</p> <p>Additional information on the species, including life history stages, population structure, longevity, mortality, pollination vectors and seed biology, are not available.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> Hitchcock et al. 1969
Initial Evaluator(s): Bonnie Heidel			Date: 11 Oct 2001

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

<u>Colorado NF/NG</u>		<u>Kansas NF/NG</u>		<u>Nebraska NF/NG</u>		<u>South Dakota NF/NG</u>		<u>Wyoming NF/NG</u>	
Known	Likely	Known	Likely	Known	Likely	Known	Likely	Known	Likely
		Cimmaron NG		Samuel R.McKelvie NF	?	Black Hills NF		Shoshone NF	
				Halsey NF		Buffalo Gap NG	X	Bighorn NF	
				Nebraska NF		Ft. Pierre NG	X	Black Hills NF	
				Ogalala NG	X			Medicine Bow NF	
								Thunder Basin NG	X

Literature cited

Dorn, R.D. 1977. Vascular Plants of the Black Hills. Mountain West Publishing, Cheyenne, WY.

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.

ATTACHMENT SS2

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Great Plains Flora Association. 1986. Flora of the Great Plains. Univ. Kansas Press, Lawrence, KS.

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