

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: *Salix candida* / Hoary Willow, Silver Willow, Sage Willow

Criteria	Rank	Rationale	Literature Citations
<p><b>1</b> Distribution within R2</p>	<b>BD</b>	<p>Hoary Willow is at the southern limits of its range in Region 2. It occurs in the Laramie Basin and the Laramie, Absaroka, Beartooth, and Medicine Bow ranges in Albany and Park counties, Wyoming, on the Medicine Bow and Shoshone national forests. In Colorado, it occurs on the Arapaho-Roosevelt, Pike-San Isabel, and Grand Mesa, Uncompahgre, Gunnison national forests. It also occurs in the Black Hills of South Dakota, therefore, additional information is necessary in order to determine its status in Region 2.</p> <p>This species is found on floating mats and in bogs, fens, and willow thickets around ponds on wet to saturated, histic soils, sometimes influenced by limestone. The elevation range is 6,600 to 9,200 feet. Its peatland habitat is very patchy and discontinuous on the landscape.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> <li>• Colorado Native Plant Society 1997</li> <li>• Dorn 1997, 2001</li> <li>• Fertig 1998b, 2000</li> <li>• Fertig and Jones 1992</li> <li>• Fertig and Markow 1998</li> <li>• Jankovsky-Jones et al. 1996</li> <li>• Mills and Fertig 1996</li> <li>• Mills and Neighbours 1995</li> <li>• Porter 1967</li> <li>• Rosenthal 1998, 1999</li> <li>• Sanderson and March 1996</li> <li>• Spackman et al. 1997</li> <li>• University of Wyoming 1998</li> <li>• USDA Forest Service 2001</li> <li>• Walford et al. 1997</li> </ul>
<p><b>2</b> Distribution outside R2</p>	<b>C</b>	<p>Hoary Willow is known from Labrador to Alaska and south to the Great Lakes states, South Dakota, Colorado, and Idaho. In Wyoming, it is known from outside Region 2 in Jackson Hole, the Wind River Range, the Yellowstone Plateau, and the Green River Basin in Teton, Sublette, and Park counties.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> <li>• Brunsfeld and Johnson 1985</li> <li>• Dorn 1997, 2001</li> <li>• Fertig 1995, 1998a, 2000</li> <li>• Hitchcock and Cronquist 1964</li> <li>• Markow and Fertig 1993</li> <li>• Moseley et al. 1991</li> <li>• University of Wyoming 1998</li> </ul>
<p><b>3</b> Dispersal Capability</p>	<b>C</b>	<p>Hoary Willow's seed is transported by wind, allowing it to disperse readily across unsuitable habitat.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> <li>• Hitchcock and Cronquist 1964</li> </ul>

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4 Abundance in R2	BD	<p>Hoary Willow is known from 10 extant occurrences and 1 historical record in Wyoming. Eight of these populations have been discovered or relocated since 1994 (most recently in 1999). Three of the extant occurrences and the historical record are on the Medicine Bow National Forest and 2 of the extant occurrences are on the Shoshone National Forest. Known populations are mostly very small and restricted to specialized wetland habitats that are themselves very uncommon. This species is ranked "S2" in Wyoming and Colorado and "S1" in South Dakota.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> <li>• Fertig 1995, 1998a, b, 2000</li> <li>• Fertig and Jones 1992</li> <li>• Jankovsky-Jones et al. 1996</li> <li>• Mills and Fertig 1996</li> <li>• Mills and Neighbours 1995</li> <li>• Rosenthal 1998, 1999</li> <li>• University of Wyoming 1998</li> <li>• USDA Forest Service 2001</li> <li>• Walford et al. 1997</li> <li>• WYNDD 2002</li> </ul>
5 Population Trend in R2	D	<p>Trends are not known. Some habitat may have been lost in the Laramie Valley since European settlement.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> <li>• Fertig 2000</li> </ul>
6 Habitat Trend in R2	D	<p>Not known.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> <li>• -</li> </ul>
7 Habitat Vulnerability or Modification	BD	<p>Populations may be threatened by grazing pressure on the National Elk Refuge. Hoary Willow occurs in the Swamp Lake Special Botanical Area, the Sheep Mountain Wildlife Refuge, and on lands managed for multiple use by the Bridger-Teton, Medicine Bow, and Shoshone national forests. It also occurs in Yellowstone National Park, the National Elk Refuge, and possibly the BLM Pinedale Field Office.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> <li>• Fertig 1995, 1998a, b, 2000</li> <li>• Fertig and Jones 1992</li> <li>• Jankovsky-Jones et al. 1996</li> <li>• Mills and Fertig 1996</li> <li>• Mills and Neighbours 1995</li> <li>• Rosenthal 1998, 1999</li> <li>• University of Wyoming 1998</li> <li>• Walford et al. 1997</li> <li>• WYNDD 2002</li> </ul>

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Criteria	Rank	Rationale	Literature Citations
8 Life History and Demographics	D	<p>Hoary Willow is a dioecious shrub. The flowers are wind-pollinated. Flowering and fruiting occur from June through July.</p> <p>Additional information on the species, including life history stages, population structure, longevity, mortality, and seed biology, are not available.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> <li>• Dorn 1997</li> <li>• Fertig 2000</li> <li>• Fertig and Markow 1998</li> <li>• Hitchcock and Cronquist 1964</li> </ul>
Initial Evaluator(s): Joy Handley, Bonnie Heidel and Scott Laursen			Date: May 8, 2002

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

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<sup>1</sup> 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

<u>Colorado NF/NG</u>	Known	Likely	<u>Kansas NF/NG</u>	Known	Likely	<u>Nebraska NF/NG</u>	Known	Likely	<u>South Dakota NF/NG</u>	Known	Likely	<u>Wyoming NF/NG</u>	Known	Likely
Arapaho-Roosevelt NF	X		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		
Grand Mesa, Uncompahgre, Gunnison NF	X					Ogalala NG						Medicine Bow NF	X	
San Juan NF												Thunder Basin NG		
Rio Grande NF														
Pike-San Isabel NF	X													
Comanche NG														

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## ATTACHMENT SS2

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## ATTACHMENT SS2

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