

SPECIES: Scientific [common]	<i>Carex microglochin</i> [False uncinia sedge]
Forest:	Bridger-Teton National Forest
Forest Reviewer:	Daniel Lay/Rose Lehman; K. Clause
Date of Review:	1/25/2020; 3/27/2021; 3/25/25
Forest concurrence (or recommendation if new) for inclusion of species on list of potential SCC: (Enter Yes or No)	No

FOREST REVIEW RESULTS:

1. The Forest concurs or recommends the species for inclusion on the list of potential SCC:
Yes ___ No X
2. Rationale for not concurring is based on (check all that apply):
Species is not native to the plan area _____
Species is not known to occur in the plan area _____
Species persistence in the plan area is not of substantial concern X

FOREST REVIEW INFORMATION:

1. Is the Species Native to the Plan Area? Yes X No ___

If no, provide explanation and stop assessment.
2. Is the Species Known to Occur within the Planning Area? Yes X No ___

If no, stop assessment.

Table 1. All Known Occurrences, Years, and Frequency within the Planning Area

Year Observed	Number of Individuals	Location of Observations (USFS District, Town, River, Road Intersection, HUC etc.)	Habitat Description	Source of Information ¹
7/12/1994 7/16/2006 7/24/2018	N/A N/A N/A	West Slope Wind River Range: unnamed cold water spring due N of Kendall Warm Springs; ca 30 air mi NNW of Pinedale.	Graminoid fen below marl pools with hummocks, 7800 ft.	Collector: Walter Fertig, Collection #15054, 22817 (Rocky Mountain Herbarium, accessed 2020). SEINet, 2020 & WYNDD, 2019.

¹The Consortium of Pacific Northwest Herbaria (Consortium of Pacific Northwest Herbaria 2019) and the Rocky Mountain Herbarium (RMH, 2020) were also searched, and no additional occurrences on the Bridger-Teton National Forest were found.

a. Are all Species Occurrences Only Accidental or Transient?

Yes ___ No X

If yes, document source for determination and stop assessment.

b. For species with known occurrences on the Forest since 1990, based on the number of observations and/or year of last observation, can the species be presumed to be established or becoming established in the plan area?

Yes X No ___

If no, provide explanation and stop assessment

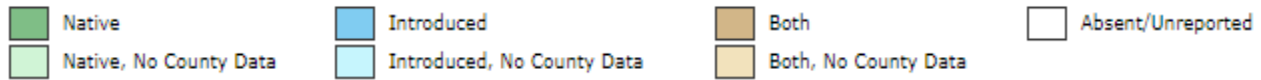
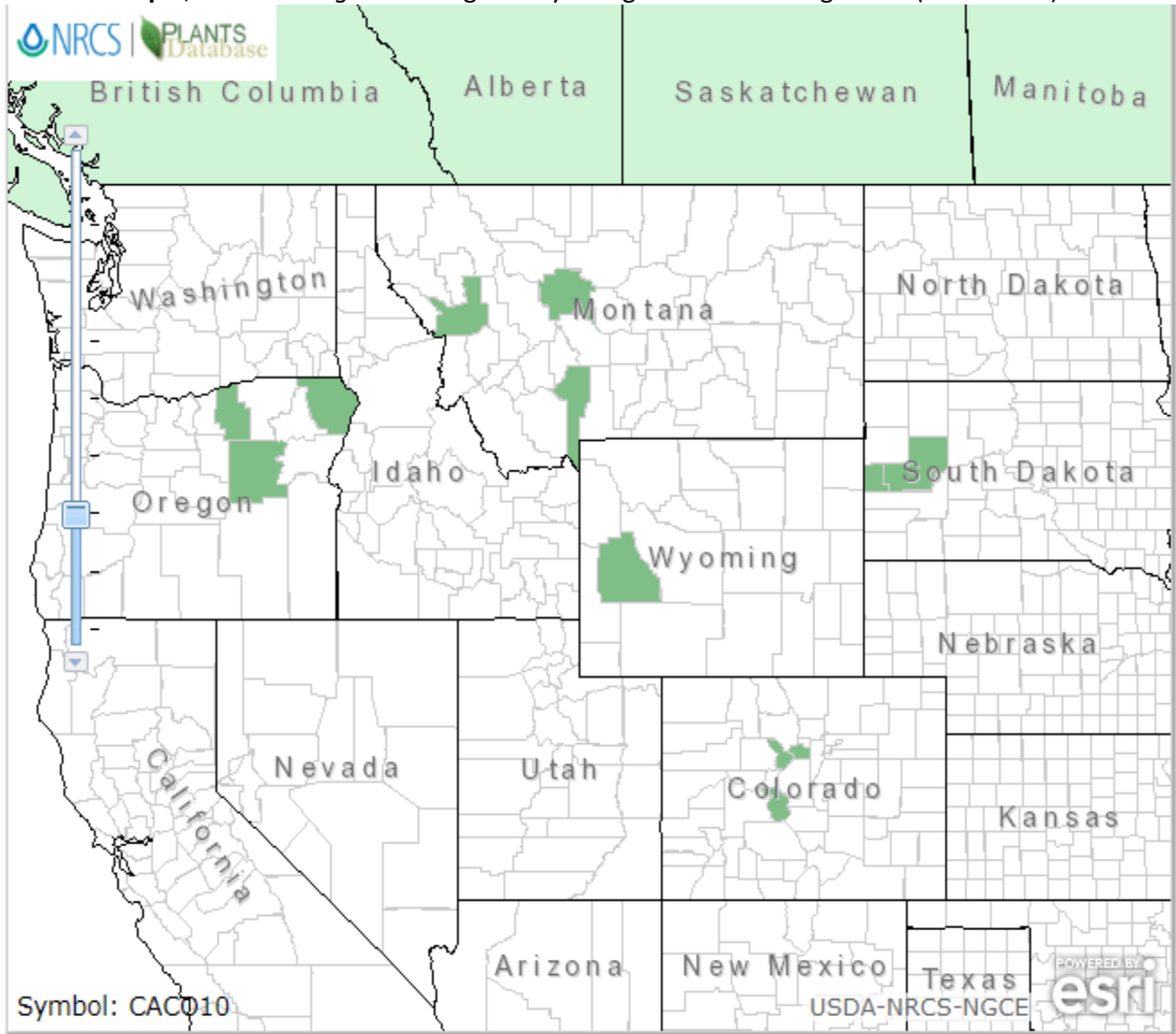
c. For species with known occurrences on the Forest predating 1990, does the weight of evidence suggest the species still occurs in the plan area?

Yes X No ___

Provide explanation for determination

If determination is no, stop assessment

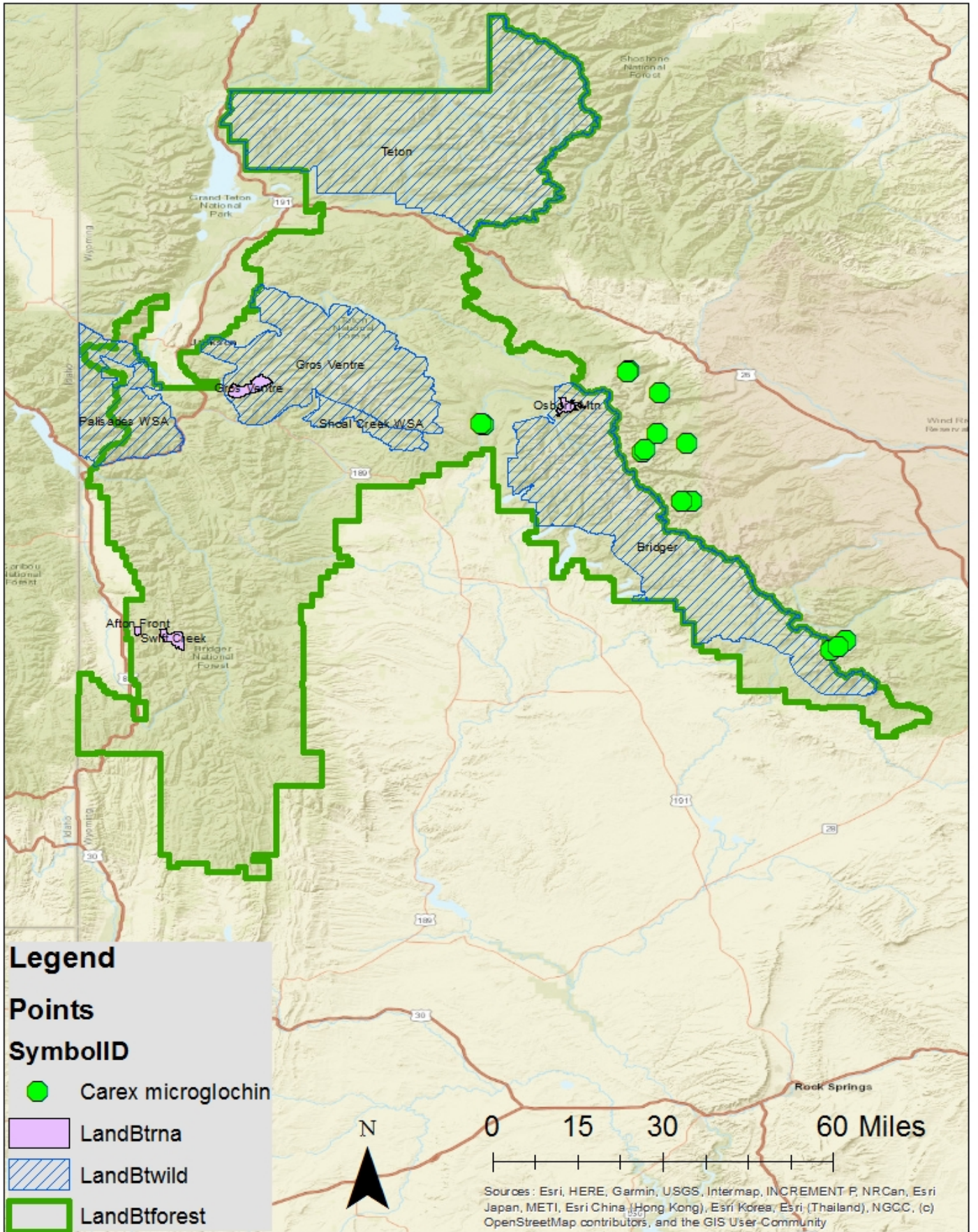
d. **Map 1, *Carex microglochis* range in Wyoming and surrounding states (NRCS 2020).**



Native Status:



Map 2: *Carex microglochis* occurrences on the Bridger-Teton National Forest and vicinity.



3. Is There Substantial Concern for the Species' Capability to persist Over the Long-term in the Plan Area Based on Best Available Scientific Information?

Table 2. Status summary based on existing conservation assessments

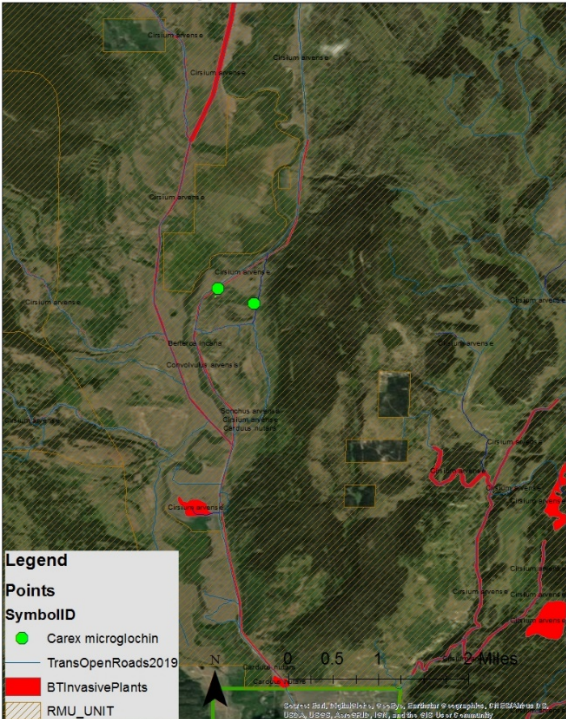
Entity	Status/Rank (include definition)
NatureServe Global Status	G5— Apparently Secure <i>At very low risk of extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.</i>
NatureServe State Status	S2— Imperiled <i>At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.</i>
WYNDD	Plant Species of Concern G5/S2 <i>Species vulnerable to extirpation at the global or state level due to:</i> <i>a. their rarity (e.g., restricted distribution, small population size, low population density)</i> <i>b. inherent vulnerability (e.g., specialized habitat requirements, restrictive life history)</i> <i>c. threats (e.g., significant loss of habitat, sensitivity to disturbances)</i> (Wyoming Natural Diversity Database - Species of Concern)
USDA Forest Service	Not listed
USDOI FWS	Not listed
USDOI BLM	Not listed

Sources: WYNDD 2019; Heidel 2018; USDA Forest Service Regions 2 and 4 Sensitive Species Lists; NatureServe 2020.

Table 3. Status summary based on best available scientific information.

Criteria	Rationale
Distribution on the Bridger-Teton National Forest	Table 1 and Map 2 detail <i>C. microglochin</i> occurrences in the Bridger-Teton National Forest. The only EO that occurs on the Bridger-Teton NF is located near Kendall Warm Spring Special Interest Area at an elevation of 7,800 feet.
Distribution outside the Bridger-Teton National Forest	Newfoundland to Alaska, south to Connecticut, Pennsylvania, Minnesota, and Washington. Disjunct populations occur in Montana, Wyoming, and Colorado. In Wyoming it is known from the Yellowstone Plateau, and northern Absaroka and Wind River Ranges in Fremont, Park, and Sublette counties.
Abundance on the Bridger-Teton National Forest	<p>There have been three visits at the only occurrence on the BTNF, and none of those visits contained abundance data. However, according to (Fertig & Mills, 2000), populations may be locally abundant in limited areas of specialized habitat.</p> <p>Although the entirety of Bridger-Teton National Forest has not been floristically inventoried, some areas within and adjacent to Bridger-Teton National Forest have been surveyed over the years. This species was not documented during these survey efforts:</p> <ul style="list-style-type: none"> • Sensitive plant surveys and status of rare plant species on Bridger-Teton National Forest, 1997-1998 (Fertig 1999) • A Floristic Inventory of Grand Teton National Park, Pinyon Peak Highlands, and Vicinity, Wyoming U.S.A (Kesonie and Hartman 2011) • Sensitive and rare plant species inventory in the Salt River and Wyoming Ranges, Bridger-Teton National Forest (Heidel 2012). • Rare Species and Riparian Vegetation of the Snake River Basin in Wyoming (Jones et al. 2002)
Population Trend on the Bridger-Teton National Forest	Data on population trends for this species have not been collected. No other sources provide additional population or multi-year trend monitoring data.
Habitat Trend on the Bridger-Teton National Forest	In (Heidel, 2019), a level 1 inventory of fens on the forest was conducted to determine the status and species diversity of fens on the Bridger-Teton NF. Most of the fens that were surveyed had little to no natural or anthropological impacts. In areas along the Green River with easy access and seemingly high-visitation, the fens showed surprisingly few hydrological disturbances. With the data provided within (Heidel, 2019), it can be assumed that habitat for <i>C. microglochin</i> is stable, but further studies need to be conducted to determine the long-term trend of the habitat.
Threats to the Species and its Habitat on the Bridger-Teton National Forest	Riparian and wetland habitat may be threatened by climate change effects and disturbance or loss of wetland habitat. Changes in flow regimes, such as those from water diversions and dams, impact the amount, season, and timing of flows. This can substantially alter associated riparian and wetland species because of their dependence on fluvial geomorphic process, surface water, and

Criteria	Rationale
	<p>groundwater. Floods are responsible for erosion, transport, and deposition of sediments, as well as the amounts and location of vegetation and debris. Many dominant riparian species, such as cottonwoods and willows, are pioneer species that depend on these events to provide bare, moist substrates necessary for seed germination and plant establishment (Halofsky et al. 2018). Mid-elevation riparian and wetland communities are rated as having a moderate to high sensitivity to climate change, moderate adaptive capacity, and moderate to high vulnerability (Halofsky et al. 2018). Mid-elevation riparian plant species may have the ability to move upward in elevation, but where resilience has been compromised by human uses, these systems may not be able to easily adjust to changes in their environment. Invasive species that already dominate many mid-elevation sites are likely to expand their dominance. As riparian areas become drier, upland species will continue to expand into these sites (Halofsky et al. 2018). Grazing can impact wetlands by altering water quality, trampling herbaceous vegetation, increasing bare ground, and facilitating noxious weed expansion in riparian areas. Rangelands form a major component of ecosystems in the Bridger-Teton National Forest, and there are open rangelands throughout the Forest (USFS 2017). No active grazing allotments overlap the two occurrences, but it is possible that they overlap potential habitat and could limit future recruitment. Adherence to rangeland management plans will limit the chance of overgrazing.</p> <p>The <i>C. microglochin</i> occurrence is within close proximity to nonnative invasive plant, <i>Cirsium arvense</i>, which occurs along the Green River Road (see map 3). The likelihood of <i>C. arvense</i> impacting the fen/riparian area is quite low, as <i>C. arvense</i> is limited to more xeric/mesic environments where there are not waterlogged soils (NRCS, 2020).</p>

Criteria	Rationale
	<p data-bbox="792 212 1052 233">Map 3: <i>Carex microgloch</i> and associated threats</p>  <p data-bbox="448 978 1369 1052">A forest system road does come within 300 feet of the <i>C. microgloch</i> occurrence, but does not seem to have any direct impacts (see map 3).</p> <p data-bbox="448 1073 1495 1182">The above analysis suggests that habitat for <i>C. microgloch</i> may have experienced low impacts from natural and anthropogenic disturbances, but may experience increased long-term effects from climate change.</p>
<p data-bbox="131 1205 407 1356">Life history and demographic characteristics of the species</p>	<p data-bbox="448 1205 1487 1356"><i>Carex microgloch</i> is a low-growing perennial graminoid with slender rootsalks, that flowers June-August. Life history and dispersal capacity knowledge is generally limited. Habitat is described as occurring in fens, bogs, and willow thickets on wet saturated histic soils (WWND, 2019).</p>
<p data-bbox="107 1379 423 1577">Date: January 25, 2020 Reviewer: D. Lay Updated: K. Clause 3/25/25</p>	

Summary and Recommendations

Species (Scientific and Common Name): *Carex microglochin* (False uncinia sedge)

Carex microglochin is listed as S2 (imperiled) and G5 (secure) globally. General habitat has been described as Fens, bogs, and other areas with saturated histic soils. Although it is sparse in Wyoming, it appears to be relatively abundant and secure as a circumboreal plant.

Only one occurrence has been documented on the BTNF which is also within the protections of the Kendall Springs Special Interest Area. This occurrence has had no baseline abundance or population trend assessments conducted. Additional surveys and long-term trend monitoring need to be conducted on this occurrence to assess the trend of the populations on the BTNF.

Threats to current habitat include climate change and hydrologic alteration. Grazing and invasive plant species do not pose much of a threat to *C. microglochin* as current occurrence is in a protected area and the habitat is not preferred by the nearest invasive plants. Climate change is projected to be a long-term threat to both populations and habitat for this species. With the lack of sufficient trend and abundance data, the fact that the species is globally secure, and existing protections from the Kendall Springs Special Interest area, it is not recommended as a Species of Conservation Concern.

Evaluator: Daniel Lay; Rose Lehman Date: 1/25/2020; 3/27/2021 Updated: K. Clause 3/25/25

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