

SPECIES: Scientific [common]	<i>Potamogeton friesii</i> [Fries' pondweed]
Forest:	Bridger-Teton National Forest
Forest Reviewer:	Daniel Lay/Rose Lehman, K. Clause, Trevor Bloom
Date of Review:	1/27/2020; 3/27/25
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 N
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
8/11/1990	N/A	West Slope Wind River Range: Mosquito Lake, 1/4 mi due E of Union Pass Road; ca 37 air mi NNW of Pinedale.	Submerged aquatics growing in Mosquito Lake.	Collector: Walter Fertig #5905 (Rocky Mountain Herbarium, accessed 2020). SEINet, 2020)

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?

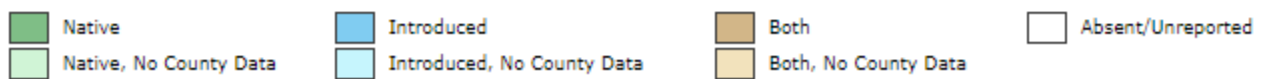
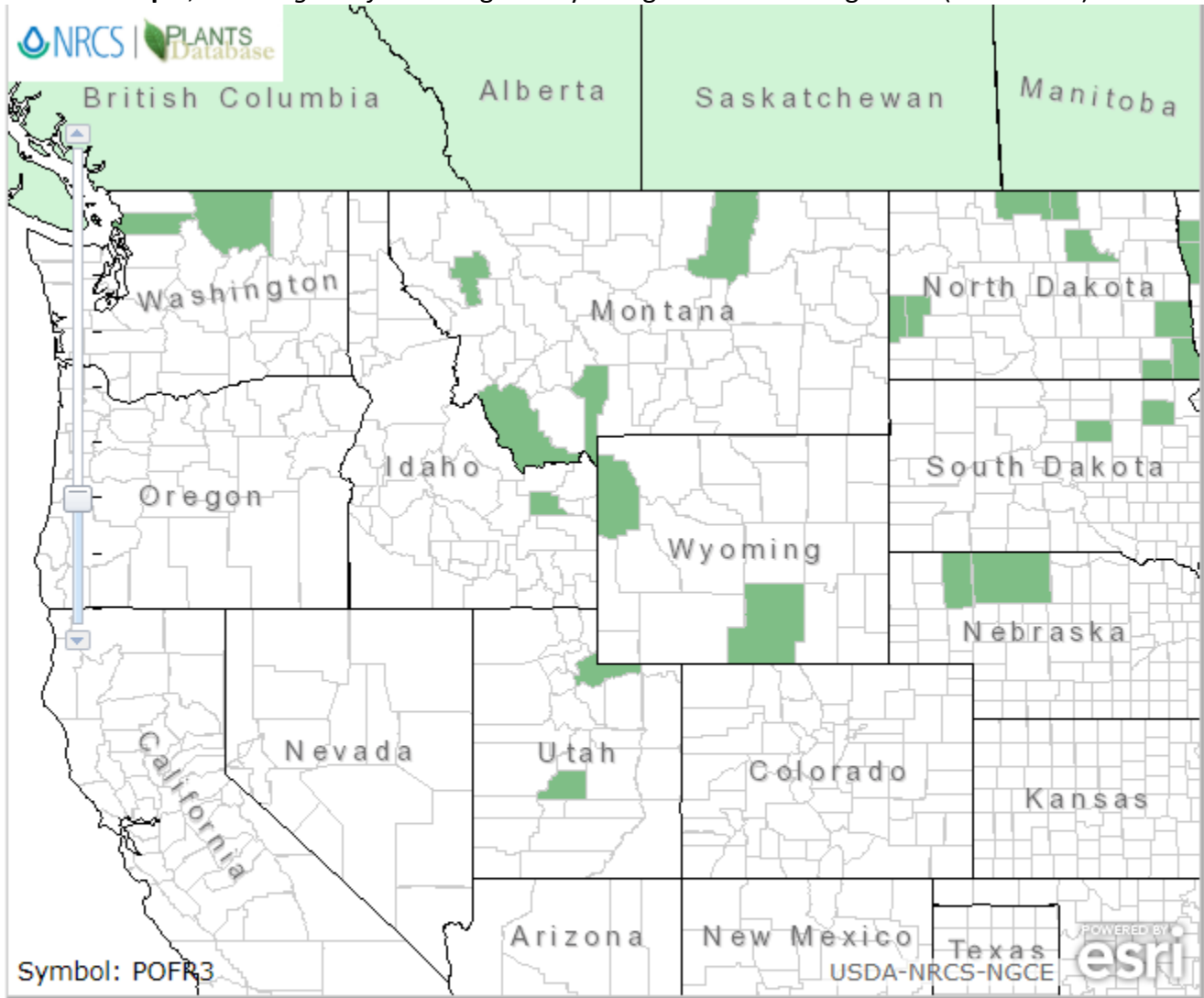
Yes___ No___

Provide explanation for determination

No occurrences predating 1990.

If determination is no, stop assessment

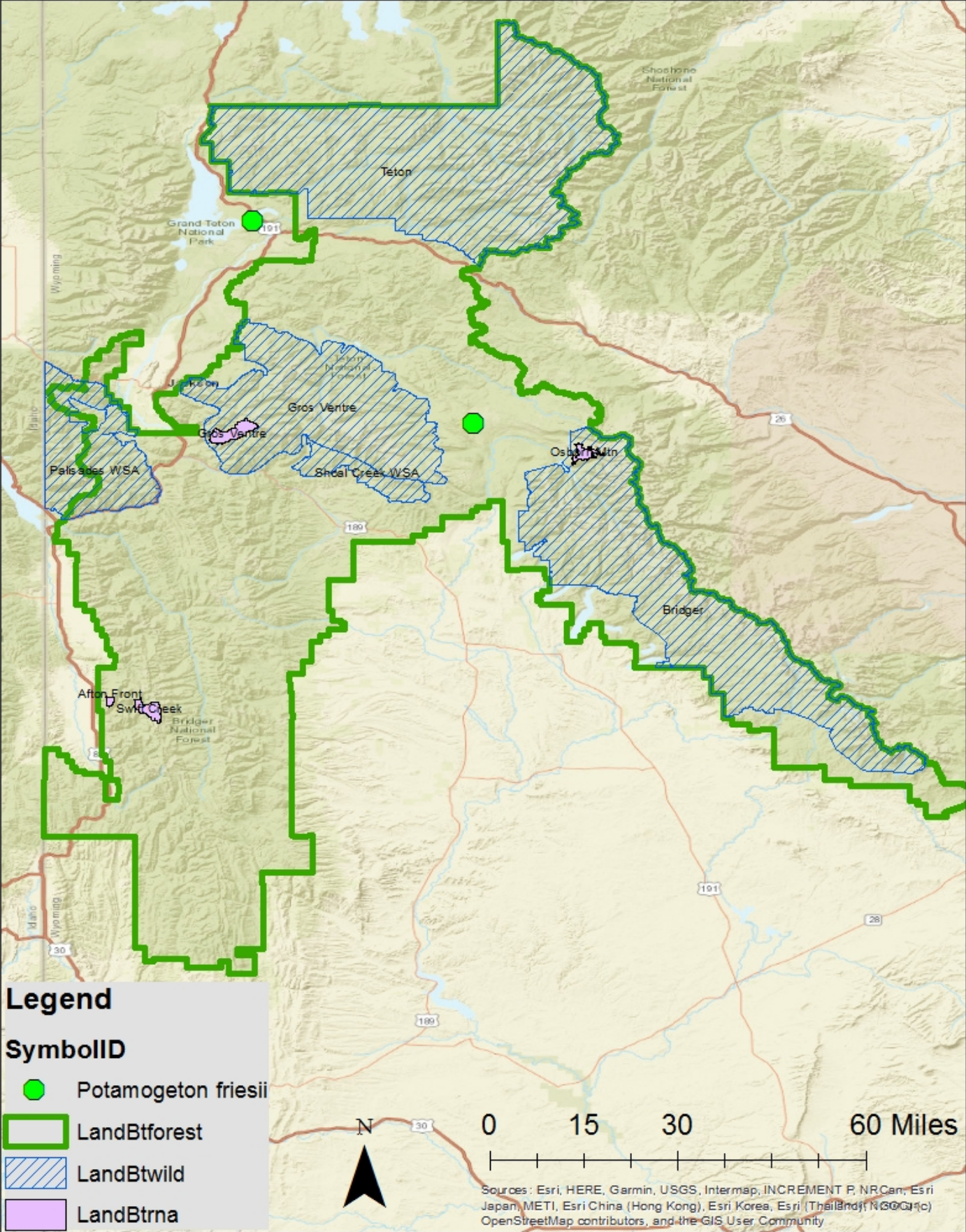
d. **Map 1, *Potamogeton friesii* range in Wyoming and surrounding states (NRCS 2020).**



Native Status:



Map 2: *Potamogeton friesii* occurrences within 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	N/A 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 - not a Species of Concern)
USDA Forest Service	Not listed
USDOI FWS	Not listed
USDOI BLM	Not listed

Sources: WYNDD 2025; 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>Potamogeton friesii</i> occurrences in the Bridger-Teton National Forest. There is one occurrence at Mosquito Lake on the Bridger-Teton NF near union pass. This plant grows directly in the water of Mosquito Lake.
Distribution outside the Bridger-Teton National Forest	Alaska to Newfoundland, south to Washington, Utah, South Dakota, Indiana and Virginia. In Wyoming it is known from the Absaroka, Wind River, and Medicine Bow ranges and Jackson Hole in Carbon, Park, and Teton counties.
Abundance on the Bridger-Teton National Forest	<p>No abundance data was collected for the 1990 visit.</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 on the BTNF.
Habitat Trend on the Bridger-Teton National Forest	Habitat trend fluctuates with annual snowpack and precipitation. The composition and distribution of alpine ecosystems will be affected by decreasing snowpack. Some species may be able to persist or migrate to suitable habitat, but the lower extent of some communities will be compromised by tree establishment (Halofsky et al., 2018).
Threats to the Species and its Habitat on the Bridger-Teton National Forest	Wetland habitat may be threatened by climate change effects and disturbance or loss of wetland habitat. A decline in winter snowpack is expected to become an increasing trend, which will result in less stored water, and decreased stream flows that provide habitat for <i>P. friesii</i> . 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 wetland species because of their dependence on fluvial geomorphic process, surface water, and groundwater (Halofsky et al., 2018). This occurrence occurs in the sub-alpine/alpine zones for the area, and are at greater risk for adverse effects from climate change. Grazing can impact wetlands by altering water quality, and facilitating noxious aquatic weed expansion into wetland areas. Recreational activities such as boating and

Criteria	Rationale
	fishing can also have adverse impacts on <i>P. friesii</i> .
Life history and demographic characteristics of the species	<i>Potamogeton friesii</i> is a submerged aquatic herb that flowers June-August. Dispersal is via rhizomes or the transport of turions (Adamec, 2018). Habitat is described as ponds, lakes or reservoirs at 6,300-8,860 feet (Fertig & Markow, 2000).
Date: January 27, 2020 Reviewer: D. Lay	

Summary and Recommendations
Species (Scientific and Common Name): <i>Potamogeton friesii</i> (Fries' pondweed)
<p><i>Potamogeton friesii</i> is listed as S2 (imperiled) and G5 (secure) globally. It has not been identified as a Species of Concern by WYNDD. General habitat has been described as rooted in the mud of lakes, ponds or reservoirs. Although it is rare in Wyoming, it is distributed fairly well throughout its circumboreal range.</p> <p>Only one occurrence have been documented on the BTNF with only one visit total. This occurrence has had no baseline abundance or population trend assessments conducted. Additional surveys and long-term trend monitoring need to be conducted on these occurrences to assess the trend of the populations on the BTNF.</p> <p>Threats to current habitat include recreation, aquatic invasive plants, climate change, and water quality impacts from a variety of uses. Climate change is projected to be a long-term threat to both populations and habitat for this species. Aquatic Invasive plant species have not been documented in the immediate area of these lakes.</p> <p>There is a lack of sufficient population status and trend data for <i>P. friesii</i> on the Bridger-Teton, therefore, it is not recommended to be a Species of Conservation Concern at this time.</p>
Evaluator: Daniel Lay Date: 1/27/2020 Updated: K. Clause 3/27/25

References

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