SPECIES: Scientific [common]	*Potamogeton amplifolius* [Large-leaf pondweed]
Forest:	Bridger-Teton National Forest
Forest Reviewer:	**Daniel Lay/Rose Lehman; K. Clause, Trevor Bloom**
Date of Review:	**1/25/2020; 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_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]
7/28/1973 8/2/1990		New Fork Lake near Cora. West Slope Wind River Range; north shore of New Fork Lakes, ca 17 air miles north of Pinedale.	In about 12 feet of water. Willow swamp between wilderness parking lot and narrows campground. Growing in Upper New Fork Lake.	Collector: Walter Fertig #5189 & Peter Dunwiddie #167 (Rocky Mountain Herbarium, accessed 2020). SEINet, 2020 & WYNDD, 2025.
8/8/1956	N/A	Lake of the Woods, near the Continental Divide, ca 1 mile west of Union Pass.	In 5-7 feet of clear water in a soft, muddy bottomed lake.	WYNDD, 2025

[1]The 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

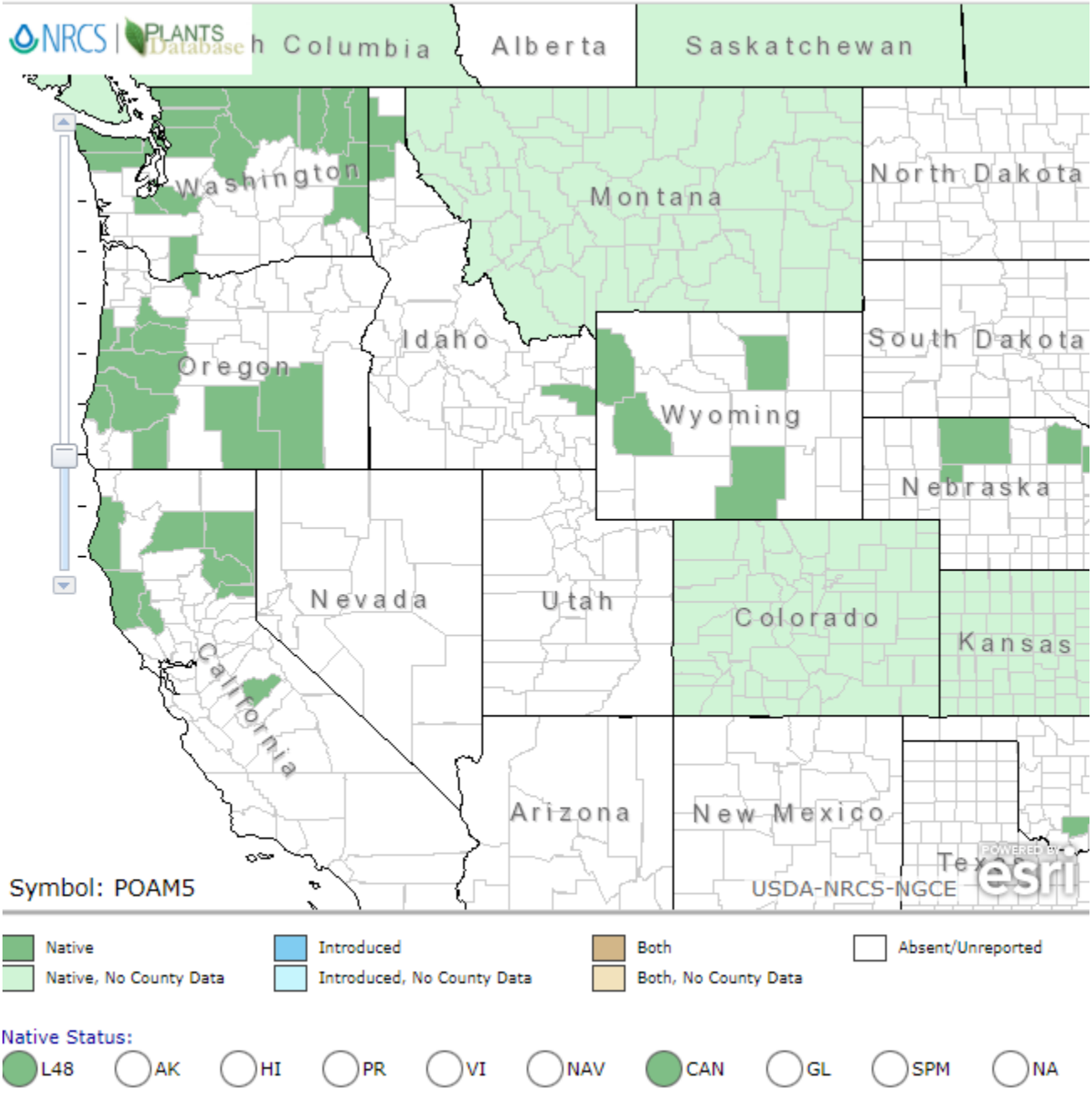
c. For species with known occurrences on the Forest predating 1990, does the weight of evidence suggest the species still occurs in the plan area?

Yes_X__ No___

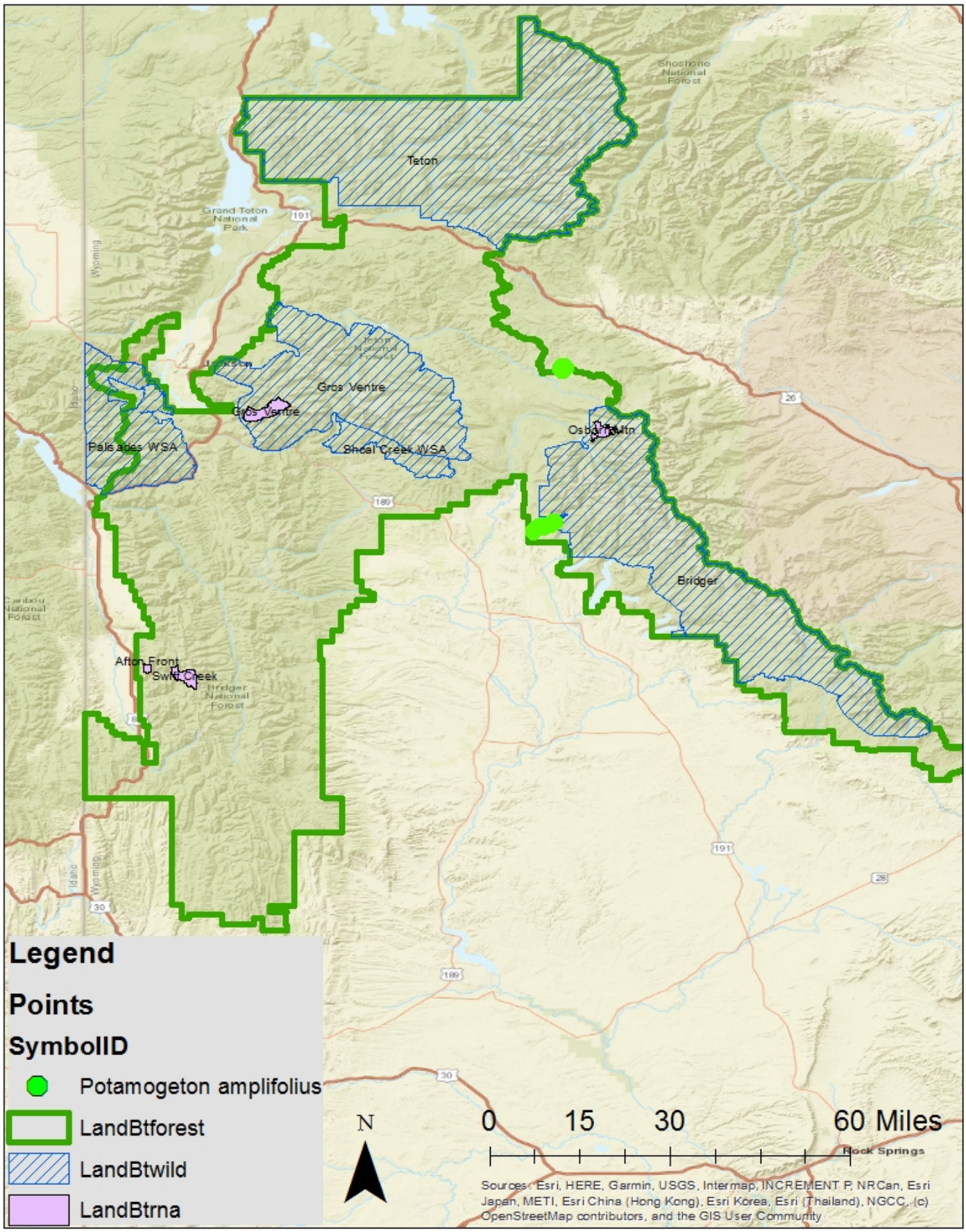
Provide explanation for determination

If determination is no, stop assessment

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



Map 2: Potamogeton amplifolius occurrences within the Bridger-Teton National Forest.



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** *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.*
NatureServe State Status	**S1S2— Critically Imperiled or Imperiled** *At very high to high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.*
WYNDD	**Plant Species of Concern** **G5/S1S2** *Species vulnerable to extirpation at the global or state level due to:* *a. their rarity (e.g., restricted distribution, small population size, low population density)* *b. inherent vulnerability (e.g., specialized habitat requirements, restrictive life history)* *c. threats (e.g., significant loss of habitat, sensitivity to disturbances)* (Wyoming Natural Diversity Database - Species of Concern)
USDA Forest Service	Species of local concern: Bighorn National Forest
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 *Potamogeton amplifolius* occurrences in the Bridger-Teton National Forest. There are two occurrences on the Bridger-Teton NF; one is located at New Fork Lakes, and the other is located at Lake of The Woods. Both occurrences grow directly in the water.
Distribution outside the Bridger-Teton National Forest	British Columbia to Quebec, south to California, Wyoming, Arkansas, and Virginia. In Wyoming it is known from the Sierra Madre, Beartooth, Bighorn, and Wind River ranges in Carbon, Fremont, Johnson, Park, and Sublette counties.
Abundance on the Bridger-Teton National Forest	With three visits at two separate occurrences on the BTNF, none of these visits contained abundance data. 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: • 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, although presence detected at the same site on two separate occasions. No other sources provide additional population or multi-year trend monitoring data.
Habitat Trend on the Bridger-Teton National Forest	Habitat trend fluctuates with seasonal flows into New Fork Lake and Lake of The Woods. New Fork Lake is used for irrigation in the valleys and is constantly in an ebb and flow pattern. Recent news has discussed the idea of better irrigation practices or potentially altering the lake to provide for more water (Thuermer, 2017).
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 *P. amplifolius*. 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). Recreational activities such as boating can also have adverse impacts on *P. amplifolius.*

Criteria	Rationale
	Recent news has discussed the idea of better irrigation practices or potentially altering the lake to provide for more water (Thuermer, 2017), which could also be an adverse impact.
Life history and demographic characteristics of the species	*Potamogeton amplifolius* is a large-leafed aquatic perennial herb that flowers June-August. Life history and dispersal capacity knowledge is generally limited. Habitat is described as slow-moving streams and lakes, usually in deep water at 7,820-9,400 feet (Fertig, 2000).
Date: January 27, 2020 Reviewer: D. Lay Updated: K. Clause 3/27/25	

Summary and Recommendations
Species (Scientific and Common Name): *Potamogeton amplifolius* (Large-leaf pondweed)
Potamogeton amplifolius is listed as S1S2 (critically imperiled) and G5 (secure) globally. General habitat has been described as slow-moving streams and lakes, usually in deep water. Although it is sparse in Wyoming, it is distributed well throughout its range, especially in the northeastern United States, and appears to be relatively abundant and secure within it main range. Only two occurrences have been documented on the BTNF with only three visits 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. 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. Due to a lack of sufficient population status and trend data, globally secure status, and BTNF's low contribution to status, it is not recommended to be a Species of Conservation Concern at this time.
Evaluator: Daniel Lay Date: 1/27/2020 Updated: K. Clause 3/27/25

References

Consortium of Pacific Northwest Herbaria. 2019. Specimen data search. Available at: http://pnwherbaria.org.

Fertig, W. 2000. Wyoming State Species Abstract. Wyoming Natural Diversity Database. Laramie, WY: University of Wyoming.

Fertig, W. 1999. Sensitive plant surveys and status of rare plant species on Bridger-Teton National Forest, 1997-1998. Report prepared by the Wyoming Natural Diversity Database, Laramie, Wyoming.

Fertig, W. 2000. Status of Plant Species of Special Concern in US Forest Service Region 4 in Wyoming. Prepared for the U.S. Forest Service, by the Wyoming Natural Diversity Database, University of Wyoming. Laramie, WY.

Halofsky, Jessica E.; Peterson, David L.; Ho, Joanne J.; Little, Natalie, J.; Joyce, Linda A., eds. 2018. Climate change vulnerability and adaptation in the Intermountain Region. Gen. Tech. Rep. RMRS-GTR-375. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. Part 1. pp. 1–197.

Heidel, B. 2012. Sensitive and rare plant species inventory in the Salt River and Wyoming Ranges, Bridger-Teton National Forest. Wyoming Natural Diversity Database. Laramie, WY.

Heidel, B. 2018. Wyoming plant species of concern, March 2018. Wyoming Natural Diversity Database, Laramie, WY. Accompanied by Wyoming plant species of potential concern, with tables of additions and deletions.

Heidel, B. 2019. Botany inventories in select fens of the Caribou-Targhee and Bridger-Teton National Forests. Report prepared for the USDA Forest Service – Region 4 by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.

Jones, G.P., R.S. Smith, W.F. Fertig, D.A. Keinath, M.L. Neighbours, L.A. Welp and G.P. Beauvais. 2001. Rare Species and Riparian Vegetation of the Snake River Basin in Wyoming. Prepared for the U.S. Bureau of Reclamation, by the Wyoming Natural Diversity Database, University of Wyoming. Laramie, WY.

Kesonie, D. and Hartman, R. 2011. A Floristic Inventory of Grand Teton National Park, Pinyon Peak Highlands, and Vicinity, Wyoming U.S.A. Journal of the Botanical Research Institute of Texas 5(1) pages 357 – 388.

National Resources Conservation Service (NRCS). 2020. Internet website: https://plants.usda.gov. Accessed on August 03, 2019.

NatureServe. 2020. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Internet website: http://explorer.natureserve.org.

Rocky Mountain Herbarium Specimen Database. 2020 University of Wyoming, Department of Botany. Laramie, WY. Internet website: http://rmh.uwyo.edu/data/search.php. Accessed July 2020.

SEINet. 2020. SEINet data portal. Available at: http://swbiodiversity.org/seinet/collections/index.php.

Thuermer, A. 2017. Study: Drain New Fork Lake 7 feet for irrigation. Retrieved from https://www.wyofile.com/study-drain-new-fork-lake-7-feet-irrigation/

Wyoming Natural Diversity Database. 2025. Wyoming Natural Diversity Database; Data Explorer. Laramie, WY: University of Wyoming.