



Biodiversity Research Institute

To: Bridger Teton National Forest

Subject: Bridger-Teton National Forest's Draft Assessment

24 August 2025

To Whom it May Concern:

We would like to comment on the Proposed Terrestrial Wildlife Species of Conservation Concern (SCC) in the current Bridger-Teton National Forest's (BTNF) Draft Assessment. We feel that it is worth considering the inclusion of the Common Loon (*Gavia immer*; loons) as a SCC, and regardless of SCC designation, to continue to manage habitat for this rarest breeding bird and the highest ranked Species of Greatest Conservation Need in Idaho and Wyoming (IDFG 2017, WGFD 2017).

The BTNF-presented Evaluations for Species Not Considered as Potential SCC for this decision-making process has outlined many of our concerns and draws heavily from our own annual reports. Therefore, we would like to focus our current comments on three main points: the extirpation potential of known breeding loon territories in the BTNF, the importance of the BTNF in the GYE population's health, and the disproportionate lack of understanding of the GYE Common Loon's population range in the BTNF.

Background

As a symbol of Wilderness, the Common Loon is the only species of loon to occupy the plateaus of the Greater Yellowstone Ecosystem (GYE; Paruk et al. 2021). With roughly two dozen pairs identified annually, GYE loons are the smallest and most isolated population of Common Loons in North America. This population's nearest neighbor is ~200 miles (300km) away in Montana, well beyond the average 12-25km dispersal distance for loons or any maximum recorded dispersal distance (Piper et al. 2013).

Localized extirpation through western settlement has left the GYE population of loons entirely dependent on public lands for breeding sites (1989-2024; WGFD 2020; Greater Yellowstone Common Loon Working Group [GYCLWG] unpublished data). Following the functional extirpation of Idaho loons in the 1990s, all recent breeding activity within the

GYE is assumed to occur within Wyoming (Hammond 2009, MTFWP 2015, Orabona 2016, IDFG 2017, GYCLWG unpublished data).

Localized Extirpation Potential

In Montana, continued site occupancy is primarily dependent on the density of territorial loons, with low-density areas being the most vulnerable to site abandonment and pair loss (Hammond 2009). In 2025 alone, 12% of the known recent breeding territories in the GYE were without documented pairs, leaving just 47% of historical breeding sites occupied. Despite supporting the largest abundance of potential loon habitat in Wyoming, the BTNF is known to host just 2-3 breeding loon pairs, making them highly vulnerable to loss through stochastic events.

All but one breeding pair in the BTNF is located in the Wind River Range, with the Winds ~80 miles (120km) disjointed from other known breeding pairs in the GYE. This distance is potentially twice the maximum known dispersal distance of any known individual loon dispersal. As an isolated subset of the GYE population, continued occupancy of Wind River habitat is likely dependent or heavily reliant on the productivity and survival of existing pairs.

Of the territories that have been identified in the Wind River Range, only one currently supports productivity levels capable of maintaining adult replacement and pair stability. Similar loss of breeding pairs and limited dispersal ability have caused significant range retraction throughout the western United States, leading to extirpation in California and Oregon, Idaho in most years, and large parts of Washington. Segments at a distance from the core GYE population in and around Yellowstone would face an uphill battle to recolonize if lost. The Wind River Range represents an extraordinarily isolated segment in the most disjointed breeding population within the species range.

Human disturbance has been identified as a primary threat to loon productivity, as it can result in nest failures and eventually breeding site abandonment (Brown & Patla 2018). Current recreational activity is expected to impact the breeding success of 2 out of 3 of the known loon pairs in the BTNF. It would be important that any infrastructure expansion or improvement around these lakes, consider the impact on breeding loon habitat requirements.

Breeding Contribution

While the BTNF possessed only 8% of the GYE's known territorial pairs in 2025, it produced 20% of fledged chicks. Noteworthy is that no management unit supported a majority of chick production (Figure 1). In contrast to Yellowstone National Park, with 16 documented pairs, the BTNF with only two confirmed pairs, produced 50% as many chicks in the same breeding season. This also stresses the disproportionate contribution of highly productive pairs and supportive habitat, which the BTNF possess.

Without recruitment in the BTNF's portion of the GYE Common Loon breeding range in 2025, annual recruitment would only have averaged approximately at the 0.48 chicks fledge per territorial pair mark, an established threshold needed to sustain loon populations over time, and not in the expected realm of growth through recruitment. While this is only a one-year snapshot, breeding pairs in the BTNF have acted as regional anchors with low pair turnover, and dispersal events from the BTNF resulting in recolonization of previously vacant neighboring management units (e.g. Grand Teton National Park).

Mgmt		Pairs		% of Pairs		Chicks		% of Chicks

BTNF		2		8%		3		20%
CTNF		5		21%		4		27%
GRTE		1		4%		2		13%
YELL		16		67%		6		40%

Figure 1. Greater Yellowstone Ecosystem Common Loon Breeding Pairs and Chick Productivity by Management Unit (2025). Total number of territorial pairs (pairs), proportion of pairs by unit (%_Pairs), number of chicks fledged (chicks), and percentage of total chicks fledge by management unit (%_chicks).

Lack of Understanding

The remote nature of the BTNF's Wilderness, combined with imperfect aerial survey detection and an abundance of potential breeding lakes in a likely low-density Wind River Range have contributed to a disproportionately lower understanding of historic and current breeding sites relative to other management units in the GYE.

We stress that the total number of territorial pairs within the BTNF is poorly understood, and the importance of loons in the BTNF is likely more significant in the overall population's health than currently reported. Habitat modification that takes place without identifying the presence of breeding loons is a risk in the BTNF where distribution is poorly

understood. It should be emphasized that the total number of breeding pairs in the BTNF is very likely above the 8% reported for 2025.

Conclusions

The BTNF's survey coordination and voluntary information signage with the public has very likely played an important role in providing quality habitat for a species that is known to have individuals breed into their 40s. In a population of only 24 breeding pairs, the continued maintenance of habitat for each pair is critical for their long-term persistence. The Common Loon is a species in which active management can and currently does make a meaningful difference in its long-term presence on the landscape.

We appreciate the opportunity to comment on the current Draft Assessment, and greatly appreciate the efforts, partnership and leadership taken by the BTNF and its staff in ensuring this species continued place on the GYE's landscape.

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Citations

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