

SPECIES: Scientific [common]	<i>Charina bottae</i> [Northern Rubber Boa]
Forest:	Bridger-Teton National Forest
Forest Reviewer:	Randall Griebel, James Wilder
Date of Review:	05/29/2018; reviewed 2/24/2025
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	Source of Information
Unknown	0	Greys River Ranger District	Wyoming Natural Diversity Database; USFS Natural Resource Information System; WGFD (May 2018)
2015	1 individual		
Unknown	0	Kemmerer Ranger District	Wyoming Natural Diversity Database; USFS Natural Resource Information System; WGFD (May 2018)
2009-2017	3 individuals		
Unknown	0	Pinedale Ranger District	Wyoming Natural Diversity Database; USFS Natural Resource Information System; WGFD (May 2018)
1991-2017	0		
Unknown	0	Big Piney Ranger District	Wyoming Natural Diversity Database; USFS Natural Resource Information System; WGFD (May 2018)
1991-2017	0		
Unknown	0	Blackrock Ranger District	Wyoming Natural Diversity Database; USFS Natural Resource Information System; WGFD (May 2018)
1991-2017	0		
Unknown/ 1941-1990	2 individuals	Jackson Ranger District	Wyoming Natural Diversity Database; USFS Natural Resource Information System; WGFD (May 2018)
1991-2017	3 individuals		

**Numbers are approximations. Due to an overlap in data from multiple datasets, duplicate occupancy records are expected. This is avoided to the extent practicable. The number of records is provided as opposed to the number of individuals; this is because the number of juveniles, metamorphs, and tadpoles in each dataset were too large to count accurately.*

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 ___

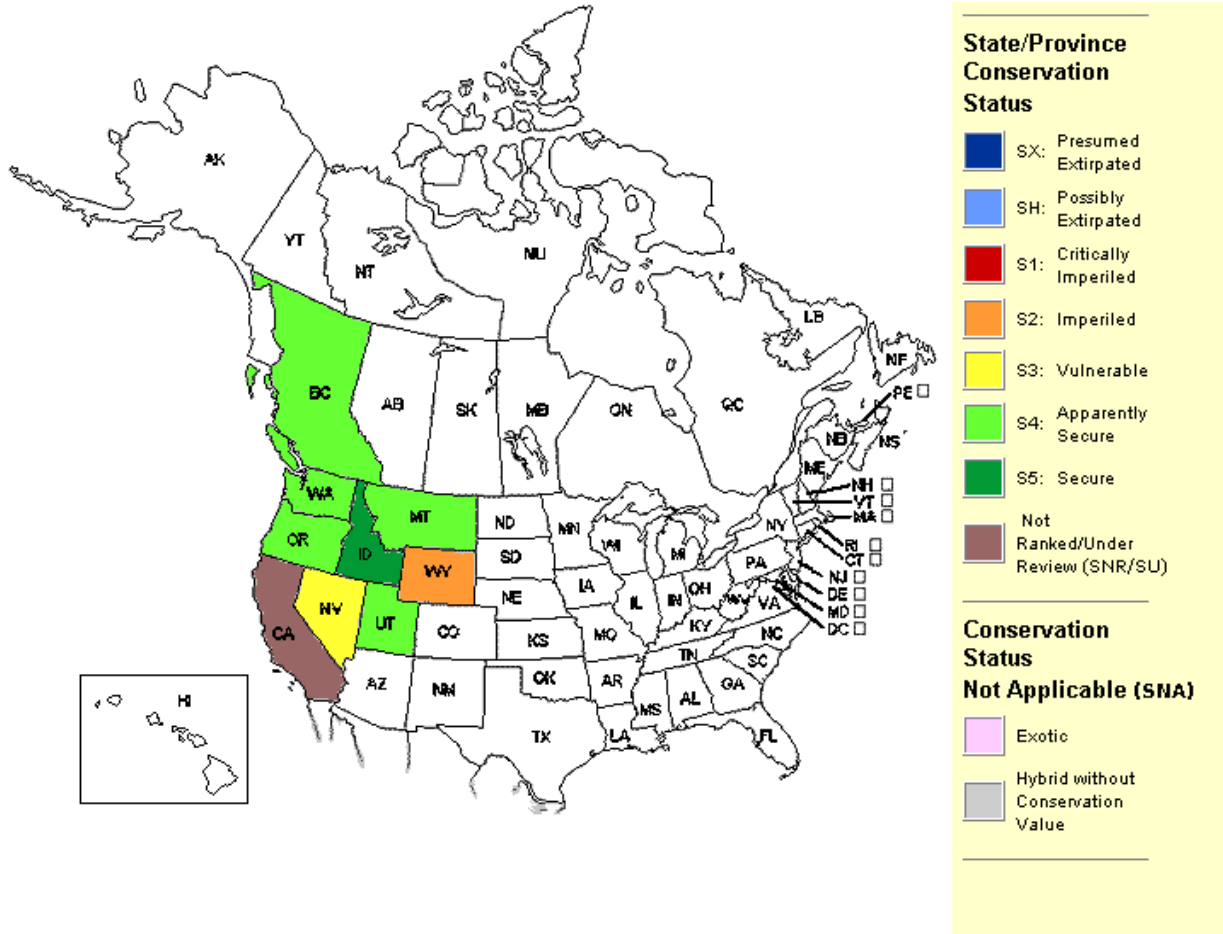
If no, provide explanation and stop assessment

- 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___

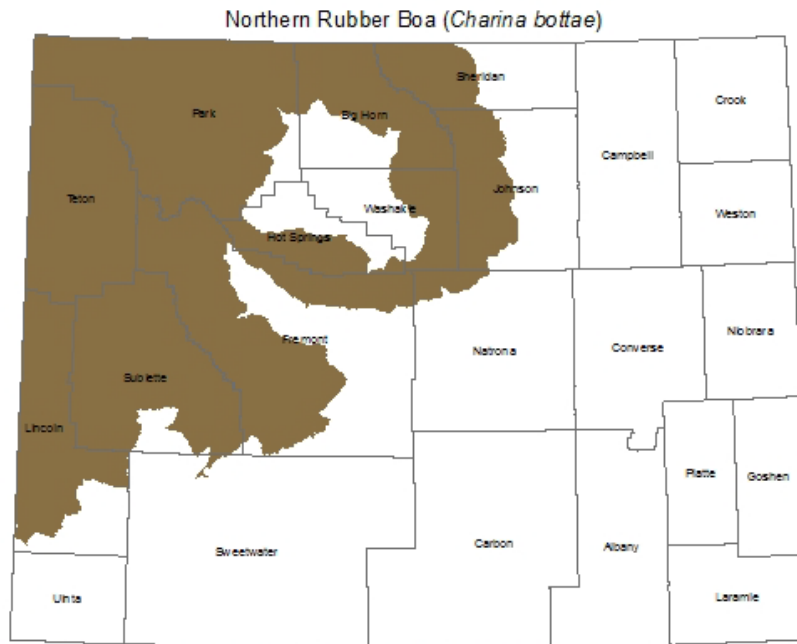
Provide explanation for determination; If determination is no, stop assessment

- d. **Map 1**, Northern rubber boa distribution map of North America



Nature Serve. Accessed April 2018. Northern Rubber Boa (*Charina bottae*).

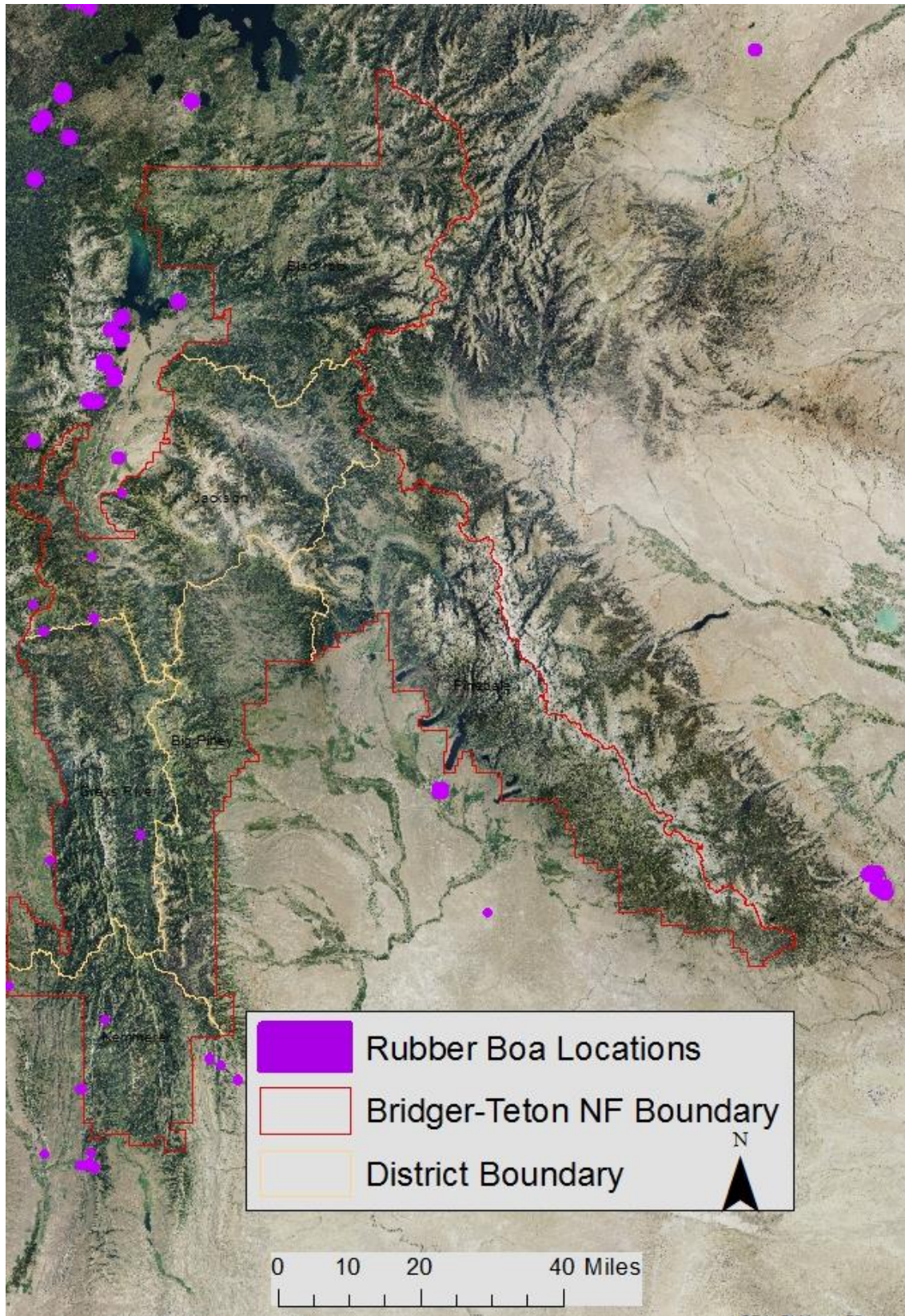
e. **Map 2**, Range and predicted distribution of *Charina bottae* in Wyoming.



SOURCE: Digital maps of ranges for Wyoming Species of Greatest Conservation Need: February 2016. Wyoming Game and Fish Department. Note that brown indicates the current known range of the species.

Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Northern Rubber Boa (*Charina bottae*).

f. **Map 3**, Map of Rubber boa occurrences on the Bridger-Teton National Forest (Wyoming Natural Diversity Database, USFS Natural Resource Information System, & WGFD [May 2018])



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 if Other)
NatureServe Global Status	<p>G5— Demonstrably Secure</p> <p><i>Widespread in western North America; secure due to widespread and locally common occurrence in many areas that still provide suitable habitat.</i></p>
NatureServe State Status	<p>S2—Imperiled</p> <p><i>Imperiled—Imperiled in the nation or state/province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province.</i></p>
WGFD	<p>NSS3 (Bb), Tier 2</p> <p><u>Population Status:</u> <i>Vulnerable. Restricted in numbers and distribution, extirpation is not eminent.</i></p> <p><u>Limiting Factor:</u> <i>Habitat: the low elevation forested habitat for this species is limited, but loss is not increasing significantly.</i></p> <p><u>Tier 2:</u> <i>Moderate priority</i></p> <p><i>[The WGFD's Species of Greater Conservation Need (SGCN) designation process is based upon its Native Species Status (NSS) classification system that compares population and limiting factor variables using a 16 cell matrix. As a species moves from a placement closest to the upper left corner of the matrix (Aa/NSS1) toward the lower right corner (Dd/NSS7) the species' population status in Wyoming is considered more secure. Numerical scores were assigned to each of these variables and summed to provide a total score (i.e. NSS3). SGCN were placed into one of three tiers based on their total score: Tier I – highest priority, Tier II – moderate priority, and Tier III – lowest priority.]</i></p> <p><i>(WGFD - Wyoming Species of Greatest Conservation Need)</i></p>
WYNDD	<p>Species of Concern</p> <p><i>Species vulnerable to extirpation at the global or state level due to:</i></p> <ul style="list-style-type: none"> <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	Region 4: No special status
USDI FWS	No Special Status
WY BLM	No Special Status
IUCN	LC - Least concern <i>A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category. (IUCN – Red List Categories and Criteria)</i>

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

Species (Scientific and Common Name): <i>Charina bottae</i> [Northern Rubber Boa]		
Criteria	Rationale	Literature Citations
Distribution on Bridger-Teton National Forest	Distribution is difficult to determine because of the lack of baseline surveys and the cryptic nature of this species. Suspected low density on the Bridger-Teton Forest because of the paucity of observations within the forest boundary relative to a few miles outside the boundary. The association of rubber boas with the foothills and lower montane zone of Wyoming may also limit their distribution in the higher elevation areas of the Bridger-Teton forest.	Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Wyoming Natural Diversity Database (May 2018).
Abundance on the Bridger-Teton National Forest	There is a lack of basic information on the species presence, distribution, and ecology in Wyoming. Given that there are 9 reported detections of this species on the forest, relative to areas surrounding the forest (Map 3), it is assumed that their abundance is low within the Bridger-Teton National Forest boundary.	Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Wyoming Natural Diversity Database (May 2018).
Population Trend on the Bridger-Teton National Forest	The population trend is not known for the forest. Below is the global trend from NatureServe: Short-term Trend: Relatively Stable (<=10% change) Short-term Trend Comments: Overall, the extent of occurrence, area of occupancy, number of subpopulations, and population size probably are relatively stable. Long-term Trend: Decline of <30% to relatively stable	Nature Serve. Accessed 2018. Northern Rubber Boa (<i>Charina bottae</i>).
Habitat Trend on the Bridger-Teton National Forest	In general, Northern rubber boa habitat includes woodlands, forest clearings, patchy chaparral, meadows, and grassy savannas, generally not far from water; also riparian zones in arid canyons and sagebrush in some areas (NatureServe 2018). In Wyoming they are found in the foothills and lower montane zones and prefer areas with nearby water and an abundance of flat rocks, logs, stumps, and boulders (Baxter and Stone 1985, Ernst and Ernst 2003 <i>in</i> SWAP 2017). Although the low elevation forested habitat for this species is limited, loss is not increasing significantly (SWAP 2017).	Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Nature Serve. Accessed 2018. Northern Rubber Boa (<i>Charina bottae</i>).

Species (Scientific and Common Name): <i>Charina bottae</i> [Northern Rubber Boa]		
Criteria	Rationale	Literature Citations
Threats to the Species and its Habitat on the Bridger-Teton National Forest	In some parts of the country, this species has been the target of collection for the pet trade (NatureServe 2018). Timber harvest practices and prescribed burning activities may also be a threat if they remove or reduce habitat structures important to rubber boas (i.e, rocks, stumps, logs, bark from dead or fallen trees).	Nature Serve. Accessed 2018. Northern Rubber Boa (<i>Charina bottae</i>). Wyoming Game and Fish Department. 2017. State Wildlife Action Plan.
<p>Summary and recommendations:</p> <p>The Bridger-Teton National Forest is within and near the eastern extent of the range of the Northern rubber boa. There are very few detections of this species on the BTNF. However, the species is cryptic and there have not been thorough surveys on the forest. Although their abundance and distribution across the forest is uncertain, the detections near but outside the forest boundary suggest that abundance is low on the BTNF. The population size is estimated at 10,000-1,000,000 individuals across their range.</p> <p>Trend for the BTNF and the global range is uncertain, but suspected to be relatively stable to declining <30% across their range. This species is vulnerable to loss of low elevation montane habitat through forest management activities. The projected logging program on the BTNF is not expected to contribute substantially to additional loss or degradation of habitat. Impacts of weather and prey availability on survival are probably not outside the normal range of variation.</p> <p>While habitat is limited, and abundance appears low on the BTNF, habitat loss is not increasing significantly on the BTNF and the species is demonstrably secure rangewide. While there is uncertainty of population trends on the Forest, there is little concern for habitat decline, concluding that the species' capability to persist over the long-term within the planning unit is currently adequate. Therefore, it is not recommended that the Northern rubber boa be proposed as a Species of Conservation Concern for the Bridger-Teton National Forest.</p> <p>Evaluator(s): G. Wes Watts, Randall Griebel</p>		Date: May 27, 2018