

SPECIES: Scientific [common]	<i>Oncorhynchus virginalis bouvieri</i> [Yellowstone Cutthroat Trout (YCT)]
Forest:	Bridger-Teton National Forest
Forest Reviewer:	Patrick M. Barry, Masako Wright
Date of Review:	1/16/2020, 7/10/2025
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 _____

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. Some of the 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.)	Source of Information
		See Map 2	

- 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?

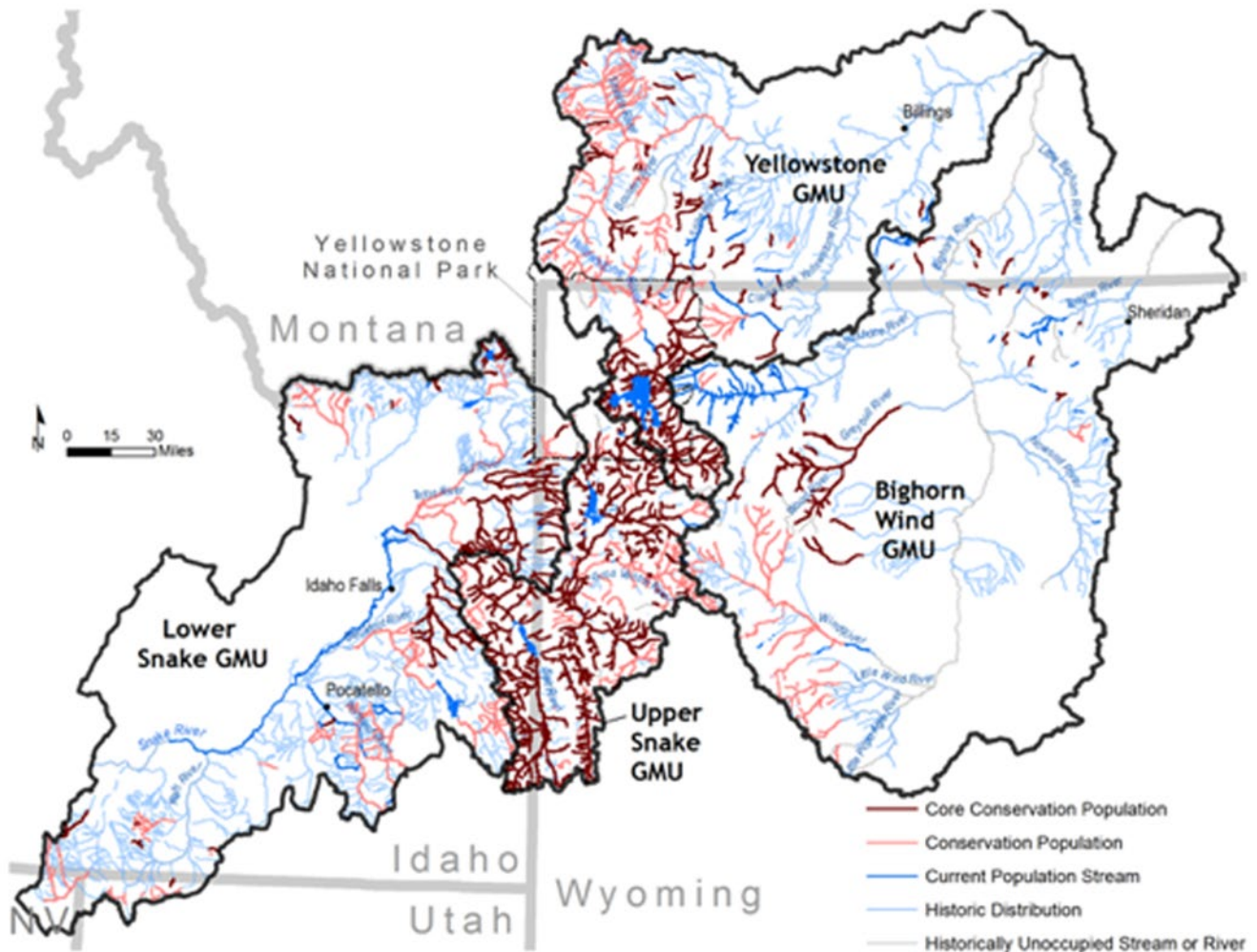
Yes ___ No ___

Provide explanation for determination

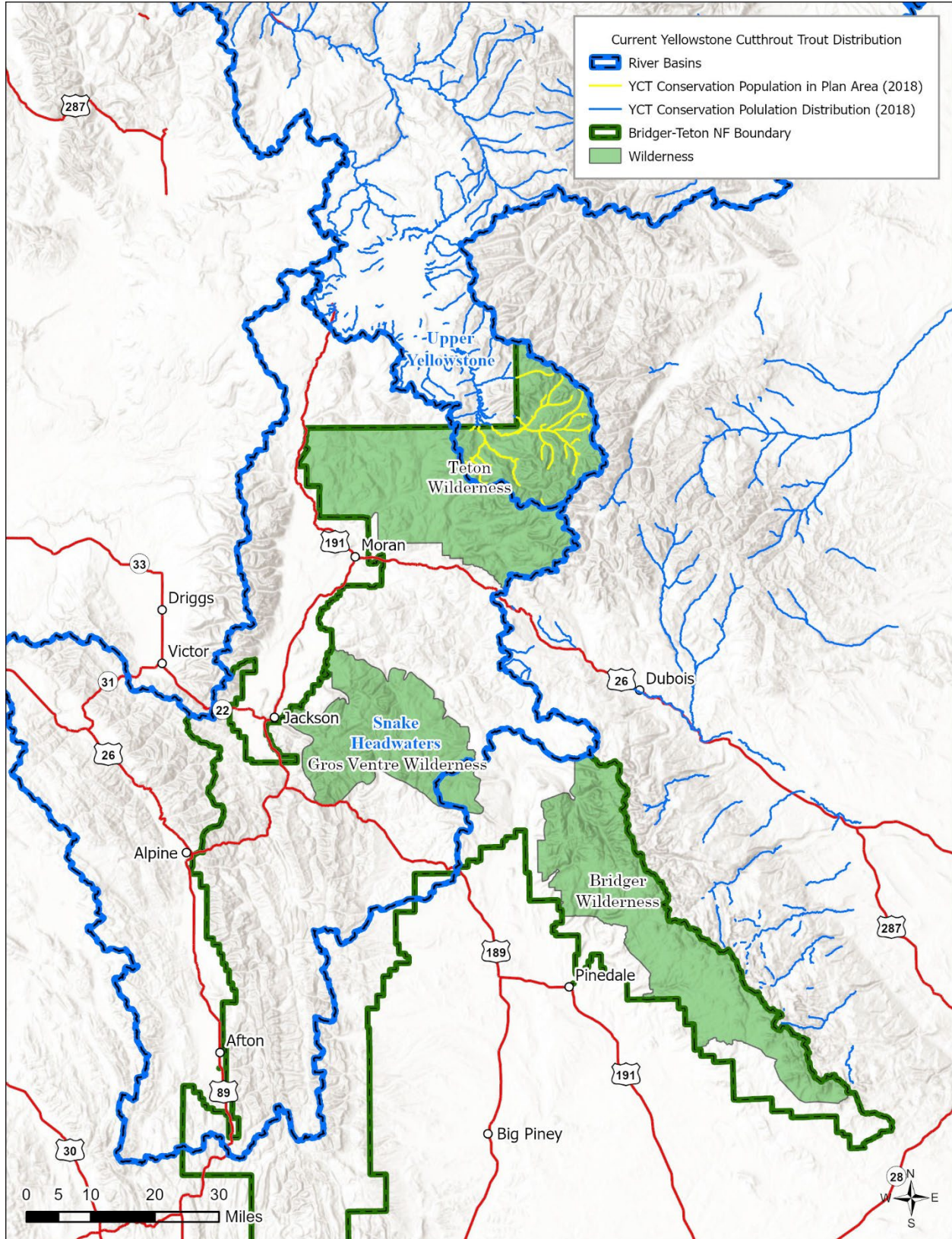
N/A-There are known occurrences on the Forest since 1990.

If determination is no, stop assessment

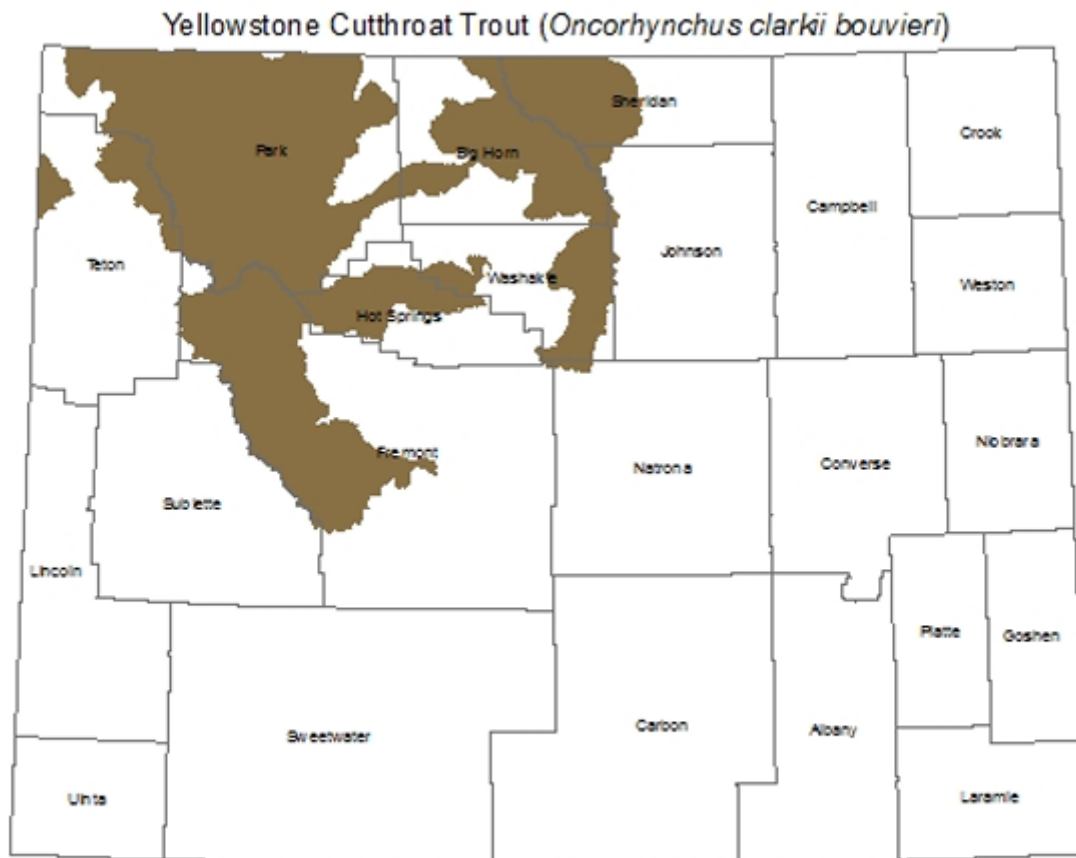
d. **Map 1.** The distribution of Yellowstone Cutthroat Trout (within Yellowstone GMU) (Western Native Trout Initiative 2019).



Map 2. The current distribution of Conservation Populations of Yellowstone Cutthroat Trout within the Plan Area.



Map 3. Range of Yellowstone Cutthroat Trout (*Oncorhynchus clarkii bouvieri*) in Wyoming (WGFD 2017).



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.

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	<p>GNR T4 (Infraspecific Taxon) — Apparently Secure (Yellowstone Cutthroat Trout)</p> <p><i>Uncommon but not rare; some cause for long-term concern due to declines or other factors.</i></p>
NatureServe State Status	<p>S2—Imperiled (Yellowstone Cutthroat Trout)</p> <p><i>At high risk of extirpation in the jurisdiction due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.</i></p>
WGFD	<p>NSS3 (Bb), Tier II</p> <p><i><u>Population Status:</u> Vulnerable - Population size or distribution is restricted or declining but extirpation is not imminent.</i></p> <p><i><u>Limiting Factors:</u> Severe - Limiting factors are severe and not increasing significantly.</i></p> <p><i><u>Tier II:</u> 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.] (Wyoming Game and Fish Department 2017)</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> <p><i>(Wyoming Natural Diversity Database - Species of Concern)</i></p>

<p>USDA Forest Service</p>	<p>Region 4: Sensitive Species</p> <p><i>Those plant and animal species identified by a Regional Forester for which population viability is a concern, as evidenced by</i></p> <ul style="list-style-type: none"> <i>a. Significant current or predicted downward trends in population numbers or density.</i> <i>b. Significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.</i> <p>(FSM 2670.5 – Threatened, Endangered & Sensitive Species)</p>
<p>USDOJ FWS</p>	<p>No Special Status; Listing Not Warranted</p> <p><i>A formal proposal for listing as Endangered or Threatened was recently denied.</i></p>
<p>USDOJ BLM</p>	<p>Sensitive</p> <ul style="list-style-type: none"> <i>1. Sensitive species must be native species found on BLM-administrated lands for which BLM has the capability to significantly affect the conservation status of the species through management, and either:</i> <ul style="list-style-type: none"> <i>a. There is information that a species has recently undergone, is undergoing, or is predicted to undergo a downward trend such that the viability of the species or a distinct population segment of the species is at risk across all or a significant portion of the species range, or</i> <i>b. The species depends on ecological refugia or specialized or unique habitats on BLM-administrated lands, and there is evidence that such areas are threatened with alteration such that the continued viability of the species in that area would be at risk.</i> <i>2. All federally designated candidate species, proposed species, and delisted species in the 5 years following their delisting shall be conserved as Bureau sensitive species</i> <p>(BLM Wyoming Sensitive Species Policy and List; March 31, 2010)</p>

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

<p>Criteria</p>	<p>Rationale</p>
<p>Distribution on the Bridger-Teton National Forest</p>	<p>Yellowstone cutthroat are game fish native to coldwater habitats in the Snake, Yellowstone, Bighorn-Wind and Tongue River drainages of Wyoming (Wyoming Game and Fish Department 2017). Yellowstone cutthroat distribution throughout their range and in Wyoming have declined substantially. The Bridger-Teton overlaps a small portion of the Yellowstone Geographical Management Unit (GMU) (Map 1).</p>

Criteria	Rationale
Abundance on the Bridger-Teton National Forest	Yellowstone Cutthroat Trout currently occupy 143 stream miles in the northeastern portion of the Plan Area (Map 2). Although still limited, this represents an increase from the 126 stream miles historically occupied, indicating an expansion in distribution.
Population Trend on the Bridger-Teton National Forest	In the Yellowstone GMU no counts of historical populations are available, but the number of current populations remained the same during the 2006 to 2011 assessment updates (Endicott et al. 2016).
Habitat Trend on the Bridger-Teton National Forest	Degradation and fragmentation of habitat continue to be factors limiting Yellowstone cutthroat trout populations in some areas. Degradation has occurred to varying extents from land use, habitat alteration, and water diversions. Over the past 20 years, a substantial amount of habitat has been restored by state and federal agencies and non-governmental organizations. Despite such efforts, there continue to be abundant opportunities for additional restoration projects in areas currently occupied by Yellowstone cutthroat trout and in historically occupied areas where reintroductions may be feasible. The Bridger-Teton National Forest has seen less development and land uses compared with surrounding areas. Much of the area did not have early development brought by railroad systems, and hunting and scenery values lead to protection of natural areas. As a result, most streams within the Bridger-Teton National Forest have current Yellowstone cutthroat trout distribution remaining, while outside the Greater Yellowstone Area the historic distribution has greatly decreased (Map 1) (Al-Chokhachy et al. 2017).
Threats to the Species and its Habitat on the Bridger-Teton National Forest	Overharvest has been greatly reduced through angling regulations and changes in angler behavior. As a result, current threats include hybridization with non-native rainbow trout, competition with non-native brook trout, entrainment in water diversions, and sedimentation/habitat fragmentation from grazing practices and deferred road maintenance (Gresswell 2011). According to the 2011 Range-Wide Status Assessment for the Yellowstone Cutthroat Trout, the Yellowstone GMU supports 105 unaltered populations across 857 miles (Endicott et al. 2016). In addition, conservation projects to suppress rainbow trout have been effective to reduce hybridization (Kovach et al. 2018, Wyoming Game and Fish Department 2017).
Date: August 07, 2019 Reviewer: Julie Remp	

Summary and Recommendations

Yellowstone Cutthroat Trout currently occupy 143 stream miles in the northeastern portion of the Plan Area. Although still limited, this represents an increase from the 126 stream miles historically occupied, indicating an expansion in distribution. Distribution outside of the Bridger Teton has declined to the point of extirpation in many historic drainages, but they remain well distributed within the Bridger Teton boundaries likely due to less development compared to surrounding areas. Threats to the species on the Bridger Teton National Forest include hybridization with non-native rainbow trout, competition with non-native brook trout, entrainment in water diversions, and sedimentation/habitat fragmentation from grazing practices and deferred road maintenance.

There is considerable hybridization within many populations, but there are numerous genetically pure populations within the plan area (Al-Chokhachy et al. 2017, Endicott et al. 2016). Moreover, potentially genetically isolated populations are widely distributed, maintaining a high degree of genetic and phenotypic variation across the plan area. In addition, habitat for the species is likely improving (Wyoming Game and Fish Department 2017, Kovach et al. 2018). Therefore, it is recommended that Yellowstone Cutthroat is not Species of Conservation Concern for the Bridger-Teton National Forest.

Summary and Recommendation Provided by: P. Barry (January 16, 2020), revised by M. Wright (July 10, 2025).

References

- Al-Chokhachy, R., Shepard, B., Burckhardt, J., Opitz, S., Garren, D., Koel, T., and Lee Nelson, M. 2017. Status and Conservation of Yellowstone Cutthroat Trout in the Greater Yellowstone Area. *Yellowstone Science* 25
- Endicott, C., Nelson, L., Opitz, S., Peterson, A., Burckhardt, J., Yekel, S., Garren, D., Koel, T.M., and Shepard, B.B. 2016. Rangewide status assessment for Yellowstone cutthroat trout (*Oncorhynchus clarkii bouvieri*): 2012. Edited by Group, Y.C.T.I.C. Helena, Montana.
- Gresswell, R.E. 2011. Biology, status, and management of the Yellowstone cutthroat trout. *North American Journal of Fisheries Management* 31: 792-812.
- Kovach, R., Al-Chokhachy, R., and Stephens, T. 2018. Proactive Rainbow Trout Suppression Reduces Threat of Hybridization in the Upper Snake River Basin. *North American Journal of Fisheries Management* 38 10.1002/nafm.10177
- Western Native Trout Initiative. 2019. Yellowstone Cutthroat Trout (*Oncorhynchus clarkii bouvieri*). Western Native Trout Status Report. Boise, ID. 13 p. https://westernnativetrout.org/wp-content/uploads/2019/09/FINAL-YCT_WesternNativeTroutStatusReport_Updated26Sept2019-1.pdf
- Wyoming Game and Fish Department. 2017. State Wildlife Action Plan-2017. Cheyenne, WY.