

SPECIES: Scientific [common]	<i>Cygnus buccinator</i> [Trumpeter swan]
Forest:	Bridger-Teton National Forest
Forest Reviewer:	Randall Griebel, James Wilder
Date of Review:	1/31/2020; reviewed 5/21/2025
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
<i>Greys River Ranger District</i>		
Pre 1990	0	
1999-2016	107	Alpine, Snake River, Baily Lake
<i>Kemmerer Ranger District</i>		
2004	10	Fontenelle Creek
2006	24	Smiths Fork
<i>Big Piney Ranger District</i>		
1985	1	Bondurant - Hoback River
2004-2018	89	Hoback River, Dell Creek, Fisherman Creek
<i>Pinedale Ranger District</i>		
1983-1989	74	Lake Creek, Wagon Creek, Mosquito Creek, Upper Green River
1990-2018	500	Wagon Creek, Mosquito Creek, Upper Green River, New Fork Lakes, Willow Lake, Fremont Lake, Boulder Lake
<i>Jackson Ranger District</i>		
1948-1989	437	Snake River, Gros Ventre River, Jackson Valley
1990-2018	2246	Snake River, Gros Ventre River, Jackson Valley
<i>Blackrock Ranger District</i>		
1951-1989	246	Blackrock Creek, Spread Creek, Yellowstone River, Enos Lake, Arizona Lake
1990-2018	163	Blackrock Creek, Spread Creek, Yellowstone River, Enos Lake, Arizona Lake, Mink Creek, Thorofare Creek

Source of Information: *Wyoming Natural Diversity Database (May 2019)*

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___

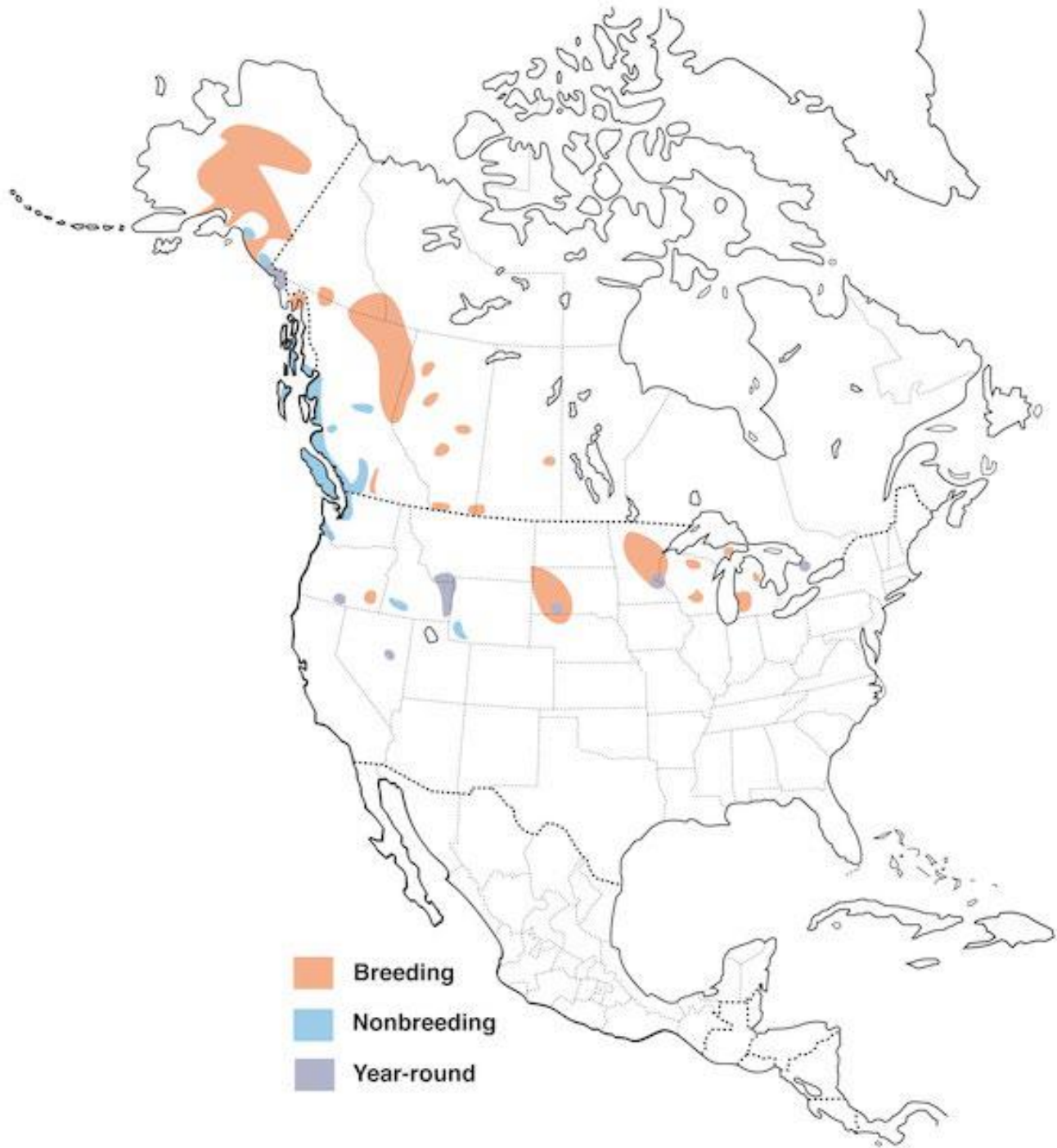
If no, provide explanation and stop assessment

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___

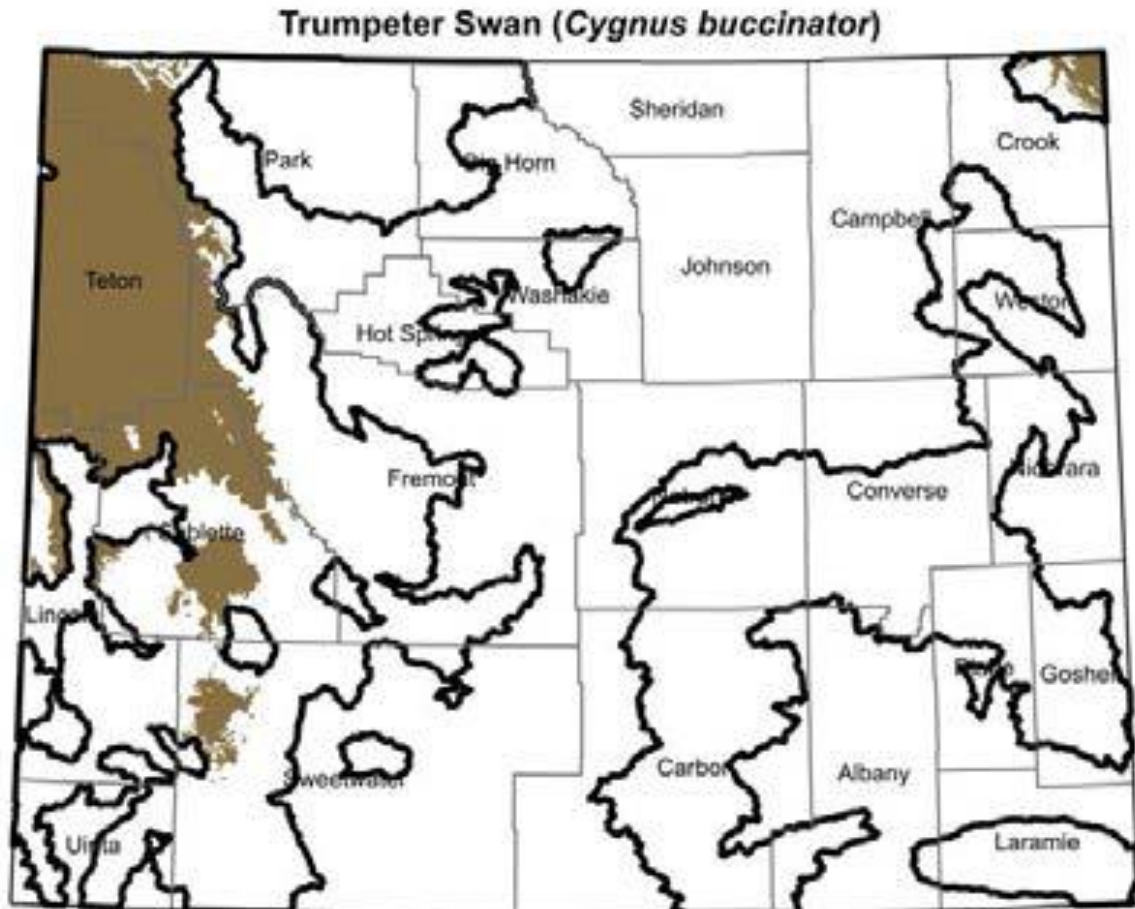
If no, provide explanation and stop assessment

d. **Map 1**, Trumpeter swan range map of North America



Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Trumpeter swan (*Cygnus buccinator*).

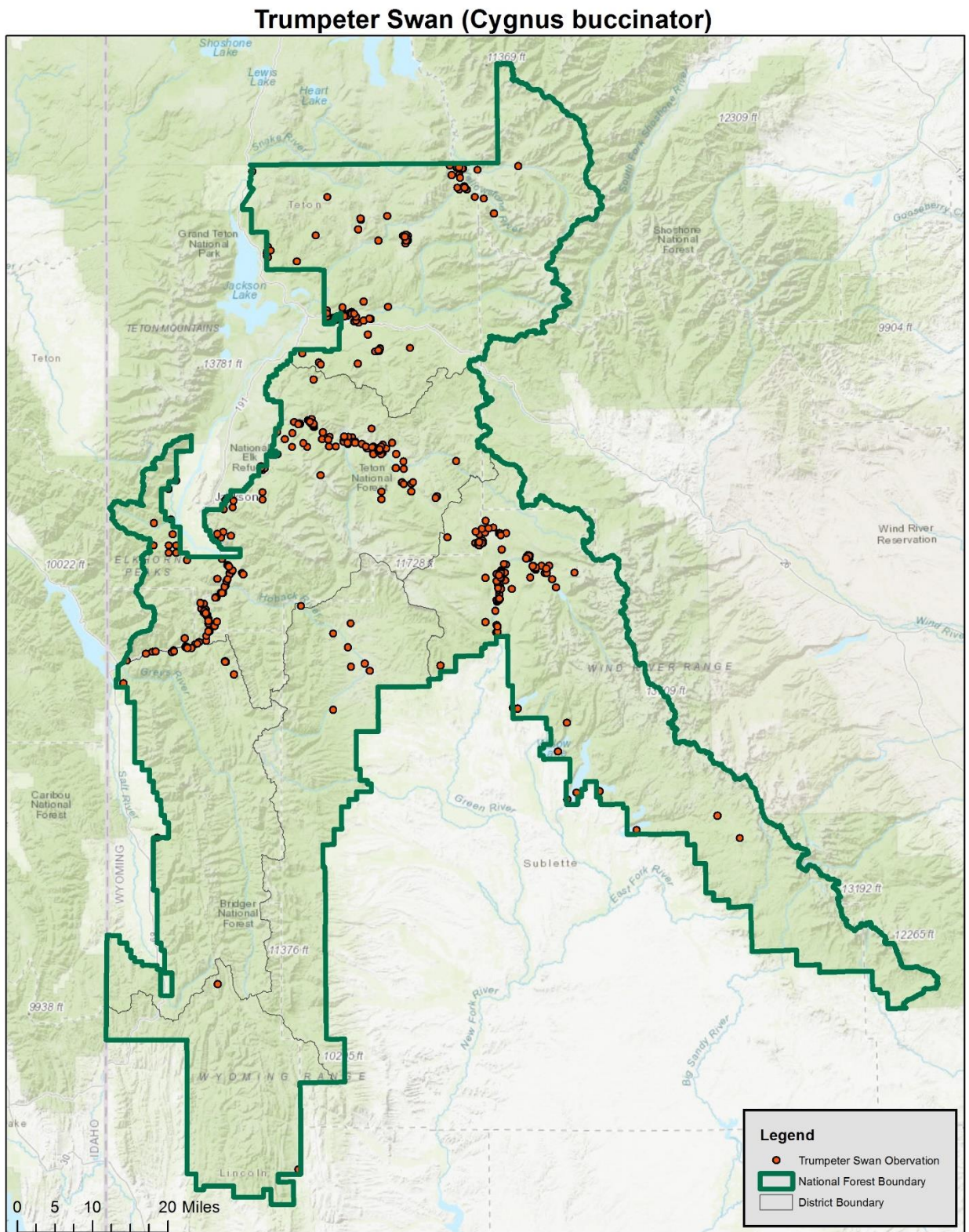
- e. **Map 2**, Range and predicted distribution of *Cygnus buccinator* in Wyoming.



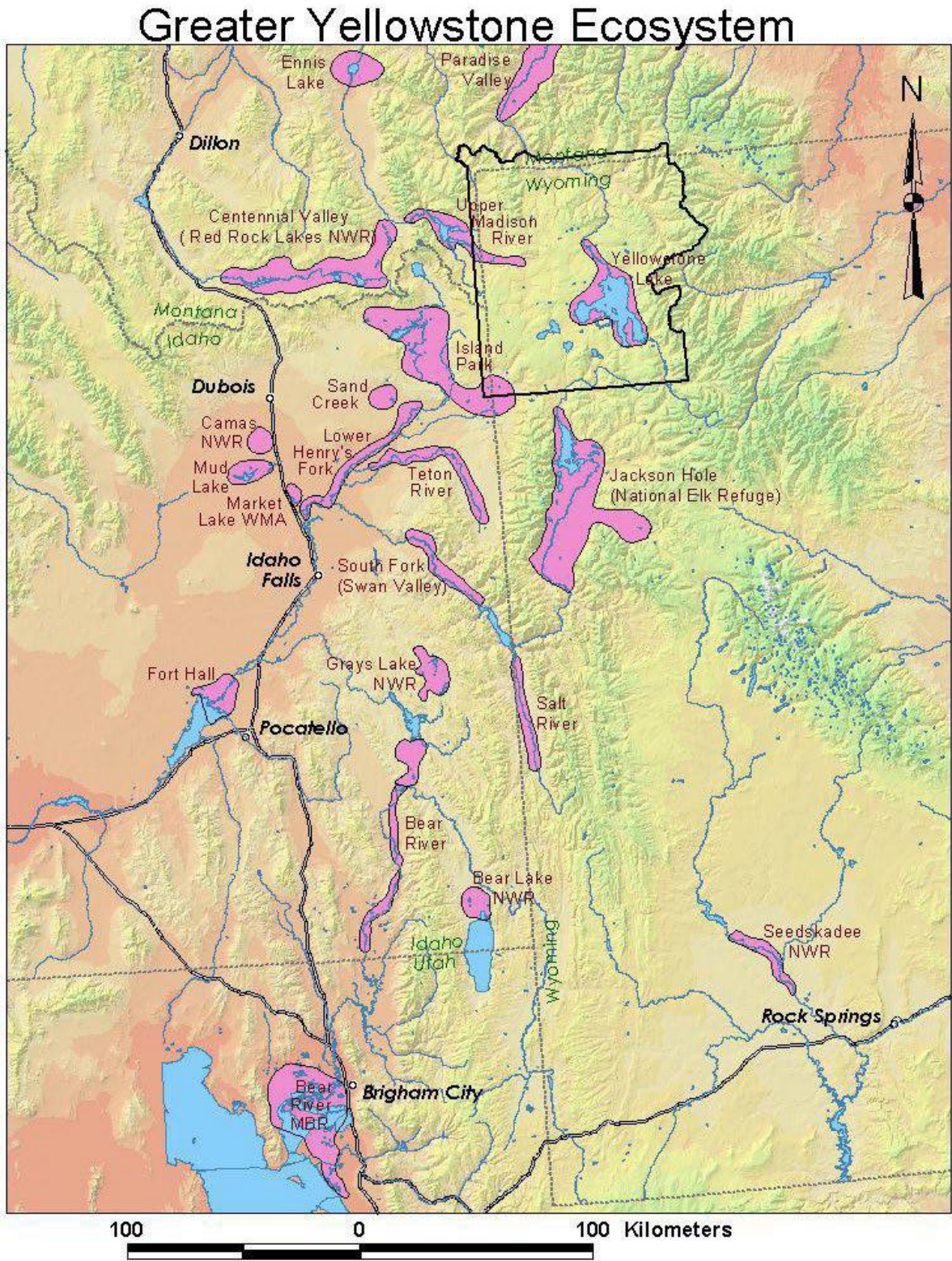
SOURCE: Digital maps of ranges for Wyoming Species of Greatest Conservation Need: Sept. 2016. Wyoming Game and Fish Department and Wyoming Natural Diversity Database. University of Wyoming, Laramie, Wyoming. Note that brown indicates the predicted distribution of the species; heavy black lines indicate outermost boundaries of possible occurrence.

Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Trumpeter swan (*Cygnus buccinator*).

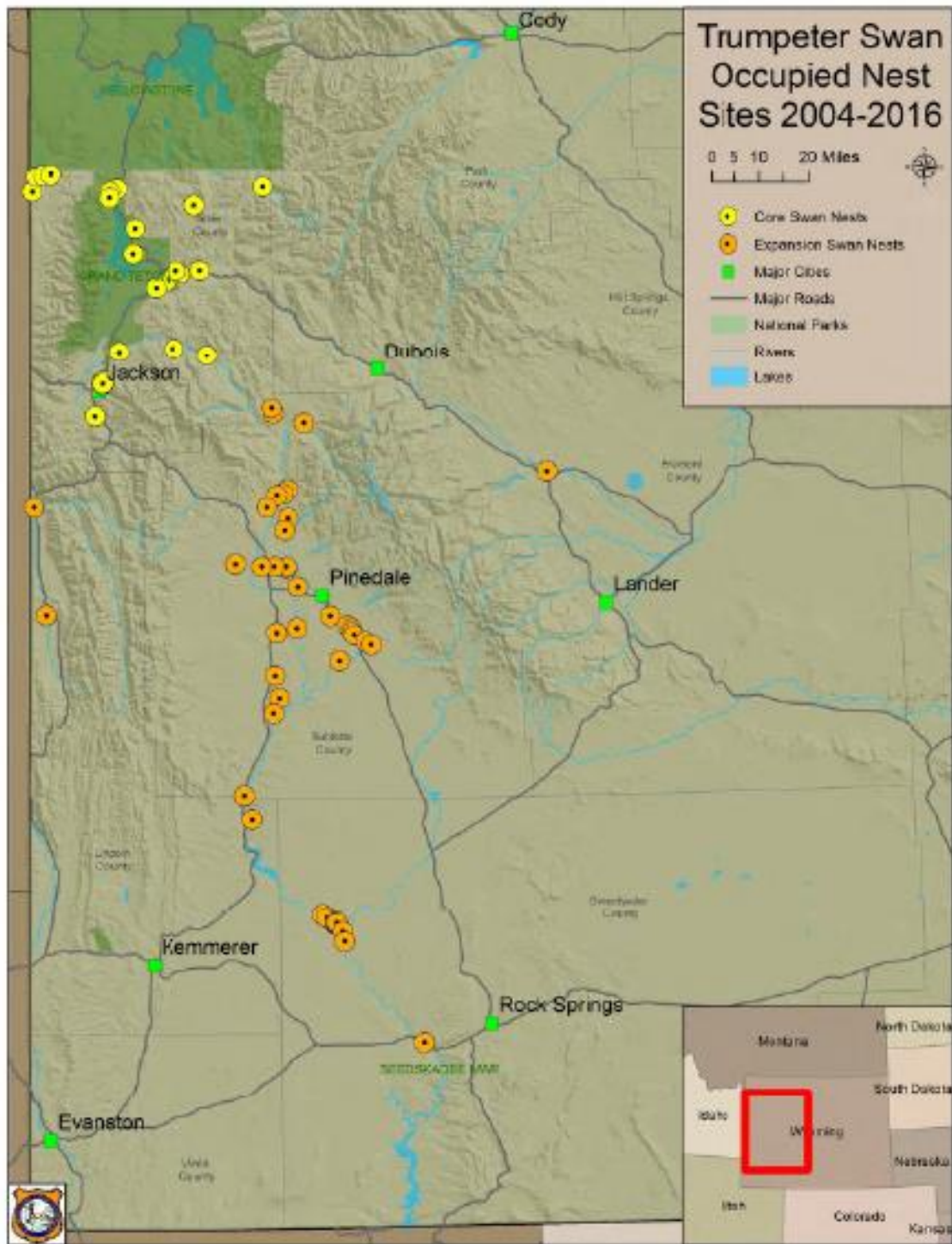
- f. **Map 3**, Map of Trumpeter swan occurrences on the Bridger-Teton National Forest (Wyoming Natural Diversity Database [May 2019], Natural Resource Information Systems [August 2019], eBIRD [2016])



- g. **Map 4**, Trumpeter swan wintering areas in the Tri-State Area of southeast Idaho, southwest Montana, and northwest Wyoming (USFWS 2012).



- h. **Map 5**, Wetland sites occupied for at least one year by a pair of trumpeter swans in Wyoming, 2004-2016 nesting seasons. (Patla 2017).



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>G4— Apparently Secure</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>S3B,S3N — Vulnerable</p> <p><i>At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.</i></p>
WGFD	<p>NSS2 (Ba), 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> Extreme; Limiting factors are severe and continue to increase in severity.</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.]</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> <p><i>(Wyoming Natural Diversity Database - Species of Concern)</i></p>
USDA Forest Service	Sensitive Species

	<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>
UDI FWS	No Special Status; Migratory Game Bird
WY BLM	<p>Sensitive</p> <p><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></p> <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> <p><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> <p>(BLM Wyoming Sensitive Species Policy and List; March 31, 2010)</p>
IUCN	<p>LC – Least Concern</p> <p><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.</i></p> <p>(IUCN – Red List Categories and Criteria)</p>
Partners in Flight (PIF) Continental Concern Score	Not Ranked

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

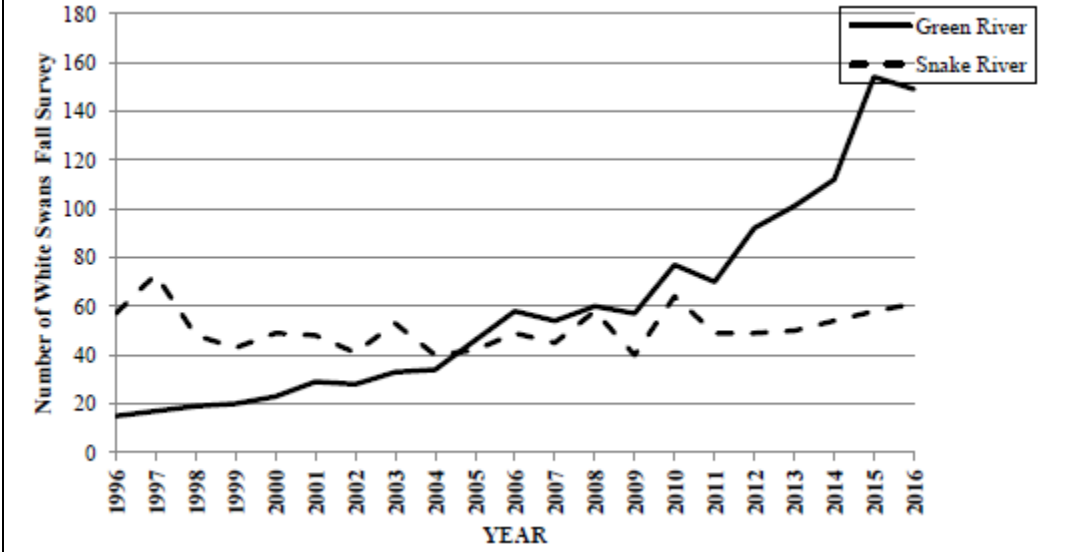
Species (Scientific and Common Name): <i>Cygnus buccinator</i> [Trumpeter swan]		
Criteria	Rationale	Literature Citations
Distribution on Bridger-Teton National Forest	<p>Historically, Trumpeter swans were widely distributed across North America. However, the species was nearly eliminated by market and subsistence hunting by the turn of the 20th century with their current range greatly reduced to three distinct breeding populations (WGFD 2017). The Rocky Mountain Population (RMP) that includes Montana, Idaho, and Wyoming is composed of relatively sedentary individuals that reside year-round in western Wyoming and eastern Idaho, overlapping with portions of the Bridger-Teton National Forest (BTNF) (Map 1 & 2). Current distribution on the BTNF includes major river drainages like the Snake, Salt, Gros Ventre, Yellowstone, and Green River, with a small number also in the Wind River drainage (Table 1, Map 3).</p> <p>Trumpeter swans have been documented on all 6 ranger districts across the Bridger-Teton National Forest (Table 1). However, distribution within the districts is low and confined to optimal nesting and wintering habitat.</p>	Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Trumpeter swan (<i>Cygnus buccinator</i>).
Abundance on the Bridger-Teton National Forest	<p>The Trumpeter swan has a statewide abundance rank of <i>very rare</i> (WGFD 2017), similar to their abundance on the Bridger-Teton National Forest. Trumpeter swan abundance in Wyoming varies greatly between the breeding and non-breeding seasons and abundance is much higher in the winter season. Their abundance will increase late fall through mid-March due to an influx of Canadian migrants. According to the Wyoming Game and Fish Department, in February of 2015 a total of 931 Trumpeter Swans (776 adults and 155 cygnets) were documented in Wyoming compared to 303 swans (212 adults and 65 cygnets) in September, prior to the arrival of migrants.</p>	Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Trumpeter swan (<i>Cygnus buccinator</i>).
Population Trend on the Bridger-Teton National Forest	<p>The Trumpeter swan was eliminated from most of its historic range by the early 1990s, although a remnant flock of fewer than 100 resident birds remained in the vicinity of Yellowstone National Park and a similar number migrated to the Yellowstone area from interior Canada (WGFD 2017). Efforts to conserve this species started in the 1930s and has subsequently led to an increase in Trumpeter swan numbers range-wide. The RMP Canadian migratory flock has</p>	<p>GYTSWG. 2019. The swan blog. https://www.swanproject.org/blog/2019/4/15/the-greater-yellowstone-trumpeter-swan-working-group.</p> <p>Patla, S. 2016. Monitoring and management of the Rocky Mountain</p>

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	<p>steadily increased since 1972 and the RMP Greater Yellowstone Area flock has fluctuated sporadically with a peak of 601 swans in 1988 and a low of 277 in 1993 (WGFD 2017). Both flocks' nest and winter in areas across the BTNF (Map 4). From 2000 to 2014 total numbers have ranged between 326 and 589 birds. Since 2012, the number of adult and subadult birds increased to over 400 for the first time since 1991.</p> <p>Surveys conducted during 2015 in western Wyoming by members of the Greater Yellowstone Trumpeter Swan Working Group (GYTSWG) found that the number of nest sites and nesting pairs continues to increase, but growth is primarily the result of increases within the Green River expansion area (Patla 2016). Known nesting sites (and those found to be active in 2015) in western Wyoming and on the BTNF are depicted on Map 5. The most recent survey data for the Tri-basin population indicates 1,043 swans were counted in fall of 2018; which is the highest total recorded since birds began to be counted in 1931 (GYTSWG 2020).</p> <p>In Wyoming, undisturbed nesting-ponds may be a limiting factor to significantly increasing populations in the Tri- State Region. Occupancy and productivity data for Trumpeter swan nesting territories in Wyoming (outside of Yellowstone National Park) from 2007 to 2014 show that a record number of nest sites were occupied in 2015 (n=57) (Patla 2016). A slow, exponential growth rate has occurred in the Green River area from 2010-2015, as compared to stagnant and/or declining growth rates in the Snake River core area during the same time period (Patla 2016 and 2017; Figure 1).</p>	<p>population of trumpeter swans (<i>Cygnus buccinator</i>) in Wyoming. https://wgfd.wyo.gov/WGFD/media/content/PDF/Hunting/JCRS/JCR_NONGAMEACR_2016.pdf.</p> <p>Patla, S. 2017. Monitoring and management of the Rocky Mountain population of trumpeter swans (<i>Cygnus buccinator</i>) in Wyoming. https://wgfd.wyo.gov/WGFD/media/content/PDF/Hunting/JCRS/JCR_NONGAMEACR_2017.pdf.</p> <p>Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Trumpeter swan (<i>Cygnus buccinator</i>).</p>

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Criteria	Rationale	Literature Citations
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Figure 1. Swans (adults and subadults combined) counted on the annual fall aerial survey in the Snake River core area and the Green River expansion area, 1996-2016 (Patla 2017).



Habitat Trend on the Bridger-Teton National Forest

Breeding/Nesting Habitat
 Trumpeter swans are restricted to shallow, freshwater marshes, ponds, lakes, and occasionally slow-moving rivers (Banko 1960, Hansen et al. 1971, Gale et al. 1987, WGFD 2017). Suitable wetlands can vary substantially in their physical (i.e., size, topography, elevation, and hydrology) and biological (i.e., macrophyte and invertebrate communities and surrounding vegetation) characteristics, but several basic features are required for Trumpeter swans:

- Approximately 100 m of unimpeded water for flight take off.
- Accessible forage—submerged, floating, and emergent plants (Mitchell 1994).
- Shallow, non-fluctuating levels of unpolluted water.
- Structural materials to build a nest platform, such as an island, a muskrat lodge, or emergent vegetation.

ADCIPTS. 1998. Mississippi and Central Flyway Management Plan for the Interior population of trumpeter swans. Mississippi and Central Flyway Councils. Twin Cities, MN. Unpublished report.

Banko, W. E. 1960. The trumpeter swan: its history, habits, and population in the United States. University of Nebraska Press, Lincoln, NE.

Gale, R. S., E. O. Garton, and I. J. Ball. 1987. The history, ecology and management of the Rocky Mountain population of trumpeter swans. Unpublished report. U. S. Fish and Wildlife Service, Montana

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Criteria	Rationale	Literature Citations
	<ul style="list-style-type: none"> • Low human disturbance. <p>Most nests are built in or surrounded by water. During the nesting period, swans require non- fluctuating water levels to ensure nests do not flood during incubation and water levels persist until cygnets have fledged. Swans often select muskrat or beaver houses, beaver dams, exposed hummocks, floating platforms, or small islands as a foundation for the nest site (Hansen et al. 1971).</p> <p>Suitable Trumpeter swan nesting habitat on the BTNF occurs predominantly within riparian areas of the Snake River, Upper Green River, and Gros Ventre River drainages.</p> <p>Winter Habitat The most commonly cited factor thought to limit population growth in all three regional populations, including those on the BTNF, is the availability and quality of winter habitat (Gillette and Shea 1995, ADCIPTS 1998, Pacific Flyway Study Committee 2004, Patla 2012). Trumpeter swan habitat on the BTNF is restricted to open water sites along the Snake River during mild winters, and especially Baily Lake and Baily Creek near the Snake River, south of Alpine Wyoming. The Upper Green and Gros Ventre Rivers are not known to provide winter habitat.</p>	<p>Cooperative Wildlife Research Unit, Missoula, MT.</p> <p>Gillette, L. N., and R. Shea. 1995. An evaluation of trumpeter swan management today and a vision for the future. Transactions of the 60th North American Wildlife and Natural Resources Conference: 258-265.</p> <p>Hansen, H. A., P. E. K. Shepherd, J. G. King, and W. A. Troyer. 1971. The trumpeter swan in Alaska. Wildlife Monograph 26:1-83.</p> <p>Pacific Flyway Study Committee. 2004. Pacific Flyway Implementation Plan for the Rocky Mountain population of Trumpeter Swans, annual report. U.S. Fish and Wildlife Service, Portland, Oregon. Unpublished report.</p> <p>Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Trumpeter swan (<i>Cygnus buccinator</i>).</p>
Threats to the Species and its Habitat on the Bridger-Teton National Forest	<p>Availability of Wintering Habitat The principal threat to the population of resident Trumpeter swans in the Tri-State Area of Wyoming, Montana, and Idaho occurs on wintering habitat. There, overcrowding on limited habitat by wintering Canadian swans and resident U.S. swans creates conditions where a substantial mortality event is possible if a severe freeze were to occur. Such an event would displace birds from feeding sites and increase the likelihood of mortality due to starvation or disease, with potentially significant consequences for the small U.S. breeding segment (USFS 2019).</p>	<p>Bangs, E. E., T. H. Sparker, T. N. Bailey, and V. D. Berns. 1982. Effects of increased human populations on wildlife resources of the Kenai Peninsula, Alaska. Transactions of the North American Wildlife Natural Resources Conference 47:605-616.</p> <p>Banko, W. E. 1960. The trumpeter swan: its history, habits, and population in the United States. University of Nebraska</p>

Species (Scientific and Common Name): *Cygnus buccinator* [Trumpeter swan]

Criteria	Rationale	Literature Citations
	<p>Overcrowding is likely a result of two issues: First, swans have a strong site fidelity to wintering habitats; thus, both population segments have continued to use the Tri-State Area as their primary wintering area even as habitat becomes increasingly limited. Secondly, swans were fed over a long period in the Tri-State Area, which likely contributed to sedentary behavior and dissuaded swans from making dispersal movements and developing migration pathways. Although feeding was discontinued in 1992, the development of migration patterns may take time, especially for such a long-lived bird (Shea 2004).</p> <p>Disturbance Impacts Recreational activities on the BTNF, including both motorized and non-motorized, can reduce habitat availability and quality for Trumpeter swans in breeding and non-breeding areas; thus, they are considered significant threats (USFS 2019). Due to their sensitivity to human disturbance, wetlands otherwise suitable for Trumpeter swans but subject to disturbance by human activity are likely avoided by swans, reducing overall habitat availability.</p> <p>Non-motorized human activities on the Forest, such as bird watching, photography, and other activities by pedestrians or researchers elicit the greatest response by swans during the breeding season (Henson and Grant 1991). Pedestrians cause disturbance to Trumpeter swans by disrupting adults, causing short- or long-term nest abandonment and resulting in displacement from breeding areas (Banko 1960, Hansen et al. 1971, Page 1976, Shea 1979, Bangs et al. 1982, Henson and Grant 1991). Pedestrians or researchers can also influence incubation and brood rearing behavior and contribute to nest failure or death of cygnets (Gale et al. 1987, Henson and Grant 1991). Although visual barriers such as vegetation and hills situated between sources of disturbance and nesting swans may serve to decrease the impact of disturbances, swans are known to respond to noises made by humans even when they were not</p>	<p>Press, Lincoln, NE.</p> <p>Gale, R. S., E. O. Garton, and I. J. Ball. 1987. The history, ecology and management of the Rocky Mountain population of trumpeter swans. Unpublished report. U. S. Fish and Wildlife Service, Montana Cooperative Wildlife Research Unit, Missoula, MT.</p> <p>Gillette, L. N. 1990. Causes of mortality for trumpeter swans in central Minnesota, 1980-87. Pages 148-151 in D. Compton, ed. Proceedings and Papers of the 11th Trumpeter Swan Society Conference. The Trumpeter Swan Society, Maple Plain, MN.</p> <p>Hansen, H. A., P. E. K. Shepherd, J. G. King, and W. A. Troyer. 1971. The trumpeter swan in Alaska. Wildlife Monograph 26:1-83.</p> <p>Henson, P., and T.A. Grant. 1991. The effects of human disturbance on trumpeter swan breeding behavior. Wildlife Society Bulletin 19:248-257.</p> <p>Page, R. D. 1976. The ecology of the trumpeter swan on Red Rock Lakes National Wildlife Refuge, Montana. Ph.D. Dissertation, University of Montana, Missoula, MT. 165 pp.</p> <p>Shea, R. E. 2004. Status of trumpeter swans nesting in the western United States and management issues. North</p>

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	<p>visible (Henson and Grant 1991). Henson and Grant (1991) recommend that wildlife viewing areas should be concealed in vegetation, designed to minimize noise of users, and located at a distance greater than 300 m from swan nests.</p> <p>Water Quality and Quantity Impacts Maintaining healthy wetlands is critical to nesting success and fledging of cygnets. Road and trail systems, like those on the BTNF, may compromise water quality in swan breeding and nesting habitat (USFS 2019). Sediment deliveries to wetlands (and potential nesting habitat for swans) can adversely impact water quality and affect emergent vegetation, an important food source for swan broods. Management activities and/or new and existing roads may have the potential to deliver sediments to such habitats and should be closely evaluated (USFS 2019).</p> <p>The use of herbicides, pesticides and other chemicals on the Forest may have an impact to nesting sites and can affect water quality; such use should be avoided, but if use is determined necessary to control noxious plants or pests, strict accordance with label instructions is critical so as not to be detrimental to swan breeding and nesting habitat (USFS 2019).</p> <p>Some Forest activities may result in fluctuations to water levels depending on the operation or project. Maintaining and managing adequate water levels in swan nesting sites is important to maintaining wetland integrity throughout the nesting and brood rearing season and critical to successful fledging (USFS 2019).</p> <p>Lead poisoning is a significant threat to Trumpeter swans both directly (a leading cause of mortality) and indirectly by reducing habitat management opportunities in high quality wetlands with a long-term hunting legacy (USFS 2019). The use of lead shot for hunting waterfowl was banned in 1991 and 1999 in the United States and Canada, respectively. Swans are vulnerable to</p>	<p>American Swans 32:85-94.</p> <p>U.S. Forest Service. 2019. Bridger-Teton National Forest Sensitive Species Conservation Assessment for the Trumpeter Swan. Unpublished Report. On file, Bridger-Teton National Forest, Jackson, Wyoming, USA.</p>

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	<p>lead poisoning because they grub on the bottom of wetlands and lakes for grit and aquatic vegetation, increasing the likelihood of uncovering legacy lead shot, and because much of their diet requires thorough grinding in the gizzard, which increases the rate of lead absorption (Gillette 1990). Incidences of lead poisoning can occur in areas that have not been hunted for more than 30 years, and only three or four pieces of lead shot can cause death (Wilson et al. 2004). The impacts of lead poisoning are equally significant as an indirect threat to swans because they can force management activities for swans away from otherwise high-quality wetlands that have a long legacy of waterfowl hunting and toward potentially lower-quality wetlands that are lead free (USFS 2019).</p> <p>Invasive Species Invasive species are present and continue to spread across the Forest. Invasive species may inhibit vegetative growth and production, or reduce the availability of aquatic vegetation and invertebrates; predominantly from watercraft and fishing gear that has not been adequately cleaned (USFS 2019).</p> <p>Flight Pathways Physical obstructions (fences, power-lines, etc.) to swan flight pathways into ponds, marshes, lakes and streams/rivers can reduce habitat utilization and result in swan death and/or injury (USFS 2019). Although building structures on the Forest near wetlands is uncommon, some existing structures may reduce the availability of swan habitat.</p> <p>Emergent Vegetation Management activities on the Forest, such as livestock grazing or motorized route development, may have the potential to effect emergent vegetation quality and quantity. If a wetland does not produce adequate food resources, young will develop very slowly and be vulnerable to predators, may die within the first four weeks due to malnourishment, or may not be strong enough to fly</p>	

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	prior to freeze-up and be abandoned by adults (USFS 2019). Inadequate food resources near the nest site can also cause the incubating female to spend excessive time off the nest, resulting in heat or cold stress to the eggs and developing embryos, and can adversely affect hatchability. An abundant source of aquatic insects and crustaceans, harbored by aquatic vegetation, is important for the reproductive female and her rapidly growing brood (USFS 2019). These invertebrates are attached to aquatic plants and consumed incidental to their use. The diversity, abundance and succession of aquatic vegetation will depend upon many factors, including size and depth of the wetland, water level management, substrates, and time of ice-off.	
<p>Summary and recommendations:</p> <p>The Bridger-Teton National Forest (BTNF) is home to one of three Trumpeter swan breeding populations, referred to as the Rocky Mountain Population. While most of the Trumpeter swans' distribution in Wyoming overlaps with the BTNF and surrounding Snake River valley, distribution and abundance remains limited, with small isolated groups of nesting and wintering birds. Trumpeter swan occurrences and nesting locations on the BTNF are restricted to optimal wetland and foraging habitat—consisting typically of ponds with specific habitat requirements. However, swans in and around the BTNF continue to successfully nest and produce young. The 2016 nesting season resulted in swan numbers and productivity exceeding the 10-year means in Wyoming - outside of YNP (Patla 2017). As summarized in Patla (2017), the resident Trumpeter Swan population in Wyoming is greatly improved compared to where it was in the 1990s. There has been an increase in the number and distribution of swans in the state, as well as an increase in the amount of wetland habitat important for swans.</p> <p>The Tri-state swan population has shown an annual increase of 2.4% for white birds and +4.1% for cygnets between 1993 and 2015 (Olson 2017 as cited in Patla 2017). Thus, there is not a substantial concern for the species' capability to persist over the long-term within the planning unit. Adequate nesting, foraging, and wintering resources will likely remain available on the Forest, and there are no significant threats influencing the population dynamics for this species. Thus, it is recommended that the Trumpeter swan is not a Species of Conservation Concern for the BTNF</p> <p>Evaluator(s): Ashley Egan, Randall Griebel</p>		<p>Olson, D. 2017. Trumpeter Swan Survey of the Rocky Mountain Population, United States Breeding Segment, Fall 2016. (January 9, 2017). US Fish and Wildlife Service, Migratory Birds and State Program, Mountain-Prairie Region, Lakewood, Colorado, USA.</p> <p>Patla, S. 2017. Monitoring and management of the Rocky Mountain population of trumpeter swans (<i>Cygnus buccinator</i>) in Wyoming. https://wgfd.wyo.gov/WGFD/media/content/PDF/Hunting/JCRS/JCR_NONGAMEACR_2017.pdf.</p> <p>Date: September 9, 2019</p>

