SPECIES: Scientific [common]	*Leucosticte atrata* [Black Rosy-Finch]
Forest:	Bridger-Teton National Forest
Forest Reviewer:	Randall Griebel, James Wilder
Date of Review:	07/17/2018; updated 4/17/2025
Forest concurrence (or recommendation if new) for inclusion of species on list of potential SCC: (Enter Yes or No)	YES

FOREST REVIEW RESULTS:

1. The Forest concurs or recommends the species for inclusion on the list of potential SCC:
   Yes_X__ No____

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. All Known Occurrences, Years, and Frequency within the Planning Area

Year Observed	Number of Individuals	Location of Observations	Source of Information
2015	4	Greys River Ranger District	Brown, et al. 2018.
N/A	0	Kemmerer Ranger District	N/A
1987	33	Pinedale Ranger District	eBird Basic Dataset. Nov 2017.; IMBCR 2018; Wyoming Natural Diversity Database
1998-2017	354		
2009-2017	16	Big Piney Ranger District	Brown, et al. 2018.; eBird Basic Dataset. Nov 2017
1982-1988	3	Blackrock Ranger District	eBird Basic Dataset. Nov 2017.
1990-2013	4		
1994-2017	370	Jackson Ranger District	Brown, et al. 2018.; eBird Basic Dataset. Nov 2017

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?

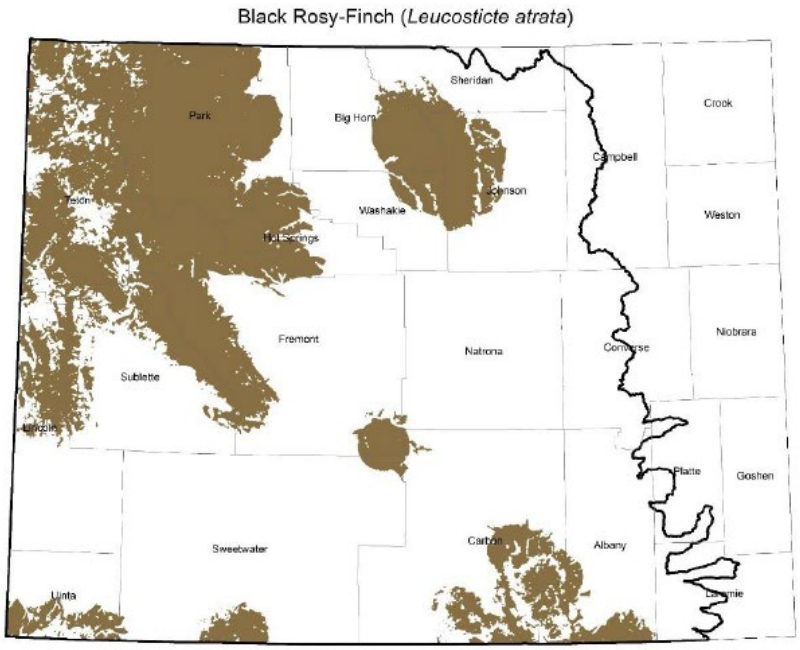
Yes_X__ No___

Provide explanation for determination; If determination is no, stop assessment
NA–occurrences have been documented since 1990.

d. **Map 1**, *Leucosticte atrata* range map of North America

Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Black Rosy-Finch *(Leucosticte atrata)*

e. **Map 2a**, Range and predicted distribution of *Leucosticte atrata* in Wyoming. *Source:* Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Black Rosy-Finch *(Leucosticte atrata).*



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.

*The above "Range and Predicted Distribution of *Leucosticte atrata* in Wyoming" is slated to be corrected. The forthcoming range and predicted distribution map may look similar to the following map that describes a range extension of the Black Rosy-Finch, but will exclude those areas such as extreme southwest, central, and southeast Wyoming from the map (Brown, pers. comm. July 2018).

Map 2b. Potential refined Range and Predicted Distribution of *Leucosticte atrata* in Wyoming. *Source:* Brown, C., S. Patla, and R. Johnson. 2018. Extension of the Breeding Range of the Black Rosy-Finch in Wyoming. Western Birds 49:82-85**.**

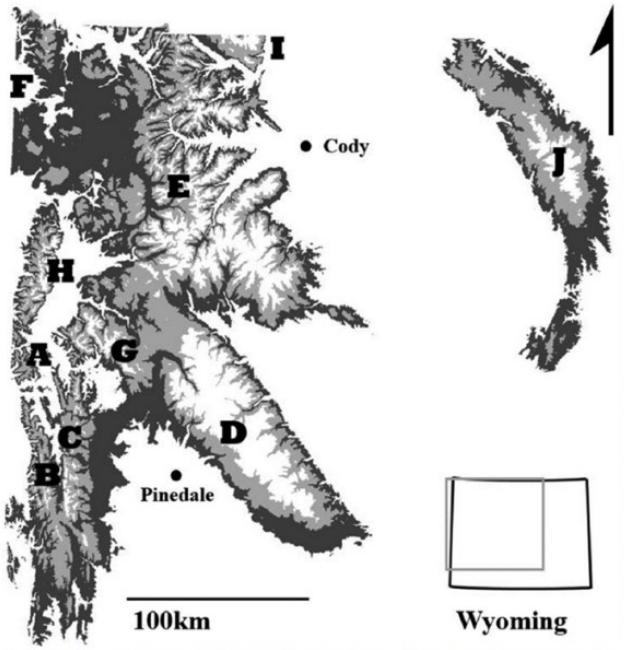
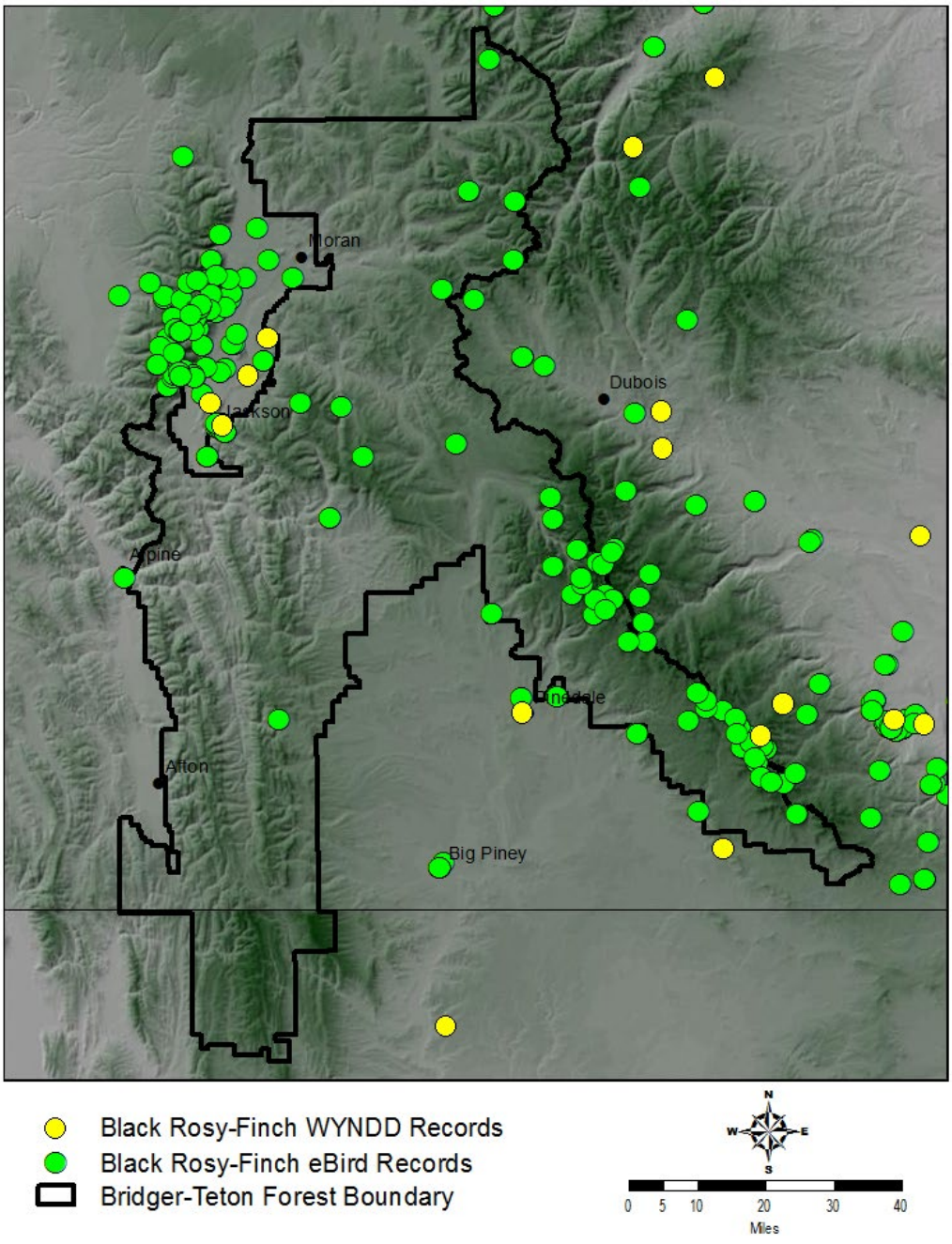


Figure 1. Range extension of the Black Rosy-Finch in northwestern Wyoming's Snake River Range (A), Salt River Range (B), and Wyoming Range (C). Mountain ranges previously reported occupied: Wind River Range (D), Absaroka Range (E), Gallatin Range (F), Gros Ventre Range (G), Teton Range (H), Beartooth Range (I), Bighorn Mountains (J).

f. **Map 3**, Map of Black Rosy-Finch occurrences on the Bridger-Teton National Forest (Wyoming Natural Diversity Database, USFS Natural Resource Information System, & WGFD [June 2018]; eBird Basic Dataset. Version: EBD_relNov-2017. Cornell Lab of Ornithology, Ithaca, New York. Nov 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	**G4— Apparently Secure** *Moderate numbers of occurrences, limited range, and is somewhat numerous. However, approximately 30% of the population is concentrated in a single occurrence, the Beartooth Mountains. Most occurrences are on public lands, and develop in alpine areas (e.g. mining) has apparently not caused population declines. Overall, is apparently secure.*
NatureServe State Status	**S1— Critically Imperiled** *At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.*
WGFD	**Protected Bird** **NSSU (U), Tier II** **Species of Greatest Conservation Need** *Population Status: Unknown* *Limiting Factors: Unknown* *Tier II: Moderate priority* *Obtaining a greater understanding regarding population numbers and distributions of these species is necessary in determining their conservation status, including responding to petitions for listing under the Endangered Species Act.* *[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.]* *NSSU* 1. *NSSU species are assigned a score of 1-12 based on the variable "Wyoming's contribution to the species' overall conservation"; 12 being the highest contribution and 1 being the lowest contribution.* 2. *Next, a score of 1-6 is assigned for each of the following variables ; 6 being the highest and 1 the lowest :* 1. *Regulatory/monetary impacts of the species' listing under the Endangered Species Act.*

	2. *Urgency of conservation action* *An NSSU species can have a maximum of 24 points. Species with a total score of 1-8 are Tier III, 9-16 are Tier II, and 17-24 are Tier I.*
WYNDD	**Species of Concern** **S1B/S2N** **Wyoming Contribution: Very High** *S1B=critically imperiled during the breeding season* *S2N=imperiled during the non-breeding season* *Black Rosy-Finch (Leucosticte atrata) has been assigned different S-ranks by the Wyoming Natural Diversity Database for the breeding and non-breeding seasons. This is because the species' habitat is not as restrictive during the non-breeding season, which makes the species less intrinsically vulnerable. (Wyoming Species Accounts)* *Species of Concern=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	**Region 4: No Special Status**
UDI FWS	**Bird of Conservation Concern** **Not listed**
WY BLM	**No Special Status**
IUCN	**LC- Least Concern (2016)** **Current Population Trend: Stable** *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)
Partners in Flight	**Red Watch List** *Species with extremely high vulnerability due to small population and range, high threats, and range-wide declines. 95% loss of global population lost over the period of 1970-2014 (Rosenberg at al. 2016).*

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

Species (Scientific and Common Name): ***Leucosticte atrata*** **[Black rosy-finch]**		
Criteria	**Rationale**	**Literature Citations**
Distribution on Bridger-Teton National Forest	The Black Rosy-Finch is an alpine specialist, and is a localized, high-altitude breeder that summers in high-elevation alpine habitats in numerous mountain ranges on the Bridger-Teton, including the Teton, Gros Ventre, Absaroka, Snake River, Salt, Wind River, and Wyoming Ranges (French 1959, Brown et al 2018). Summer breeding habitats are patchy, and dependent upon the characteristics provided by elevation, including an alpine environment and late-season snowpack. They persist at elevations of roughly 10,000 feet and above. Recent detections have significantly improved our understanding of the distribution of Rosy-Finches on the Bridger-Teton, but comprehensive site-specific data is not yet available (Brown pers. comm. 2018). Breeding has recently been confirmed at Roaring Fork Lakes in the Wyoming Range, on Mt. McDougal in the Wyoming Range, Crow Creek Lakes in the Salt River Range, Ferry Peak in the Snake River Range, and near the Bridger-Teton in the Teton Range (Brown, et al. 2018). Black Rosy-Finches have a latitudinal and altitudinal seasonal migration. They descend to considerably lower valleys and landscapes (4,000-7,000 feet) and at least 300 miles southward in winter, and are found in the southern half of Wyoming in a less restrictive distribution than in summer (French 1959). The majority of the Black Rosy-Finch distribution in the U.S. is on the Bridger-Teton and Shoshone National Forests. The Wyoming Game and Fish Distribution map (Map 2a above) is considered to be inaccurate and is scheduled to be corrected with updated information (Brown, pers. comm. 2018). The Integrated Monitoring in Bird Conservation Regions report for 2017 has provided an occupancy estimate of the proportion of 1 km² grid cells occupied (Psi), with a result of Psi=0.333 for the roadless/wilderness on the Bridger-Teton (CV=82%; CV values less than 50% are considered robust). This shows a decrease in occupancy for the same strata compared to 2013, which reported an occupancy rate of 0.49 (Woiderski et al. 2018). The overall occupancy estimate provided by this report describes the Bridger-Teton occupancy rates as being higher than any other surrounding administrative units, which shows the proportional importance of the Bridger-Teton to this species overall.	Brown, C. Personal communication. 6/25/2018 Brown, C., S. Patla, and R. Johnson. 2018. Extension of the Breeding Range of the Black Rosy-Finch in Wyoming. Western Birds 49:82-85; doi 10.21199/WB49.1.7 French, N. 1959. Distribution and Migration of the Black Rosy Finch. Condor. 61: 18-29. Woiderski, B. J., N. E. Drilling, J. M. Timmer, M. F. McLaren, C. M. White, N. J. Van Lanen, D.C. Pavlacky Jr., and R. A. Sparks. 2018. Integrated Monitoring in Bird Conservation Regions (IMBCR): 2017 Field Season Report. Bird Conservancy of the Rockies. Brighton, Colorado, USA.

<table>
<tr><td colspan="3">Species (Scientific and Common Name): Leucosticte atrata [Black rosy-finch]</td></tr>
<tr><td>Criteria</td><td>Rationale</td><td>Literature Citations</td></tr>
<tr><td>Abundance on the Bridger-Teton National Forest</td><td>Abundance is not well documented on the Forest, and no robust population estimates are available for the Black Rosy-Finch in Wyoming (WGFD 2016). The Integrated Monitoring in Bird Conservation Regions (IMBCR) report for 2017 indicated that only one survey plot out of the 20+ plots monitored since 2010 on the forest produced sightings of the species. The number of individuals observed at this location was highly variable by year (range 0-9; Woiderski et al. 2018):

<table><tr><th></th><th>2010</th><th>2011</th><th>2012</th><th>2013</th><th>2014</th><th>2015</th><th>2016</th><th>2017</th></tr><tr><td>Black Rosy-Finch</td><td>0</td><td>4</td><td>9</td><td>1</td><td>4</td><td>2</td><td>1</td><td>5</td></tr></table>
Wyoming supports a large portion of the total Black Rosy-Finch population. The population size is estimated to be 250-1000 individual Black Rosy-Finches in Idaho (IDFG 2017), and Montana reports low relative densities (MNHP and MFWP 2017).</td><td>IDFG (Idaho Department of Fish and Game). 2017. Idaho State Wildlife Action Plan, 2015. Boise, ID.

MNHP and MFWP (Montana Natural Heritage Program and Montana Fish, Wildlife, and Parks). 2017. Montana Field Guides – Black Rosy-Finch (Leucosticte atrata). Internet website: http://fieldguide.mt.gov/speciesDetail.aspx?elcode= ABPBY02010. Accessed on July 13, 2018.
Woiderski, B. J., N. E. Drilling, J. M. Timmer, M. F. McLaren, C. M. White, N. J. Van Lanen, D.C. Pavlacky Jr., and R. A. Sparks. 2018. Integrated Monitoring in Bird Conservation Regions (IMBCR): 2017 Field Season Report. Bird Conservancy of the Rockies. Brighton, Colorado, USA.

Wyoming Game and Fish Department, 2016, Bird Species of Greatest Conservation Need 2017, Species Account, Black Rosy-Finch.</td></tr>
<tr><td>Population Trend on the Bridger-Teton National Forest</td><td>Black Rosy-Finches are one of the least studied species in North America, and population trend on the Bridger-Teton National Forest is unknown (WGFD 2016), but thhe newest IMBCR report indicates that this species is showing</td><td>Brown, C., S. Patla, and R. Johnson. 2018. Extension of the Breeding Range of the Black Rosy-Finch in</td></tr>
</table>

Species (Scientific and Common Name): ***Leucosticte atrata*** **[Black rosy-finch]**		
Criteria	**Rationale**	**Literature Citations**
	robust decline in the Bridger-Teton (Shivik 2024). Recent work has documented Black Rosy-Finches in three additional mountain ranges in Western Wyoming, all on Bridger-Teton National Forest Lands (Brown et al. 2018). Wyoming Game and Fish Department describes a slight increase in the number of birds detected over the past 20 years, which is similar to national trends, but WGFD cautions that these apparent trends may be due to the nomadic nature of the species in winter and may not be representative of true population trends (WGFD 2016).	Wyoming. Western Birds 49:82-85; doi 10.21199/WB49.1.7 IDFG (Idaho Department of Fish and Game). 2017. Idaho State Wildlife Action Plan, 2015. Boise, ID. Shivik, J. A. 2024. 2024 Intermountain Region Broad-Scale Bird Monitoring Report. Wyoming Game and Fish Department, 2016, Bird Species of Greatest Conservation Need 2017, Species Account, Black Rosy-Finch.
Habitat Trend on the Bridger-Teton National Forest	Black Rosy-Finch is restricted to high alpine slopes located above timberline (above 10,000) and appears to be tightly linked to both tundra and persistent snowpack (Brown et al. 2018). They nest on cliff and rock faces. Snowfields and glaciers are considered important for foraging during the breeding season. The remoteness and inaccessibility of breeding habitats protects this species from most threats (WGFD 2016). Other than potential climate-change effects to Black Rosy-Finch summer breeding habitat (below), habitat trends are considered stable.	Brown, C. Personal communication. 6/25/2018 Brown, C., S. Patla, and R. Johnson. 2018. Extension of the Breeding Range of the Black Rosy-Finch in Wyoming. Western Birds 49:82-85; doi 10.21199/WB49.1.7 Wyoming Game and Fish Department, 2016, Bird Species of Greatest Conservation Need 2017, Species Account, Black Rosy-Finch.
Threats to the Species and its Habitat on the	While there is no current research on the relationship between climate change and Black Rosy-Finches, it is presumed that changes in snowpack and the rates	Brown, C. Personal communication. 6/25/2018

Species (Scientific and Common Name): ***Leucosticte atrata*** **[Black rosy-finch]**		
Criteria	**Rationale**	**Literature Citations**
Bridger-Teton National Forest	and timing of snowpack melt every year will have some effect on this species due to their close relationship with late season snow patches and their preference for foraging at the snow edge (Brown pers. comm. 2018). Breeding habitat may become reduced in size and quality due to global climate change. The rate of annual snowmelt may be an issue for Black Rosy-Finches into the future, and if snowpack melting occurs in more compressed time periods than they did historically, there may be a potential negative effect on Black Rosy-Finches due to their reliance on foraging at the snowpack edge. In the Southern Greater Yellowstone area, which includes the Bridger-Teton, median maximum temperature is projected to rise between 5 and 11 degrees Fahrenheit by 2100, and annual precipitation projections are highly variable with no discernible trend to a slight increasing trend over the same time period. The implications of these changes on alpine vegetation and snowpack are unclear, but snowpack amounts and mean snow residence time may decline. The composition and distribution of alpine communities on the Bridger-Teton are expected to be affected by decreasing snowpack, which will alter plant vigor and regeneration. Seed food sources may change with changing plant composition and growing seasons. Therefore, altered snowpack could affect reproductive success. The lower extent of some alpine communities are expected to be compromised by tree establishment. This species will probably disappear from some areas where snowfields and glaciers are lost (Friggins et al. 2018).	Friggens, M., M. Williams, K. Bagne, T. Wixom, and S. Cushman. 2018. Chapter 9: Effect of Climate Change on Terrestrial Animals. p. 286, In Halofsky, J., D. Peterson, J. Ho, N. Little, and L. Joyce, 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.
Summary and recommendations: Partners in Flight documents a 95% loss in the global population 1970-2014. WYNDD classification is bifurcated between breeding and non-breeding season, with a critically imperiled status for breeding season, when these birds are concentrated on high-elevation patches on the Bridger-Teton. Black Rosy-Finch is restricted to high alpine slopes located above timberline (above 10,000) and appears to be tightly linked to both tundra and persistent snowpack (Brown et al. 2018). While alpine habitats may undergo change due to increasing temperatures and possible precipitation rate changes, alpine habitats will persist but with a possible reduction in size and quality. Changes in the timing of snow melt could be detrimental to the breeding success if this is a cue indicating optimal forage availability. While the magnitude and character of habitat change is unknown, breeding habitat losses are expected. Given the apparent global		Date: 7/16/2018

Species (Scientific and Common Name): ***Leucosticte atrata* [Black rosy-finch]**		
Criteria	**Rationale**	**Literature Citations**
decline, negative trends in the Bridger-Teton (Shivik 2024), the fact that the Bridger-Teton provides a significant share of the breeding habitat for this species while their habitat requirements are restricted to high-elevation patches, and changes occurring on summer breeding habitat; there is a substantial concern for the persistence of the black rosy-finch over the long-term on the BTNF and it is recommended as a species of conservation concern. Evaluator(s): Jason Wilmot, Randall Griebel, Masako Wright		