Forest Service **Washington Office** **1400 Independence Avenue, SW**
Washington, D.C. 20250

File Code: 1570 **Date:** March 4, 2021
Route To:

Subject: Objection Response for the Species of Conservation List associated with the Custer Gallatin Plan Revision

To: Regional Forester, Northern Region

This letter documents my response to the objections filed regarding the identification of Species of Conservation Concern (SCC) for the Custer Gallatin National Forest Land Management Plan (LMP) revision. 36 CFR 219 states that objections specific to the identification of SCC be reviewed by the Chief of the Forest Service, who delegated that authority to me in accordance with the regulation at 36 CFR 219.56(e)(2). The objections have been consolidated into one set of issues and covered in this one response. Several of the issues were sufficiently similar to allow consolidation as described in (36 CFR (Code of Federal Regulations) 219.57(b) (1)).

The objection process followed 36 CFR 219 regulatory requirements, which includes an objection filing period, interested person filing period, and resolution meetings. A draft Record of Decision was issued on July 9, 2020, with a notice of an opportunity to object. The objection filing period ended September 8, 2020. The inherently complex nature of land management planning contributed to the overall time needed for the review and required me to exercise my discretion to extend the time to issue my final response (36 CFR 219.56(g)).

During the objection process I heard from more than 450 eligible objectors bringing up a variety of issues along with multiple interested persons. A virtual resolution meeting was held November 17-19, 2020, where we discussed core points with objectors and interested persons.

The enclosure with this letter is the outcome of the extensive review of concerns raised by objectors. This response reflects my findings following review of the written objections, statutory and regulatory requirements, the discussions at the resolution meeting, and follow-up discussions with you. My response contains instructions for you to implement before signing the final Record of Decision and is the final determination of the U.S. Department of Agriculture on the objections.

I would like to thank regional SCC experts and your land management planning team whose expertise was evident in the quality of the documentation and the thoughtful approach that went into the identification of SCC for the Custer Gallatin LMP revision. I would also like to thank each objector, interested person, and member of the public who participated throughout the entire process for their dedication and passion. I appreciate the time they spent working with the Region and Forest and their interest in the future management of the Custer Gallatin National Forest.

By copy of this letter and notification of availability on the Northern Region SCC Web site, I am notifying all parties of this objection response.

X Jennifer Eberlien

Signed by: JENNIFER EBERLIEN
JENNIFER EBERLIEN
Reviewing Officer for the Chief

Enclosure

cc: Objectors and Interested Persons, Mary Ericksen, Custer Gallatin Forest Supervisor, Timory Peel, Regional Planner, Jody Sutton Spalding, Objection Coordinator, Katherine Renwick, Julie Schaefers

REVIEW FINDINGS: REGION 1 SPECIES OF CONSERVATION CONCERN OBJECTIONS, CUSTER GALLATIN PLAN REVISION

Introduction

The USDA Forest Service, Northern Region (Region 1) had approximately 450 objectors bring up issues pertaining to the identification of Species of Conservation Concern (SCC) related to the Custer Gallatin Forest Plan Revision. Most of the objectors, in response to the Buffalo Field Campaign, requested that bison be identified as an SCC. The remaining objectors brought up several other general and species-specific issues. The other specific species which objectors raised concerns include wolverine, bighorn sheep, grizzly bear, moose, piping plover, inland least tern, evening grosbeak, and Yellowstone cutthroat trout. The list of primary objectors and interested persons can be found at the end of this document.

What is required by Law, Regulation, and/or Policy?

The regulation and/or policy for SCC identification fall under 36 CFR 219 (2012 Planning Rule) and Forest Service Handbook (FSH) 1909.12, Chapters 10 and 20. The 2012 Planning Rule defines species of conservation concern as follows:

> "A species of conservation concern is a species, other than federally recognized threatened, endangered, proposed, or candidate species, that is known to occur in the plan area and for which the regional forester has determined that the best available scientific information indicates substantial concern about the species' capability to persist over the long-term in the plan area" (36 CFR 219.9(c)].

FSH 1909.12, Chapter 10, section 12.52c outlines the criteria for identifying species of conservation concern and potential species of conservation concern:

> 1. The species is native to, and known to occur in, the plan area.
>
> A species is known to occur in a plan area if, at the time of plan development, the best available scientific information indicates that a species is established or is becoming established in the plan area. A species with individual occurrences in a plan area that are merely "accidental" or "transient," or are well outside the species' existing range at the time of plan development, is not established or becoming established in the plan area. If the range of a species is changing so that what is becoming its "normal" range includes the plan area, an individual occurrence should not be considered transient or accidental.
>
> 2. The best available scientific information about the species indicates substantial concern about the species' capability to persist over the long term in the plan area.
>
> If there is insufficient scientific information available to conclude there is a substantial concern about a species' capability to persist in the plan area over the long-term that species cannot be identified as a species of conservation concern.
>
> If the species is secure and its continued long-term persistence in the plan area is not at risk based on knowledge of its abundance, distribution, lack of threats to persistence, trends in habitat, or responses to management that species cannot be identified as a species of conservation concern.

Forest Service Handbook (FSH) 1909.12, Chapter 10, section 12.52d outlines the species to consider when identifying potential species of conservation concern.

The 2012 Planning Rule states the Regional Forester has the responsibility to identify species of conservation concern (36 CFR 219.7(c)(3)). To be identified as a species of conservation concern the species cannot be a federally recognized threatened, endangered, proposed, or candidate species. In determining a species to be a species of conservation concern the species must 1) be native to and known to occur within the plan area, and 2) the best available scientific information indicates a substantial concern about the species' capability to persist within the plan area over the long-term (FSH 1909.12, Chapter 10, section 12.52 and Chapter 20, section 21.22a). Based on this rule the species cannot be identified as a SCC simply because there is a concern related to the species at the broader scale. Instead, there must be sufficient information related to abundance, distribution, lack of threats to persistence, trends in habitat, or responses to management to suggest the same risks to the species that occurs at the large-scale apply at the plan scale over the long-term. The identification of a species that may be at risk at a state level, or broader scale, documented in a State Heritage Program for example, does not in and of itself constitute the identification of the species as an SCC. Rather, this information, in conjunction with other best available science, shall aid the responsible official in their determination. It is also important to understand the handbook when it states "A species with individual occurrences in a plan area that are merely 'accidental' or 'transient,' or are well outside the species' existing range at the time of plan development, is not established or becoming established in the plan area."

The 2012 Planning Rule sets out requirements for Best Available Scientific Information (BASI) in planning:

> "The responsible official shall use the best available scientific information to inform the planning process required by this subpart. In doing so, the responsible official shall determine what information is the most accurate, reliable, and relevant to the issues being considered. The responsible official shall document how the best available scientific information was used to inform the assessment, the plan decision, and the monitoring program […]. Such documentation must: Identify what information was determined to be the best available scientific information, explain the basis for that determination, and explain how the information was applied to the issues considered." (36 CFR 219.3)

Further, the planning directives (FSH 1909.12, Chapter 10, section 12.52(c)) put forth that, "If there is insufficient scientific information available to conclude there is a substantial concern about a species' capability to persist in the plan area over the long-term that species cannot be identified as a species of conservation concern."

A letter from the Deputy Chief (Leslie A. C. Weldon letter of June 6, 2016 (File Code 1920)) clarifies that, "Identification of SCC must be based on current conditions in the plan area. Species should not be eliminated from inclusion as SCC based upon existing plan standards or guidelines, proposed plan components under a new plan, or threats to persistence beyond the authority of the Agency or not within the capability of the plan area, such as climate change." The memo also reiterates "If a species is determined to be at risk across its range, but is determined to be secure within the plan area, it cannot be a SCC."

The Region outlined the process used in the identification of SCC in the process documents for both animals and plants and FAQ document on the Northern Region web page for SCC (link to Regional Office SCC web page). In addition, the rationale (evaluation spreadsheets) used to identify animal and plant SCCs are also found on this web page.

OBJECTION ISSUES

Should include more species from other Lists

Objectors claim that the Regional Forester failed to identify multiple species as SCC even though those species may be identified by NatureServe, Montana State Department of Fish, Wildlife and Parks, the Montana Natural Heritage Program, and as Regional Forester sensitive species to have some level of concern. The objectors contend it is unclear why the Forest Service appears to not rely on these "other lists" and questions why outside sources, which are used as a starting point for the preliminary SCC list, do not carry more weight when identifying SCC.

Review Findings

The process papers for animals and plants and FAQ document (located on the Regional Office SCC web page) are the primary methods of documenting the process utilized by the region in the identification of SCC.

During the assessment phase, the Custer Gallatin's planning team biologists, in conjunction with regional office biologists, external experts and the public, identified which of the animal species documented to occur within the planning area and potentially met the categories described in the planning process document. The planning team utilized a variety of species lists to begin the first filter of the identification process. These include but are not limited to, NatureServe, Montana Natural Heritage Program and South Dakota Natural Heritage Program, and Regional Forester sensitive species to name a few.

The Frequently Asked Questions document describes why species may not end up being identified as SCC even if they may be identified on a separate list such as NatureServe, state Natural Heritage Program, and Regional Forester sensitive species lists.

Concern that species on other lists such as NatureServe and state lists are not identified as SCC

In identifying SCC, the forest and region used the criteria outlined in the 2012 Planning Rule (36 CFR 219) and Forest Service policy (FSH 1909.12, Chapter 10, section 12.52 and Chapter 20, section 21.22a). In addition to utilizing the criteria in Forest Service policy to form an initial list of species to consider, the forest and region also considered local and state data. Although the Forest Service utilizes a multitude of data and species lists from outside sources, such as NatureServe and Montana and South Dakota Natural Heritage Programs, the criteria by which a species may be identified on each of these State lists does differ from that of the Forest Service's species of conservation concern. As described in the FAQ document pertaining to the question about how these other lists apply (p. 3), "When evaluating species the regional forester considers a broad suite of information, and rarity alone does not necessarily result in identification as SCC unless population declines, known threats, or other relevant information indicates "substantial concern for persistence" of the species in the plan area."

Concern that Regional Forester's sensitive species are not identified as SCC

As described in the FAQ document pertaining to the question about how the regional forester sensitive species differ from SCC (pp. 5-6), both the Regional Forester sensitive species (RFSS) and SCC concepts implement the "diversity requirement" of NFMA under different Planning Rules. "The 1982 planning rule implemented this aspect of the Act by requiring the agency to manage habitat for viable populations of

native and select non-native vertebrates…. The development of sensitive species policy embodies the part of the Agency's commitment to manage habitat for viable populations as directed in the 1982 planning rule. The 2012 planning rule implements the NFMA requirement to 'provide for the diversity of plan and animal communities' using a different approach."

Although there are similarities in the goals for identifying both RFSS and SCC, the processes and purpose for identifying the species are different (see Table 1 in the FAQ document, pp. 5-6). Most importantly, are the differences in the planning purpose. The planning purpose for SCC is to "Ensure the land management plan includes plan components to provide the ecological conditions to both maintain the diversity of plan and animal communities and support the persistence of most native species in the plan area." The planning purpose for RFSS is to "Review programs and activities as part of the National Environmental Policy Act process through a biological evaluation, to determine their potential effect on sensitive species." The RFSS list ensures that the potential impacts to these species are analyzed for each project. The intent of SCC is to generate plan components and to thus guide project level application of those plan components. In short, SCC is a **planning tool** as opposed to an **analysis tool** like RFSS. Because the intent of SCC is to generate plan components it follows that the SCC list be specific to the plan area whereas RFSS lists are region-wide. For a species to become a SCC it must be native and known to occur in the plan area, where the species need not be known to be present to be an RFSS. Additionally, RFSS are included if there is a current or predicted downward trend in the population, whereas the threshold for inclusion as SCC is *substantial concern* about the species' capability to persist over the long term in the plan area which takes into account things beyond just trend. Finally, the focus of SCC is on Ecological Conditions (habitat *and* the effects of human uses) and the plan components that provide those Ecological Conditions for each SCC where the focus of RFSS is on impacts to individuals from projects.

Because RFSS and SCC are not the same and have different criteria outlined in policy, this leads to some species formerly on the RFSS for a unit not being on the SCC list for the same unit.

Conclusion

The Region used criteria for SCC (not RFSS) so some species that were RFSS are not identified as SCC. In addition, species from other lists (Nature Serve, Montana State Department of Fish, Wildlife and Parks, the Montana Natural Heritage Program) were considered, but as the SCC criteria were applied, not all these species were ultimately identified as SCC.

No Instructions

SCC Identification Process

The Gallatin Wildlife Association questions the 3-step process for identifying SCC and contends additional species need to be added.

Objector-Provided Remedies:

Go back and reconsider adding more species, based on the 3-step process.

Review Findings

The Region outlined their approach used in the identification of SCC in the process papers for both animal and plant species found on the Regional Office SCC web page. The process papers outline the criteria and filters applied in a 3-step process. These criteria are also outlined in FSH 1909.12, Chapter 10, section 12.52c and 12.52d.

As described in the process papers, during the assessment phase, the Custer Gallatin planning team biologists identified potential SCC to be further considered for SCC status by the Regional SCC team. To do this, the Custer Gallatin planning team biologists first identified all species that met the categories in Step 1 of the process. These criteria included: NatureServe rankings of 1 or 2; species delisted from the Endangered Species Act list within the last five years; Regional Forester's sensitive species in the plan area and on adjoining forests, SCC on adjoining forests; threatened or endangered designations by the states of Montana and South Dakota; and several other criteria. The planning team biologists then applied the Step 2 criteria to the list of species considered for SCC. The Step 2 criteria are as follows: whether the species is native or known to occur within the planning area; whether best available science indicates a substantial concern for the ability of the species to persist within the plan area over the long term; and whether there was sufficient information to determine if there was a substantial concern about the ability of the species to persist within the plan area over the long term; and whether the species was secure in the plan area.

In Step 3 of the process, the Regional SCC team conducted more thorough evaluations of the criteria used in Step 2. This resulted in a list of SCCs that were then presented to the Regional Forester for review of the best available scientific information to determine if a substantial concern was present for a species' ability to persist within the plan area over the long-term. The rationale spreadsheets provide explanation and the best available scientific information (BASI) utilized in identifying SCC.

In addition to the process papers already cited, the Regional SCC team developed a list of frequently asked questions which further explains several common questions (link to document Regional Office SCC web page). Questions such as, how NatureServe and state Natural Heritage Program rankings are utilized, how public input is incorporated into the list, and the difference between Regional Forester sensitive species and SCC, among other items.

Conclusion

The region documented the criteria utilized in the determination of SCC, and best available scientific information (BASI) and rationale utilized in their final determination. The region followed Forest Service regulation and policy. It is, however, difficult to jump back and forth between multiple documents posted on the region's website for a complete picture of the process and criteria that was used to support the rationale whether to identify a species as an SCC. In the future, it would be beneficial to organize the information or provide a comprehensive outline that "connects the dots" between multiple documents (i.e. process for animals, process for plants, and Q&A document) to improve clarity. Finally, special attention needs to be made to how Best Available Scientific Information was used and compared with the scientific information provided by the public. Specific instructions can be found in the Bison and Yellowstone Cutthroat Trout sections.

No Instructions

Best Available Scientific Information (BASI)

This objection issue is about 3 separate, but semi-related items:

1. What constitutes insufficient information and who makes that determination?
2. Suggestions to gather more data if it is insufficient
    a. Suggest a plan component
3. Suggest the SCC process should not focus on the small population paradigm but rather on the trend paradigm

Objectors disagree with the findings of insufficient information that keeps many species off the list and claim there is plenty of best available scientific information to determine persistence and threats to both population and habitat. They also do not believe the Forest Service is using the right measures to gage species viability. It is their contention that there are better, more recent ways to calculate the "health and wellbeing" of a species, proven by new scientific studies.

Review Findings

The Regional Forester has the responsibility and authority in determining "whether the best available scientific information indicates: (1) That the species is native and known to occur in the plan area, and (2) There is a substantial concern about the species' capability to persist over the long term in the plan area based on the guidance of FSH 1909.12, chapter 10, section 12.52c" (FSH 1909.12, Chapter 20, section 21.22a).

What constitutes insufficient information and who makes that determination?

The Regional Forester has the responsibility and authority, not only to determine substantial concern, but also determines what information is sufficient to make that conclusion. The process by which it was determined insufficient information was available to conclude substantial concern is outlined in Step 2 C) ii. of the process paper for animal species:

> "Lack of sufficient scientific information included having limited inventory data resulting from low survey effort, lack of effective detection methods, or, in the case of purported population declines, lack of reasonably consistent monitoring methods among trend monitoring periods that would preclude meaningful comparison."

It does appear to be largely limited to issues of inventory data and monitoring to determine trends or presence and is largely silent on the other aspects of determining substantial concern listed elsewhere in the same document such as dispersal capability or reproductive potential. However, the rationale provided in the evaluation spreadsheets is expanded to include the other factors of determining substantial concern.

In the end it is ultimately the Regional Forester's determination of substantial concern and determining if the information available is sufficient to even make such a determination and is documented in Column J of the evaluation spreadsheets.

Suggestions to gather more data if it is insufficient

There is nothing in law, regulation, or policy that compels the Regional Forester to generate new information to make the determination of substantial concern. The determination of substantial concern is based on the best *available* scientific information.

In summary, the planning rule is clear that the Regional Forester makes the determination of substantial concern and thus the sufficiency of the information to make that determination at 36 CFR 219.9. The implementing handbook further clarifies that this authority cannot be delegated (FSH 1909.12, Chapter 20, section 21.22.a.1.b).

Focus on trend paradigm not small population paradigm

The evaluation spreadsheet provides the rationale and contains factors beyond the "small population paradigm" to determine substantial concern. Included in the rationale are a consideration of trend in population, trend in habitat, relevant life history traits, and relevant threats. Similarly, the process papers for both plants and animals has criteria that are well beyond just the small population paradigm, including trends in populations and trends in habitat.

Conclusion

1. What constitutes insufficient information and who makes that determination?
    a. Insufficient information is discussed in the process paper for animals at Step 2.Cii. While this description appears to be largely limited to issues with data availability for trend and monitoring, the execution of the concept in Column J of the evaluation spreadsheets is more expansive in explaining how information about the other factors of determining substantial concern (beyond trend and presence) was sufficient or not.
    b. The Planning Rule and its implementing handbook as well as the record are clear that the determination of substantial concern and thus the sufficiency of the information to make that determination are the Regional Forester's.
2. Generate new information
    a. It is clear in the record that existing information was used in the Assessment Phase and that *available* is the operative word in the phrase "Best Available Scientific Information". In short, the Regional Forester is not compelled to generate new information to determine substantial concern and the assessment phase uses existing information.
3. Small population paradigm
    a. It is clear in the record that more than just the small population paradigm was considered for determining substantial concern. It is worth sorting out however, why the process paper spotlights rarity in particular, without an explanation of why. Why it was decided that rarity alone is not enough unless accompanied by another indicator is not explained. It is unclear why there is focus on just one of the eight factors without explanation.

Instructions

- Clarify in the process papers that other factors beyond the examples given can contribute to insufficient information.
- Clarify in the process paper why rarity alone is not enough to determine substantial concern, citing any relevant literature.

Wolverine and other Greater Yellowstone Ecosystem (GYE) Species

Objectors are concerned about the lack of representative terrestrial species such as bison, wolverines, bighorn sheep, moose, gray wolf, potentially grizzly bears, etc. The Gallatin Wildlife Association points out that ""there still seems to be a large deal of ambiguity, subjectivity, and perhaps a lack of perspicacity in the decision-making process. GWA finds nothing in this definition that prevents listing of further species."

Objector-Provided Remedies:

Expand list to include at a minimum those species uniquely important in the Greater Yellowstone ecosystem because the GYE is the southernmost extension of their range (grizzly bears, wolves, bison are examples) or because their original range has been reduced by over 90% and the GYE contains the greatest expanse of suitable habitat within the region much of which is currently unoccupied (bighorn sheep).

The proposed solution is to review and to recognize the fact that species on the CGNF are in peril, not just here but elsewhere. This argument could most likely easily be made on other forests across our country. That makes the argument even more strong, not less. The proposed solution is to list these species and others as a Species of Conservation Concern.

Review Findings

The Region evaluated many GYE species for which objectors were concerned including grizzly bear, gray wolf**,** bison**,** bighorn sheep**,** moose**,** and swift fox. There are detailed review responses for species that objectors provided detailed information on, including, bison, bighorn sheep, grizzly bear, and moose, elsewhere in this review document. Wolverine, however, was not evaluated as a potential SCC because it was proposed for listing under the Endangered Species Act at the time the SCC evaluation was written. However, on October 8, 2020, the USFWS withdrew the proposed listing of the wolverine.

Instruction

- Evaluate the wolverine to determine whether they should be identified as a SCC.

Bison

Hundreds of objectors sent in requests that bison be added to the SCC list. Many of the objections were initiated by the Buffalo Field Campaign, who submitted substantive reasons why the Bison should be on the SCC list. Most objectors allege that the Region did not use the best available scientific information when assessing and determining the rationale for not putting bison on the list. Other objectors such as Defenders of Wildlife weigh in, stating "Bison as a SCC would afford the proper protections needed for long term viability of the species as well as toward overall restoration of Plains bison across the West, with Yellowstone bison as a vital resource. We explained the numbers and historic bison range, to illustrate the species' occurrence in the planning area, and provided scientific evidence as to why there is substantial concern about its capability to persist over the long term; both requirements for an SCC decision." Western Watersheds Project, et al, submits that, "cumulative impacts well understood by the Forest were

ignored in this decision making. Bison experience stressors curtailing their natural range, fragmented habitat, agency permitted actions that disrupt connectivity to habitat, cattle grazing allotments, fences in migration corridors, climate change uncertainties, drought, and fires that may shift bison into intolerant "management zones." Bison clearly meet the criteria to be listed on the SCC list so their exclusion is a violation of law."

Objectors also bring up the need for genetic diversity that would be promoted by not restricting natural migratory patterns and the need for specific plan components related to the species, which they believe cannot happen unless bison is on the SCC list.

And finally, several objectors contend that the Region was not transparent during the assessment and rationale for Bison. As Charles Keating writes, "the record evidence of the Forest Service evaluating all of the criteria and factors threatening the long-term persistence and viability of genetically distinct and unique bison subpopulations in the Custer Gallatin planning area is missing and needs to be publicly disclosed."

Examples of Objector-Provided Remedies:

Please list the native bison as a species of conservation concern in Region 1 so bison persist as a viable and stable native species within the plan area.

Regional Forester Marten's decision should be reversed, and her assessment and evaluation of the best available scientific information for listing American bison as a species of conservation concern publicly disclosed. The National Forest planning rule supports listing native bison as a species of conservation concern because the migratory species provides a diversity of plant and animal communities that the National Forest Management Act requires to be protected. These key characteristics make bison an ideal food species to monitor ecosystem integrity.

Review Findings

As the 2012 Planning Rule states "the Regional Forester has the responsibility to identify species of conservation concern. In determining a species to be a species of conservation concern the species must 1) be native to and known to occur within the plan area and 2) the best available scientific information indicates a substantial concern regarding the ability of the species to persist within the plan area over the long-term (FSH 1909.12.52)". Based on this rule set the species cannot be listed as a SCC simply because there is a concern related to the species at the broader scale. There must be substantial concern about persistence in the plan area. The Regional Forester outlined the process used in the identification of SCC in the "Process Documents" for both animal and plant on the Regional Office webpage for SCC.

Response from the Rationale Spreadsheet: "The primary limit to the GYA population stems from human intolerance. Bison may be intentionally removed through hazing, culling and hunting regulations to keep the population near tolerable levels recognized in the IBMP. Intolerance primarily relates to the potential spread of brucellosis to cattle, human safety, and property damage. Regardless, migrations into the plan area have been regular since development of the IBMP, and there is no indication this will change.

Brucellosis generally decreases fecundity of females during their first pregnancy following infection but does not significantly affect bison survival (White et al. 2015).

There is some concern about the genetic integrity of GYE bison given the small founder sizes of both herds, but testing shows significant genetic variability as measured by heterozygosity and allelic diversity, and a lack of inbreeding effects (White et al. 2015). There is also no evidence of genetic mixing with cattle (Halbert et al. 2012, White et al. 2015). Further, reproductive connectivity between the two GYE herds appears to have increased during recent years. The Central herd's smaller size, unique genetic signature and dominance on the Hebgen Basin winter range suggest it could be sensitive to over-culling if managers are not mindful of this. Despite potential threats, birth and survival rates are high in the GYA, resulting in population growth between 2000 and 2018 while the IBMP was in effect.

Other factors related to climate change and weather, such as snow pack and drought, may influence bison movements and energetics. However, these factors have minimal influence on population dynamics compared to the culling program (White et al. 2015).

The IBMP is adaptively administered by 2 state agencies, 3 tribal entities and 3 federal agencies. The 3,000 animal population objective set in the IBMP meets or exceeds the estimated number of animals needed to preserve bison genetic variation over centuries (multiple citations in White et al. 2015). In 2016, the plan expanded the management zones outside of YNP (IBMP 2016) to about 200,000 acres in the Hebgen Basin and about 105,000 acres in Gardiner Basin. Previously, the zones were much smaller at about 12,500 acres and 70,000 acres, respectively.

The species is secure and characteristic seasonal migrations are expected to continue in the plan area over the long-term. The GYA bison population has increased in recent years, reproduction and survival have been high, genetic diversity is significant, genetic connectivity appears to be increasing, and habitat is readily available and could support additional numbers and distribution of bison. Redundant security is provided by the watchful, diverse eyes that administer the adaptive interagency bison management plan."

Science Provided in Rationale Spreadsheet

Geremia, C., R. Wallen and P. White. 2018. Status report on the Yellowstone bison population, Sept 2018. Obtained from http://www.ibmp.info/Library/OpsPlans/2018_StatusYellowstoneBisonPopulation_Sep2018_Final.pdf

Geremia, C., P. White, R. Wallen and others. 2014. Predicting bison migration out of Yellowstone National Park using bayesian models. PLoS ONE accessed from https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0016848

Halbert, N., P. Gogan, P. Hedrick, J. Wahl, and J. Derr. 2012. Genetic population substructure in bison at Yellowstone National Park. Journal of Heredity 103:360-370.

IBMP. 2016. 2016 IBMP Adaptive Management Plan. Accessed from http://www.ibmp.info/Library/AdaptiveMgmt/2016_IBMP_Adaptive_Management_Plan_signedFINAL.pdf.

State of Montana. 2015. Decision Notice, Year-round habitat for Yellowstone bison environmental assessment. 38pp.

USDA Forest Service. 2017. Terrestrial wildlife assessment report. Accessed from https://www.fs.usda.gov/detail/custergallatin/landmanagement/planning/?cid=fseprd532957

White, P., R. Wallen, and D. Hallac. 2015. Yellowstone bison: Conserving an American icon in modern society. Accessed from https://www.nps.gov/yell/learn/nature/upload/Yellowstone_Bison_ForWeb.pdf

Science Submitted By Objectors

(Freese, C.H., et al. 2007) in an article entitled "Second Chance for the Plains Bison" in Biological Conservation, there is this scientific fact: "Research indicates that it takes between 2,000-4,000 bison in order to preserve 95% of the genetic diversity of Yellowstone bison over 200 years (Freese et al. 2006),

Traill in the 2010 abstract of his paper states the following: "This literature collectively shows that thousands (not hundreds) of individuals are required for a population to have an acceptable probability of riding-out environmental fluctuation and catastrophic events, and ensuring the continuation of evolutionary processes. The evidence is clear, yet conservation policy does not appear to reflect these findings, with pragmatic concerns on feasibility over-riding biological risk assessment."

Scientific journal article entitled "Conservation Genetics and North American Bison" (Hedrick, Phillip, 2009) genetic rationale is provided for the conservation of the species as we know it

The best available scientific information on American bison's distinct and unique population substructure is found in Natalie D. Halbert et al., Genetic Population Substructure in Bison at Yellowstone National Park, Journal of Heredity, Advance Access published (Feb. 8, 2012).

In another study, scientists "identified two independent and historically important lineages in Yellowstone bison" finding "Yellowstone bison represent nearly half - 10 of 22 modern plains bison haplotypes - of all the known haplotypes in plains bison . . ." David Forgacs et al., Mitochondrial Genome Analysis Reveals Historical Lineages in Yellowstone Bison, 11(11) PLoS ONE e0166081 pages 1, 6 (Nov. 23, 2016). Before new management standards and policies are defined for the Yellowstone bison population, additional studies involving population structure and genetic diversity based on both DNA and nuclear genetic diversity assessments need to be conducted. David Forgacs et al., page 7 (Nov. 23, 2016).

Prehistoric bison distribution in the GYE can perhaps best be summarized simply by saying that bison appear to have been living everywhere in Greater Yellowstone where habitats were suitable. Paul Schullery & Lee Whittlesey, Greater Yellowstone Bison Distribution and Abundance in the Early Historical Period, page 136 (2006).

Nie, Martin and Barns, Christopher and Haber, Jonathan and Lurman Joly, Julie and Pitt, Kenneth and Zellmer, Sandra B., Fish and Wildlife Management on Federal Lands: Debunking State Supremacy (June 5, 2017). Environmental Law, Vol. 47, No. 4, 2017, Available at
SSRN: https://ssrn.com/abstract=2980807

Conclusion

The SCC identification rationale spreadsheet developed by the Region identifies bison as a winter migrant in the plan area and indicates the overall Greater Yellowstone Area's (GYA) population is stable and typically exceeds the target population size of 3,000 established through the Interagency Bison Management Plan (IMBP). The Region states habitat quality may be improving but provide limited evidence to support this assertion in the species rationale spreadsheet. Key stressors identified by the Region focus on human intolerance of bison and highlight the role of the IMBP in managing human/bison conflicts. Objectors focus on 3 elements of the SCC determination (1) not applying the

Best Available Scientific Information in making the determination, (2) failing to disclose analysis and detailed rationale for determination, and (3) insufficient consideration of other stressors that may affect bison migration and persistence. To some degree, points raised by objectors focus more on broader bison conservation issues than on specific criteria and rationale required to inform potential identification as a species of conservation concern.

For the most part, rationale provided by the Region supports the determination that bison do not meet the criteria to be identified as a species of conservation concern for the plan area. Though the species is ranked G2 by NatureServe, the population appears to be stable in the GYA and is the focus of coordinated, interagency management to assure continued persistence in the GYA and as a migratory population in the plan area. It is, however, difficult to determine how science provided by commenters in 2019 and once again within their objections was considered. Objectors also raised concerns regarding connectivity of migratory habitat resulting from prior agency actions (e.g., livestock grazing, fences); this concern is not adequately addressed in the species rationale.

Instructions

- Assure that specific best available scientific information identified by the objectors is explicitly addressed and that additional information used to inform the SCC determination, if any, is documented and disclosed to the public. (use list above under Science provided by Objectors)
- Strengthen the rationale regarding connectivity of migratory habitat to support its SCC determination, addressing the genetic diversity issue and clarify/strengthen its assessment of habitat quality. Include relevant information regarding potential effects of fences and other infrastructure within migratory habitat.
- Once BASI and the rationale regarding connectivity have been addressed, revisit the process steps to determine if bison meet the criteria to be identified as a species of conservation concern.

Bighorn Sheep

Objectors assert that bighorn sheep be added to the SCC list because of perceived threats to populations such as disease, over hunting, habitat loss, and exposure to domestic sheep and goats. Objectors are also very concerned that the information and data used to conclude there was no need to put the bighorn sheep on the SCC list, was insufficient.

Objector-Provided Remedies:

Recent trends and status of bighorn herds on the Custer Gallatin Forest, and the complexity of bighorn environmental issues and needs, justify determining that bighorn sheep are a species of conservation concern on the Forest. Such classification would encourage funding and application of a long-term strategic program for reestablishing large, productive bighorn herds on complete year-round ranges on the Forest. Anything less will not be a coordinated long-term plan for the habitat of this species.

Review Findings

The Region determined that bighorn sheep do not meet the criteria to be identified as an SCC. The rationale focuses on population status and lack of stressors in the plan area. Populations vary from fairly

large and well-connected herds, to smaller isolated herds which the Region identifies as a distribution condition that protects against widespread disease epidemics. Domestic sheep grazing is not permitted in the plan area and there is accordingly no risk of pathogen transmission from domestic sheep to bighorn sheep in the plan area.

Objectors raise concerns about the quality of bighorn sheep population data collected by Montana Fish Wildlife and Parks, and the rationale provided by the Region does not include detailed information about population status. The Region indicates that "forage conditions … have likely improved since the elimination of domestic sheep grazing in the plan area" but does not provide additional information to support this.

Conclusion

While the general distribution and population status of bighorn sheep combined with the lack of domestic sheep grazing on the Custer Gallatin National Forest suggest no substantial concern for bighorn sheep persistence, detailed population and habitat data are not provided in the species rationale spreadsheet though the 2017 wildlife assessment is referenced which includes additional detail. Limited information is provided regarding other potential sources of pathogen transmission (e.g., small domestic sheep flocks, domestic goats) to assess the potential risk to resident bighorn sheep.

Instructions

- Strengthen the rationale regarding bighorn sheep population status and distribution by carrying forward information from the wildlife assessment, along with more recent data from Montana FWP if available.
- Substantiate the limited risk from small outside flocks and other potential domestic livestock pathogen sources as possible.
- Describe the adequacy of Montana FWP bighorn sheep data in its assessment of substantial concern for bighorn sheep. Attention should be paid to assure adequate information is available to determine substantial concern and is done so consistently with other species considered for identification as SCC.
- After addressing previous instructions, revisit rationale to determine if bighorn sheep meet criteria to be a SCC.

Grizzly Bear

Objectors assert that if grizzly bear is removed from the Threatened and Endangered List, for any reason, that they must be added to the Regional Forester's SCC list. Objectors disagree with the planning rule that Threatened and Endangered species should not be on the list.

Review Findings

The definition of a species of conservation concern in the 2012 Planning Rule under 36 CFR 219.9(c) begins "a species of conservation concern is a species, other than federally recognized threatened, endangered, proposed, or candidate species." Because grizzly bear is listed as a threatened species, it cannot be a SCC.

The planning directives describe that after the Regional Forester has identified the species of conservation concern, new scientific information may indicate some species should be added or removed from the list. If this were the case, the Forest Supervisor and Regional Forester would follow the process outlined in the Forest Service Handbook titled, "Evaluating New Information on Species of Conservation Concern" (FSH 1909.12, Ch20, sec. 21.22b).

The reason the Department of Agriculture, through rule making for the 36 CFR 219 planning rule, determined it was not necessary to put Threatened or Endangered species on the SCC list is because the ESA, through Section 7, provides adequate protection and requires the Forest Service to consult with Fish and Wildlife and/or NOAA for any decision that might impact the species. Terms and Conditions provided by these agencies are required to be adhered to before proceeding and for forest planning, plan components are developed.

Conclusion

There is no violation of law, regulation, or policy. Grizzly bear cannot be listed as an SCC because it is listed as a threatened species.

No Instructions

Moose

Gallatin Wildlife Association would like the Region to consider adding moose to the SCC list due to stressors on both population and habitat. The GWA summarizes their objection issue, "the Custer Gallatin National Forest Draft Revision Plan and the associated Draft Environmental Impact Statement barely recognizes how stressors affecting moose populations on the CGNF. Knowing what we know and knowing what we don't know, GWA would like a full accounting as to why these conditions don't justify status of Species of Conservation Concern? As you can see, many species are facing severe threats right here on the Custer Gallatin National Forest, not that this is an indication of something the Forest is doing wrong, but because these are regional and with the regard to climate change, global threats. Not listing these species and others as Species of Conservation Concern is a disservice to the reality on the ground. Hopefully the listing of these and other species will help direct the management of the Forest Service back to their original missions of the agency; to protect the resources at large. By ignoring the reality on the ground, we are turning the other way and basically pretending all is well, when we know it is not".

Review Findings

Rationale is provided by the Region to support determination that moose do not meet the criteria to be identified as an SCC focus on population status and status of habitat in the plan area. Status and trends of habitats are mostly stable though there may be a decrease in successional habitats.

The general distribution and population status of moose suggest no substantial concern for persistence, although detailed population and habitat data are not provided for the plan area in the species rationale spreadsheet. The 2017 assessment is referenced in regard to habitat status for riparian and successional habitats.

Objectors raise concerns and present information about the effects of climate change to moose and their habitats. Little to no attention is given to the direct and indirect effects of climate change on moose and their habitats.

Conclusion

There is no violation of law, regulation, or policy. However, though the rationale for not identifying moose as SCC is reasonable and sound, the findings would be bolstered by being more responsive to objectors' comments regarding climate change.

Instructions

- Include a summary of population and habitat data from the 2017 assessment in the rationale.
- Evaluate information regarding effects of climate change on moose and their habitats and add information into documentation as appropriate.

Piping Plover & Inland Least Tern

The objector is concerned about the "Inland shorebirds "and claim that the piping plover has basically disappeared from CGNF lands and ornithologists no longer look for the bird there. The objector adds that, "particularly near water on the eastern segments of the forest, the species should be encouraged to return because the entire Northern Plains population is at risk."

Objector-Provided Remedies:

Add species such as the Northern Plains population of piping plover and the inland least tern.

Review Findings

The piping plover and inland least tern were not considered or evaluated to be SCC because they are listed as a threatened species under the Endangered Species Act. The reason the Department of Agriculture, through rule making for the 36 CFR 219 planning rule, determined it was not necessary to put Threatened or Endangered species on the SCC list is because the ESA, through Section 7, provides adequate protection and requires the Forest Service to consult with Fish and Wildlife and/or NOAA for any decision that might impact the species. Terms and Conditions provided by these agencies are required to be adhered to before proceeding and for forest planning, plan components are developed.

Conclusion

There was no violation in law, regulation, or policy. These species cannot be listed as an SCC because they are listed as a threatened species.

No Instructions

Evening Grosbeak

The objector asks that the Evening Grosbeak be added to the list by using the best available and most current science.

Review Findings

The rationale provided in the evaluation spreadsheet does a good job of describing why evening grosbeak was not included as a SCC. This spreadsheet provides population numbers and suggests trends in the area are stable. The data suggests meaningful populations on the forest with a high likelihood of longer-term persistence.

Conclusion

There is no violation of law, regulation, or policy. The Region found no substantial concern and has documented such in the rationale spreadsheet.

No instructions

Wilderness Grassland Species

The objector suggests that the Brewer's Sparrow, Common Poorwill, Grasshopper sparrow, and Sage-Grouse should be considered for the SCC list. "Wilderness Species of Conservation Concern should include the entire group of birds known as grassland birds that use habitat in treed areas as well as in clearings near cleared areas, on the CGNF lands".

Review Findings

Several species that fit the general description as grassland species (e.g. Brewer's Sparrow, Common Poorwill, Grasshopper sparrow, Sage Grouse) have been evaluated. The Regional Forester identified the greater sage grouse as SCC but determined that these other species did not meet the criteria for SCC, and the species rationale spreadsheet supports this conclusion.

No Instructions

Yellowstone Cutthroat Trout

"Defenders of Wildlife appreciates that the Westslope cutthroat trout has been put on the Species of Conservation List, but requests that the Yellowstone cutthroat trout also be added to the list. They assert that the same criteria applied to the Westslope apply to the Yellowstone cutthroat. They do not agree on how the Forest Service and Region interprets the planning rule regarding persistence in the plan area and population distribution. "The agency must look at the complete planning area distribution of at-risk species, not simply cherry pick the locations where the species may be relatively secure. Pursuing this argument is dangerous because it encourages the Forest Service to determine that if any given forest includes one "secure" population or location, then SCC status is not justified, which is ridiculous. The agency needs to reverse this determination. In reexamining this issue, the Forest Service should consider the BASI provided in the SCC Rationale for WCT that is equally applicable to the SCC determination for YCT, given similar habitat requirements and threats. Specifically, this BASI from the SCC Rationale as applied to the WCT SCC determination should be applied to the YCT determination as it raises concern about the viability of local cutthroat trout populations (emphases added)".

Objectors contend that the Regional Forester incorrectly dismissed Yellowstone cutthroat trout (YCT) as a SCC due to an incorrect interpretation of Planning Rule requirements. Objectors also argue that as a scientific matter, there is substantial concern about the species' capability to persist over the long-term

in the plan area. The assessment identified YCT as a potential SCC because of significant range-wide population declines and current populations on Custer Gallatin being critical to conservation. Even though habitat trends are improving within the plan area, local populations could be susceptible to further hybridization, isolation, and declining numbers from stressors such as localized habitat degradation and climate change (Assessment -Aquatic and Riparian Ecosystems Report, p. 21). Other objectors contend that YCT should be listed as an SCC because they occupy 46% of historical habitat within the plan area, they are threatened by climate change, non-native species, and various forms of habitat requirements and threats as Westslope cutthroat trout, which have been named an SCC.

Review Findings

The Region outlined in detail the process and criteria they used in the identification of SCC in the process documents for both animals and plants found on the Regional Office webpage for SCC. In terms of the argument that because the Custer Gallatin NF has chosen to identify Westslope cutthroat trout as an SCC the Yellowstone cutthroat trout should be identified as an SCC, the two subspecies of cutthroat exist in significantly different condition across the plan area.

Regarding the current and future impacts of climate change, the impacts are complex and fairly uncertain at this time. Climate change modeling suggests that the headwaters of stream systems will serve as important refuge areas for cutthroat trout and other coldwater species (Isaak et al. 2015), and that the best remaining cutthroat habitat exists in wilderness and designated roadless areas (Rhodes et al. 1994, Kershner et al. 1997). These headwater systems located in wilderness will continue to provide refuge under a changing climate. If habitat conditions change significantly in the future, the Regional Forester retains the ability to add YCT as a SCC.

Conclusion

The Regional Forester has provided sufficient rationale to conclude that Yellowstone cutthroat trout does not meet the criteria for SCC identification. However, the rationale could be strengthened by clarifying the Best Available Scientific Information used.

Instruction

- Make sure BASI has been explained. Review climate change modeling from Isaak et al. 2015 and Rhodes et al. 1994, Kershner et al. 1997.

List of Primary Objectors and Interested Persons

The following list, by topic area, does not include names associated with the Bison due to the large number of objectors and interested persons. A complete record and copy of all objections can be found in the project record for the Custer Gallatin Plan Revision objection process.

Objections or Interested Person requests that contained almost all topics

Objector - Organization	**Interested Person (Every Issue) – Organization**
Wuerthner, George	Cleveland, Emily - Montana Wilderness Association
Nagel, Clinton - Gallatin Wildlife Association	Dudinyak, Linda (Forest plan revision)

	Foster, Tracy
	John, Tubbs - Montana Department of Natural Resources and Conservation

SCC Identification Process

Objector - Organization	Interested Person - Organization
Warden, Darcie - The Greater Yellowstone Coalition	Dieterich, Michele
Nagel, Clinton - Gallatin Wildlife Association	Foster, Tracy
Scherfig, Katie	Harrison, John - Confederated Salish and Kootenai Tribes of the Flathead Reservation
Stevens, Nike	Healow, Linda
Nelson, Peter - Defenders of Wildlife	Kerr, Rick
George Wuerthner	Mastri, Francis
	O'Neill, Deb - Montana Fish, Wildlife & Parks
	Ostlie, Nancy - Great Old Broads for Wilderness, Bozeman Broadband
	Quaempts, Eric - Confederated Tribes of the Umatilla Indian Reservation
	Wallace, William - Sweet Grass County Commission
	Warden, Darcie - Greater Yellowstone Coalition
	Wheeler, Shannon - Nez Perce Tribe

Best Available Scientific Information

Objector - Organization	Interested Person - Organization
Warfield, Melissa	Dougherty, Kelsie -National Parks Conservation Association
Moreland, Tom	Kerr, Rick
Leroux, Jocelyn - Western Watersheds Project - Adam Riessen, WildEarth Guardians	Mastri, Francis
Nelson, Peter - Defenders of Wildlife	Quaempts, Eric - Confederated Tribes of the Umatilla Indian Reservation
	Warden, Darcie - Greater Yellowstone Coalition
	Wheeler, Shannon - Nez Perce Tribe

Bighorn Sheep

Objector - Organization	Interested Person - Organization
Wuerthner, George	Baily, James - Gallatin Wildlife Association
Nagel, Clinton - Gallatin Wildlife Association	Dieterich, Michele
Richardson, Gail and John	Foster, Tracy
Dieterich, Michelle	Harrison, John - Confederated Salish and Kootenai Tribes of the Flathead Reservation
Leroux, Jocelyn - Western Watersheds Project	Mastri, Francis
Stevens, Nike	Ostlie, Nancy - Great Old Broads for Wilderness, Bozeman Broadband

Nelson, Peter - Defenders of Wildlife	Quaempts, Eric - Confederated Tribes of the Umatilla Indian Reservation
	Warden, Darcie - Greater Yellowstone Coalition
	Wheeler, Shannon - Nez Perce Tribe

Grizzly Bear

Objector - Organization	**Interested Person - Organization**
Warden, Darcie - The Greater Yellowstone Coalition	Dieterich, Michele
Wuerthner, George	Ostlie, Nancy - Great Old Broads for Wilderness, Bozeman Broadband
Dieterich, Michelle	
Knight, Philip - Montanans for Gallatin Wilderness	
Leroux, Jocelyn - Western Watersheds Project	
Stevens, Nike	
Nelson, Peter - Defenders of Wildlife	

Moose

Objector - Organization	**Interested Person - Organization**
Nagel, Clinton - Gallatin Wildlife Association	
Richardson, Gail and John	

Bird Species

Objector - Organization	**Interested Person - Organization**
Millbrooke, Anne - Audubon	
Phillip Knight – Montanans for Gallatin Wilderness	

Yellowstone Cutthroat Trout

Objector - Organization	**Interested Person - Organization**
Nelson, Peter - Defenders of Wildlife	
Nagel, Clinton – Gallatin Wildlife Association	