Animal Species of Conservation Concern Identification Process for the Custer Gallatin National Forest's Revised Forest Plan (Post-Objection)

<u>The 2012 Planning Rule (</u>36 CFR 219) defines a species of conservation concern (SCC) as "a species, other than a 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). The Regional Forester typically identifies SCC as part of the planning process. Direction for identifying SCC are in the <u>Forest Service handbook (FSH) for land management planning</u> (i.e., the planning directives) at FSH 1909.12, chapter 10, section 12.52 and at chapter 20, section 21.22a.

This document outlines the Northern Region's approach in identifying animal SCC for the Custer Gallatin National Forest's draft revised forest plan (hereafter referred to as plan revision). It includes terrestrial and aquatic vertebrates and invertebrates (plants are documented separately). This approach is consistent with the <u>2012 Planning Rule</u> and agency guidance contained in the planning directives. The best available scientific information, including external expert knowledge and information received from the general public, was considered during the development of this list.

Step 1. 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 met the categories described in items 1A-I below. This step resulted in the list of species to consider for potential SCC status.

The Custer Gallatin planning team reviewed spatial observation records maintained by the Montana Natural Heritage Program (NHP) and the South Dakota NHP¹, of all species documented to occur on National Forest System (NFS) lands within the plan area. The biologists then queried those records for species that met at least one category in Step 1 A-I below.

The Montana and South Dakota NHP observation databases were used because they are the most comprehensive, reliable, and up-to-date source of documented species occurrences on NFS lands in Montana and South Dakota. The NHPs, which are part of the international NatureServe network, manage statewide observational data, occurrence records and other information for species and habitats of conservation interest. The Forest Service, other agencies, and the public all contribute observation records to the NHP's statewide data repository. The definitions of "occurrence" and "observation," as used in the animal and plant evaluations, are from the Montana Natural Heritage Program. An occurrence is a documented location of a specimen collection or species/population observation, and an observation is a visual, specimen, genetic, or other documentation of a species at an

¹ This may include the use of standalone GIS files obtained from the NHPs, or the use of the Montana NHP's Species Snapshot tool, available at http://mtnhp.org/SpeciesSnapshot/

occurrence with an assigned spatial precision during a given time period.

The categories of species to consider originated from the final planning directives at FSH 1909.12, chapter 10, section 12.52. A species meeting any one category was further considered for potential SCC status regardless of whether it met another category. The categories were:

- A) NatureServe global (G) or intraspecific taxon (T) ranks of 1 or 2²
- B) NatureServe G3 ranks (vertebrates only)². G3 invertebrate species were not evaluated because commonly, there is insufficient scientific information available to indicate substantial concern, such as data on distribution, abundance, habitat use, trends, relevant threats and life history characteristics, and reliable identification in the field. Any species with higher ranks (e.g., G4, G5) were not automatically considered because they are reasonably secure at the global level, and if there was concern at the plan level, they would be identified in Step 1 category I. This approach is consistent with FSH 1909.12 chapter 10, section 12.52d(3)(a).
- C) Delisted (removed) from the Endangered Species Act list within the last five years, or delisted and still monitored by the regulatory agency³
- D) Threatened or endangered designations by the states of Montana and South Dakota²
- E) Positive "90-day findings" made by the US Fish and Wildlife Service in response to federal listing petitions.³
- F) Montana NHP and South Dakota NHP state (S) ranks of 1 or 2.² The Montana state ranks, while assigned by the Montana NHP, are also reflected in the Montana Species of Concern (SOC) list by Montana Fish Wildlife and Parks and Montana NHP. Higher numerical ranks (e.g., S3, S4, S5) were not included in category E regardless of whether they are Montana SOC because they indicate relatively secure conservation status at the statewide level; concern at the plan level would be identified in Step 1 category I. This approach is consistent with FSH 1909.12 chapter 10, section 12.52d(3)(a).
- G) Regional Forester's sensitive species in the plan area and on adjoining National Forests in other regions (i.e., the R2 Shoshone and R4 Bridger-Teton).⁴
- H) SCC in on adjoining National Forests (i.e., the Helena-Lewis and Clark)⁵
- Local conservation concern due to potentially significant threats to populations or habitats, declining trends in populations or habitat, restricted ranges or habitats, or low population numbers. This category of species may be identified through public comments and from conversations with local biologists from the Forest Service, other

² Statuses obtained from Montana NHP and South Dakota NHP. See <u>http://fieldguide.mt.gov/StatusCodes.aspx#msrc</u> and <u>http://gfp.sd.gov/wildlife/threatened-endangered/threatened-species.aspx</u> for definitions and more information.

³ Statuses obtained from US Fish and Wildlife Service.

⁴ See <u>http://www.fs.usda.gov/detail/r1/plants-animals/?cid=stelprdb5130525</u>. The final planning directives do not require consideration of this category; however, it was applied to compensate for the absence of SCC on some adjoining units, which have not yet been designated.

⁵ See http://www.fs.usda.gov/detail/r1/landmanagement/planning/?cid=fseprd500402

federal agencies, Montana Fish Wildlife & Parks, Montana NHP, South Dakota Game, Fish and Parks (including South Dakota NHP), Tribes, and local groups or individuals with scientific expertise.

Step 2: During the assessment phase, the Custer Gallatin planning team, in consultation with regional office staff and others, identified which of the animal species that emerged from Step 1 met the criteria in items 2A, B, and C below. This step resulted in the "potential SCC" animal list disclosed in the Custer Gallatin's Final Assessment Report and supporting specialist reports.

This step was completed by using the best available scientific information, including expertise from internal and external individuals, to determine which species identified in Step 1 met the criteria in Step 2 A, B, and C below. The criteria originated from the planning directives at FSH 1909.12, chapter 10, section 12.52c. External expertise originated from Montana Fish Wildlife & Parks, Montana NHP, Glacier National Park, South Dakota Game, Fish and Parks (including South Dakota NHP), US Geological Survey, Tribes, research entities, and local groups or individuals. The planning team also solicited public involvement in identifying potential SCC through a series of public meetings and public fieldtrips.

The criteria for identifying potential SCC were:

- A) The species must be native to and known to occur in the plan area.
 - i. A species is "known to occur" if, at the time of plan development, the best available scientific information indicates that it is established or becoming established on NFS lands in the plan area.
 - ii. 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.
 - iii. Species were removed from the dataset if they were designated by both state NHPs as SX, SH, SNR, SU, or SNA.⁶
 - iv. Observation records were automatically excluded if the point location was too imprecise to determine whether the observation actually occurred in the plan area, such as those recorded with latilong or quarter latilong precision (which in Montana, represent approximately 3,200 and 800 sq mi, respectively). These types of records most commonly originate from historical documentation that provided only broad reference to locations. However, it is important to note that exclusion of these records would only result in dropping a species from further consideration if more precise records for the species did not also occur within the planning area.
- B) The best available scientific information must indicate substantial concern about the species' capability to persist over the long term in the plan area.

⁶ SX=Presumed extinct or extirpated in Montana; SH=Historical; SNR=Not yet ranked; SU=Unrankable; SNA=No applicable rank. See http://mtnhp.org/SpeciesOfConcern/?AorP=a for detailed descriptions.

- i. In general, substantial concern was best demonstrated by a decreasing population (abundance or distribution), decreasing habitat, or significant threats, particularly when they were greater than expected under natural variation. Other factors considered during this evaluation included abundance, geographic distribution, reproductive potential, dispersal capabilities, and other demographic and life history characteristics of the species that could influence long-term persistence in the plan area. This approach was based on best available scientific information in conjunction with professional expertise of Regional Office biologists.
- We clarify that rarity alone typically was not considered a substantial concern unless accompanied by one of the three general conditions listed in Step 2 (B)(i) above or having other prominent circumstances leading to concern for long-term persistence in the plan area. Most species in any given community are naturally rare (McGill et al. 2007, Magurran and Henderson 2003), so low abundance is not necessarily cause for concern.
- C) If there was insufficient scientific information available to conclude that there was a substantial concern about a species' capability to persist in the plan area over the long term, or if the species was secure in the plan area, that species was not identified as a potential SCC. Rationale for not identifying species as potential SCC included:
 - i. If the species was secure and its continued long-term persistence in the plan area was not at risk based on knowledge of its abundance, distribution, lack of threats to persistence, trends in habitat, or responses to management.
 - ii. Insufficient scientific information was available to conclude that there was a substantial concern about the species' capability to persist in the plan area over the long term. 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. The availability of information about other factors noted in the rationale spreadsheet was also considered.

Step 3. In response to public comments, objections, and new scientific information, Regional Office staff iteratively reviewed the species selection process and criteria requirements, available information, and the rationale for identifying the SCC. During this phase, Regional Office staff clarified and augmented documentation for the SCC planning record. This step resulted in the animal SCC list for the Custer Gallatin National Forest's Proposed Action and Final Environmental Impact Statement.

This step was completed using the best available scientific information (including expertise from internal and external individuals) and the planning directives at FSH 1909.12, chapter 10, section 12.52 and chapter 20, section 21.22a. External expertise originated from many of the same organizations listed in Step 2.

Process clarifications resulting from this step:

A. We applied NatureServe timelines to species observation records in the plan area to differentiate which animal species have sufficient information to determine they are

currently known to occur in the plan area from those only known to *historically* occur in the plan area. We accepted NatureServe timelines⁷ as best available scientific information to establish when past observations are not enough evidence to conclude that the species is known to occur in the plan area at this time. NatureServe describes their guidelines for ranking species as historical occurrences at <u>http://explorer.natureserve.org/eorankguide.htm</u>. Montana Natural Heritage Program describes their historic ranking information at <u>http://fieldquide.mt.gov/statusCodes.aspx#msrc:rank</u>.

- B. We clarify that, for the purposes of the planning process, the individuals of a species of conservation concern that exist in the plan area will be considered to be members of one population of that species. Further, to be considered viable (persistent) in the long term, a population must have sufficient distribution to be resilient and adaptable to stressors and likely future environments (preamble to the 2012 Planning Rule, 77 FR at 21217, April 9, 2012). A population need not be present or secure throughout the entire plan area in order to be viable.
- C. We clarify that threats must be both relevant and significant to indicate substantial concern. To be relevant, they must pertain to spatial and temporal scales appropriate to the plan area. To be significant, they must be of a magnitude that would potentially affect long-term persistence in the plan area. This characterization would normally include those threats known to exist in the plan area, as well as those occurring outside of the plan area if they affect populations or habitats inside the plan area. It typically would not include threats that might occur under a theoretical context (e.g., speculative), or occur in a location or time that would not affect individuals using the plan area.

As a result of processes described in this document, the following animal SCC have been identified for the Custer Gallatin National Forest's plan revision. One species (westslope cutthroat trout) was added to what the regional forester identified in her letter dated February 7, 2019. See the species evaluation documentation (i.e., rationale spreadsheet) for a full description of the information considered to make that determination. Additional documentation was added in response to objections, but this did not result in any changes to the SCC list.

Common Name	Scientific Name
Greater Sage-grouse	Centrocercus urophasianus
White-tailed Prairie Dog	Cynomys leucurus
Westslope Cutthroat Trout	Oncorhynchus clarki lewisi
Western Pearlshell	Margaritifera falcata

References

Magurran, A.E. and P.A. Henderson (2003). Explaining the excess of rare species in natural species abundance distributions. Nature, vol. 422: 714-716.

McGill, B.J. et al. (2007). Species abundance distributions: moving beyond single prediction theories to integration within an ecological framework. Ecology Letters, vol. 10: 995-1015.

⁷ Per NatureServe, being ranked as historical means that recent field information verifying the continued existence is lacking.