

Peer Review Statement of Work

National Center for Ecological Analysis and Synthesis (NCEAS) Sponsored Independent Expert Peer Review of the Scientific Findings in the Proposed Rule: Removing the Gray Wolf (*Canis lupus*) from the List of Endangered and Threatened Wildlife and Maintaining Protections for the Mexican Wolf (*Canis lupus baileyi*) by Listing It as Endangered

September 23, 2013

1. Introduction/Background

The U.S. Fish and Wildlife Service (Service) evaluated the classification status of gray wolves (*C. lupus*) currently listed in the contiguous United States and Mexico under the Endangered Species Act (ESA). Based on our evaluation, we published a proposed rule on June 13, 2013 (78 FR 35664), to remove the gray wolf from the List of Threatened and Endangered Wildlife but to maintain endangered status for the Mexican wolf by listing it as a subspecies (*C. l. baileyi*). We proposed these actions because we determined that the best available scientific and commercial information indicates that the currently listed entity is not a valid species under the ESA and that the Mexican wolf (*C. l. baileyi*) warrants listing as an endangered subspecies.

In the course of making these determinations, we recognized three wolf species with ranges in the contiguous United States: *Canis lupus*, *C. rufus*, and *C. lycaon*. We interpreted the results of recent molecular genetic analyses and morphometric studies to show that the mid-Atlantic and southeastern states historically were occupied by the red wolf (*C. rufus*). We accepted and relied upon a recent taxonomic review and synthesis that concluded that the gray wolf subspecies, *Canis lupus lycaon*, which occurs in southeastern Canada and historically occurred in the northeastern United States and portions of the upper Midwest United States, should be recognized as a separate species, *Canis lycaon*. In light of the above, we found that the best available scientific information indicated that *C. lupus* did not occur in the eastern United States.

The proposed rule also constituted the completion of a status review for gray wolves in the Pacific Northwest initiated on May 5, 2011. Finally, the proposed rule replaced our May 5, 2011, proposed action to remove protections for *C. lupus* in all or portions of 29 eastern states. Upon publication of the proposed rule (June 13, 2013, 78 FR 35664), the Service opened the public comment period on the proposal. Public comments will be accepted through December 17, 2013. Specific guidance on how to submit comments is posted on our public website (<http://www.fws.gov/home/wolfrecovery/>). The Service intends to reopen the public comment period on the proposal in early 2014 in conjunction with the submission and posting of the peer review report. The Service expects to make a final determination regarding the proposed rule by December 2014.

In accordance with the Service's July 1, 1994 peer review policy (59 FR 34270) and the Office of Management and Budget's December 16, 2004, Final Information Quality Bulletin for Peer Review, the Service is subjecting this proposal to independent expert peer review. The purpose of seeking independent peer review is to ensure use of the best scientific and commercial information available and to ensure and maximize the quality, objectivity, utility, and integrity of

the information upon which the proposal is based, as well as to ensure that reviews by qualified experts are incorporated into the rulemaking process.

The National Center for Ecological Analysis and Synthesis (NCEAS), a research center located at the University of California, Santa Barbara, has agreed to sponsor this peer review and an NCEAS associate, Dr. Steven Courtney, has offered to donate his time to organize and manage the peer review process at no cost to the Service. This Statement of Work describes the nature of the peer review process needed by the Service.

2. Description of Analyses/Service

The purpose of this review is to provide an objective, independent, external scientific peer review of the information in the proposed rule. The proposed rule is 246 pages long and synthesizes the existing best available scientific and commercial information regarding the status of various gray wolf populations and subspecies that occur within portions of the lower 48 States where the species is currently listed. Factors to be addressed in the peer review include the scientific merit of the proposed rule's primary analysis components (i.e., gray wolf taxonomy and status) which provide the basis for the proposal. The peer reviewers should confirm that any scientific uncertainties are clearly identified and characterized by the Service, and the potential implications of the uncertainties for the technical conclusions drawn are clear. Specific factors and questions the reviewers must evaluate, at a minimum, are listed under Item 3 below.

The estimated start date for the peer review is December 1, 2013. The peer review needs to be completed, and a draft peer review report provided to the Service, in accordance with the signed purchase order. Following receipt of the draft peer review report, the Service will have the opportunity to seek clarification, through the Panel Coordinator (PC), of any peer review comments. Following that, the PC will submit a final peer review report, by January 31, 2014, in a format suitable for posting on the FWS public web site.

Peer reviewers should prepare individual memoranda summarizing their opinions and conclusions; these memoranda will be incorporated into a peer review report provided by the PC. The PC should provide a summary narrative of the comments and issues contained in the peer review memorandums, but the PC is not required to analyze the similarities and differences in the individual peer review memorandums. The Service will be available to answer questions from the PC as needed to clarify the proposed rule.

3. Methods, Protocols and/or Scientific Standards

It is important that the peer review be managed and conducted by individuals with appropriate and relevant expertise who are independent (i.e., not under the control or influence) of the U.S. Fish and Wildlife Service. The independent peer reviewers shall be experienced senior scientists, who have previously conducted similar reviews or regularly provided reviews of research and conservation articles for the scientific literature. The PC will be responsible for leading this review and for the selection of 5-7 well-qualified, independent reviewers.

The peer reviewers shall include individuals with professional qualifications and relevant expertise in at least one of the following areas: conservation biology, management of large carnivores, wildlife management, and mammalian taxonomy/systematics. The PC should assemble a group of peer reviewers that includes representative expertise and experience that covers all of these areas, with particular attention to individuals with experience applying these disciplines to conservation of the gray wolf. The PC must also vet peer reviewers to verify and document that they are able to provide an objective review of the proposal and that they have no financial, professional, or other conflict of interest with the outcome or implications of the Service's ESA listing determination. Attachment A is provided as guidance to the PC in selecting peer reviewers that have no conflict of interest, are independent of the Service, and are capable of providing an objective scientific peer review, but the selection and vetting of peer reviewers is to otherwise occur completely outside the influence of the Service.

Peer reviewers will be asked to provide a thorough, objective peer review and to focus their review on aspects of the proposed rule that are within their area of expertise. Peer reviewers should distinguish between matters related to legal interpretation and application of agency policy and those related to the analysis and consideration of scientific information; we ask that they focus their review and comment on the latter.

Peer reviewers are asked to comment specifically on the quality of any information and analyses used or relied on in the document; identify oversights, omissions, and inconsistencies; provide advice on reasonableness of judgments made from the scientific evidence; ensure that scientific uncertainties are clearly identified and characterized, and that potential implications of uncertainties for the technical conclusions drawn are clear; and provide advice on the overall strengths and limitations of the scientific data, analyses, and conclusions presented in the document.

Peer reviewers are asked to answer questions pertaining to the logic of our assumptions, arguments, and conclusions and to provide any other relevant comments, criticisms, or thoughts. The peer reviewers should consider and respond to the four questions listed below, at a minimum, in their reviews. Peer reviewers should also be mindful of the questions contained in the proposed rule.

(1) Did the Service consider the best available scientific information, including the scientific literature, in developing this proposal? Is there additional biological, commercial, trade, or other information relevant to our analysis of the current *C. lupus* listed entity that we did not consider, but should?

(2) Are the assumptions, analyses, and conclusions reflected in the proposed rule reasonable in light of the best available information?

(3) The Service determined that the synthesis and conclusions of Chambers *et al.* (2012. *North American Fauna* 77:1-67) reflect the best available scientific information regarding taxonomy of wolves in North America. In doing so, does the proposed rule draw reasonable and scientifically sound conclusions concerning the taxonomy of the eastern wolf, *Canis lycaon*? (We are not requesting information on the status of *C. lycaon* because we are

conducting a status review for this species and peer review of that document will occur separately.)

(4) Does the proposed rule utilize the best available scientific information and draw reasonable and scientifically sound conclusions concerning the status of the gray wolf in the Pacific Northwest United States; the gray wolf subspecies *Canis lupus nubilus*; the gray wolf subspecies *C. l. occidentalis*; and the gray wolf subspecies *C. l. baileyi*?

The PC should advise peer reviewers that their reviews (without specific attribution), their names, and affiliations will be included in the administrative record of our final determination regarding this proposal, and will be available to the public by posting on the FWS Office of the Science Advisor peer review web page and on www.regulations.gov once all reviews are completed. The Service will summarize and respond to the issues raised by the peer reviewers in the record supporting our final rulemaking determination.

The peer review must be conducted in a manner that satisfies OMB and Service guidance for peer review of influential scientific information (OMB 2005, FWS 2012). Until the final peer review report is made public by the Service, no information from the peer review may be released by the PC without express written permission from the Service.

4. PC Responsibilities and Required Deliverables

The PC will execute the responsibilities and produce the deliverables listed below per requirements and guidance in this Statement of Work. Specifically the PC will:

- a) Select peer reviewers.
- b) Organize, structure, lead, and manage the scientific reviews and products.
- c) Manage and produce a draft and final report.
- d) Coordinate response to any follow-up questions from the Service following review of the draft report.
- e) Maintain and produce an official administrative record for the peer review.
- f) Respond to questions, inquiries, or other related requests after the final acceptance of the peer review report, as needed. Inquires or requests are limited to the products provided, and work performed under the MOU. Responses include, but are not limited to phone calls, written responses, and/or meetings.

5. Information Sources

The Service will provide the proposed rule and copies of references cited to the PC.

6. Point of Contact

Project Leader: Don Morgan, don_morgan@fws.gov, 703-358-2444

7. List of Enclosures/Attachments

Attachment A: Guidance for Selection of Peer Reviewers to Avoid Conflicts of Interest and to Facilitate an Independent, Objective, and Unbiased Scientific Peer Review

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In accordance with the Service's July 1, 1994 peer review policy (59 FR 34270) and the Office of Management and Budget's December 16, 2004, Final Information Quality Bulletin for Peer Review, the Service will subject the proposed rule, "Removing the Gray Wolf (*Canis lupus*) from the List of Endangered and Threatened Wildlife and Maintaining Protections for the Mexican Wolf (*Canis lupus baileyi*) by Listing It as Endangered" to peer review. Peer review is one of the important procedures used to ensure that the quality of published information meets the standards of the scientific and technical community (OMB 2005).

The purpose of this review is to provide an objective, independent, external scientific peer review of the information in the proposed rule. To accomplish this, it is necessary for the peer review to be conducted by individuals, and managed by an entity, that are: 1) independent of FWS; 2) lacking any real or perceived conflict of interest; and 3) able to provide an objective review of our proposed rule.

The following information will serve as guidance to the Panel Coordinator (PC) in selecting peer reviewers that have no conflict of interest, are independent of the Service, and are capable of providing an objective scientific peer review. The PC will also be advised to consult the four documents cited below for additional clarifying information.

Independence – "In its narrowest sense, independence in a reviewer means that the reviewer was not involved in producing the draft document to be reviewed. However, for peer reviewer of some documents, a broader view of independence is necessary to assure credibility of the process. Reviewers are generally not employed by the agency or office producing the document." [Excerpted from (OMB 2005)]

Conflict of Interest – The National Academy of Sciences defines "conflict of interest" as any financial or other interest that conflicts with the service of an individual on the review panel because it could impair the individual's objectivity or could create an unfair competitive advantage for a person or organization (NAS 2003).

Objectivity and Lack of Bias – "Questions of lack of objectivity and bias ordinarily relate to views stated or positions taken that are largely intellectually motivated or that arise from the close identification or association of an individual with a particular point of view or the positions or perspectives of a particular group. ... Potential sources of bias are not necessarily disqualifying for purposes of committee service. ... Some potential sources of bias, however, may be so substantial that they preclude committee service (e.g., where one is totally committed to a particular point of view and unwilling, or reasonably perceived to be unwilling, to consider other perspectives or relevant evidence to the contrary)." [Excerpted from NAS (2003)]

Peer Reviewers must be capable of providing an objective review of the proposal. Peer reviewers are ideally free of bias with respect to the proposed rule. If selection of unbiased peer reviewers is not possible, then to ensure the panel is fully competent, the PC should appoint peer reviewers in such a way as to represent a balance of potentially biasing backgrounds or perspectives (NAS 2003).

Citations

National Academy of Sciences. 2003. Policy and Procedures on Committee Composition and Balance and Conflicts of Interest for Committees Used in the Development of Reports. May 2003. Available online at: <http://www.nationalacademies.org/coi/index.html>

Office of Management and Budget. 2005. Final Information Quality Bulletin for Peer Review. December 16, 2004. Available online at: <http://www.whitehouse.gov/omb/memoranda/fy2005/m05-03.pdf>

U.S. Fish and Wildlife Service and National Marine Fisheries. 1994. Endangered and Threatened Wildlife and Plants: Notice of Interagency Cooperative Policy for Peer Review in Endangered Species Act Activities. 59 FR 34274, July 1, 1994. <http://www.nwr.noaa.gov/Publications/FRNotices/1994/loader.cfm?url=/commonspot/security/getfile.cfm&pageid=20831>

U.S. Fish and Wildlife Service. 2012. Information Quality Guidelines and Peer Review. Revised June 2012. Available online at: <http://www.fws.gov/informationquality/>