



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240



IN REPLY REFER TO

SEP 12 2007

Mr. Kent Holsinger
Hale-Friesen
Attorneys At Law
1430 Wynkoop Street
Suite 300
Denver, Colorado 80202

Dear Mr. Holsinger:

On March 24, 2006, the Fish and Wildlife Service (FWS) received the Data Quality Act (DQA) challenge sent to Secretary Norton on behalf of Coloradoans for Water Conservation and Development and the Colorado Farm Bureau. Under current FWS guidelines for responding to such challenges, a response is due to you 90 calendar days from receipt of the challenge unless circumstances arise that prevent a timely response. Since the receipt of your challenge, policy issues related to the Endangered Species Act have prevented a more timely response. Upon review of the challenge, FWS concluded that the U.S. Geological Survey (USGS) was the appropriate entity to respond to some aspects of the challenge. The USGS, upon reviewing the challenge, agreed and prepared a response to certain portions of the challenge. The FWS prepared a response to the remainder.

Enclosed are responses to the DQA challenge. Attachment 1 is the USGS response to the portions of the challenge for which it has responsibility and Attachment 2 is the FWS response.

If the challengers are dissatisfied with the responses, they may appeal to the appropriate agency, FWS or USGS within 21 calendar days of this decision. Appeals to the FWS may be addressed to the Correspondence Control Unit, Attention: Information Quality Correction Request Processing, USFWS, 1849 C Street NW, Mailstop 3238-MIB, Washington, DC, 20240-0001 for issues related to Attachment 2. For issues related to Attachment 1, appeals may be addressed to the Director, through the Geospatial Information Office, USGS, 12201 Sunrise Valley Drive, Mailstop 108, Reston, VA, 20192-0002. The Director(s) will consider the appeal and make a final determination within 60 business days of receipt of the appeal.

Sincerely,

Senior Science Advisor
Fish and Wildlife Service

Sincerely,

Chief Scientist for Biology
U.S. Geological Survey

Attachment 1

Response to Technical Issues Contained in the Information Quality Act Challenge Submitted by Coloradoans for Water Conservation and Development and the Colorado Farm Bureau Regarding the Preble's Meadow Jumping Mouse--Prepared by the U.S. Geological Survey

Issues and Responses

Issue 1 - King Study Exhibits Bias in Selective Sampling

Response – Specifically the challenge states that Dr. King did not have any specimens from northeast Colorado – this is incorrect as he did have samples from that area. The lack of samples from populations in southeastern Wyoming was mentioned by several reviewers but they noted that Dr. King's sampling was "superior," "sufficient," or "more comprehensive" than Ramey et al. While not a significant issue impacting adequacy or sufficiency, Dr. King has obtained samples from 28 specimens from populations in southeastern Wyoming which will be included in his published manuscript. Analyses of these samples did not change his final results or interpretations.

We believe that the King study meets or exceeds all requirements for information quality. The review of the King Study by K. Crandall (the editor of the journal *Animal Conservation* who accepted Ramey's for publication) led him to opine "This study is, in general, well done with an excellent use of a broad range of statistical approaches to analyze data and good sampling at given locations for population genetic inference." Therefore, no information requires correction.

Issue 2 - King Study Ignores Taxonomy and Ecology

Response – The King Study did consider taxonomy but did not consider morphology and ecology. Rather, the study was designed to collect and analyze a broader sample of the Preble's nuclear and mitochondrial DNA than did Ramey et al. (2005). Therefore, no information requires correction.

Issue 3 - A "Troubling" Discrepancy?

Response – It is an appropriate practice for scientists to confer when developing study designs or performing statistical analyses. In this case, Dr. King was concerned about the methods employed by Ramey et al. and wanted to get the input of other scientists on the values used by Ramey in his analyses. Therefore, no information requires correction.

Issue 4 - Significant Questions as to Method and Protocol

Response – The USGS has a rigorous process to ensure the compliance of all its science products with USGS, DOI, the DQA and OMB guidelines. These procedures have been followed and the King Study meets or exceeds all these standards (see http://www.usgs.gov/info_qual/). The King Study was thoroughly reviewed to ensure that the quality of the sampling, collection procedures, analysis and interpretation of results met the highest of standards. Dr. King had the specimens analyzed in two separate labs to avoid the possibility of contamination during the analytical process. Independent reviewers used by FWS had similar views of the King Study (See review comments at <http://www.fws.gov/mountain%2Dprairie/species/mammals/preble/PEER/PEERindex.htm>). Reviewers had various comments including “Overall, this is a very convincing study” and “Comparisons to a previous study are factual, impartial and straight-forward.” Therefore, there is no information in need of correction.

Issue 5 - King Study Fails Transparency Standards of the DQA and the Guidelines

Response – The King study meets agency standard for transparency and reproducibility. The data was released on February 23, 2006, prior to the receipt of the March 15, 2006 request for correction. The data are available on the FWS web-site: <http://mountain-prairie.fws.gov/preble/PEER/PEERindex.htm> including all mtDNA and nDNA and a list of specimen and specimen locations. Thus, there is no information in need of correction.

Issue 7 - Previous King Studies Show a Predisposition towards Subspecific Classifications - The King study relies upon less than one-half of one-percent of genetic variation.

Response – The basic question being addressed by the King et al. study is one of intraspecific variation (i.e., subspecies-level). Does the variation observed by the King study for *Zapus hudsonius* subspecies rise to level of subspecies? There is no established benchmark for the amount of sequence variation/divergence necessary to achieve the status of subspecies. The reason for this lack of an established criterion is that evolution occurs at varying rates depending primarily on environmental- and demographic-based dynamics. This absence of accepted benchmarks is acknowledged by Ramey et al. 2005.

The King study approached this issue from both qualitative and quantitative perspectives. Qualitatively, no mitochondrial DNA haplotypes were shared among any of the five subspecies compared. In fact, no credible published data exists that indicates any haplotype sharing between *Z. h. preblei* and any other *Z. hudsonius* subspecies. Microsatellite DNA variation concurred with the findings for mitochondrial DNA. Quantitatively, Table 8 of the King et al. report provides values of ~1% sequence divergence between *Z. h. preblei* and *Z. h. campestris*, 0.6-0.7% for *Z. h. preblei* and *Z. h. intermedius*, and 0.2-0.3% for *Z. h. campestris* and *Z. h. intermedius*. This level of sequence divergence is similar to that found in other small mammal species. Moreover, significant Φ_{ST} values are better metrics for assessing divergence at the intraspecific-level. Table 9 of the King et al. report indicates that all Φ_{ST} values are large and

statistically significant for all subspecies comparisons. Thus, there is no information in need of correction.

Issue 8 - King Studies Challenged Before

Response – The FWS asked the National Academy of Sciences to address Atlantic Salmon issues: "Previous genetic analysis of Atlantic salmon was questioned on statistical, methodological, biological, and other grounds by the State of Maine." The genetics analysis on the Atlantic Salmon was based on Dr. King's work. The National Academy of Science's National Resource Council was asked to review the genetic analysis and found "The statistical significance of the results is so strong and the departures from random expectations are so large that the committee judged the results to be persuasive... the general conclusions are so strongly supported by the evidence that they are not invalidated by imperfections in the data collections or analyses." The FWS found that none of the allegations under the Atlantic Salmon IQA challenge called for a correction of information as the report met their scientific and legal requirements. Thus, there is no information in need of correction.

Issue 9 – No evidence that the King Study was subject to independent pre-dissemination review

Response – Dr. King asked 8 colleagues for their advice on the design of the study and its statistical analysis and 7 colleagues to review his paper prior to formal external USGS peer review. An additional 7 internationally recognized scientists (all of whom are outside of the Department of Interior) were asked to review the manuscript prior to its release to the FWS according to USGS requirements. In addition, the manuscript is being peer reviewed by the scientific journal to which it is being submitted for publication. Thus, there is no information in need of correction.

Issue 10 – Should the FWS fail to retract the King Study, it must convene an independent, unbiased peer review of the King Study by qualified, disinterested scientists outside the U.S. Department of Interior.

Response – The IQA allows a person to request a correction of information. Therefore the remedy if the agency determines that standards for quality were not met is correction of the information disseminated, as well as taking appropriate measures regarding any agency action or information that relied on the disseminated information. The King Study is a USGS science product that meets the standards for quality (including objectivity, utility, and integrity) set by USGS for the dissemination of science products. Furthermore, as discussed in the response to Issue 9, the USGS conducted substantial pre-dissemination review.

In addition, the FWS, prior to receipt of the final King study report, approached the same 16 peer reviewers that were asked to review Ramey et al. (2004a, 2004b) to review the upcoming King et al. report (note that of the 16 reviewers asked to review Ramey's work, 14 responded to the request to review Ramey et al. 2004a, and 11 responded to the

request for reviews of Ramey et al. 2004b). On January 26, 2006, the FWS sent a request letter to those same 16 reviewers. Three of the 16 initially declined to participate. On January 29, one more reviewer notified the FWS they would not be able to participate in the review. Of the remaining 12 who committed to reviewing the King et al. report, 9 responded. These reviews are listed in their entirety at: <http://mountain-prairie.fws.gov/preble/PEER/PEERindex.htm>

Attachment 2:
**Response to Policy and Management Issues Contained in the
Information Quality Act Challenge Submitted by Coloradans for
Water Conservation and Development and the Colorado Farm Bureau
Regarding the Preble's Meadow Jumping Mouse—Prepared by the
USFWS**

Background

Zapus hudsonius preblei (the Preble's meadow jumping mouse (Preble's)) was listed as threatened on May 13, 1998 (63 FR 26517). On December 19, 2003, the Denver Museum of Nature and Science released the results of a mitochondrial deoxyribonucleic acid (mtDNA) and morphometrics study indicating that *Z. h. preblei* was not a discrete taxonomic entity (Ramey *et al.* 2003). This report suggested that *Z. h. preblei* should be synonymized with *Z. h. campestris* (the Bear Lodge meadow jumping mouse), a subspecies of *Z. hudsonius* (meadow jumping mouse) to the north. This report was revised and expanded in March and December 2004, respectively (Ramey *et al.* 2004a, 2004b). In August 2005, the work of Ramey *et al.*, including microsatellite nuclear DNA results, was published in the refereed journal *Animal Conservation* (Ramey *et al.* 2005). In these later works, Ramey *et al.* (2004b, 2005) suggested that *Z. h. preblei* and *Z. h. intermedius* should be synonymized with *Z. h. campestris*.

On February 2, 2005, the U.S. Fish and Wildlife Service (FWS) published a proposed rule to delist the mouse based largely on the research of Ramey *et al.* (70 FR 5404). As a result of peer reviews of Ramey *et al.* (2004a, 2004b), peer review of the proposed rule (70 FR 5404, February 2, 2005), and public comments on the proposed rule, several issues potentially critical to the FWS final decision were identified, prompting the FWS to commission a second study. Results of the second study (King *et al.* 2006), conducted by the U.S. Geological Survey, raised questions about the data, findings, and conclusions of Ramey *et al.* Because of the complexity of this issue, the FWS extended the schedule for making a final determination regarding our proposal to delist due to taxonomic revision and data error by 6 months, as allowed under the Endangered Species Act in cases of "substantial disagreement regarding the sufficiency or accuracy of the available data."

Issues and Responses

Issue 1 – The FWS violated its own peer review policy by commissioning Dr. Tim King of the USGS to conduct additional peer review of Ramey *et al.* (2005).

Response – First note that King *et al.* (2006) is not a peer review of Ramey *et al.* (2006), but rather, represents a stand-alone evaluation of the taxonomy of *Z. h. preblei* and neighboring subspecies. King *et al.* (2006) only discusses Ramey *et al.* (2005) as is necessary to explain why their data, findings, and conclusions differ. Second, the policy

referred to in the challenge is the Interagency Cooperative Policy for Peer Review in Endangered Species Act Activities. This policy applies to peer review of the proposed rule (70 FR 5404, February 2, 2005; 71 FR 8556, February 17, 2006), but not whether the agency should commission scientific papers such as King et al. (2006). Thus, no information requires correction.

Issue 2 – According to the Final Listing Priority Guidance for Fiscal Year 2000 (LPG), the FWS must focus its efforts on listing actions that provide the greatest conservation benefits to imperiled species in the most expeditious and biologically sound manner. DOI should delist Preble’s because it is expensive relative to the conservation benefits realized.

Response – The IQA provides a mechanism for persons to seek correction of information that does not comply with OMB or agency guidelines. It does not provide an opportunity to challenge agency funding and policy decisions. In addition, the LPG provides a priority system for addressing backlogged petition findings and warranted-but-precluded listing determinations. The LPG does not apply to this action because the FWS addressed the original petition in the required 90-days. Therefore, the petition is not backlogged; nor did the FWS make a warranted-but-precluded determination. Any determination on whether the species is threatened or endangered must be based “solely on the basis of the best scientific and commercial information and data available.” Spending on a species or economic impacts cannot be considered in such a determination. Thus, there is no information that requires correction. All information presented in this challenge regarding this issue will be considered a public comment on the proposed rule because it was received during the open public comment period on the proposed rule (70 FR 5404, February 2, 2005; 71 FR 8556, February 17, 2006; 71 FR 16090, March 30, 2006).

Issue 3 – In addition, should the FWS decline to delist Preble’s, it would be in violation of the Interagency Policy Regarding the Role of State Agencies in Endangered Species Act Activities (Interagency Policy) and Executive Order No. 13352 as both the States of Colorado and Wyoming support delisting the mouse.

Response – The IQA provides a mechanism for persons to seek correction of information that does not comply with OMB or agency guidelines. The IQA is not an appropriate mechanism for challenging policy decisions, such as an allegation that an agency would be in violation of an agency policy, statute, or Executive Order if it takes a particular course of action in the future. Thus, there is no information that requires correction. For your information, additional information on these policies is provided. Neither the Interagency Policy, nor Executive Order No. 13352 delegates ESA listing decisions to the States. Such delegation would violate the ESA. Instead, the Interagency Policy Regarding the Role of State Agencies requires we solicit and utilize the expertise of and information possessed by State Agencies. Similarly, Executive Order No. 13352 promotes cooperative conservation, with an emphasis on appropriate inclusion of local participation in Federal decision making, in accordance with their respective agency

missions, policies, and regulations. We have worked, and continue working cooperatively in seeking and utilizing all relevant information in the possession of both the Wyoming Game and Fish Department and Colorado Division of Wildlife as required for decisions made under Section 4 (b) of the ESA. We have met or exceeded the requirements of the Interagency Policy and Executive Order No. 13352.

Issue 4 – The FWS proposed rule is biased in that it failed to address significant distribution, abundance, trends, and threats information from the Coloradans for Water Conservation and Development and the State of Wyoming delisting petitions.

Response – On February 2, 2005, the Service issued a 12-month finding on a petition to delist the Preble's meadow jumping mouse and proposed to remove the mouse from the Federal list of threatened and endangered species. The basis for the proposed action was that Preble's was "likely not a valid subspecies of meadow jumping mice (*Zapus hudsonius*)." A threats assessment under 16 U.S.C. Section 1533 is conducted only for listable entities. The IQA pertains to the quality of information disseminated by the FWS; one dimension of quality is completeness of information. However, as stated above, it is not necessary or appropriate to consider distribution, abundance, trend or threats until it is determined whether the Preble's meadow jumping mouse qualifies as a listable entity under the ESA. Based on analysis of the work by both Ramey and King, the FWS will determine if Preble's mouse is a listable entity. If it is determined to be a listable entity, then all relevant information on distribution, abundance, trends, and threats including that presented in the petition will be considered in our evaluation of whether the species still qualifies as threatened or endangered. Thus, there is no information that requires correction. All distribution, abundance, trends, and threats information submitted as part of this challenge have been forwarded to the docket and will be considered as public comments on the proposed rule because it was received during the open public comment period on the proposed rule (70 FR 5404, February 2, 2005; 71 FR 8556, February 17, 2006; 71 FR 16090, March 30, 2006).

Issue 5—Should the FWS fail to retract the King Study, it must convene an independent, unbiased peer review of the King Study by qualified, disinterested, scientists outside the U.S. Department of the Interior.

Response – The King Study has been the subject of internal and external peer review, pursuant to USGS policy, and according to that bureau, meets or exceeds requirements for quality established by the Information Quality Act (including objectivity, utility, and integrity). The study was then published in the journal *Molecular Ecology*. The FWS accepts the USGS process of manuscript review for the King Study as meeting the IQA. Furthermore, the FWS has provided the King Study to independent external scientists and will include their comments in the record for consideration as it weighs the scientific evidence pertaining to the proposal to delist this subspecies (see peer review plan at <http://mountain-prairie.fws.gov/endspp/PeerReview/PeerReviewPrebles.htm>)
The FWS also issued a contract for independent comparison and analysis of the Ramey and King studies. The FWS believes that both studies constitute scientific information that must be analyzed in considering this important decision. Further, the FWS believes

that we have taken significant steps to ensure that analysis is independent, unbiased, transparent and complete. The contractor's report is found at http://mountain-prairie.fws.gov/preble/Prebles_SEI_report.pdf

Thus, there is no need for additional independent review.

Issue 6 – The information in the proposed rule (70 FR 5404, February 2, 2005) incorrectly links human actions to evidence that existing regulatory mechanisms are inadequate. The disseminated information in the Proposed Rule that suggests federal, state and local conservation efforts are insufficient to protect the Preble's requires correction or retraction. FWS failed to properly consider the states of Colorado and Wyoming efforts in the proposed rule.

Response – The proposed rule does not address and makes no determination regarding the adequacy of existing regulatory mechanisms including ongoing federal, state, and local conservation efforts. However, if the Service determines Preble's is a listable entity, all relevant information (including that on the adequacy of existing regulatory mechanisms and ongoing federal, state, and local conservation efforts) will be considered in our evaluation of extinction risk. Thus, there is no information that requires correction. All discussion of threats (including the adequacy of existing regulatory mechanisms and ongoing federal, state, and local conservation efforts) within this challenge have been forwarded to the docket to be considered a public comment on the proposed rule because the challenge was received during the open public comment period on the proposed rule (70 FR 5404, February 2, 2005; 71 FR 8556, February 17, 2006; 71 FR 16090, March 30, 2006).

Issue 7 – Listings under the ESA have been found to do little to further conservation.

Response – The IQA provides a mechanism for persons to seek correction of information that does not comply with OMB or agency guidelines. The effectiveness of listing a species as endangered or threatened under the ESA for conserving the species is a reasonable policy debate, but not a request for correction. Thus, there is no information that requires correction. However, all information presented in this challenge regarding this issue has been forwarded to the docket and will be considered a public comment on the proposed rule because it was received during the open public comment period on the proposed rule (70 FR 5404, February 2, 2005; 71 FR 8556, February 17, 2006; 71 FR 16090, March 30, 2006).

Issue 8 – In the proposed rule, the FWS violated the IQA by suggesting that Preble's may qualify as a Distinct Population Segment.

Response – The proposed rule does not suggest Preble's "may qualify" as a DPS. Instead the proposed rule stated that prior to finalizing the proposed rule, "we will analyze whether the Preble's portion of *Z. h. campestris* qualifies as a DPS" (70 FR 5404, February 2, 2005) and requested information pertinent to such an analysis (70 FR 5404,

February 2, 2005; 71 FR 8556, February 17, 2006). Thus, there is no information that requires correction.

Issue 9 – Preble’s fails the discreteness test required to qualify as a Distinct Population Segment.

Response – As noted above, the proposed rule did not discuss the issue of discreteness relative to a DPS analysis. We did however ask for public comments on this subject (70 FR 5404, February 2, 2005; 71 FR 8556, February 17, 2006). Thus, there is no information that requires correction. All discussion of discreteness within this challenge has been forwarded to the docket and will be considered a public comment on the proposed rule because the challenge was received during the open public comment period on the proposed rule (70 FR 5404, February 2, 2005; 71 FR 8556, February 17, 2006; 71 FR 16090, March 30, 2006).

Issue 10 - Preble’s fails the significance test required to qualify as a Distinct Population Segment.

Response – As noted above, the proposed rule did not discuss the issue of significance relative to a DPS analysis. We did however ask for public comments on this subject (70 FR 5404, February 2, 2005; 71 FR 8556, February 17, 2006). Thus, there is no information that requires correction. Therefore, all discussion of significance within this challenge will be considered a public comment on the proposed rule because the challenge was received during the open public comment period on the proposed rule (70 FR 5404, February 2, 2005; 71 FR 8556, February 17, 2006; 71 FR 16090, March 30, 2006).

Issue 11 - The Structured Decision Making process proposed by the Mountain-Prairie Region of the FWS violates the IQA and its implementing guidelines.

Response – The IQA allows persons to seek correction of information that does not comply with OMB or agency guidelines concerning the quality of information disseminated to the public. “Information” reviewable under the IQA is “knowledge such as facts or data” (See OMB Guidelines, 67 Fed. Reg. 8452, Feb. 22, 2002). As noted in the DOI IQA Guidelines, correspondence between two individuals is not considered “dissemination” of information and, therefore, this “information is specifically not subject to these Information Quality guidelines.”

However, as a courtesy to the challengers we provide the following information. The FWS no longer intends to convene a panel of experts to evaluate all available information on Preble’s genetics and taxonomy. Instead, the Service contracted with an independent contractor to assemble and manage a scientific review panel to analyze, assess, and weigh the reasons why the data, findings, and conclusions between King et al. differ from the data, findings, and conclusions of Ramey et al. This contracted review was not restricted to Federal, State, or State University system employees. Instead, the contractor selected a balanced, independent, and objective panel with the appropriate expertise and free from

conflict of interest in compliance with the National Academy of Science's "Policy and Procedures on Committee Composition and Balance and Conflicts of Interest for Committees Used in the Development of Reports" (2003) and the Office of Management and Budget's "Final Information Quality Bulletin for Peer Review" (2005). Solicitation RFQ (601816Q269) was posted on FedBizOpps.gov on April 3, 2006 (<http://www.fbo.gov/spg/DOI/FWS/CGSWO/601816Q269/listing.html>). The final decision on the taxonomic interpretation of the available information will be made by the Service.