

**Peer Review Plan:** A Review and Critique of Risk Assessments Considered by the U.S. Fish and Wildlife Service Regarding the Collision Risk for Whooping Cranes with NPPD's R-Project

**Timeline of the Peer review (estimated):**

**Draft documents to be disseminated:** February 1, 2019

**Peer review to be initiated:** August 28, 2019

**Peer review to be completed by:** Estimated December 31, 2019

**About the Peer Review Process:**

In accordance with our July 1, 1994, peer review policy (59 FR 34270), the Service's August 22, 2016, Director's Memo on the Peer Review Process, the Service's Information Quality Guidelines and Peer Review, and the Office of Management and Budget's December 16, 2004, Final Information Quality Bulletin for Peer Review, we will solicit independent scientific reviews of the collision risk assessments for whooping cranes with NPPD's R-Project.

The U.S. Fish and Wildlife Service (Service) will request peer review from three independent experts. We will consider the following criteria.

- Expertise: The reviewer should have knowledge of or experience with these species or similar species biology.
- Independence: The reviewer should not be employed by the Service. Academic, consulting or government scientists should have sufficient independence from the Service if the government supports their work.
- Objectivity: The reviewer should be recognized by his or her peers as being objective, open-minded, and thoughtful. In addition, the reviewer should be comfortable sharing his or her knowledge and perspectives and openly identifying his or her knowledge gaps.
- Conflict of Interest: The reviewer should not have any financial or other interest that conflicts or that could impair his or her objectivity or create an unfair competitive advantage. If an otherwise qualified reviewer has an unavoidable conflict of interest, the Service may publicly disclose the conflict.

While expertise is the primary consideration, the Service will select peer reviewers (considering, but not limited to, these selections) that add to a diversity of scientific perspectives relevant to risk assessments for whooping crane collisions. We will solicit reviews from three qualified experts.

The Service will provide each peer reviewer with information explaining their role and instructions for fulfilling that role, the risk assessments, prior reviews of these risk assessments, and a list of citations as necessary. The purpose of seeking independent peer review is to ensure use of the best scientific and commercial information available and to ensure and to maximize the quality, objectivity, utility, and integrity of the information. Peer reviewers will be advised that they are not to provide advice on policy. Rather, they should focus their review on

identifying and characterizing scientific uncertainties. Peer reviewers will be asked to answer questions pertaining to the logic of our assumptions, arguments, and conclusions and to provide any other relevant comments, criticisms, or thoughts. Specific questions and tasks put to the reviewers are detailed in the section *Review Scope and Intent for Peer Reviewers*.

Peer reviewers will provide individual, written responses to the Service. Peer reviewers will be advised that their reviews, including their names and affiliations, will: (1) be included in the decisional record of our determinations regarding this species' status (i.e., final rules or withdrawals); and, (2) be available to the public upon request once all reviews are completed. We will summarize and respond to the issues raised by the peer reviewers in the record supporting our determinations.

### **About Public Participation**

The peer review process will be initiated shortly. We strongly encourage that public comments on the approach of this peer review be submitted by December 12, 2019, in order to allow enough time for processing and consideration.

### **Contact**

For more information, contact Nicole Alt at [Nicole\\_Alt@fws.gov](mailto:Nicole_Alt@fws.gov).

## **Review Scope and Intent for Peer Reviewers:**

*Overview:* The Service has solicited three independent peer reviewers for this effort. Peer reviewer #1, Dr. Craig Davis, reviewed several of the risk assessments in 2018 and was asked by the Service to review all of the completed risk assessments detailed in the Service document “**A Review and Critique of Risk Assessments Considered by the U.S. Fish and Wildlife Service Regarding the Collision Risk for Whooping Cranes with NPPD’s R-Project**” in 2019. Details of the scope and tasks assigned to Dr. Davis are listed below. In addition to Dr. Davis’ 2019 review, two additional independent reviews were organized by Dr. Kevin Whalen (USGS) through the USGS peer review process, on behalf of the Service. Dr. Whalen identified Dr. David Andersen (Peer reviewer #2) and Dr. Sammy King (Peer reviewer #3) to provide independent reviews. Details of the tasks asked of Drs. Anderson and King are described below.

Dr. Whalen (USGS) will collate all three reviews and provide a summary of his findings to David Scott, U.S. Fish and Wildlife Service (Science Integrity Officer). Mr. Scott will then provide his assessment to Nicole Alt, U.S. Fish and Wildlife Service, Deputy Assistant Regional Director-Ecological Services (Mountain-Prairie Region).

**Peer Reviewer #1:** Dr. Craig Davis, Professor and Bollenbach Chair, Department of Natural Resource Ecology and Management, Oklahoma State University, Stillwater, Oklahoma

*Background:* In 2018, Craig Davis, PhD, provided a scientific review of several risk assessments for migrating whooping cranes associated with Nebraska Public Power District’s (NPPD) proposed R-project transmission line in Nebraska (Davis review 2018). Soon after the completion of 2018 Davis review, the U.S. Fish and Wildlife Service (FWS) produced 2 additional, follow-up risk assessments for the R-project based partly on newly available data. Additionally, NPPD updated their 2016 risk assessment in 2018, based partly on comments provided in the 2018 Davis review. As a way to summarize the eight completed and refined risk assessments by various parties, FWS produced a short document entitled “**A Review and Critique of Risk Assessments Considered by the U.S. Fish and Wildlife Service Regarding the Collision Risk for Whooping Cranes with NPPD’s R-Project**” in early 2019. Given the variability in results and conclusions from the risk assessments that the Service considered during the regulatory process, the Service is now requesting that Davis review the assessments and reviews produced and clarify any outstanding questions that were unresolved since his initial review in 2018.

### *Study Tasks for Subject Matter Expert:*

Listed below are the tasks to be completed by the subject matter expert in review of documents provided by U.S. Fish and Wildlife Service:

**Task 1:** Review the Service 2018(b) (Table 1) Whooping Crane Risk Assessment and offer an independent assessment of FWS conclusions. Specifically, offer an independent opinion on the conclusions reached by Service 2018(b) as listed below:

- Is the report’s take assessment and underlying assumptions based on best available science?
- Are the take calculations mathematically correct?
- Do the final conclusions of the report match up with species biology and current scientific understanding of future species growth and threats?

**Task 2:** Review the Service 2018c – corrected b (Table 1) Whooping Crane Risk Assessment and offer an independent assessment of FWS conclusions. Specifically, offer an independent opinion on the conclusions reached by Service 2018c – corrected b as listed below:

- Is the report’s take assessment and underlying assumptions based on best available science?
- Are the take calculations mathematically correct?
- Do the final conclusions of the report match up with species biology and current scientific understanding of future species growth and threats?

**Task 3:** Review the NPPD 2018 (Table 1) Whooping Crane Risk Assessment and offer an independent assessment of NPPD conclusions. Specifically, offer an independent opinion on the conclusions reached by NPPD 2018 as listed below:

- Is the report’s take assessment and underlying assumptions based on best available science?
- Are the take calculations mathematically correct?
- Do the final conclusions of the report match up with species biology and current scientific understanding of future species growth and threats?

**Task 4:** Review the FWS document “A Review and Critique of Risk Assessments Considered by the U.S. Fish and Wildlife Service Regarding the Collision Risk for Whooping Cranes with NPPD’s R-Project” and offer an independent assessment of FWS conclusions. Specifically, offer an independent opinion on the conclusions reached by NPPD 2018 as listed below:

- Does the document adequately reflect the FWS stepwise logic in arriving at conclusions regarding the risk of the R-project to whooping cranes in a balanced way that is transparent in regards to the public’s interest in this project?

**Peer Reviewer #2:** Dr. David Andersen, Unit Leader, Minnesota Cooperative Fish and Wildlife Research Unit, University of Minnesota, St. Paul, Minnesota.

**Peer Reviewer #3:** Dr. Sammy King, Unit Leader, Louisiana Cooperative Fish and Wildlife Research Unit, Louisiana State University, Baton Rouge, Louisiana.

**Background:** Dr. Kevin Whalen, U.S. Geological Survey’s (USGS) Cooperative Research Unit (CRU) Western Region Supervisor, was asked by the Service to identify two scientists who would provide an independent peer review of “**A Review and Critique of Risk Assessments Considered by the U.S. Fish and Wildlife Service Regarding the Collision Risk for Whooping Cranes with NPPD’s R-Project**” dated **January 30, 2019** [hereafter the

“Review”]. Part of Dr. Whalen’s supervisory duties include overseeing the peer review and approval process for many publications each year using USGS Fundamental Science Practices (FSPs). Following is an outline of the recommended process, peer reviewers, the review charge, and expected goal.

*Process:* The peer review will follow standard USGS FSPs including the nomination of two independent peer reviewers having no certifiable conflict of interest. The peer reviewers will provide comments focusing on the scientific aspects of the Review and its conclusions and will avoid any management or policy recommendations. The comments will be provided to Dr. Whalen and he will summarize key issues identified by the reviewers in addition to sharing their individual comments.

*Peer reviewers:* Dr. Whalen identified two peer reviewers for this effort:

- 1) Dr. David Andersen, Unit Leader Minnesota Cooperative Fish and Wildlife Research Unit: Dr. Andersen has worked with migratory birds for many years, including research on cranes.
- 2) Dr. Sammy King, Unit Leader, Louisiana Cooperative Fish and Wildlife Research Unit: Dr. King has worked with migratory birds for many years, including research on Whooping Cranes.

*Documentation:* The Service has provided Dr. Whalen with the January 30, 2019, Review summarizing the information the Service considered related to assessing the risk to Whooping Crane and 10 attachments consisting of analyses, reviews of analyses, and other documents used to support the summary. The Review and supporting attachments are the only documentation subject to the peer review.

*Peer review charge:* The over-arching peer review charge is to evaluate whether the Services’ current assessment of the various reports and their conclusion regarding Whooping Crane take in this matter is reasonable. Specifically, but not limited to: (1) is the Review’s take assessment and underlying assumptions based on best available science?; (2) do the final conclusions of the Review match up with species biology and current scientific understanding of future species growth and threats?; and (3) what are (identify) the limitations and/or deficiencies with the Services’ approach and assumptions in their conclusion on Whooping Crane risk to take?

Various modelling efforts were conducted and summarized in the attachments; however, the charge is not to redo nor certify their mathematical outputs, which is beyond the scope of this effort. The attachments are included in the documentation only so the reviewers may ascertain the validity of the individual efforts as they relate to the Service’s conclusions in the Review.

*Review goal:* The goal of the peer review is for the Service to have a high degree of confidence in the overall recommendation on risk to Whooping Cranes related to take or be made aware of potential errors, omissions, missing literature, violated assumptions, or inappropriate logic in estimating risk.