



## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

[Docket No. FWS–HQ–MB–2017–0092; 91200–FF09M20300–189–FXMB123109EAGLE]

### Updated Collision Risk Model Priors for Estimating Eagle Fatalities at Wind Energy Facilities

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Notice of availability.

**SUMMARY:** This notice announces our adoption of updated species-specific eagle exposure and collision probabilities used to generate fatality estimates for consideration in issuing eagle incidental take permits to wind-energy facilities under the Bald and Golden Eagle Protection Act. This action will improve our ability to carry out our statutory responsibility to ensure conservation of bald eagles and golden eagles when issuing those permits.

**DATES:** [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

**ADDRESSES:** Information related to this notice, including the public comments received in response to the previous *Federal Register* notices, is available at the Federal eRulemaking Portal: <http://www.regulations.gov> in Docket No. FWS–HQ–MB–2017–0092.

**FOR FURTHER INFORMATION CONTACT:** Brian Millsap, at 505–559–3963 (telephone), or [brian\\_a\\_millsap@fws.gov](mailto:brian_a_millsap@fws.gov) (email). Individuals who are hearing impaired or speech impaired may call the Federal Relay Service at 800–877–8337 for TTY assistance.

### SUPPLEMENTARY INFORMATION:

#### Background

The Bald and Golden Eagle Protection Act (16 U.S.C. 668–668d; “Act”) prohibits take of bald eagles and golden eagles except pursuant to Federal regulations. The Act authorizes the Secretary of the Interior to issue regulations to permit the “taking” of eagles for various purposes, provided the taking is compatible with the preservation of eagles. Under regulations in

part 22 of title 50 of the Code of Federal Regulations, we, the U.S. Fish and Wildlife Service (hereafter, “the Service”), issue permits to authorize take of eagles that is incidental to an activity (50 CFR 22.26).

In carrying out our responsibility to issue these types of permits for wind-energy facilities, we use a collision-risk model (CRM) to predict the number of bald and golden eagles that may be taken at facilities (USFWS 2013; New et al. 2015). The CRM allows the Service to produce conservative initial take estimates for new wind energy facilities, as well as to produce more precise updated estimates for operating facilities that have collected fatality monitoring data. The take estimates provided by the CRM allow the Service to ensure authorized eagle take numbers are within the eagle management unit take limits, and provide the data necessary to assess effects of take permits on local area eagle populations, both required actions under our Programmatic Environmental Impact Statement for eagle take permits (USFWS 2016a). The CRM incorporates prior information (priors) on eagle exposure and eagle collision probability, and these priors are updated as new information becomes available as part of the adaptive management process associated with eagle take permitting (USFWS 2016b).

In 2017 the Service undertook a review of newly available information and generated updated priors for the CRM. The Service announced the updated priors and availability of a report summarizing the analysis in a June 21, 2018, *Federal Register* notice (83 FR 28858) that solicited public comment on the proposed priors and how the Service should use the updated bald eagle priors in the CRM. The report is available at:

<https://www.fws.gov/migratorybirds/pdf/management/crmpriorsreport2018.pdf> or as described above in **ADDRESSES** (at [www.regulations.gov](http://www.regulations.gov) in Docket No. FWS–HQ–MB–2017–0092). At the request of wind-industry representatives, the Service reopened the comment period for another 30 days on November 13, 2018 (83 FR 56365).

### **Alternatives Considered and Summary of Responses**

In our notice of availability, we presented updated priors for golden eagle exposure and golden eagle collision probability. We also developed and presented for the first time priors for bald eagle exposure and collision probability. These updated and new priors incorporate substantial new information, and their adoption thus constitutes an improvement in the scientific information used by the Service to estimate the effects of our take permits on eagle populations.

The alternatives for both eagle species that we considered and presented for public comment are as follows:

Alternative 1—Use the updated species-specific priors, and use the 80th quantile of the CRM fatality estimates as the initial permitted take number for permits, as is the current practice.

Alternative 2—Use the updated species-specific priors, and because bald eagle populations are increasing and additional take is sustainable (U.S. Fish and Wildlife Service 2016a,c), accept a more risk-tolerant CRM approach for the initial permitted take number for bald eagles.

Alternative 3—Given the limitations in data available to inform the bald eagle priors, initiate an expert-elicitation process to further refine the bald eagle priors.

Of the 58 comments received during the two comment periods, we received substantive comments from several entities, including States, environmental organizations, and wind-energy organizations or companies. Many of the comments stated that the Service's CRM either overestimated or underestimated eagle fatalities, or stated that another method for estimating exposures and collisions should be adopted. Because the CRM has been the subject of three prior peer reviews and three rounds of public comment (February 18, 2011; May 2, 2013; May 6, 2016 [U.S. Fish and Wildlife Service 2011, 2013, 2016]), including being considered in detail as part of the 2016 revisions to the regulations pertaining to incidental take of eagles and eagle nests (81 FR 91494, December 16, 2016), we regarded these comments as outside the scope of this notice and we did not consider them further.

Most of the comments were in support of Alternative 1, use of the 80<sup>th</sup> quantile of the species-specific fatality distributions. However, many comments from the wind industry opposed Alternative 1 and asserted that approach was not based on best available science and results in unduly burdensome higher costs for eagle take that is unlikely to occur.

Industry largely objected to Alternative 2 because the underlying priors are still based on data that does not represent all locations in the United States. One energy coalition suggested that Alternative 2 should not be used because a confidence interval should not be prematurely selected until the Service has validated the model. This validation process should include public input to ensure that those impacted by the take estimates have an opportunity to evaluate and opine on the impacts of any confidence interval selected. A major trade association commented that Alternative 2 using the 50<sup>th</sup> or 60<sup>th</sup> quantile of the fatality distribution for bald eagles as the permitted take number would be preferable to the current use of the 80<sup>th</sup> quantile.

Industry rejected Alternative 3 on the grounds that available data and reports on eagle and wind interaction exist that could be used to inform a reasonable risk assessment approach without the need for eliciting scientific and technical judgments from experts. However, of the State fish and wildlife agencies that commented, most supported Alternative 3 because a further refined national bald eagle prior using expert elicitation would help to inform the uncertainty in the exposure and collision probability for bald eagles given their variable densities across the landscape.

### **Service Decision**

The Service is adopting Alternative 2 as the best approach given currently available data and status of eagle populations. We will use the 80<sup>th</sup> quantile of the fatality distribution as the initial permitted take number for golden eagles and the 60<sup>th</sup> quantile of the fatality distribution as the initial permitted take number for bald eagles. We regard this approach as a suitable balance

between the more secure status of bald eagles and the uncertainty in their take estimates that is consistent with our 2016 Programmatic Environmental Impact Statement (USFWS 2016a).

With regard to initiating an expert elicitation process, we agree with many States that gathering additional information from either experts or industry has the potential to further refine the bald eagle priors. For this reason, we may choose to engage in an expert elicitation process in the future. In the meantime, the best method to gain the information needed to develop a more accurate assessment is through fatality monitoring of permitted projects. The fatality-estimation process using the CRM is an exercise in adaptive management, and as more data are collected the Service will continue to revise and update the priors over time. Should it become apparent that a different risk balance is appropriate based on additional data, we will address that scenario in conjunction with a future update of the CRM. In order to streamline the adaptive management process and ensure rapid adoption of new scientific information going forward, in the future the Service will update and implement the updated priors for both eagle species as soon as sufficient new information becomes available to warrant an update. We will notify the public of future updates by posting them on the Service's Eagle Management web page (<https://www.fws.gov/birds/management/managed-species/eagle-management.php>) or the equivalent.

Upon publication of this notice, we will use the following data and risk tolerances for initial fatality predictions at wind energy facilities: The updated species-specific exposure and collision priors for both eagle species; the 80th quantile of the fatality distribution as the permitted take number for golden eagles; and the 60th quantile of the fatality distribution as the permitted take number for bald eagles. We will use the updated priors for all eagle incidental take permits issued to wind facilities, including those issued under the Endangered Species Act (16 U.S.C. 1531 et seq.) when eagles are covered in a habitat conservation plan as a non-listed species. (See 50 CFR 22.11(a).)

## **Literature Cited**

U.S. Fish and Wildlife Service. 2011. Migratory Birds; Draft Eagle Conservation Plan Guidance. 76:9529–9530.

U.S. Fish and Wildlife Service. 2013. Migratory Birds; Eagle Conservation Plan Guidance: Module 1—Land-Based Wind Energy, Version 2. Federal Register 78:25758.

U.S. Fish and Wildlife Service. 2016a. Programmatic Environmental Impact Statement for the Eagle Rule Revision. Division of Migratory Bird Management, U.S. Fish and Wildlife Service, Washington, D.C. USA. <https://www.fws.gov/migratorybirds/pdf/management/FINAL-PEIS-Permits-to-Incidentally-Take-Eagles.pdf>

U.S. Fish and Wildlife Service. 2016b. Eagle Permits; Revisions to Regulations for Eagle Incidental Take and Take of Eagle Nests. Federal Register 242:91494–91553.

U.S. Fish and Wildlife Service. 2016c. Bald and golden eagles: population demographics and estimation of sustainable take in the United States, 2016 update. Status Reports, Division of Migratory Bird Management, U.S. Fish and Wildlife Service, Washington, D.C. USA. <https://www.fws.gov/migratorybirds/pdf/management/EagleRuleRevisions-StatusReport.pdf>

**Martha Williams,**

*Principal Deputy Director,*

*Exercising the Delegated Authority of the Director,*

*U.S. Fish and Wildlife Service.*

[FR Doc. 2021-09362 Filed: 5/4/2021 8:45 am; Publication Date: 5/5/2021]