



The Western Section of The Wildlife Society and Wildlife Research Institute

Western Raptor Symposium
February 8-9, 2011
Riverside, California



Symposium
Sponsors



February 8 – 04:25-04:40 pm Session: Department of Interior Eagle Session

Overview of 2011 Golden Eagle Products, Anticipated Timelines, and Synopsis

Robert Murphy and Brian Millsap, Division of Migratory Birds, U.S. Fish & Wildlife Service, P.O. Box 1306, Albuquerque, NM. 87103-1306;
Brian_A_Millsap@fws.gov

The USFWS perceives that the next decade will be an exciting and fruitful time for Golden Eagle conservation in North America. Coordinated efforts led by the USFWS, Native American Tribes and First Nation Peoples, Mexico and Canada, sister agencies, and other cooperators and partner organizations will advance the current scientific knowledge of the species to reduce known threats, and acknowledge the inherent importance of known nest territories and foraging habitat. We anticipate that the first several months after the release of the USFWS Eagle Management Team products will have minor kinks, but with a cooperative attitude of all involved, on-the-ground conservation, monitoring, and scientific inquiry will advance our efforts to alleviate and mitigate extant threats. Through the USFWS Eagle Management Team and its sub-teams, we look forward to working closely with all parties to maintain and increase Golden Eagle populations in North America.

The authors and institutions that have provided the following presentations are happy to share their information, data, and opinions. However, these are not, necessarily, peer-reviewed presentations and the potential to take something out of context also exists. In order to avoid that, you are requested to contact the respective lead authors(s) before using specific information contained in any of the following papers. Once you have done that, the proper citation is: "[Author(s). Date. Title.] Presented at the Western Raptor Symposium. Jeffrey L. Lincer and David Bittner (Co-Chairs). Hosted by Wildlife Research Institute and The Wildlife Society, Western Section. Riverside Convention center, Riverside, California, USA. February 8-9, 2011

Synopsis of 2011 products and anticipated timelines for U.S. Fish & Wildlife Service actions involving Golden Eagles



R. Murphy



Mark Priest

Robert K. Murphy
USFWS-Division of Migratory Birds
Southwest Region, Albuquerque NM

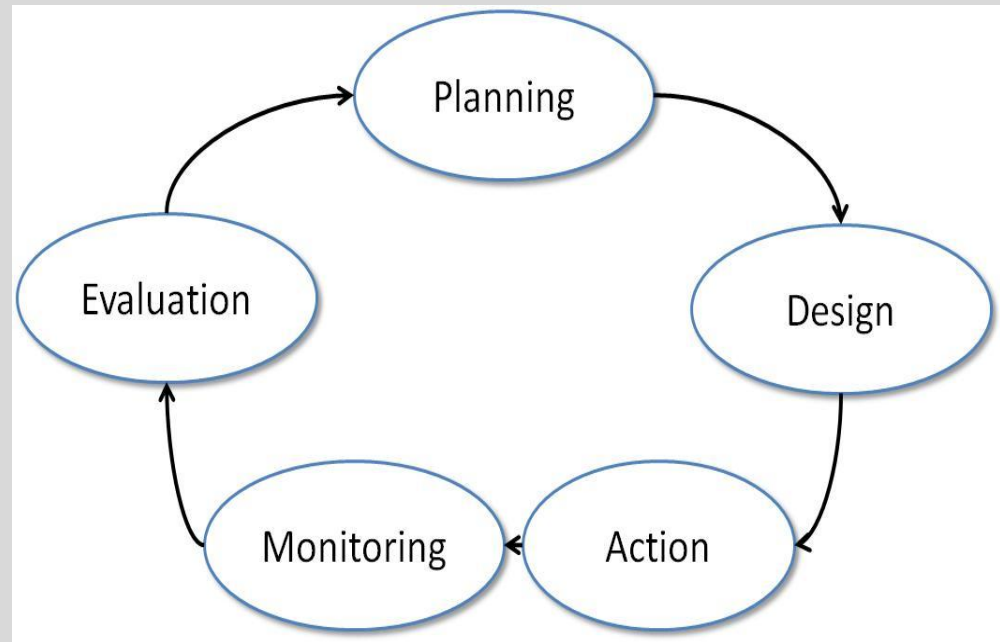
Western Raptor Symposium - 8 Feb 2011

summary: Eagle Conservation Plan

- a comprehensive “APP for eagles”
- tells how a project’s risks will be assessed and offset and how standards for an eagle take permit will be met
- provides menu of ACPs
- incorporates all known measures to avoid and minimize project effects on eagles
- describes compensatory mitigation approaches to help applicant reach no-net-loss threshold

summary, cont'd:

AM framework is integral



- predicts project's risk
- explicitly shows how various combinations of avoidance and minimization measures + ACPs reduce risk
- predicts what residual mortality/disturbance effects might be

AM: "...managing in the face of uncertainty, with a focus on its reduction"
(Williams and Johnson 1995)

derivation of fatality estimate

1. measure of eagle flight time in project area (extensive sampling at 800-m radius pt counts)
2. proportion of project area that's dangerous*
3. risk of a strike per minute that an eagle is exposed
4. factor in site-specific turbine features

$$\text{Fatalities}_{\text{Project, Year}} = \text{Exposure}_{\text{Minutes}} \times D \times P_{\text{Strike}}$$

*D is the portion of the project footprint that is in the danger zone, the zone where eagles are in danger from the turbines, power lines, or other project hazards.

turbine-specific “Risk Factors” incorporated into fatality estimates

1. Topographic features conducive to slope soaring
2. “ “ creating potential flight corridors
3. Near (< 100 m) potential foraging sites
4. Near likely perch structures or roost sites
5. In area where eagles may frequently engage in territorial interactions*

* about one-half of the mean project-area inter-nest distance (based on Stage 2 surveys) from an eagle nest site.

Timelines:

Draft Eagle Conservation Plan Guidelines

- published in Federal Register this week
- 90-day Public Comment
- guidelines may/may not be implemented during comment period

Related, pending:

- ABPP Guidelines for MBTA species
- Permit Implementation Guidelines



Timelines: Programmatic permits for take of eagles at wind energy facilities

- likely available within the year, possibly few mos.
- first permits somewhat flexible, conditions will get more rigorous
- Adaptive Management process integral in permit conditions



Please comment on the draft ECP!

- anticipate kinks
- constructive criticism
- suggest ways to improve



Acknowledgments

USFWS Eagle Mgt Team & subteams

Brian Millsap, Coordinator