



U.S. Fish and Wildlife Service Migratory Bird Program Bald and Golden Eagle Protection Act Information for the Department of Defense

A number of activities on and off public lands have the potential to impact eagles and their habitat. Military training and testing, energy development (solar, wind, oil, gas, and geothermal), recreational, and other activities may potentially impact eagles.

This document is intended to provide information to help the Department of Defense (DoD) comply with the Bald and Golden Eagle Protection Act (Eagle Act) and the new regulations for non-purposeful eagle take (50 CFR 22.26). The regulations provide for individual and programmatic permits that are consistent with the goal of stable or increasing eagle breeding populations.

Individual (Standard) Permits

Individual permits authorize limited, isolated instances of disturbance and in certain situations other take, but are not intended to authorize landscape-scale mortalities and injuries.

Programmatic Permits

Programmatic permits are designed to authorize take that is recurring and not in a specific timeframe and/or location. With adequate population data, projections for take, and enhanced mitigation, programmatic permits may authorize take over a longer period of time or across a larger area by a given industry, agency, or company. This type of authorization can be extended to industries, such as electric utilities or transportation industries, that currently take eagles in the course of otherwise lawful activities but who work with the Service to develop and implement additional, exceptionally comprehensive measures (Advanced Conservation Practices or ACPs) to reduce take to the level where it is essentially unavoidable. While ACPs are being developed, the Service encourages the use of interim measures that are consistent with the goal of stable or increasing breeding populations of Bald Eagles and Golden Eagles.

The status of Golden Eagle populations, for which there are limited data, but may be declining, limits the availability of permits. Until further information indicates that Golden Eagle populations can withstand additional take and to ensure compatibility with the Eagle Act, the US Fish and Wildlife Service (Service) will not issue any take permits for Golden Eagles beyond historically authorized take levels, unless the impacts to Golden Eagles can be completely offset to achieve no net loss to the breeding population.

Interim Measures

The following points are intended to provide guidance to DoD personnel while ACPs are being identified and/or developed.

The Service will work with DoD (DoD) to avoid take and to develop permits as needed as a conservation tool to be used when a project or activity can reduce take to a level that is unavoidable. Projects and actions include, but are not limited to, proposed or ongoing military training and testing activities, energy development projects (including associated infrastructure

development), and recreational activities. Our goal is to collaborate with our partners on avoidance, minimization, and mitigation of fish and wildlife impacts to the maximum extent feasible. Avian Protection Plans (APPs)¹ can be an important tool to use while the ACPs are being developed. Applicants and Field Offices should include cumulative impacts analysis in APPs where such information is available. It will likely be necessary to reevaluate the APP as programmatic permits are developed to include additional analysis and conservation measures that will serve as the ACPs. Given their voluntary nature, the use of APPs as a long-term measure needs further evaluation to determine the potential cumulative impacts to eagle populations. In some instances it may be advisable to develop geographically-based programmatic permits involving more than one industry or agency. In the case of Golden Eagles, and in some areas for Bald Eagles, a landscape-scale, multi-party approach (partnership) to management that would offset impacts from take may help minimize the potential for cumulative adverse impacts to eagles.

1. Our Service Ecological Services Field staff will provide most of the early technical assistance. Field staff biologists will work with project proponents to mitigate the potential impacts of projects on eagles and other wildlife. Field staff, in coordination with Migratory Bird offices, will work with DoD biologists to assess the potential for impacts to eagles, including take, using the best available current and historic information and appropriate risk analysis tools. Field staff will use the best available, scientifically-supportable conservation techniques and their knowledge of the area to recommend measures to avoid and minimize impacts.

The results of the impact analysis and mitigation planning should be recorded in mitigation plans, Avian Protection Plans (APPs), National Environmental Policy Act (NEPA), or other functionally equivalent documents. Depending on the size and potential impacts of the project, as well as the stage of planning and permitting, any combination of these documents can be employed to formalize mitigation plans and further the goal of eagle conservation. With large projects or multiple projects within an area, these documents may serve as an interim step while a programmatic permit is considered. Field staff, in consultation with Migratory Bird Offices at the Regional and National level, will recommend which document(s) to use.

2. Data on eagle home ranges, nesting, foraging and migration should be collected at the earliest opportunity and in collaboration with federal, state, tribal and private partners. Siting to avoid lethal take of eagles needs to consider the entire life-cycle of eagles, such as dispersal, migration, winter concentration behaviors, and foraging behaviors during both breeding and nonbreeding seasons. If additional data are needed to inform an impact assessment, the project proponent and other partners should be notified early in the planning process. Environmental and risk assessment documents (*e.g.*, NEPA

¹ An Avian Protection Plan is a document that delineates the practices that an entity, such as an electric utility or a wind power company will adopt to reduce the operational and avian risks that result from avian interactions with the entity's operations. APPs are voluntary and each one may be different; however, the overall goal of any APP is to reduce avian mortality. Entities tailor an APP to best fit their needs while furthering the conservation of avian species and improving reliability and customer service, and to reduce the entity's risk of enforcement under the MBTA or the Eagle Act. An APP typically includes a statement of company policy confirming the company's commitment to work cooperatively towards the protection of migratory birds.

documents) should describe the potential risk for eagles to the extent possible. However, if data are lacking, these documents should describe the limits of the analysis, the need for additional data, and the mitigation approach to be used in light of the uncertainties. Measures to meet the goal of stable or increasing breeding populations should be specified. The Service is in the process of drafting survey design recommendations and Field staff should coordinate with Migratory Bird Regional and National offices for the best information available.

3. Energy project mitigation should include conservation measures addressing the siting and operation of the facility, post construction monitoring, and reporting on impacts to eagles as long as potential take occurs. Mitigation should also include adaptive management measures that outline potential approaches to modifying the project if problems with eagle take occur once the facility is in operation, and a commitment to implementing the approaches if take occurs. These measures should be documented in APPs; however, other documents, including those mentioned above, can also serve as conservation plans for a developer and/or lead agency.
4. APPs or other mitigation plans may serve as part of the application process while programmatic permit conditions are being developed. A programmatic permit may build upon an APP. However, additional information may be needed.
5. The regulation and Final Environmental Assessment (FEA) reiterate that the Service has an obligation to consult with Native American tribes before authorizing any take that would affect their interests. Take thresholds, permit conditions, cumulative impact analyses, and management recommendations have been or will be designed to ensure our ability to meet the preservation standard of the Eagle Act and be compatible with Tribal Trust responsibilities.
6. Nothing in this guidance suggests that the Service forfeits the right to voice concern for and/or object to the issuance of permits for a given project or activity if unavoidable impacts to raptors or other species appear unacceptably high.
7. If the project or activity results in eagle take, and the project proponent chooses not to work with the Service, or to ignore suggestions for mitigating the risks to eagles, Service Law Enforcement should be contacted. Ideally, negotiations between the Service and DoD will result in the reduction of risks to eagles. However, prosecution under the Eagle Act remains possible.

Questions and Answers

The following are Questions and Answers regarding government agency compliance with the Eagle Act and the new permit regulations.

What are the legal requirements for DoD to comply with the Eagle Act and permit regulations and to conduct activities on DoD lands?

(a) Requirements for compliance with the Eagle Act/Rule.

The Eagle Act of 1940 prohibits a variety of actions with respect to eagles, including ‘take.’ ‘Take’ under the Eagle Act is defined as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb.” Any ‘take’ an eagle is in violation of the Eagle Act unless the take has been authorized by the Secretary of the Interior. Where an activity results in take, it is a violation of the Eagle Act unless a permit authorizing that take has been obtained prior to the action.

If a DoD activity will take eagles, DoD should seek a permit in order to comply with the Eagle Act.

(b) DoD and applicant responsibilities to seek permits under the Eagle Act.

Persons and organizations that obtain licenses, permits, grants, or other such services from DoD are responsible for their own compliance with the Eagle Act and should individually seek permits for their actions that may take eagles. DoD must obtain permits for take that would result from DoD actions that are implemented by DoD or a DoD entity (See 74 FR at 46843). If DoD leases or issues a right-of-way authorization, DoD should consider the likelihood that the action will take eagles. If take may result from activities conducted pursuant to a right-of-way authorization, DoD should consider minimizing the likelihood of successful legal challenge to its authorization by conditioning its right-of-way permit to require the applicant to prepare an Avian Protection Plan (APP). The agency should also consider taking appropriate administrative action if the applicant fails to prepare or properly implement its APP. However, the Service recognizes that DoD should make its own judgment regarding legal risks involved. For example, DoD may consider such factors as the willingness of the applicant to meet its responsibilities under the Eagle Act on its lands (*e.g.*, if the applicant is not willing to avoid take, and DoD knows this, DoD might not be able to reasonably assume that eagles will be protected).

(c) Additional Obligations.

There are other obligations specific to DoD, as opposed to the applicant. First, Executive Order 13186 expressly requires that federal agencies evaluate the effects of proposed actions on migratory birds (including eagles) pursuant to the National Environmental Policy Act (NEPA) “or other established environmental review processes”; to restore and enhance the habitat of migratory birds, as practicable; identify where unintentional take reasonably attributable to agency actions is having, or is likely to have, a measurable negative effect on migratory bird populations; and, with respect to those actions so identified, the agency shall develop and use principles, standards, and practices that will lessen the amount of unintentional take, developing any such conservation efforts in cooperation with the Service.

Second, federal agencies are responsible for NEPA compliance. To demonstrate appropriate analysis under NEPA, the Service recommends that DoD evaluate (1) whether take is likely to occur from activities associated with the proposed activity, and (2) the direct, indirect, and cumulative impacts the proposal may have on the ability to meet the preservation standard of the Eagle Act, which the Service has interpreted to mean “compatible with the goal of stable or increasing breeding populations.” DoD should, in their NEPA documents, include all practicable avoidance and minimization measures, as well as any monitoring or necessary additional mitigation in the project plan or as Conditions of Approval in the decision document.

Third, DoD has a responsibility to notify the applicant or permittee when a likelihood of take from activities associated with the proposal has been identified and should seek to be in compliance with the Eagle Act.

What additional management considerations or options does the Service suggest?

To meet obligations under the Eagle Act as well as other obligations, the Service will provide technical assistance, and Service biologists will continue to work with project proponents to identify appropriate mitigation measures for potential impacts of projects on eagles and other wildlife. Service Field staff, in coordination with the Migratory Bird Offices, will use a risk-analysis approach with reference to the preservation standard of the Eagle Act to determine the potential impacts of projects on eagles. Field staff should use existing best available conservation measures to recommend measures to avoid and minimize impacts, until specific guidance documents and Advanced Conservation Practices (ACPs) are identified and/or developed. The results of the risk analysis and impact mitigation planning should be recorded in mitigation plans, APPs, NEPA, or other functionally equivalent documents. Depending on the size and potential impacts of the project, as well as the stage of planning and permitting, any combination of these documents may be employed to formalize mitigation agreements with DoD and further the goal of eagle conservation. These documents may serve as an interim step while a programmatic permit is considered.

Is DoD required to obtain a take permit for actions that are interrelated to or interdependent on its action (for example, as those terms are understood within an Endangered Species Act context)? For multi-jurisdictional projects, is eagle take that is associated with DoD authorization confined to the take that would occur on DoD’s land?

When authorizing actions by third parties, DoD should consider whether the taking of eagles will be a direct or indirect effect of the authorized action, irrespective of where the take occurs. The concepts of “interrelated” or “interdependent” actions have not been incorporated into the Eagle Act regulations, which require consideration of the impacts of a proposed activity, including its “indirect effects.” The Eagle Act regulations define “indirect effects” as “effects for which a proposed action is a cause, and which may occur later in time and/or be physically manifested beyond the initial impacts of the action, but are still reasonably likely to occur.”

Will Service concurrence be required or will DoD be solely responsible for the unilateral determination of their compliance with the Eagle Act and regulations?

Service concurrence is not necessary when DoD determines its activity has no impact, and therefore chooses not to seek a permit. However, DoD bears the risk that its determination is incorrect, regardless of whether the Service concurs. If, contrary to DoD's determination, it causes take, that take will constitute a violation of the Eagle Act. We recommend the NEPA process as the best tool for DoD to demonstrate the impact their actions will have on individual eagles and on local area populations, *i.e.*, whether the actions they permit may individually or cumulatively result in a net loss to the breeding population. The NEPA document can identify mitigation and conservation measures (*i.e.* reducing impacts from activities resulting in currently unregulated take) that will be implemented to offset impacts and to improve conditions for the local area population. However, as an agency with special expertise on eagles, the Service has a duty to provide comments on NEPA documents (40 CFR 1503.2), and our comments should reflect our conservation and law enforcement responsibilities under the Eagle Act and under E.O. 13186.

For the Service to issue a permit for take of Golden Eagles, the Service would have to determine that there would be no net loss to the breeding population, for the following reason. The Eagle Act requires the Service (as delegated from the Secretary of the Interior) to determine that any take be compatible with the preservation of the Bald Eagle or the Golden Eagle as a condition of issuing any permit. As part of the environmental assessment it prepared on its new permit regulations for incidental take of eagles, the Service concluded that it currently cannot authorize additional take of Golden Eagles above historically authorized take levels (under other previously existing types of permits).

Does the permit regulation apply to existing ongoing actions (e.g., military training or testing, recreational activities, etc), or are they a part of the baseline? If they are part of the baseline, would it also include renewal of existing use authorizations?

The Eagle Act does not distinguish between ongoing activities and new activities. Take resulting from either is in violation of the Eagle Act and therefore is prohibited. Accordingly, the permit regulation does not limit the availability of permits to new activities. (Regarding disturbance, data suggest that eagles, or at least Bald Eagles, are generally less likely to be disturbed by ongoing activities than new ones. We have no data to suggest, however, that other types of incidental take, such as injury or mortality, decrease as activities persist.)

In addition, in the Service's Final Environmental Assessment, multiple sources of unregulated take were identified that are likely to contribute to population pressures. To address those sources of unregulated take, the permit for programmatic reduction in take resulting in mortality was developed and we committed to a National Golden Eagle Conservation and Management Plan.

The plan will establish the framework for achieving preservation of Golden Eagles, and will identify and assess the influence of population threats; establish criteria for setting favorable conservation status targets; identify and develop management measures to achieve favorable conservation status; develop tests for measuring achievement of favorable conservation status targets; and develop standardized protocols for surveys and monitoring.

For ongoing activities with impacts that were previously exempted from the prohibitions of the Endangered Species Act (ESA) under ESA Section 7, the Service has established an expedited permit system to extend Eagle Act authorization for the take exempted through valid incidental take statements. Ongoing activities with take coverage under ESA section 10(a)(1)(B) incidental take permits are covered under the Eagle Act though new provisions at 50 CFR 22.11(a). See 73 FR 29075, May 20, 2008.

DoD has limited ability to collect data on breeding sites and wintering or migrating eagles . How does the Service suggest that agencies address such uncertainties? With little data, how can DoD demonstrate compliance with the Eagle Act?

In the immediate future, the Service recommends that DoD employ an adaptive management strategy within their NEPA compliance for these projects and for planning in general and a commitment to work with the Service. In the long term, the Service hopes to develop or adopt recommendations for surveys applicable to non-nesting eagles in other documents. DoD's evaluation of impacts and elements in an adaptive management plan can demonstrate their commitment to be consistent with the preservation standard of the Eagle Act. (Also see responses 1(b) above and 11(b) below).

What are the data standards the Service will use for compliance with the Eagle Act and permit regulations (e.g. best available)? Does the FWS suggest DoD collect additional data in order to be in compliance with the Eagle Act and permit regulations?

Compliance with the Eagle Act requires that take of eagles not occur without authorization from the Secretary of the Interior; it does not require any particular data or data standards. Data adequacy is important because it allows the entity responsible for compliance with the Eagle Act to estimate impacts to eagles, and for DoD to demonstrate compliance with additional related obligations such as E.O. 13186 and NEPA. It is important to have adequate data to estimate the impacts to eagles, to compare data sources in a statistically valid fashion, and to track impacts through time. While the Service intends to develop general standards for data that are provided for use in the delineation of Eagle Management Units, population estimates, demographic studies, and threshold calculations, our data requirements for individual permits under the new regulations are consistent with existing requirements for permits for Take of Golden Eagle Nests for Resource Development and Recovery (50 CFR 22.25). In addition, we have required only minimal reporting for individual permittees' compliance with the Eagle Act.

We intend to develop a National Golden Eagle Conservation and Management Plan and protocols that will include recommendations, not requirements, for information, *e.g.*, documentation of existing types and levels of activities, that will be useful for site-specific needs as well as landscape scale needs, and will be short-term (*e.g.*, productivity monitoring pre-and post disturbance) and long-term (*e.g.*, territory occupancy) in scope. Short-term data gathering is recommended for activities that are likely to have short-term impacts. Long-term monitoring is most useful to document that cumulative actions are not resulting in net loss to the breeding population.

How current do the data need to be considered “up to date” to be in compliance with the Eagle Act and permit regulations?

Compliance with the Eagle Act requires that take of eagles not occur without authorization from the Secretary of the Interior, rather than requiring any particular data or data standards. Data accuracy is relevant when used to evaluate impacts. , If a permit is sought, data can demonstrate that all appropriate avoidance and minimization measures have been incorporated into the project design. Data older than 10 years may fall into the category of ‘historical’, data between one and 10 years old, in combination with historical data, may be adequate for a coarse, landscape-scale estimate of territories, and data to determine impacts to individual pairs should include data from both historical and one to 10 years, plus data from the year(s) of the analysis. Data that are based on observations or only from a single year’s effort do not lend themselves to the more rigorous analysis that is possible from data gathered in a systematic fashion over more than one year.

Without explicit information on foraging habitat use (which can only be gathered by radio or satellite telemetry survey techniques) or prey base (which is typically gathered through ground survey techniques), how should DoD analyze foraging impacts?

Methods for gathering information on foraging habitat use are not limited to radio or satellite telemetry survey techniques. They can include comprehensive, observer-based studies. However, the time and personnel requirements of the observer based methods may conflict with the time constraints of some projects. There are other available tools that can help DoD estimate likely foraging areas. For example, DoD could develop a coarse analysis of potential foraging areas within estimated home ranges of breeding pairs using Soil Survey Geographic (SSURGO) Database soils data and the vegetation associations included in the SSURGO GIS information, or other comparable or better available vegetation or soils data, and could use appropriate multispectral satellite imagery. Because the locations supporting prey in an arid environment likely vary from year-to-year, based largely upon rainfall occurrences, DoD could also explore the historical climate data available through the national Climatic Data Center <http://www.ncdc.noaa.gov/oa/climate/stationlocator.html>), using stations available within or adjacent to the cumulative impacts area.

How does the Service suggest DoD analyze cumulative impacts for a 140-mile Golden Eagle natal dispersal area?

The cumulative impacts analysis is rarely as quantitative as the analyses of direct or indirect effects. Because of the limited data for the cumulative impact area, the analysis may be more qualitative, but the Service recommends that DoD estimate, over the life of the project, what other kinds of impacts (both adverse and positive - the latter being especially important when considering mitigation) to eagle populations are reasonably foreseeable. GIS can be employed in some portion of the analysis. A coarse analysis of available foraging habitat can be computed and threats to nest sites (ridge lines) can be evaluated by using existing layers for vegetation and topography, and for various disturbances (military training), habitat loss (cantonment/urban areas), energy developments (new and existing proposals), agricultural areas, etc.

What is the threshold of disturbance that would be determined to result in take (e.g., define ‘substantial interference’)? What types of activities would cause this disturbance and how will take in the form of disturbance be quantified?

As defined in regulation, “disturb” means to agitate or bother a Bald or Golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. “Substantial interference” was not defined in regulation but refers to interference at or above the level that that causes eagles to abandon their nest or that causes injury or loss of productivity. “Injury” could be the direct result of the interference, such as a nestling being knocked from the nest by a startled adult, or it can be indirect, such as a nestling that is fed inadequately because the adults are agitated when in the vicinity of the nest. Loss of productivity refers to a situation where productivity is reduced. Some examples of when it is the product of disturbance include (1) where adults abandon a nesting attempt because of human activity in the vicinity, (2) where nestlings fail to survive because the adults inadequately feed them because they are deterred from using their primary foraging area, and (3) where a pair of previously successful breeding eagles are underweight and make no nesting attempt the next breeding season after their wintering concentration area is destroyed. The Service addressed the issue of disturbance in detail in its final regulations defining the term (see 72 FR 31132, June 5, 2007).

Regarding the question of how the Service will quantify take that occurs in the form of disturbance, our FEA lays out the approach to be used to measure disturbance at nest sites. For the likely loss of a single year of productivity at a Bald Eagle nest, the expected take varies between Bald Eagle Management Units. However, for most management populations, take resulting from disturbance at one nest for only one time = 1.3 individuals from the threshold; one nest take or disturbance resulting in the permanent abandonment of a territory = 1.3 individuals from the threshold the first year, and a reduction in 8 individuals from the annual threshold each year thereafter until data show the number of breeding pairs has returned to the original estimated, or until it can be demonstrated that the predicted loss has not occurred. For Golden Eagles: take resulting from disturbance at one nest for only one time = 0.79 individuals from the threshold; one nest take or disturbance resulting in the permanent abandonment of a territory = 0.79 individuals from the threshold the first year, and a reduction of 4.26 individuals from the annual individual permit limit each year thereafter until data show the number of breeding pairs has returned to the original estimated, or until it can be demonstrated that the predicted loss has not occurred.

Is an Avian Protection Plan required for compliance with the Eagle Act and regulations?

Neither the Eagle Act nor the permit regulations require APPs. The use of APPs has the potential to reduce eagle take. APPs also have the potential to be used as foundation documentation for the application and processing of programmatic permits, once they become available. The development and implementation of an APP is voluntary. An APP does not itself constitute authorization for take under the Eagle Act.

Given the unlikelihood of permits being available for Golden Eagle take, is any project or activity (military training, wind energy development, etc.) within the range of a Golden Eagle viable (Final Rule, 74 FR at 46842)? If conclusion is reached “pre-project” that “no net loss” would result, what happens if unanticipated lethal take occurs as a result of project implementation?

(a) Viability of projects.

Projects that will take Golden Eagles should pursue programmatic permits and meet a no-net-loss to the breeding population standard. The likelihood of a project obtaining a permit will depend on the measures identified to reduce take and to compensate for any unavoidable take. DoD should consider conservation measures when addressing the siting and operation of activities and facilities, adaptive-management measures to outline potential approaches to modifying the project if problems with eagle take occur once the project or activity is implemented, and a commitment to implementing the conservation measures and approaches if take occurs. These measures are frequently documented in APPs; however, other documents, including those already mentioned above could also serve as conservation agreements between the Service and DoD.

(b) Unanticipated lethal take after project implementation.

Without a permit or permits authorizing take, individuals and entities that take eagles are liable under the Eagle Act and the MBTA. Additionally, take beyond the level permitted after project implementation would violate the Eagle Act. However, the Service realizes there may be impacts to some birds even if all reasonable measures are taken to avoid such impacts. Although it is not possible to absolve individuals and entities from liability under the Eagle Act or the MBTA, the Service exercises enforcement discretion to focus on those individuals, companies, or agencies that take migratory birds without regard for the consequences of their actions and the law, especially when conservation measures are available, but have not been implemented. The Service prioritizes its enforcement efforts to focus on those individuals or entities who take bald eagles or their parts, eggs, or nests without implementing appropriate measures.