

Questions and Answers — Implementation of the Revised Eagle Incidental Take Permit Regulations

Avoidance and Minimization

Question: Does the Service consider the applicant’s funds when determining the amount of avoidance and minimization measures that will be required? Will the amount of avoidance and minimization be different for commercial vs. noncommercial applicants, for example?

Answer: The last part of the definition of “practicable” goes to the resources of the applicant: *“Practicable means available and capable of being done after taking into consideration existing technology, logistics, and cost in light of a mitigation measure’s beneficial value to eagles and the activity’s overall purpose, scope, and scale.”* The definition is intended to reflect our rationale that it is more appropriate to base the level of mitigation on the scope and scale of the project than directly on the financial resources of the project proponent. Focusing analysis on the scope and scale of the project also better aligns required conservation measures to the project’s impacts generally. Similar consideration of an activity’s “purpose, scope, and scale” also applies in determining whether a project is commercial or noncommercial in nature.

Question: Will the Service develop a list of adaptive management practices to be incorporated into permit conditions?

Answer: Adaptive management is intended to be permit specific, and should focus on addressing possible long-term risks that are not fully addressed through avoidance and minimization measures implemented as conditions of the permit. Possible examples of adaptive management strategies specific to particular situations are (for wind, in this example): (1) permitting a project that includes a turbine within 1/2 mile of an alternate eagle nest site, but with the adaptive management trigger that if eagles show signs of using that nest, operations of that turbine are curtailed until after eagles are no longer using the area; (2) permitting a project that includes turbines on a ridge hypothesized, but not known, to be used by eagles in fall on migration, with the adaptive management trigger that if an eagle is killed during fall migration, the operation of turbines on the ridge will be curtailed during daylight hours for the duration of fall migration; and (3) permitting a project with an estimated fatality rate of two eagles per year, but with the adaptive management trigger that if total take exceeds five eagles in three years, an informed curtailment program will be implemented.

Compensatory Mitigation

Question: Can actions taken to benefit eagles prior to permit application be credited towards compensatory mitigation requirements?

Answer: Voluntary actions taken to benefit eagles in anticipation of and prior to issuance of an eagle take permit may be credited towards compensatory mitigation requirements. Such actions must meet all mitigation standards set forth in the rule for compensatory mitigation. The Service

will determine whether and how much to credit such actions. Potential applicants intending to take voluntary conservation actions prior to permit application are encouraged to seek technical assistance from the Service. If an applicant is contemplating such actions, a monitoring or research component is recommended to provide data usable in quantifying the project's benefits to eagles in order to generate a credit.

Question: Mitigation is required at a ratio of 1.2 to 1 for golden eagles. Does this apply to bald eagles also, or would compensatory mitigation for bald eagles be at 1:1?

Answer: Compensatory mitigation for bald eagle take that exceeds take thresholds will be at a 1 to 1 ratio. (This is addressed in the PEIS.) Currently, bald eagle populations in all eagle management units (EMUs) are growing, so additional mitigation is not currently needed to ensure populations do not decrease.

Question: If an electric company is interested in a golden eagle incidental take permit, would take that results from infrastructure that was operational before 2009 be subtracted from EMU thresholds and thereby require compensatory mitigation?

Answer: No, take that was occurring prior to 2009 is part of the environmental baseline and is not subtracted from EMU take limits or subject to offsetting compensatory mitigation under the permit.

Question: What is the standard for a "net benefit" to eagles when considering applications for take of eagle nests? Are there different standards for bald eagles and golden eagles? Is the standard applied differently for mitigating disturbance versus nest removal?

Answer: The "net benefit" standard is from the eagle nest take permit regulations at [50 CFR 22.27](#). It is not found in the eagle incidental take permit regulations ([50 CFR 22.26](#)), which authorize disturbance, among other forms of incidental take. Often these two separate permit regulations are confused because they were both promulgated in one rulemaking, but they provide different authorizations and contain distinct conditions and criteria.

In order to qualify for a nest-take permit, the applicant must show that there will be a net benefit to eagles. Generally, this will take the form of compensatory mitigation; however, if the activity that necessitates the nest removal will, in and of itself, provide a net benefit to eagles, compensatory mitigation is not needed. When compensatory mitigation is required to create the net benefit, the Service will consider how valuable the particular nest is, biologically, and what can be done to result in better conditions for eagles than were present prior to the nest being removed. The margin of improvement will often be small, which is appropriate when considering the health and success of most bald eagle populations. Generally speaking, many individual bald eagle nests are not providing essential population benefits because bald eagle populations have reached a saturation point in many areas. This results in eagles fighting for territories and producing less young per nest. Thus, creating a net benefit could mean protecting or enhancing habitat in other areas with potentially viable conditions for attracting breeding eagles.

In some cases, the nest to be removed is degraded and no longer used, in which case very little would need to be done to provide a net benefit. These types of situations open the door to creative solutions such as funding an avian center's visit to a school to teach children about raptors or making a modest donation to a facility permitted to rehabilitate injured and sick eagles. In sum, for bald eagle nest removal, the amount of mitigation needed is proportional to the value of the nest to bald eagles; thus it is a biological determination that must be made on a case-by-case basis.

In some emergency situations where eagles are at risk, there may be a net benefit from simply removing the nest. An example would be a new nest that eagles have built on infrastructure likely to be hazardous to the nest and the eagles. However, there would be no net benefit to eagles from removing a nest that pre-existed the activity that poses the risk to eagles. For example, if a wind facility builds turbines in the traditional home range of a breeding pair of eagles, compensatory mitigation will be required to remove the nest to protect the eagles.

Question: 50 CFR 22.26(c)(1)(ii) states that compensatory mitigation may be required if the LAP take threshold will be exceeded. Will the Regional Permit Office decide whether to require compensatory mitigation on a case-by-case basis in this context or will the Service develop general guidance?

Answer: The Regional Permit Office will make this determination on a case-by case basis. First it would first need to undertake additional environmental analysis to ensure that any permitted take is compatible with the preservation of eagles if cumulative authorized take exceeds 5% in the LAP. The Eagle Act preservation standard has both an EMU scale and local scale that must be considered. For the Service to issue the permit, the environmental analysis would need to demonstrate that the take is compatible with the persistence of local populations. Compensatory mitigation within the LAP may be needed to meet that standard.

However, there are situations where compensatory mitigation may not be warranted. For example, if the take to be covered under the permit has been ongoing and predates the 2009 baseline, the take is not new and is not adding to the cumulative take already considered and analyzed in the [2009 EA](#). The project proponent will be required to implement all practicable avoidance and minimization measures, which in most cases will result in reducing anticipated take. Also, exceeding the 5% LAP limit for a growing bald eagle population may not be incompatible with maintaining the persistence of local populations as required under the preservation standard. Conversely, exceeding the 5% LAP limit for golden eagles would more likely result in additional compensatory mitigation requirements, or a determination that the permit cannot be issued. The [PEIS](#) did not analyze specific criteria that could be used to determine whether a project that would exceed the LAP take limit still meets the preservation standard. Therefore, for permits where the authorized take would exceed the LAP limit, the NEPA analysis for the permit must include an assessment of the impacts of exceeding the LAP threshold.

Local Area Population (LAP) Eagle Densities

Question: Does the Service have new eagle density estimates for the new EMUs (to determine the local area populations)?

Answer: Yes, we have calculated eagle densities under the updated population estimates and these have been incorporated into the Cumulative Effects Tool.

Question: If local eagle density data is available, can it be used instead of the average EMU density estimate for the LAP analysis?

Answer: No, the LAP analysis averages over local “highs and lows” in abundance, and using local data in one location but not another confounds the analysis of cumulative effects. We are developing tools that will allow prediction of variation in eagle density on a nationwide scale, but those tools are not currently available.

Permits for Wind Energy Facilities

Question: Can wind companies applying for permits use their own collision risk models rather than the one developed by the Service?

Answer: The Service’s adaptive management approach for eagle incidental take permits necessitates the collection of standardized pre- and post-construction data and the use of the Collision Risk Model (CRM) to generate and update fatality estimates. For this reason, the Service has incorporated minimum standards for such data directly into the final rule, subject to waiver under exceptional circumstances. The Service will not require permit applicants to use the CRM to estimate eagle fatalities for their permit applications. We will use the standardized project data supplied by the permit applicant and our CRM to generate a predicted number of fatalities for each incidental eagle take permit for a wind facility, and the 80th quantile of the CRM estimate will be the take limit for the permit except under exceptional circumstances. If project proponents wish, they can use any credible, scientifically peer-reviewed model to generate eagle fatality and associated uncertainty estimates as supplemental information for their permit applications, but this is not required. Alternative models that, over time, demonstrate better or comparable predictive performance to the CRM could eventually be formally incorporated into the adaptive management process for estimating permit take limits.

Question: The Service has recommended that wind companies get a permit if they may take at least one eagle over the life of their wind project. Many wind companies will have some (usually less than 5-10) minutes of eagle observations during their pre-construction surveys. If you run this through the Service’s model, it will indicate a very slight amount of risk, perhaps take of a few eagles over 30 years. Will the Service still recommend a permit for situations such as this?

Answer: If eagles are present in a project area, there is some chance take will occur. Without a permit, such take would be a violation of the Bald and Golden Eagle Protection Act. Until we have developed an approach for identifying and addressing low impact projects, our only mechanism to provide take coverage is through an eagle incidental take permit.

Question: How can existing wind energy facilities comply with the requirement to conduct two years of pre-construction surveys to ascertain the risk to eagles? Will the Service waive this requirement for these companies?

Answer: Yes, existing facilities may apply for a permit without complying with the two-year, pre-construction survey requirement because it is impossible to conduct pre-construction surveys at already-operational facilities. However, if pre-construction surveys were not conducted at an existing facility, the applicant must provide sufficient data for the Service to determine the fatality risk to eagles from operation of the facility. For existing facilities, the Service may initially rely on estimates using a “generic” version of the collision risk model to provide a conservative estimate of fatalities for the facility. To minimize the risk that the permit authorization underestimates the level of take, the Service would assign a conservative fatality rate at the 80th quantile (i.e., a rate we are 80% confident will be greater than the actual number of fatalities) for authorizing take under the first five years of the permit. Alternatively, the authorization could be issued as a five-year permit until project-specific data is available. We would require rigorous post-construction monitoring over the first five years to provide an adequate basis for updating the initial prediction for the next five years (either under the same or a new permit).

Question: If the requirement to conduct two years of pre-construction surveys in accordance with the regulations is waived by the Service, will that mean the NEPA analysis for that permit will not be able to tier from the 2016 [PEIS](#)?

Answer: A lack of pre-application survey data does not *directly* affect the ability to tier. The [PEIS](#) provides the opportunity to tier some NEPA analyses for individual permits based primarily on whether the take to be authorized is within the EMU and LAP take limits. A failure to conduct pre-construction surveys is material only insofar as it may prevent the Service from making the determinations that the permit would meet those criteria. If we can't make those determinations, we can issue the permit only if the authorized take level, associated compensatory mitigation, and post-issuance monitoring requirement will be increased to ensure the preservation standard is met. Development of those enhanced permit requirements warrants stand-alone (not tiered) NEPA analysis. In sum, if waiving the two-year, pre-construction survey requirement will prevent the Service from determining if the take will be within the EMU and LAP take limits without additional analysis, the ability to tier from the PEIS will be significantly reduced or negated.

Question: Do the two years of pre-construction monitoring have to be conducted consecutively? Will new monitoring be necessary if several years (e.g., 3-5) lapse between the survey and submittal of the permit application?

Answer: The surveys do not have to be done in consecutive years. In fact, in the case of golden eagles, spanning a few more years could provide slightly better information due to apparent cyclical fluctuations that have been observed in golden eagle populations. Of course, more than two years of survey data would provide even better information for either species. For bald eagles, the most recent data is likely to be most accurate because of the ongoing growth and expansion of bald eagle populations. In general (for both species), the minimum required two years of surveys should be conducted in two out of the most recent five years.

Question: Wind project proponents are required to report the observable proportion of the 3-dimensional survey plots during pre-construction monitoring. Is there a preferred method for estimating this proportion? Would this proportion be incorporated into the Collision Risk Model (CRM)? If so, how will that be done?

Answer: There are multiple ways to account for the proportion of a survey plot that is observable. The appropriate method for a particular project may depend on circumstances specific to that project. The Service recommends that project proponents consult with the Service's Regional eagle permit biologist regarding a particular method. Survey plot 'maps' illustrating landscape features that reduce plot visibility may be helpful. The observable area would be included in the CRM as part of the exposure calculation (exposure is calculated by dividing the eagle minutes observed by the time and space over which those eagle minutes were observed). Not accounting for unobserved space within the sample plot may result in an underestimate of exposure and, consequently, underestimate take.

Tracking Take

Question: In the Final Environmental Assessment for the 2009 regulations, the loss of a golden eagle territory was equivalent to approximately 4.26 eagles per year. How is the Service calculating the loss of a golden eagle territory under the 2016 management actions?

Answer: The approach for accounting for take with nesting territory loss was changed in the 2016 [PEIS](#), which refers to [USFWS \(2016\)](#) for the details (page 27, Tables 13 and 14). Under the new approach, the cumulative value to be removed from the Eagle Management Unit (EMU) take limit for each permanent territory loss equals productivity at the 80th quantile across each year of the estimated generation time for each species. For golden eagles, nationwide, for each permanent territory loss, 6.49 eagles will be removed from the threshold at a rate of 0.59 eagles per year for 11 years. For bald eagles nationwide (except in the southwest EMU), this means that for each permanent territory loss, 13.3 eagles will now be removed from the appropriate EMU threshold at a rate of 1.33 eagles per year for 10 years. In the southwest (Pacific Flyway, South), this value is 11.4 eagles – at a rate of 0.95 eagles per year for 12 years.

Question: How does the Service debit a nest removal from the EMU take limits for purposes of tracking against take thresholds? Would it be treated as a territory loss until a determination is made that the eagles re-nested, or is it equivalent to a disturbance?

Answer: In terms of annual debits to the EMU take limits, it does not matter whether a permit that affects productivity is counted as disturbance or a territory-loss - the effect is the same, an annual debit to the EMU take limit of 1.33 per bald eagle nest for lost reproduction at the nest over most of the country; a 0.95 debit to the SW bald eagle EMU take limit per nest for lost reproduction in that EMU; and a 0.59 debit to the golden eagle take limit for lost reproduction in all EMUs for that species. The difference comes in the number of years over which the debit accrues. If the activity is believed likely to cause only disturbance, the projected losses are debited from the take threshold only for the years in which nest failures are expected to occur. However, for nesting territory loss, the debits are imposed annually for the generation time of the species/population (10 years for bald eagles over most of the country, but 12 in the southwest, and 11 years for golden eagles). These debits to the EMU take limits will be handled automatically depending on how the permit is coded and entered in the Service's permit tracking database.

Question: Is previously authorized take being debited under the new threshold numbers?

Answer: If the question refers to previously authorized take that is no longer occurring, the answer is no, only take that is occurring in the current year is debited from the EMU take limits and the LAP take thresholds. For take authorized previously that is still ongoing, the answer is yes. All authorized take that is occurring in the current year is debited from the current EMU take limits and the LAP take thresholds, regardless of when it was first authorized.

Question: For previously issued (prior to 2016 revised regulations) eagle take permits where territory loss has occurred, does the Service continue to debit the territory loss from the date of permit issuance for a total of 10 years rather than forever? In other words, how is territory loss from permits issued prior to 2017 being debited from take thresholds, if at all?

Answer: For golden eagles, any permits issued for nest territory loss would have included requirements for appropriate compensatory mitigation, thus any prior golden eagle take has been offset. For bald eagles, when we conducted the 2016 update of the species' status, we confirmed that the number of occupied nesting territories has continued to grow in all EMUs. Consequently, we confirmed that any bald eagle nesting territory loss that occurred between 2009 and 2016 has not caused populations to decline and thus has been compatible with the preservation standard. Also, from a numerical perspective, any nesting territories lost over this period have been replaced by newly occupied nesting territories, thus they have been naturally replaced. . Given this replacement, prior debits to the EMU take limits for nest territory loss are no longer relevant, and will be removed from the debits to take limits.

Permit Issuance / Structure

Question: When does a change to a permit require a new permit versus an amendment?

Answer: A new permit is required if the authorization covers take at a different site (not just a different location within the same project site). Also, if there is additional take caused by a different activity that is discrete from the original source of take, coverage under a new permit may be appropriate, even if it occurs at the same site. Conversely, an amendment would provide sufficient coverage if, for example, a permittee obtained a permit to remove a nest, but the eagles re-nest within the same site, necessitating removal of the second nest because of the same activity.

For a linear project, such as a pipeline or electricity transmission line, the footprint to consider as the same project site is the area that the original LAP cumulative effects analysis covered. If the new authorization would cover take outside that area, then a new analysis and new permit will likely be required.

If the permit expires or an amendment request would extend authorization beyond the maximum term for that permit type, the permit cannot be amended but can be renewed.

Question: What happens if a project proponent with a long-term action requests a short-term permit? It is much more cost effective to apply for a permit with a duration under five years, even if it needs to be renewed several times.

Answer: Long-term activities can be covered under a series of short-term permits. However, they lose the assurances that come with a 30-year permit. Also, permit application processing fees for short-term permits are likely to increase over time.

Question: If a permittee authorized under the 2009 regulations requests an amendment to his or her permit, does the new 2016 regulation apply? Or does the new regulation apply only upon renewal?

Answer: Permit amendments are governed by the regulation under that applied to the original permit. However, the current (2016) eagle management unit take thresholds apply for purposes of adjusting the level of mitigation required for any authorized take. Once a permit expires, a reissuance is a new permit (not an amendment) and the new permit must comply with the 2016 regulations.

Question: Is a five-year permit a long-term permit or a short term permit? The regulations contain provisions that apply only to permits with durations longer than five years; does that mean that a five-year permit is considered a short-term permit for which a much lower permit application processing fee is required?

Answer: A five-year permit covering take resulting from a long-term activity is a long-term permit. The application processing fee for those permits is \$36,000, and is based on the Service's

workload entailed in helping applicants develop appropriate conservation measures to minimize and mitigate ongoing incidental take of eagles. A five-year permit to cover take resulting from a discrete action that occurs within a limited, identifiable time frame is considered a short-term permit for which the lower permit application processing fee of \$2,500 applies. Short-term permits are not available for take associated with long-term activities. Examples of long-term activities include distribution of electricity and wind energy generation, both of which may incidentally take eagles over the lifetime of the activity. Examples of short-term activities include commercial or residential construction and transportation projects.

Fees

Question: Is the \$8,000 administration fee for long-term permits that is due at every five-year evaluation also due upon expiration? For example, for a 15-year permit, at year five the \$8,000 administration fee is required, and also at year 10. At year 15 would another \$8,000 fee be assessed?

Answer: The \$8,000 administration fee would not be charged when the permit expires. The Service would not conduct a 5-year review when the permit expires (although we would likely analyze the data for purposes of adaptive management). To continue take coverage after a permit expires, a new permit would have to be issued, which would require submission of a permit application and permit application processing fee.

Question: Many times a homeowner will have a commercial entity apply for the permit on their behalf, i.e., a real estate firm or a law firm that manages a family trust. Would the application be considered commercial or non-commercial?

Answer: Even if a homeowner hires someone to prepare and send in his or her application, the homeowner will be considered a non-commercial applicant because the permit would be issued to the homeowner. The situation is similar to when an individual uses a professional service to file personal income taxes; the taxpayer is not filing under a commercial status.

Question: How does the cost compare between a series of less than 5-year permits and a long-term permit? Is there a cost difference between “re-applying” (renewing) a short-term permit over 30 years versus applying for and maintaining coverage under a longer term permit?

Answer: A commercial entity would pay \$2,500 seven times to cover a 30 year permit. Each permit is less than 5 years, so it takes seven permits to extend to 30 years. There is no administration fee, so the total cost of a series of 5-year permits is $\$2,500 \times 7 = \$17,500$. In contrast, the long-term permit application fee is \$36,000, and the permittee would then also need to pay \$8,000 five times. So the total cost of covering the 30-year project under the long-term permit is $\$36,000 \text{ plus } (5 \times \$8,000) = \$76,000$. The applicant should examine the assurances provided under the regulations for long-term permits and other business factors to decide which option to pursue. Another consideration should be the likelihood that the \$2,500 short-term permit application fee will increase over the 30-year period.

Question: Is there a definition of “commercial”? How does the Service determine whether an applicant is commercial or not for purposes of which application processing fee to assess?

Answer: Applications are considered commercial, *unless* the applicant is:

- 1) An individual (section A of the application form), *and* the permit is for take associated with activities at or involving the individual’s privately-owned real or personal property (primary or alternate residence, boat, building or land, etc.); OR
- 2) A not-for-profit or government entity (section B of the application).

Permit Type

Question: If eagles are prevented from nesting in an alternate nest (for example, by placing a cone in the nest prior to being in-use for one breeding season), would that require a § [22.26](#) permit to cover disturbance or nest take permit issued under § [22.27](#)?

Answer: Take resulting from a temporary placement of the cone would be in the form of disturbance, so a permit under § [22.26](#) is appropriate. If the cone will remain in the nest indefinitely, a nest take permit is required.