

Introduction

The Department of Defense’s (DoD’s) ability to sustain and enhance military readiness and other installation activities depends on proactive, ecosystem-based management strategies that help installations promote healthy landscapes, maintain realistic training environments, and ensure regulatory compliance.

Purpose

The purpose of this guidance is to consolidate current legal and policy requirements, specifically the Migratory Bird Treaty Act, Migratory Bird Readiness Rule, Executive Order (EO) 13186, and other legislation listed in Appendix 1 (*Relevant Legislation*); and to help identify potential migratory bird conservation best practices for use in Integrated Natural Resources Management Plans (INRMPs).

Background

INRMPs and the National Environmental Policy Act (NEPA) process constitute the principal tools for effectively integrating mission needs with ecosystem-based natural resource management. INRMPs and NEPA environmental analyses also serve to ensure compliance with applicable natural resources related laws, EOs, and regulations. For DoD construction, operations, and training activities, the INRMP and NEPA processes provide valuable baseline information to help planners avoid or minimize adverse effects on sensitive species and habitats. These processes also provide useful information for conducting effective regulatory consultations and ensure potential natural resource impacts, viable alternative courses-of-action, and reasonable mitigation options (if determined to be required) are identified and considered early in the development, design, and siting approval processes for a proposed action.

DoD installations must ensure that INRMPs and NEPA analyses adequately address migratory bird management and the potential impacts of proposed military activities - readiness and non-readiness related alike - on migratory birds. Section 315 of the 2003 National Defense Authorization Act and the Military Readiness Rule (50 CFR Part 21) authorizes, with certain limitations, the incidental take of migratory birds during military readiness activities. Nonetheless, the Armed Forces must give appropriate consideration to protecting migratory birds when planning and executing military readiness activities; however, implementing protections must not diminish the effectiveness of those activities. Moreover, this requirement pertains to all military readiness activities,¹ not just those that may result in a significant adverse effect on a population of a migratory bird species (see *Preamble to Final Rule on the Take of Migratory Birds by the Armed Forces*, 72 Fed. Reg. 8931-8950 (February 28, 2007)).²

¹ “Military Readiness Activity” includes all training and operations of the Armed Forces that relate to combat, and the adequate and realistic testing of military equipment, vehicles, weapons, and sensors for proper operation and suitability for combat use. It does not include (a) routine operation of installation operating support functions, such as administrative offices; military exchanges; commissaries; water treatment facilities; storage facilities; schools; housing; motor pools; laundries; morale, welfare, and recreation activities; shops; and mess halls, (b) operation of industrial activities, or (c) construction or demolition of facilities listed above. See Pub. L. 107-314, §315(f) and 50 CFR § 21.3.

² See Appendix 2, *Definitions*, for explanation of “significant adverse effect” and “population.”

DoD installations manage and monitor the effects that both military readiness (e.g., Migratory Bird Readiness Rule) and non-readiness (e.g., DoD-U.S. Fish and Wildlife Service (USFWS) Memoranda of Understanding (MOUs), EO 13186) activities have on migratory bird species and populations. Through the implementation of INRMPs, proper management of migratory bird species and habitats, including the timely implementation of appropriate conservation practices, helps installations avoid or minimize impacts to migratory birds. This guidance does not create any new requirements.

Guidance: How to Incorporate Migratory Bird Conservation into INRMPs

The Armed Forces have a long history of working with the USFWS and state fish and wildlife agencies to develop and implement conservation measures to conserve birds and their habitats. Many of the conservation measures detailed below represent state-of-the-art techniques and practices to inventory, protect, and monitor migratory bird populations. In accordance with the Sikes Act, conservation measures are detailed in DoD INRMPs specific for each installation, and coordinated with the USFWS and state fish and wildlife agencies. The most important factor in minimizing and mitigating effects on takes of migratory birds is an understanding of when and where such takes are likely to occur. This means developing knowledge of migratory bird habits and life histories, including their migratory paths and stopover sites, and their feeding, breeding, and nesting habits. This basic inventory data provides the basis for migratory bird conservation in the INRMP. The annual Sikes Act INRMP reviews conducted by the Armed Forces installation biologist and their USFWS and state partners is an opportunity to review the current status of migratory bird species and determine if changes to conservation measures are required.

The following steps are recommended to help guide installation planning as it relates to the conservation of migratory birds and their habitats:

Step 1: Determine the Bird Species of Concern on Your Installation

- In collaboration with the USFWS and state fish and wildlife agencies, identify in the installation INRMP the bird species of concern that may require specific management emphasis to ensure both species conservation and military mission sustainability. The DoD Partners in Flight database of Migratory Bird Species of Concern (<http://www.dodpif.org/resources/bcrmap.php>) provides useful information about species that are likely to occur on an installation, and that may require special consideration in the installation's INRMP. This database has been developed for most DoD Installations, and includes information from the following sources:
 - USFWS Birds of Conservation Concern, found at: <https://www.fws.gov/migratorybirds/pdf/grants/BirdsofConservationConcern2008.pdf>
 - Priority Migratory Bird Species documented in the:
 - North American Waterbird Conservation Plan
 - U.S. Shorebird Conservation Plan
 - Partners in Flight Bird Conservation Plans
 - North American Waterfowl Management Plan
 - List of Threatened and Endangered Bird Species in 50 CFR 17.11 (<http://www.fws.gov/endangered/wildlife.html>) and
 - Game Birds Below Desired Condition (https://www.blm.gov/style/medialib/blm/wo/Information_Resources_Management/policy/im_attachments/2008.Par.38405.File.dat/IM2008-050_att3.pdf)
- The Species of Concern list can be further refined to an installation-specific Mission Sensitive Priority Bird Species list. See the DoD PIF Mission Sensitive Priority Bird Species fact sheet at http://www.dodpif.org/downloads/factsheet11_priority-species.pdf

or contact your regional DoD PIF Representative if you need help determining what Mission Sensitive Priority Bird Species are on your installation.

Step 2: Describe Interrelatedness between the Mission Sensitive Species and Installation Mission Activities

- Utilize basic life history data on the installation-specific Mission Sensitive Priority Bird Species to help articulate and describe interrelatedness and potential conflicts between these birds and installation mission requirements. It is important to describe just what the bird conservation/installation conflicts are, their significance, and how implementing the INRMP will de-conflict these issues.

Step 3: Develop Specific Goals, Objectives, and Conservation Measures to Manage the Installation-Specific Mission Sensitive Priority Bird Species

- Identify and incorporate into your INRMP the applicable bird conservation goals, habitat protection objectives, and conservation measures identified in the various bird conservation plans for your state and physiographic region. It is important that the installation's natural resource program be a part of the larger bird conservation initiatives surrounding the installation. Some suggested bird conservation plans and initiatives that can be linked to the INRMP include the:
 - North American Bird Conservation Initiative: <http://www.nabci-us.org>
 - Partners in Flight: <http://www.partnersinflight.org/>
 - North American Waterfowl Management Plan: <https://www.fws.gov/birds/management/bird-management-plans/north-american-waterfowl-management-plan.php>
 - North American Waterbird Conservation Plan: <https://www.fws.gov/birds/management/bird-management-plans/waterbird-conservation-for-the-americas.php>
 - U.S. Shorebird Conservation Plan: <http://ndwr.state.nv.us/hearings/past/spring/browseable%5Cexhibits%5CUSFWS/FWS-2050.pdf>
 - State Wildlife Action Plans
- The INRMP should identify the conservation measures that support the INRMP Goals and Objectives for bird species of concern, describing how they improve existing habitat, create new habitat, enhance degraded habitat, improve conditions for birds, and/or support other stakeholder efforts within your physiographic region. These measures may include protecting wetlands; maintaining and enhancing forest buffers; eliminating feral animals (including feral cats) that may be a threat to migratory birds or their habitat; reducing or eliminating harmful grazing practices; and implementing appropriate invasive species controls to prevent establishment or reduce presence of species that negatively impact migratory bird survival. All conservation measures should be detailed in the installation INRMP. Examples for the installation natural resource manager (NRM) to consider in the INRMP may include:

- Forest management
 - Convert to uneven-age and/or other progressive forest management that enhances available habitat values.
 - Maintain and enhance bottomland hardwood forests.
 - Create snag trees or protect existing snags during forestry programs.
- Habitat enhancement/restoration
 - Maintain and restore priority habitats.
 - Incorporate habitat enhancement into project review and project design.
 - Create habitat as mitigation programs.
 - Promote nest box and platform programs.
 - Encourage nesting in tower structures, where appropriate.
- Invasive, non-native species
 - Implement feral cat eradication programs.
 - Implement invasive species control programs.
 - Removal of exotic species.
- Wetlands
 - Protect and restore wetlands.
 - Promote positive water use modifications to improve hydrology and avian habitat in arid areas.
- Agricultural Outleases
 - Initiate establishment of native warm-season grasses or other field and grassland conditions beneficial to birds found in the area.
 - Modify agricultural leases to promote nesting and fledgling protection by setting appropriate dates for mowing, haying, or harvesting.
 - For leases near an airfield, do not grow crops that will attract species which create a bird strike risk.
- Communication towers, power lines, wind energy, and buildings
 - Identify and remove inactive/abandoned communication towers.
 - Remove unused power lines and poles, especially in open habitat areas such as deserts and grasslands where such structures provide artificial raptor perches.
 - Minimize new tower and wind turbine construction impacts through critical assessment of structure requirement, location site evaluation and structure design assessment for minimal avian impacts.
 - To promote appropriate nesting, maintain towers that do not present collision issues or provide raptor perches in inappropriate habitats (e.g., desert, grasslands, prairie).
- Explain how these measures were developed to support both readiness and non-readiness activities, and how these measures help to avoid and minimize impacts on priority species and their habitats. Again, it is important that installation's natural resource program be a part of the larger bird conservation initiatives surrounding the installation to achieve

meaningful bird conservation results. Installations should develop and maintain conservation partnerships to manage migratory birds in support of military mission requirements, comply with applicable laws and sound stewardship, and maintain consistency with the broad national bird management objectives, such as the national Partners in Flight initiative.

Step 4: Determine Survey and Monitoring Requirements

- Identify in the INRMP any surveys and monitoring required to support INRMP Goals and Objectives for the conservation of bird species of concern.
- Become familiar with the *Coordinated Bird Monitoring Plan (CBMP): Technical Recommendations for Military Lands*, which describes monitoring techniques to meet the Bird Rule and NEPA requirements. It is important to use the best scientific data available to assess the impacts of proposed actions and to determine the most effective mitigation strategies.
- Consider participating in large-scale surveys such as the North American Breeding Bird Survey and the Monitoring Avian Productivity and Survivorship initiatives, which ensure that data from DoD lands is incorporated into national efforts.
- Enter survey and monitoring data into eBIRD or the Coordinated Bird Monitoring Database (CBMD), and store data in the CBMD and Avian Knowledge Network (AKN).
- Collaborate with USFWS and other groups involved with bird monitoring to:
 - Assess the status and trends of the installation-specific Mission Sensitive Priority Species.
 - Use national standards and protocols described in the CBMP.
 - Deposit monitoring and inventory data in national repositories.
 - Promote participation in national inventory and monitoring programs.

Step 5: Ensure Collaboration with the Installation's Bird Air Strike Hazard (BASH) Program

- Responsibility for executing the BASH Program generally falls to the installation's Air Operations function. NRMs should be an integral part of the installation's BASH team, supporting the Air Operations function. The NRM must ensure that bird control techniques, disposal of animal remains, and habitat modifications around the airfield are properly described in the INRMP and incorporated into the BASH Plan.

Step 6: Summarize Outreach and Public Access Programs

- Summarize the installation's migratory bird outreach and public access programs. Outreach activities should be coordinated with the installation's Public Affairs Office.
- Outreach programs may include, but are not limited to, International Migratory Bird Day, Endangered Species Day, Earth Day, National Public Lands Day, Breeding Bird Survey, and Christmas Bird Count.

Step 7: Review and Maintain the Bird Conservation Goals in the INRMP

- Maintain regular communications with the USFWS, state fish and wildlife agencies, and other partners to stay current with bird conservation efforts within your physiographic region.
- Use the information gathered during the INRMP annual review as part of the discussion about the effectiveness of your bird conservation efforts.
- Utilize the findings and recommendations from the INRMP annual reviews to determine effects on birds, especially bird species of concern, and modify the bird conservation measures in your INRMP.
- Use the information from your partnership interactions and other sources to keep your INRMP migratory bird information current.

Resource: DoD Partners in Flight (PIF)

As part of its Natural Resources Program, DoD has established an ad hoc network of subject matter experts to provide technical information that supports migratory bird management and monitoring on DoD lands. The National Technical Representative³ leads the DoD PIF Steering Committee, provides technical support and expertise regarding migratory bird issues, coordinates inputs from this group, and is charged by the DoD Natural Resources Program to:

- Collect/compile relevant technical information;
- Distribute DoD approved information to all interested and appropriate stakeholders;
- Monitor trends; and
- Serve as a resource center for relevant technical information and materials.

DoD PIF offers a wide variety of resources to help natural resources managers better comply with relevant laws and policies, and incorporate migratory bird information into installation INRMPs. DoD PIF representatives also provide assistance to installation NRMs for monitoring and inventory, research and management, and education programs involving birds and their habitats. For more information on DoD PIF, please visit the [DoD PIF website](#).

³ The [2014 Strategic Plan for Bird Conservation and Management on Department of Defense Lands](#) defines the National Technical Representative and their role.

Appendix 1: Relevant Legislation

Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712)

The MBTA (16 USC §§ 703 et seq.) of 1918 is a federal statute that implements four treaties with the U.S. and Canada, Mexico, Japan, and Russia on the conservation and protection of migratory birds. The MBTA states that it is illegal to pursue, hunt, take, capture, kill, or sell “migratory” birds or sell any of their parts (e.g., feathers, eggs, nests), alive or dead, as defined in 16 U.S.C. §§ 703-712. Further, the regulatory definition of “migratory bird” as applied in this context and detailed in 50 CFR §§10.13, is broad, and includes most native birds found in the United States – including species that do not migrate. The regulation prohibits the taking, selling, transporting, and importing of migratory bird species and includes any part, egg, or nest of such bird (50 CFR §§10.12 and 10.13). The MBTA is a strict liability statute, meaning that any take, intentional or not, is prohibited without regulatory authorization. This protection extends to nearly all species of waterfowl, shorebirds, raptors, seabirds, and songbirds.⁴

DoD Migratory Bird Readiness Rule (50 CFR Part 21)

Section 315 of the 2003 National Defense Authorization Act and the Military Readiness Rule (50 CFR Part 21) implementing Section 315 authorize, with certain limitations, the incidental take of migratory birds during military readiness activities. Some confusion has arisen over whether the Armed Forces must give appropriate consideration to the protection of migratory birds only for military readiness activities that may result in a significant adverse effect on a population of migratory birds, or for all military readiness activities.

Under the Migratory Bird Readiness Rule, installations must identify and consider ways to minimize or mitigate the take of migratory birds during *all* military readiness activities. Nevertheless, it is important to understand that for military readiness activities that are *not* expected to have a significant adverse effect on a population of migratory birds, an installation need only identify and *consider* ways to minimize or mitigate the take of migratory birds (typically, in its INRMP or in project-specific NEPA documents). Installations are not obligated to *implement* any measures that would diminish the effectiveness of the military readiness activities under consideration. On the other hand, for military readiness activities that may have a significant adverse effect *at the population level*, an installation must confer with the USFWS to develop and implement appropriate conservation measures to minimize or mitigate any significant adverse effects.

2001 Executive Order (EO) 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*, and DoD-USFWS Memoranda of Understanding (MOUs)

On July 31, 2006, DoD and the USFWS entered into a MOU to [*Promote the Conservation of Migratory Birds*](#), in accordance with [EO 13186](#).⁵ The MOU does not address or authorize migratory bird take. Instead, it identifies activities where cooperation between DoD and the USFWS will contribute substantially to the conservation of migratory birds and their habitats.⁶

The [2014 MOU](#) between DoD and the USFWS describes specific actions that DoD should take to advance migratory bird conservation, reasonably avoid or minimize the take of migratory

⁴ <http://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php>

⁵ <http://www.dodpif.org/downloads/EO13186.pdf>

⁶ <http://www.dodpif.org/plans/migratory/mbtadod.php>; <http://www.dodpif.org/downloads/EO13186.pdf>

birds, and ensure DoD activities (excluding military readiness) comply with the MBTA in ways that are “consistent with imperatives of safety and security.” In addition, Armed Forces must ensure that its operations are consistent with the MBTA and, in ways that help sustain the use of military managed lands and airspace for testing, training, and operations, should avoid or minimize the take of migratory birds and advance migratory bird conservation through its natural resources management activities.

Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668c)

The BGEPA prohibits anyone, without a permit issued by the Secretary of the Interior, from “taking” bald and golden eagles, including their parts, nests, or eggs. It provides criminal penalties for persons who “take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle [or any golden eagle], alive or dead, or any part, nest, egg thereof.”⁷

Endangered Species Act (ESA) (7 U.S.C. § 136, 16 U.S.C. § 1531 et seq.)

The purpose of the ESA is to protect and recover imperiled species and the ecosystems upon which they depend. Under the ESA, species may be listed as either endangered or threatened. “Endangered” means a species is in danger of extinction throughout all or a significant portion of its range (i.e., at the brink of extinction). “Threatened” means a species is likely to become endangered within the foreseeable future (i.e., likely to reach the brink of extinction in the near future). Federal agencies must consult with the USFWS and/or the National Marine Fisheries Service on ongoing or proposed actions they authorize, fund, or carry out that ‘may affect’ listed species or designated critical habitat.⁸

National Environmental Policy Act (NEPA) (42 U.S.C. §4321 et seq.)

Enacted in 1969, NEPA established a national policy to adequately consider environmental impacts of major federal projects on the human environment (natural and physical). It directs federal agencies to thoroughly assess the environmental consequences of “major federal actions significantly affecting the environment” and requires federal agencies to give equal consideration to environmental factors in their planning and decision-making processes. Prior to DoD funding or implementing a project that may have environmental impacts, DoD decision makers must be informed of the environmental consequences from a proposed action that may significantly affect the human environment, make that information available to the public, and consider those consequences in their decision making process.

Sikes Act: (16 U.S.C. 670a-670f, as amended)

Originally enacted in 1960, the Sikes Act Improvement Act (1997) requires that DoD develop and implement INRMPs for all military installations, unless the Secretary of the Military Department determines that the absence of significant natural resources makes preparation of an INRMP inappropriate. INRMPs, prepared in cooperation with the USFWS and state fish and wildlife agencies, integrate natural resource management activities with other installation activities, including military operations and training. INRMP implementation should benefit the capability of DoD lands to support military testing, training, and operations.⁹

⁷ <https://www.fws.gov/midwest/midwestbird/eaglepermits/bagepa.html>

⁸ <http://www.fws.gov/endangered/laws-policies/>; <http://www.fws.gov/endangered/esa-library/pdf/t-vs-e.pdf>

⁹ <http://legcounsel.house.gov/Comps/Sikes%20Act.pdf>

Appendix 2: Definitions

Significant Adverse Effect

What is a significant adverse effect on a population?

An effect that could, within a reasonable period of time, diminish the capacity of a population of migratory bird species to sustain itself at a biologically viable level.

How is that determined?

The Migratory Bird Readiness Rule specifies that the Armed Forces' implementation of the NEPA process will be the primary mechanism to determine whether any ongoing or proposed military readiness activity is likely to result in a significant adverse effect on a population of a migratory bird species. NEPA documents provide the opportunity for both the USFWS and the public to review and comment on proposed military readiness activities relative to migratory birds. Due to the significant variability in military readiness activities and the species that may be impacted, estimates of significant measurable decline will be determined on a case-by-case basis. Additional mechanisms for making significance determinations include the INRMP preparation and review processes and, when applicable, consultation under the ESA.

Who is Responsible for assessing "Significant Adverse Effects?"

This responsibility initially lies with the Armed Forces. When requested, the USFWS will provide technical assistance to the Armed Forces in identifying specific populations of migratory bird species that may be affected by a military readiness activity.

Population

[50 CFR 21.3](#) defines *population* as "a group of distinct, coexisting, conspecific individuals, whose breeding site fidelity, migration routes, and wintering areas are temporally and spatially stable, sufficiently distinct geographically (at some time of the year), and adequately described so that the population can be effectively monitored to discern changes in its status."

What constitutes a population for the purposes of determining potential effects of military readiness activities will be scientifically based. A population could be defined as one that occurs spatially across a geographically broad area, such as the Western Atlantic red knot population that migrates along the Atlantic seaboard, to a more geographically limited species, such as breeding population of Bicknell's thrush whose breeding range is limited to mountain tops in the northeastern U.S. and southeastern Canada.

The Migratory Bird Readiness Rule states that when conservation measures are implemented and require monitoring, the Armed Forces must retain records of any monitoring data and report it to the USFWS during the annual INRMP review, along with migratory bird conservation measures implemented and the effectiveness of the conservation measures in avoiding, minimizing, or mitigating take of migratory birds.¹⁰ The conservation measures developed in cooperation with the USFWS should also be documented during the NEPA process for the military activity at issue.

¹⁰ <http://www.dodpif.org/plans/migratory/mbtadod.php>