

A Conceptual Framework for Evaluating and Responding to Conflicts with Migratory Bird Species: A Migratory Bird Program Decision Making Tool

Introduction

As human, and in some cases, bird, populations expand, the possibility of conflicts with human interests (e.g., agriculture, development, conservation of threatened and endangered species), and, at times, with other species, increase. The conflicts occur across social, economic, environmental, and regulatory contexts, with each conflict being somewhat unique in terms of species biology, stakeholders involved, extent of damage, and additional factors. These conflicts can range from minimal, such as a minor nuisance, to potentially significant economic and ecological damages, or risks to human health and safety. Species that depredate crops or fish produced through aquaculture for human consumption may cause a significant, negative economic impact. Some species of birds negatively affect other species that are themselves imperiled. Conflicts can also arise where other natural resources are being adversely affected resulting from locally very abundant populations.

To better address these conflicts, where a protected migratory bird species¹ is perceived to be negatively affecting a resource to the extent that intervention is necessary to reduce the effects, the Division of Migratory Bird Management, USFWS, has drafted this systematic approach to promote consistency and coordination with stakeholders in identifying and implementing management solutions.

The approach described here is a conceptual framework of step-wise guidance to identify management options that could be implemented to resolve conflicts, including identifying whether lethal take is necessary, and, if so, to identify the appropriate level of lethal take to reduce the conflict. This process is designed to be biologically defensible and to promote efficiency, effectiveness, and transparency.

This conceptual framework does not supersede the need to first attempt resolution of conflicts through nonlethal means (e.g., outreach, education, hazing, harassing, habitat modification, cultural practices). However, when nonlethal means have not been effective in reducing the conflict to an acceptable level, this process provides a biologically sound approach for determining whether lethal take of birds will resolve the problem, the level of lethal take theoretically appropriate to meet the specified objectives, and a step to evaluate whether the efforts were successful.

¹ 50 CFR §10.13 List of Migratory Birds lists species protected by the Migratory Bird Treaty Act.

Guiding principles

The use of the framework, regardless of the conflict involved, must adhere to these guiding principles:

- The Service's responsibilities are to the four international conventions (with Great Britain (on behalf of Canada), Mexico, Japan, and Russia) and implementing the Migratory Bird Treaty Act (MBTA).
- The factors (e.g., biological, anthropomorphic) contributing to the conflict(s), must be clearly articulated.
- Reducing the conflict(s) for which the Service has an obligation to address by seeking the minimal amount of take necessary.
- Engagement in a respectful dialogue.

Overview

The framework consists of a series of steps that incorporate decision analysis methods: 1) identify the issue as a conflict appropriate for the framework, 2) through stakeholder engagement describe and quantify the issue and solicit input for the development of management options, 3) develop viable management options to consider and make a selection, 4) if lethal take is included in selection, conduct a biological assessment to identify management options, if necessary it will be used as a foundation for a National Environmental Policy Act (NEPA) analysis, 5) implement selected option(s), and 6) evaluate the outcome(s). A feedback mechanism is incorporated to allow for assessment of the implemented action and, if not fully successful, to consider other management options or re-engage stakeholders. Figure 1 illustrates the schema of the framework.

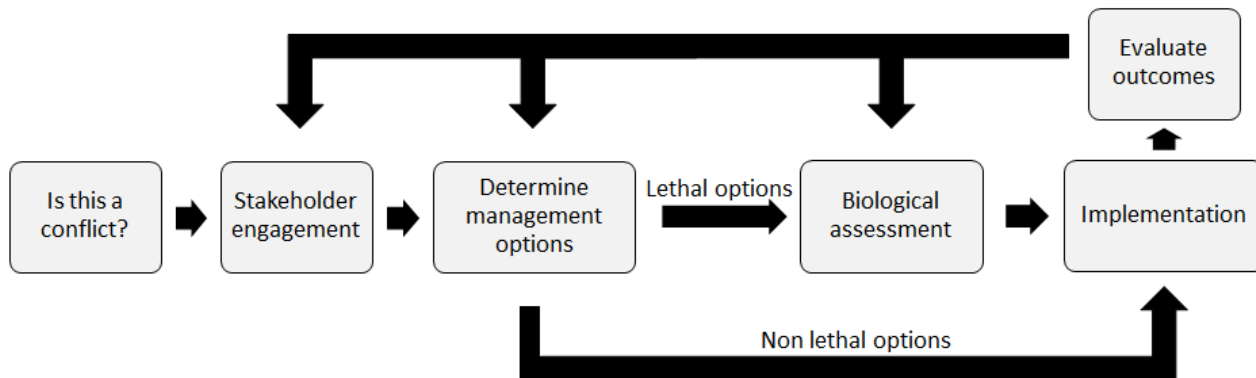


Figure 1. Conceptual framework for addressing conflicts with migratory bird species.

Recommended Steps for evaluating and responding to conflicts with migratory bird species:

Step 1: Identifying a conflict

Purpose: Determine whether or not a conflict is appropriate for use of this framework.

Desired outcome: Recognizing a conflict can be resolved independent of this framework or, if it is appropriate, raising the issue to the Migratory Bird Leadership Team (MBLT) for further consideration with a decision on how to proceed.

Criteria for identifying a conflict:

For consideration by this framework, a conflict needs to meet one or more of the following criteria:

1. A migratory bird species is perceived to be negatively affecting a resource that falls into one of four categories that are reflective of criteria in 50 CFR §21.43² and recognized by U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA APHIS) Wildlife Services³:
 - A. Agricultural resources (including aquaculture)
 - B. Human health and safety (including airports)
 - C. Natural resources (wildlife, including sensitive, threatened and endangered species)
 - D. Private property (not associated with agriculture, such as homes, schools, etc.)
2. The issue is causing controversy either within a Service region or across multiple Service regions.
3. Take of a species to alleviate an issue could have a concerning negative effect on the species' population.
4. Addressing the issue would be a new or different course of action per current Service policies, and thus precedent setting.

Pathways for the Service to identify a conflict

There are multiple pathways among Service staff and collaborators for a conflict to be recognized and considered for processing through the framework, recognizing that some may play a role in multiple pathways. Some that have been identified are:

Regional permits chiefs - Permit chiefs receive tens-of-thousands of calls, emails, and other communications annually for bird-related issues. Regional permit staff also regularly communicate with State wildlife agency staff, USDA Wildlife Services staff, and Tribal liaisons about bird-related issues. As a result, Regional permit chiefs are well-positioned to identify chronic and emerging issues and have a sense of the level of conflict. Further, Permit chiefs regularly communicate through monthly national coordination calls and in-person meetings. The modernization of the Service Permit Issuance and Tracking System (SPITS) is intended to increase the Services' capacity in assisting with identifying chronic and emerging large-scale conflicts.

² 50 CFR §21.43 is the Depredation Order for blackbirds, cowbirds, crows, grackles, and magpies. This order places conditions for its use under specific circumstances: (1) Where they are causing serious injuries to agricultural or horticultural crops or to livestock feed; (2) When they cause a health hazard or structural property damage; (3) To protect a species recognized by the Federal Government as an endangered, threatened, or candidate species.

³ https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/SA_Protected_Resources

Flyway Councils - The four Flyways game and nongame technical sections comprise state representatives who are able to cooperatively utilize the Flyway process to meet their management and conservation needs as described in the Memorandums of Understanding (MOUs) for each Flyway⁴. Members receive input from constituents and can identify if there are species or taxa causing a conflict. Technical committees can communicate about growing issues at their biannual meetings. Following the bylaws of the technical committees, it will be at the discretion of each Flyway to raise an issue affecting member states to the Flyway Representatives and Service Non-game Liaisons for consideration of action in accordance with the MOUs.

AFWA - The Association of Fish and Wildlife Agencies (AFWA) serves as the collective voice of North America's state, provincial and territorial fish and wildlife agencies. Members include both state and federal public resource agencies. AFWA's committee structure serves to bring together the collective views of its membership on a diverse array of natural resources topics and serve as a communication mechanism across traditional disciplines. Chairman of appropriate AFWA Committees or Subcommittees can raise an issue affecting member entities to the AD for consideration of action.

Tribal Governments - Tribal Governments can bring forward issues via Service Tribal liaisons. It is the role of Tribal liaisons to raise conflicts to the attention of the AD for consideration.

Other Regional and Headquarters migratory bird staff and/or leadership - Staff also receive complaints and concerns about birds from multiple constituent groups. Mechanisms for these staff to communicate about growing numbers of complaints around a particular issue are much less structured, but this does not preclude communication with migratory bird staff to convey concerns.

Issues considered by any of these groups to be sufficient to prompt a coordinated response to address conflicts should be raised to the attention of the appropriate staff, such as the Assistant Director (AD) and/or MBLT comprising the Headquarters Division Chiefs, Assistant Regional Directors, and Regional Migratory Bird Chiefs for further consideration. This team will consider the information provided by the referring groups and determine if the issue should be run through the process. If support is agreed upon by the MBLT and/or AD, they will then form a Core Team comprising Service staff to oversee processing the conflict through the framework. The Core Team will be responsible for identifying when updates need to be given to, or input is needed from, the MBLT.

If support is not agreed upon then the parties work within the region to determine the best path forward. Regions have discretion to determine when to use this framework for regional issues.

Notification of a decision made will be communicated to the referring parties.

Step 2: Stakeholder engagement

Purpose: The Core Team will be responsible for identifying a stakeholder process that will identify and compile relevant information available about the conflict.

Desired outcome: Input and information intended to inform the Service's decision on how to proceed.

⁴ Memorandum of Understanding between the U.S. Fish and Wildlife Service and the (Atlantic, Mississippi, Central, Pacific) Flyway Council for the Cooperative Exchange, Interpretation, and Evaluation of Data and Information Used for Developing Migratory Bird Regulations.

Stakeholders are defined to include any number of entities including sovereign governments, such as Tribes.

This is an information gathering step to later inform decision making by the Service. It will be the responsibility of the Core Team to identify all relevant stakeholders, considering each step of the process. The Core Team must initiate communication with each stakeholder to inform them of the issue, the intent of using the framework, some acknowledgement as to why the issue is relevant to them, request confirmation within a specified time frame of their agreement to participate in the process and to inform the Core Team of any other stakeholders which should be included.

In keeping with the Service's obligations of Government to Government Consultation with Native American and Alaska Native Tribes (herein referred to as "Tribes") the Core Team should coordinate closely with tribal liaisons once a conflict has been brought forward.

It will be the responsibility of the Core Team to notify the relevant Tribal liaison(s) and allow time for them to notify affected Tribes of the intent of the framework and give the interested Tribes an opportunity to decide if they want to be engaged in the process. The Tribal liaison will need to inform the Core Team if any interested Tribes do want to participate and, if so, it must be determined in what capacity and what type of consultation is required to facilitate their engagement.

At a minimum, the following steps should be addressed:

Document and quantify the conflict

The issue needs to be well described and quantified by including, where possible: what resource and/or groups of people are being affected, how they are being affected, what their needs and objectives are, the migratory bird species causing the problem, the spatial and temporal scale of the issue, and the economic impact. Effort should be taken to try to determine the root cause of the issue, incorporating understanding of natural systems and cumulative effects. The team must determine if there is empirical evidence of the species causing a problem versus being perceived to be causing a problem. Empirical evidence would include documenting that the species is a direct cause of a negative consequence(s) to a resource. Lack of empirical evidence should be included as supporting or dissenting information in the management options developed in this step.

Describe what management actions have been completed to date

All management actions used previously need to be described along with what, if any, monitoring was done to study effects, and what, if any, effect the action(s) had. This might include nonlethal and/or lethal (e.g., depredation permits) methodologies, or it may be the case that no actions have been attempted. Stakeholders need to consider if all reasonable nonlethal options have been exhausted and, if not, any additional actions that should be pursued prior to progressing with considerations for lethal take.

Understand/articulate and come to agreement on the biological, social, and economical importance of the issue

The stakeholders need to discuss and agree on the potential risk to bird populations, the social implications such as constituent complaints and the cultural or spiritual significance of the species to tribes, and economic loss if the conflict is allowed to continue without intervention by the Service.

Identify roles and responsibilities

Using Appendix 1 in combination with the overview of the framework, identify all relevant stakeholders moving forward, what their role is, and what their responsibilities are. This step is intended to be comprehensive in an attempt to avoid any inadvertent exclusion of critical stakeholders.

Provide input to the Service

Stakeholders will compile information intended to inform the Service's decision on how to proceed (step 3). Information provided to the Service should include impacts of past management actions to reduce depredation, economic loss, number of complaints, and/or size of the species population, and what, if any, local constraints, such as state permitting requirements, need to be considered. Information related to results of nonlethal methodologies (e.g., education, outreach, hazing and harassment, or nonlethal take such as capturing and relocating birds) regardless of including lethal take should also be included.

Step 3: Identify management options

Purpose: The Service Core Team reviews input from stakeholder process and develops viable management options to submit to the MBLT for consideration.

Desired outcome: MBLT selects a management option.

It will be the responsibility of the Core Team to review input from the stakeholder process and develop at least one, if not more, viable management option(s) and consult with the MBLT for consideration. If appropriate, the MBLT may decide on which option to pursue or the issue may need to be raised to the AD for consideration as well. Development and selection of management options must be done by Service staff, otherwise, the Federal Advisory Committee Act (FACA) may apply and the FACA should be considered prior to engaging outside stakeholders in this step. If nonlethal only methodologies are selected the process can continue at step 5 for implementation, whereas an option that includes potential lethal take in combination with nonlethal methodologies will need to proceed to step 4, a biological assessment.

Step 4: Biological Assessment

Purpose: Utilize best available science to develop and evaluate management options that include lethal take.

Desired outcome: An agreed-upon biologically-defensible management option for implementation.

The Core Team will identify an analytical working group comprising Service staff to conduct a biological assessment of the targeted population that may include collecting more information from stakeholders, such as States or Flyways, or other government agencies and non-government organizations.

This assessment will include evaluating the status of the population, the spatial and temporal distribution of the population, and how the population's annual cycle affects the conflict. The assessment needs to be conducted with the best available science and information, and should identify any missing information that is critical to better resolving the issue.

Assess take options

To adhere to the guiding principles, analytical tools will be used that will help determine if lethal take has the potential to resolve the issue, and will incorporate considerations for cumulative effects to the population. Using the best available science and the status of the population, the analytical team will evaluate options for

lethal take. Specifically, the team will identify methods to minimize the amount of take necessary to resolve the conflict while ensuring the population is sustained.

Evaluate options

The analytical group will be responsible for developing a suite of options to predict the potential consequences and tradeoffs for the relevant factors in addressing the conflict. Depending on the resource being affected, the factors would likely include a combination of nonlethal actions (including any that may not have been tried in the past), risk to the population by varying levels of take, the potential economic risk, the potential risk to the impacted resource, and the regulatory mechanism(s) to allow for the action to be completed.

The Core Team will need to consider the options supplied by the analytical team and the consequences of each in relation to the guiding principles of adhering to the responsibilities of the MBTA and reducing the conflict. The review should also consider how the options incorporate conservation measures as described in 50 CFR §21.3 to avoid and minimize take of migratory birds.

Some options may exist that do not need new NEPA assessment and could utilize existing authorization mechanisms. However, a potential take level model may need to be conducted for some conflicts/species and determine additional practices.

Some options may exist that may need a NEPA assessment. For example, an option that might create a new authorization for take (e.g., depredation orders, control orders). The biological assessment is intended to provide a foundation, if necessary, for a NEPA analysis. During a potential NEPA review, stakeholder input could be used in the analysis.

Step 5: Implementation

Purpose: Develop a timeline and process for implementing an agreed-upon management option.

Desired outcome: Implement the selected management option.

The selected option needs to be implemented with the assistance of working teams solicited by the Core Team, referring to Appendix 1 for guidance and to ensure the proper stakeholders are involved. The mechanism for implementation must be determined, along with a time frame, incorporating the results of the biological assessment.

The Core Team, in cooperation with the working teams, will identify what monitoring needs to take place, and by whom, to evaluate the efficacy of the action(s).

Step 6: Evaluation

Purpose: Evaluate the effectiveness of the implemented management option.

Desired outcome: A determination of whether or not the conflict is resolved or occurring at an acceptable level or if the framework needs to be re-engaged and at what step.

As agreed upon in the previous step, the implemented action(s) need to be properly evaluated for effectiveness and communicated to the MBLT. If lethal take was authorized, the amount of take that actually occurred needs to be documented in the SPITS.

If the implemented alternative was not successful, the feedback process provided in the framework needs to be used by either reconsidering the recommendations from the biological assessment or the stakeholder process, or re-engaging stakeholders if the conflict has significantly changed in scale or consequence. Any new information related to the conflict needs to be gathered and considered in selecting the next course of action.

