



Addressing Incidental Take of Migratory Birds: Opportunities for State Action and Leadership



Suggested Citation:

Association of Fish and Wildlife Agencies. 2019. Addressing Incidental Take of Migratory Birds: Opportunities for State Action and Leadership. Judith Scarl and Lane Kisonak (eds). AFWA, Washington, D.C. 48 pages.



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Executive Summary

The reinterpretation of the Migratory Bird Treaty Act in December 2017 left many states uncertain as to how to effectively minimize and prevent incidental take of migratory birds. An AFWA-led [evaluation of state laws](#) indicated that only 17 states have provisions regulating some form of incidental, indirect, or accidental take ([Appendix 1](#)). Other states have legal language that was made indeterminate by the federal reinterpretation, and 25 states lack provisions to regulate incidental take of migratory birds. In September 2018, AFWA's Bird Conservation Committee formed an Incidental Take working group to develop and communicate about Best Management Practices for avoiding incidental take of migratory birds, and to develop model language for states wishing to clarify their legal authority in relation to incidental take of migratory birds.

Identifying Top Incidental Take Issues for States: The Incidental Take Working Group distributed a survey to states and provinces that asked respondents to identify the most significant causes of incidental take for their agency. The five most commonly selected threats included transmission line electrocution/collision, wind energy collisions, building collisions, communication and instrumentation tower collisions, and lead shot or ammunition in the environment. Not surprisingly, these were also five of the top threats for which states indicated that they would like to see best management practices developed or improved. Finally, states indicated that the lack of regulatory authority or enforceability was a barrier to successful implementation of existing management guidelines by the vast majority of respondents, suggesting the need to pair accepted practices with regulation, or provide other incentives and resources to industry to implement voluntary best practices.

Providing or Developing Best Management Practices/Beneficial Practices for Incidental Take Issues: The Incidental Take Working Group created a [repository](#) for existing Best Management Practices documents that provide guidance for minimizing or avoiding incidental take of migratory birds. Compiling existing documents in a single, easy-to-access place will help states easily understand and access existing resources for addressing incidental take across a variety of threats. In addition, for the top five incidental take threats identified by states, the Incidental Take Working Group explored additional options for improving, creating, or distributing Best Management Practices. This included highlighting specific training resources from the Avian Power Line Interaction Committee, facilitating state agency review of new Bird-Smart Wind Energy Guidelines, and distributing new guidance on Bird-Friendly Building Designs to reduce collisions.

Model Language for States: To fill the gaps in enforcement left by the reinterpretation of the Migratory Bird Treaty Act, states and state wildlife agencies may wish to clarify that they have jurisdiction to regulate or otherwise oversee incidental take of migratory birds. AFWA's "Potential options for state regulations of incidental take of migratory birds" document ([Appendix 2](#)) provides states with legislative, executive, and regulatory models for incidental take regulations. Each proposed option is explained, and this document presents sample language that states can use as a starting point for their own state codes.

Future Considerations: The Incidental Take Working Group's efforts suggests that combining regulatory and voluntary approaches to minimizing incidental take of migratory birds will lead to the greatest successes for migratory bird conservation and management. In the absence of federally provided certainty on incidental take regulations, states can set wheels in motion for developing their own regulations and specifications that allow states to advance migratory bird conservation while tailoring

solutions to the unique needs, challenges, and constituencies within each state. States will benefit from exploring new opportunities for partnerships, especially partnerships that promote the mutual benefits of voluntary approaches that reduce incidental take. States can use this opportunity to build trust and rapport between agencies and industry while promoting the positive benefits of collaboration between industry and bird conservation entities. Several partners have successfully worked to lower barriers for industry implementation of beneficial practices, and these collaborations can provide models for broader engagement with industry.

Background

The Migratory Bird Treaty, between the US and Great Britain on behalf of Canada, acknowledged an international responsibility to protect migratory birds and a commitment to working across political boundaries to conserve this shared resource. The Migratory Bird Treaty Act (MBTA), signed in 1918, codified some of the elements of this Treaty within the United States. To celebrate the 100th anniversary of this success, bird conservation partners designated 2018 as the “Year of the Bird.”

M-opinion

In the midst of these celebrations, the bird conservation community also saw a reinterpretation of this cornerstone piece of legislation. On 22 December 2017, the Department of the Interior’s (DOI) Office of the Solicitor released M-opinion 37050 (M-opinion), stating that the MBTA’s “prohibitions on pursuing, hunting, taking, capturing, killing, or attempting to do the same apply only to affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs.” On 11 April 2018, DOI released a Memorandum providing guidance on how US Fish and Wildlife Service (USFWS) policies and practices would be modified to ensure consistency with this M-opinion, stating that, “We interpret the M-opinion to mean that the MBTA’s prohibitions on take apply when the purpose of an action is to take migratory birds, their eggs, or their nests. Conversely, the take of birds, eggs or nests occurring as the result of an activity, the purpose of which is not to take birds, eggs or nests, is not prohibited by the MBTA.”

Evaluation of state laws

State fish and wildlife agencies and USFWS share management authority for migratory birds, and some states have historically relied on the MBTA to encourage avoidance of incidental take. To evaluate how this reinterpretation may affect states’ abilities to fulfil their mandates to conserve and manage migratory birds, the Bird Conservation Committee of the Association of Fish and Wildlife Agencies (AFWA), in collaboration with the North Carolina Wildlife Resources Commission, compiled laws and regulations from all fifty states and the District of Columbia, pertaining to regulation of incidental or accidental take of migratory birds.

We produced a [set of spreadsheets](#) containing each state’s migratory bird-related statutes, as well as a document providing an overview of these findings and a summary of each state whose regulations contained provisions regulating incidental take ([Appendix I](#)).

Of the 51 jurisdictions, seventeen had provisions regulating some form of incidental, indirect, or accidental take, or potentially allowing commissions or agencies to make applicable rules (beyond take for scientific or religious purposes, or in response to predation or property damage); nine were of indeterminate effect, and twenty-five had no such provisions (Fig. 1, [Appendix I](#)). The provisions of the seventeen states with possible coverage vary substantially in structure and come with unique limitations, and we were unable to find cases where such provisions were enforced for incidental, indirect, or accidental take of migratory birds.

Formation of Incidental Take Work Group

The evaluation of state statutes suggests that under the current interpretation of the MBTA, the majority of states lack clear authority to protect migratory birds from incidental take. AFWA's Bird Conservation Committee considered a range of options for whether and how to address gaps left by the current interpretation, including: develop and distribute voluntary guidance for states to encourage avoidance; support state efforts for state-level legislation and regulation; convey state concerns about the effects of the M-opinion to partners at DOI; and encourage federal legislation that clarifies that USFWS has the authority to regulate incidental take. After evaluating the pros and cons of each option, at the September 2018 AFWA Annual Meeting, the Bird Conservation Committee formed an [Incidental Take Working Group](#) with two charges: 1) work with USFWS to develop and communicate about Best Management Practices for avoiding incidental take of migratory birds, and 2) develop potential model language or guiding principles for model legislation for states wishing to develop statutes or rules addressing incidental take.

The Working Group contains representatives from states and provincial wildlife agencies, federal agencies, and NGOs. Its membership includes:

Working Group Chair

Judith Scarl, AFWA

Best Management Practices Team

Hubert Askanas, New Brunswick Department of Energy and Resource Development

Ruth Boettcher, Virginia Department of Game and Inland Fisheries

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Additional support and feedback on the projects listed below was provided by: Jonathan Mawdsley, AFWA; Paul Schmidt (USFWS/Ducks Unlimited, retired); Chris Shepperd, ABC; Vince Slabe, West Virginia University; Geoff Walsh, Bureau of Land Management.

Best Management Practices

The Best Management Practices (BMP) team subdivided its charge into 5 tasks:

- 1) Compile existing Best Management Practices (BMPs)¹ related to incidental take of migratory birds, so that states and other partners are easily able to evaluate what resources are available and access existing tools;
- 2) Create a repository or host page for these compiled BMPs;
- 3) Evaluate state and provincial needs for new or revised BMPs;
- 4) Evaluate opportunities for developing or revising BMPs identified as high priority for states and provinces;
- 5) Provide guidance to USFWS on needs for new or revised BMPs

Compiling and Hosting Best Management Practices

Members of AFWA's Partners in Flight/Shorebird/Waterbird Working Group, USFWS, and the American Bird Conservancy worked to [compile existing Best Management Practice guidelines](#) related to incidental take of migratory birds. These groups reviewed government websites, compiled files from within their own organizations, and noted additional documents they were aware of based on experience working with incidental take threats. The final document compiled Best Management Practice documents, guidelines, or information on eleven types of incidental take threats to migratory birds. We organized these documents by threat and divided the documents into tiers using the following criteria:

Tier 1: Either the guidance document/BMP has been developed in collaboration with subject matter experts, *or* the science behind the document has been peer-reviewed, *or* subject matter experts/users have provided feedback on the effectiveness of the guidance.

Tier 2: Document is from a reputable source (*e.g.*, a federal government agency, or an NGO with subject matter experts on the topic) but reflects emerging guidance or policies to be considered, and may not yet be peer-reviewed or incorporate measures of effectiveness

Tier 3: Subject matter experts are unfamiliar with the document or its source; peer review status or effectiveness matters are unknown. Document is provided for information purposes only; partners are encouraged to further evaluate source and potential validity before use.

Threats addressed included: power lines, wind energy development, buildings and glass, communication towers, oil and gas operations, solar energy, open pipes (*e.g.*, mine markers), longline fisheries and marine debris, vehicles, cats, and aircraft. While not all of these threats have been legally categorized as "incidental take" *per se*, they represent sources of bird mortality that states address.

Links to these BMPs, organized by threat, are [available on AFWA's website](#) and will be updated as needed and as capacity allows. This repository of BMPs will retain maximum utility only if it is kept up to date, with new BMPs added as they become available. We recommend that AFWA or other partners reach out to USFWS, the American Bird Conservancy, the Avian Power Line Interaction Committee

¹ There is a growing trend towards referring to guidance documents as Beneficial Management Practices, rather than Best Management Practices. While we can often indicate that a practice is likely to benefit birds, often data are not available to support the assertion that a certain practice is best. Our group's charter statement and our state survey refer to Best Management Practices, and we continue to use that language throughout this document; however, in some cases Beneficial Practices or Beneficial Management Practices may be more appropriate terms to refer to guidance to reduce harm to birds.

(APLIC) and the Federal Communications Commission (FCC) often enough to keep the compilation current, to obtain information about new BMPs that are in development or newly released.

In the future, the [Avian Knowledge Network](#) (AKN) may also house and manage BMPs for reducing incidental take of migratory birds. The AKN is a partnership of people, institutions and government agencies supporting the conservation of birds and their habitats based on data, the adaptive management paradigm, and the best available science. Currently, their [Federal Avian Data Center](#) hosts information on reducing project impacts and links to guidelines and beneficial practices, and this partnership may expand its scope to evaluate and curate BMPs for a broad bird conservation audience throughout North America.

Evaluating State and Provincial Needs for BMPs:

In addition to creating a repository for states and other partners to easily access existing BMPs and better understand what guidelines are available for each of the threats, we sought to better understand what incidental take threats states and provinces are dealing with regularly, and what specific resources would best help them address these threats. For this purpose, the Working Group developed a survey, targeted at state and provincial agency partners, to identify top priorities regarding what type of BMPs would be most helpful to address issues related to incidental take of birds. This survey was distributed by email to members of AFWA's Bird Conservation Committee, each state's self-identified nongame bird contact, and Directors of the Canadian Provincial wildlife agencies in December 2018, and recipients were asked to identify the appropriate individual within their organization to fill out the survey. We received responses from 35 states and 2 provinces. One federal agency and one NGO also responded to the survey's first question. Not all 37 respondents answered all questions; percentages below reflect the percentage of respondents that answered the referenced question.

Incidental Take Threats and Needs

The survey's first question asked, **What are the *most significant* causes of incidental take that your organization has to address?** Respondents were presented with 21 options and were asked to select all that apply, and they could also select an "Other" category and write in additional answers. The five most commonly selected answers include:

- **Transmission line electrocution/collision (n=28; 74%),**
- **Wind energy collisions (n=24; 63%),**
- **Building collisions (n=19; 50%),**
- **Communication and instrumentation tower collision (n=19; 50%)**
- **Lead shot or ammunition in the environment (n=15; 39%).**

Other significant causes of incidental take listed by at least 25% of respondents include: Pesticides/Chemical incidents, Forestry- clear cut, Forestry- thinning, Forestry- burning, Highway projects in sensitive areas, and Coastal engineering projects.

Fewer than 10% of respondents indicated that the following represented significant threats in their state/province: Offshore oil platform lights, Gas flares, Solar reflective, Distributive solar, Industrial photovoltaics, and Fences/border walls.

Eleven respondents provided write-in responses to this question. Five responses focused on development and construction issues, such as infrastructure build-out related to Marcellus gas

exploration and extraction, the disturbance footprint associated with utility line construction or pipeline corridor construction, and housing and industrial development. One respondent noted the need to address outdoor cats, which was not listed in the standard options. Another respondent noted incidental take threats due to agricultural practices.

Of the top five most commonly noted causes of incidental take listed above:

- **59% (n=16)** of respondents indicate that they have BMPs that address **transmission line electrocution/collision**
- **56% (n=15)** of respondents indicate that they have BMPs that address **wind energy collisions**
- **18% (n=5)** of respondents indicate that they have BMPs that address **building collisions**
- **41% (n=11)** of respondents indicate that they have BMPs that address **communication and instrumentation tower collision**
- **15% (n=4)** of respondents indicate that they have BMPs that address **lead shot or ammunition in the environment**

We also asked partners, **What BMPs would you like to see developed or improved, that would help you to address your most pressing incidental take issues?**

The most commonly selected answers in response to this question were:

- **Wind energy collisions (56%, n=20)**
- **Building collisions (50%, n=18)**
- **Transmission line electrocution/collision (47%, n=17)**
- **Lead shot/ammunition in the environment (44%, n=16)**
- **Communication and instrumentation towers collisions (36%, n=13)**
- **Pesticide/chemical incidents (36%, n=13)**

More than 25% of respondents also indicated that they would like to see BMPs for highway projects in sensitive areas, forestry-clear cutting, and solar reflective.

Barriers to Implementation

We also asked respondents, **What barriers do you perceive to implementation of existing BMPs, if any?** This question had four answer choices, plus an option to write in additional perceived barriers. Respondents selected the following answers:

- **79% (n=26) Lack of regulatory authority/enforceability**
- **63% (n=21) Lack of support/partnership from specific industry**
- **45% (n=15) Lack of funding**
- **24% (n=8) Lack of internal support from agency leadership**

Respondents overwhelmingly indicated that a lack of regulatory authority or enforceability was a barrier to effectively implementing best management practices. This highlights the need to pair accepted practices with regulation, or provide other incentives and resources to industry to implement voluntary BMPs and research new or more refined impact minimization measures.

Respondents also identified additional barriers in the write-in section, including a lack of information on what constitutes best management practices; the challenge of finding BMPs for all applicable situations; lack of capacity for outreach and raising awareness about BMPs among stakeholders; and the difficulty of getting involved early enough in the development of projects to influence the project design.

Opportunities for Developing or Improving BMPs for Top Threats

Transmission line electrocution/collision, wind energy collisions, building collisions, communication and instrumentation tower collision, and lead shot or ammunition in the environment were the five most commonly identified incidental take threats and represented five of the top six threats for which respondents would like to see BMPs developed or improved. Our Working Group formed five small teams to further explore options for improving, creating, and/or distributing BMPs for each of these incidental take threats. Each team's specific approach depended on whether current and accepted BMPs exist for the threat, how many states/provinces already have access to those BMPs, what efforts partners are already undertaking to address the threat, and political sensitivities associated with the threat.

Transmission and Distribution Line ("Power Line") Electrocutions and Collisions

Twenty-eight states/provinces indicated that the threat from transmission line electrocutions or collisions is one of the most significant related to incidental take in their jurisdiction, and seventeen states/provinces want BMPs for transmission line electrocutions or collisions developed or improved. Our team contacted each survey respondent to ask a series of follow-up questions to better understand what they are looking for in new or improved BMPs. Although our original survey asked specifically about transmission lines, follow up questions included broader language about power lines, which include both transmission and distribution lines. These questions included:

1. What Best Management Practices are you currently using to address threats related to transmission line or distribution line electrocutions or collisions? Please include the title and source, as well as a link to the BMPs, if available.
2. How does your state/province evaluate the effectiveness of BMPs to address transmission line electrocutions/collisions?
3. What would you like to see improved about the BMPs for transmission or distribution line (power line) electrocutions/collisions? Or, if you do not currently have BMPs for this threat, are there specific challenges or features you would like to see addressed in new BMPs for this threat?

Eight state representatives responded to these follow-up questions and noted two sources that they used to address threats related to transmission and distribution lines:





1) *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* was produced as a cooperative effort of the Avian Power Line Interaction Committee (APLIC), the Edison Electric Institute (EEI), and the California Energy Commission. This book provides a series of safeguards, referenced by supporting research, designed to remedy the issue of raptor electrocutions.

2) *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* was first published by APLIC in 1994 under the title *Mitigating Bird Collisions with Power Lines*. The 2012 edition provides electric utilities, wildlife agencies, and other stakeholders with guidance for reducing avian power line collisions, obeying bird protection laws and enhancing the delivery of reliable electrical energy. The 2012 edition was co-authored by members of U.S. and Canadian utility companies, wildlife biologists from the U.S. Fish and Wildlife Service, the US Department of Agriculture Rural Utilities

Service, and the U.S. Department of Energy, as well as representatives from the consulting firm Normandeau Associates.

[APLIC](#), the primary source of information for states on how to minimize incidental take of migratory birds from power lines, was formed in 1989 as a collaborative effort among electric utilities, resource agencies, and conservation organizations to address whooping crane collisions with power lines. Since its inception, APLIC has expanded to address a variety of avian/power line interactions including electrocutions, collisions, nests, and avian concerns associated with construction, maintenance, and operation of electric transmission and distribution infrastructure.

The Incidental Take Working Group reached out to APLIC to inquire about [upcoming trainings and new information](#) that can be made available to states. In conjunction with their spring and fall meetings, APLIC offers one and a half day workshops on avian/power line issues. APLIC short courses are instructed by APLIC member utilities and USFWS. APLIC hosts these workshops around the country each year so that federal representatives, regional entities, utility members, and state partners may participate and learn how the guidelines and BMPs are implemented. USFWS, as well as AFWA and other members of the Working Group, will work to maintain a connection with APLIC to make this information widely available to states.

Most states indicated that their agencies do not evaluate the effectiveness of BMPs, although some state representatives meet with utility companies to discuss BMP effectiveness or needed improvements. Some states recommend that utility companies report their impacts to birds, but these states indicated that their agencies are not involved in this type of follow-up or evaluation.

Wind Energy Collisions

Twenty-four states/provinces indicate that wind energy collisions are one of the most significant incidental take threats in their jurisdiction, and twenty states/provinces want BMPs for wind energy collisions developed or improved. USFWS produced its [Land-Based Wind Energy Guidelines](#) in 2012; while these have technically expired, industry is still using these guidelines, and they can still be a valuable starting point for states and state partners. More recently,

American Bird Conservancy drafted "[Bird-Smart Wind Energy Guidelines](#)" in 2019 and members of the Incidental Take Work Group worked with AFWA's Energy and Wildlife Policy Committee and the Atlantic Flyway Council Non-Game Technical Section to facilitate state agency review of these guidelines. Feedback is being provided to American Bird Conservancy for consideration in future revisions of these guidelines, which outline how impacts to birds can reasonably be avoided, minimized, and compensated for.

Building Collisions



Fifty percent of respondents (nineteen states/provinces) indicated that building collisions were a significant threat faced by their agency, but only eighteen percent (five respondents) indicated that they have BMPs for this threat.

Two primary national-level resources exist that provide guidance or best practices for building collisions. The American Bird Conservancy's [Bird-Friendly Building Design](#), updated in April 2019, outlines the problems glass causes for birds, highlights several solutions for glass (including netting, awning, angles, patterns, films, decals, etc), discusses solutions related to light, and proposes different policy solutions. USFWS developed a resource entitled "[Reducing Bird Collisions with Buildings and Building Glass Best Practices](#)," most recently updated in July 2016. This document offers guidance for patterned glass, films, coverings, screens, and netting, as well as bird-friendly lighting and landscaping options around buildings.

Few of our survey respondents were aware of these available resources to address building collisions, so communication and outreach is key to ensuring state and provincial partners can access these documents. In addition to including these two references in our BMP compilation, we distributed an invitation to a webinar hosted by the American Bird Conservancy on Jun 5, 2019, "[Keeping Birds from Glass: Successful Strategies that Reduce Bird Collisions](#)," to AFWA's Bird Conservation Committee and additional state non-game bird contacts. We also sent short descriptions of each of these resources, along with links to access the documents and contact information for the point person at ABC and USFWS, to the AFWA Bird Conservation Committee and state non-game bird contacts in May 2019.

Communication and Instrumentation Tower Collisions



Fifty percent of responding states/provinces indicated that communication and instrumentation tower collisions were a significant threat addressed by their agency. [Federal Communications Commission \(FCC\) Guidelines](#) released in 2015 ask tower operators to update their paperwork with the Federal Aviation Administration (FAA) in order to turn off steady burning side lights that are not necessary for aviation safety. The FCC is also requiring that [new towers avoid steady burning lights](#). In addition, in 2018, USFWS updated its [Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and](#)

[Decommissioning](#) document to reflect revisions to the [2015 FAA Lighting Circular](#). In addition, USFWS developed a [fact sheet](#) in partnership with FCC to expand opportunities to change tower lighting.

Several AFWA partners are working to promote these guidelines among industry partners and facilitate industry's participation in adhering to these guidelines.

USFWS

With assistance from professional production staff at the USFWS National Conservation Training Center and through a partnership with the Federal Communications Commission, the USFWS is developing a 3-minute video aimed at communication tower owners encouraging them to convert to bird-friendly lighting. The video will focus largely on interviews with tower owners discussing the financial benefits and relatively simple process of making the switch, be professionally narrated to both thank the tower industry for their contributions to safety and those owners who have made the switch, and also discuss the benefits to birds after the switch is made. USFWS anticipates the video to be completed in the fall of 2019 and USFWS and partners will then work on making it available through a variety of platforms and promoting it to members of the tower industry.

American Bird Conservancy (ABC)

Over the course of Summer 2019, ABC is developing outreach materials and contacting communications tower operators throughout the United States. ABC has hired a legal intern for the summer who will be working on targeting communications tower operators with outreach materials. The new intern will be available as a resource for these operators to assist in preparing FAA and FCC application materials, and answer general inquiries pertaining to the application process. ABC is currently working on reaching out to tower operators, stressing the simplicity of the process as well as the cost-saving benefits of extinguishing steady-burning lights. ABC will also be publishing a press release soon congratulating tower owners who have already made the switch to flashing tower lights.

Lead Shot/Ammunition in the Environment



Thirty-nine percent of state and provincial respondents to our survey indicated that lead shot or ammunition in the environment was one of the most significant causes of incidental take addressed by their organization, and only 15% noted that they have best management practices to address this issue.

AFWA's [Lead and Fish and Wildlife Health Working Group](#) ("Lead WG") provides a forum for exchanging information related to the environmental effects of lead tackle and ammunition and non-toxic alternatives, and provides options for future regulation of the use of lead by hunters and anglers. This Working Group is an appropriate body to address state needs for guidance on issues related to lead in the future, and the Incidental Take Working Group has provided information from our survey to leadership and staff of the Lead WG. The Lead WG discusses multiple issues related to lead and birds, including residual lead in wetlands, lead related to

eagles and condors, and lead shot in dove fields. However, they also recognize that there may be other emerging issues related to lead that states are addressing, and members of the Lead WG may follow up with states in the future to evaluate what other specific concerns and issues states face related to this topic, and what tools or resources might help them manage these concerns.

Several resources are available for states looking for tools to address challenges related to lead ammunition. AFWA's 2010 [position statement on lead ammunition and fishing tackle](#) provides some guidance for states wishing to address issues related to lead. Many states have regulations related to the use of lead or non-toxic ammunition, and a [summary of these regulations is available online](#). In addition, the [North American Non-lead Partnership](#) works collaboratively to minimize the unintended impacts of lead ammunition on wildlife and encourages the design and promotion of voluntary measures to increase the use of non-lead ammunition; [several states and sports groups are part of this partnership](#). As of 1 July 2019, [California has implemented a full lead ammunition ban](#), and Utah and Arizona developed voluntary programs urging hunters to use non-lead ammunition to protect endangered California Condors. Utah offers incentives to hunters to encourage the use of non-toxic shot, including raffles that give away rifles and all-terrain vehicles to hunters that use non-lead ammunition. These legal, educational, and promotional efforts can serve as models for other states looking to address issues related to lead.

Additional resources that may be of interest to state partners include:

- New York State Department of Environmental Conservation site on [Ammunition: Non-Lead or Lead?](#)
- Wisconsin Department of Natural Resources site on [Precautions for Using Lead Ammunition](#)
- Connecticut Department of Energy and Environmental Protection offers [information for hunters and consumers on lead bullet fragments in wild game](#).
- Minnesota Department of Natural Resource's study on lead fragmentation [to simulate how different types of bullets commonly used for deer hunting might fragment](#)
- The [Hunting with Non-Lead site](#) offers summaries of and links to scientific publications that explore the impacts of lead on wildlife, as well as the presence of lead in game meat.
- Educational resources from the [Oregon Zoo's Non-Lead Hunting Education Program](#)
- Information from the US Fish and Wildlife Service on a [lead exposure pathway for Bald Eagles](#), basic information on [deer hunting with non-lead ammunition](#), and information on [voluntary use of non-lead ammunition for elk hunting](#).
- National Park Service site on [lead bullet risks for wildlife \(especially California Condors\) and humans](#)

Legal and Legislative Support for States

States identified the lack of legal authority or enforceability as one of the primary barriers to effective implementation of best management practices to reduce threats due to incidental take. With the reinterpretation of the MBTA, states no longer have a federal fallback to compel industries or individuals to reduce incidental take threats to migratory birds.

State Responses to MBTA Reinterpretation

Letters

Many states have responded individually or collectively to the MBTA reinterpretation. In June 2018, the Midwest Association of Fish and Wildlife Agencies (MAFWA), which represents 13 state and 3 provincial fish and wildlife agencies, sent a letter to then-Interior Secretary Ryan Zinke, expressing concern about actions to weaken the intent of MBTA, asking Zinke to revisit the opinion that reinterprets the MBTA, and highlights how the opinion “diminishes the States’ ability to work with multiple partners in the conservation community, industry, and others to reduce losses of birds.” Three Flyway Councils sent letters to Secretary Zinke expressing concerns about the reinterpretation. In March 2018, the Central Flyway Council expressed concerns about the reinterpretation of incidental take within MBTA and asked for the opinion to be suspended. In April 2018, the Mississippi Flyway Council asked Zinke to revisit the opinion and also highlighted how the opinion diminishes states’ ability to work with partners to protect birds. The Atlantic Flyway Council sent a letter in October 2018; similar to the Central Flyway letter, it asked for the M-opinion to be suspended and for the Department of the Interior to establish a committee of diverse expertise to evaluate a path forward.

Lawsuits

In September 2018, New York, California, Illinois, Maryland, Massachusetts, New Jersey, New Mexico, and Oregon filed suit in the Southern District of New York challenging the MBTA Solicitor’s Opinion on incidental take (“M-opinion”). The states’ lawsuit largely echoes a lawsuit filed by the National Audubon Society, American Bird Conservancy, and Natural Resources Defense Council in May 2018, asserting that the M-opinion is a final agency action binding the Department of Interior (DOI) and should have gone through notice-and-comment rulemaking, and indicating that the M-opinion deprives states of MBTA’s protections for migratory birds. The lawsuit also expresses the concern that without a “strong federal backstop,” companies may be disinclined to cooperate with states on implementing strong protections, and indicates that the M-opinion hinders state natural resource regulation, since under the Opinion, USFWS no longer collects certain information about bird deaths.

On July 31 the U.S. District Court for the Southern District of New York [allowed](#) the consolidated lawsuit to proceed. DOI and the parties will seek to agree on an administrative record by 18 October 2019 and then file their respective motions for summary judgment, with the NGOs filing jointly and the states allowed to file their own brief.

Filling the Gaps: Model Language for States

To fill the gaps in enforcement left by the MBTA reinterpretation, states and state wildlife agencies may wish to clarify that they have jurisdiction to regulate or otherwise oversee incidental take of migratory birds. AFWA’s Incidental Take Working Group has drafted model language for states wishing to clarify their jurisdiction over incidental take, or to formalize frameworks under which state agencies can regulate incidental take of migratory birds.

We created a document entitled “Potential options for state regulations of incidental take of migratory birds” ([Appendix II](#)) that provides states with legislative, executive, and regulatory models to regulate

incidental take of migratory birds. Executive Actions may include issuing an advisory opinion, such as a statement through the governor's office, fish and wildlife agency, or attorney general. For states that already have authority to address incidental take, another executive option would be to establish an incidental take permitting system. Legislative actions could include incorporating general prohibitions of incidental take into state law, providing provisions for permitting, regulating pollutants or other substances that have the potential to result in incidental take, specifying a monetary penalty for incidental take, or establishing compliance frameworks that link compliance certification with incidental take permitting. [Appendix II](#) explains each of the proposed options and provides sample language that states can use or modify as a starting point for their own state codes.

Moving forward, we recommend that states interested in exploring the option to clarify or update their regulations work with interested stakeholders, such as the National Audubon Society and its state offices, to discuss opportunities, and frame and promote potential language.

Future Considerations

While our Working Group focused on the five most commonly identified incidental take threats in our survey, many other human-caused threats represent significant challenges to bird populations. For example, [compiled estimates of the top human-caused threats to birds](#) indicate that cats may take more than 1.4 billion birds per year in the United States. Although take from cat predation was not explored by this Working Group, AFWA's [Feral and Free-Ranging Cat Working Group](#) is analyzing state laws and administrative rules pertaining to feral and free-ranging cats and developing Best Management Guidelines for addressing feral and free-ranging cat issues on state lands managed for wildlife. Also, more than 25% of state and provincial respondents reported pesticides or chemical incidents as a significant incidental take threat, and only 1 respondent indicated that their organization has BMPs for this issue; 36% of responding states and provinces indicated a need for BMPs to address this threat. Future work could explore opportunities for creating, updating, or distributing BMPs/BPs related to these threats. These efforts might explore what specific pesticides, or what types of chemical incidents, are states addressing, so as to best tailor best practices or guidelines to state and provincial needs. Within AFWA's Committee structure, opportunities exist to partner with the Fish and Wildlife Health Committee on this particular issue. Forestry issues, including clear cutting, thinning, and burning, were also listed by several partners as significant threats, and may have particular importance to the Canadian provinces. While more respondents indicated that they have BMPs for forestry issues than for pesticides or chemical incidents, more than 20% of respondents indicated a need for BMPs that address clear cutting and/or forestry thinning, and these needs are worth exploring in the future.

As mentioned above, almost 80% of survey respondents indicated that a lack of regulatory authority or enforceability was a major barrier to effective implementation of existing BMPs. With only 17 states identified as having any legal authority to regulate incidental take of migratory birds, many state representatives express frustration at what they indicate is their weak position from which to encourage industry to follow best management practice guidelines for incidental take threats. This suggests a need to couple promotion of best management practices or beneficial practices with other incentives. Under previous interpretations of the MBTA, the opportunity for federal enforcement of incidental take protections provided states a stronger platform from which to encourage use of BMPs by industry. States can enact or clarify state-level legislation to indicate that state wildlife agencies have regulatory authority over incidental take, and this report outlines multiple paths by which states can pursue this

option. This approach is not without challenges: a state-by-state approach is piecemeal and places a legislative and administrative burden on individual states to identify and enforce future incidental take violations.

Implementing an incidental take permitting system presents its own challenges as well. Prior to the 2017 reinterpretation of the Migratory Bird Treaty Act, USFWS considered implementation of an incidental take permitting system, and in this report, we suggest the establishment of incidental take permitting systems as an option for states (Appendix II). While incidental take permitting would allow states or USFWS to regulate and mitigate incidental take of migratory birds via a more structured and systematic method than is now broadly available, such an approach also requires careful consideration and a full understanding of its implications. An incidental take permitting system established with a regulatory framework that is supported by robust, long-term regional or rangewide demographic trend data would allow states to scientifically determine allowable take limits and measure cumulative effects of take over time. However, such data are limited for the full range of migratory non-game birds, and the additional monitoring, establishing of take limits, and permit administration and oversight could place considerable burdens on state wildlife agencies. Also, should a state elect to develop such an incidental take permitting system, such an undertaking would necessitate seeking cooperation and commitment from other states and provinces to collect population data that are sufficiently robust to withstand both state and federal judicial review. Another approach to permitting is to focus not on the overall risk to bird populations, but rather on the risk a project poses, and use permitting partly to enforce the use of measures that reduce project risk. This option may decrease the immediate burden of collecting extensive bird population data or creating new population models, but it may not provide any ability to promote mitigation commensurate with bird population losses. If states wish to explore the development of incidental take permitting systems, the Non-Game Technical Sections of the Flyways may serve as an appropriate forum in which to discuss the logistics of, and the collaborations necessary for, such a system.

Although many states indicated that the lack of regulatory authority or enforceability presents a barrier to effective implementation of best management practices, the lack of national incidental take laws also presents an opportunity for states to build relationships with industry. In states without what may be perceived as regulatory threats, states, federal agencies, and NGOs can use this period to build trust and rapport while emphasizing the positive benefits of collaboration between industry and bird conservation entities. We encourage states to engage with industry, proactively seek to understand industry's concerns, and working collaboratively with industry to develop BMPs that alleviate some of these concerns while maintaining benefits for birds.

Several partners have successfully worked to lower barriers for industry implementation of BMPs and can provide models for broader engagement with industry. As mentioned above, using flashing lights on communication towers provides benefits for birds and cost-savings for tower owners; this mutual benefit is a key element of the best management practices communication strategy. However, many tower owners have indicated that the paperwork associated with these cost-saving changes can be prohibitive. ABC has employed an intern to help tower owners navigate this paperwork, an inexpensive option to remove a barrier for ultimate benefits to all partners.

Overall, the importance of building successful, mutually beneficial partnerships with industry is critical. Relationships between state and industry partners will benefit if states listen to and understand industry needs and limitations and solicit feedback from industry on practices they are receptive to implementing. Emphasizing the positive benefits of implementing bird-friendly practices is also critical,

from the cost savings associated with flashing lights on communication towers, the energy and subsequent cost savings of using less glass in building design, or the boost to public perception of industry for engaging in conservation.

In addition to regulatory options and industry outreach, other approaches may support productive state-industry partnerships that benefit birds while allowing for profitable operations. States can explore other non-punitive approaches to encourage industry to comply with BMPs, such as tax incentives for businesses that employ bird- or wildlife-friendly practices. In general, we recommend that states and other conservation partners continue to facilitate collaborative discussions between state agencies and industry on the development and use of guidelines to protect wildlife. Some industries, and many individual companies, are eager for guidance and collaboration, and states may see strong benefits from approaching these companies or industries as partners.

We are seeing steady progress in the identification and implementation of best management practices to minimize the impact of incidental take hazards on migratory birds. Pioneering work in several states to enact legislation that provides the state with the authority to regulate incidental take, work with hunters to promote use of non-toxic ammunition, and develop strong partnerships with industry to develop win-win situations for birds and business can provide models for other states wishing to explore options to address incidental take issues.

Appendix 1- Summary of State Laws Evaluation



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MEMORANDUM

FROM: Lane Kisonak Association of Fish and Wildlife Agencies
TO: Gordon Myers North Carolina Wildlife Resources Commission
Tamara Zmuda North Carolina Department of Justice
Judith Scarl AFWA Bird Conservation Committee
RE: State regulation of incidental or accidental take of migratory birds absent incidental take coverage under the Migratory Bird Treaty Act (MBTA)
DATE: February 5, 2019

In March 2018 at the 83rd North American Wildlife and Natural Resources Conference in Norfolk, Virginia, the AFWA Bird Conservation Committee asked AFWA legal staff and interns to compile the statutes of the 50 states and Washington, D.C. pertaining to regulation of incidental or accidental take of migratory birds. This request sought to address Solicitor's Opinion M-37050 (Dec. 22, 2017) ("S.O.") by the U.S. Department of the Interior (DOI) which interpreted section 2 of the Migratory Bird Treaty Act (MBTA), codified at 16 U.S.C. § 703, to not prohibit the incidental take of migratory birds resulting from otherwise lawful activity.

The objective of this assignment is to advise the Association in its process of concluding what, if any, response to the S.O. is appropriate, including recommendations, legislative or regulatory remedies, best management practices, or other vehicles.

This cover memo accompanies a set of spreadsheets containing each state's migratory bird-related statutes, including relevant definitions, statements of jurisdiction, references to federal law and/or regulation, prohibited actions and exceptions, and provisions for enforcement and penalties. Each state's spreadsheet also shows a determination suggested by AFWA legal staff as to whether that state's statutes provide for any incidental or accidental take coverage identical or substantially similar to a reading of the MBTA that would prohibit such take.

Search methods

State statutes similar to MBTA's take provisions were compiled from each state legislature's online collection of 2017 statutes. Such statutes were pulled from the environmental, wildlife and/or natural resource titles of those statutes after thorough review. If a state defined terms pertaining to birds, such as "migratory (game) bird", "game bird", and "migratory waterfowl", or "take/taking" or "waste", those definitions were included. Definitions of more general terms such as "wildlife" were also included if the definition clearly extended to or explicitly mentioned birds. Statements of jurisdiction were included if they explicitly mentioned the MBTA and/or migratory birds, and/or state ownership thereof. Prohibited actions regarding the take of birds in general, exceptions, permits, and any carve-outs for incidental take were included. Some states included enforcement provisions in conjunction with a unified series of

violations, while others scattered them throughout a chapter, and others scattered them across different chapters or divisions of code.

After reviewing and compiling relevant statutes, a final double-check was conducted using the search functions of state websites on not only the state's wildlife code, but also all other titles in the state's entire statutory compilation, for mentions of terms such as "birds", "migratory birds", "eggs", "nests", and/or references to the MBTA. If the search resulted in any relevant statutes not initially included, those statutes would be included, and that section would be revisited to check for other possible inclusions.

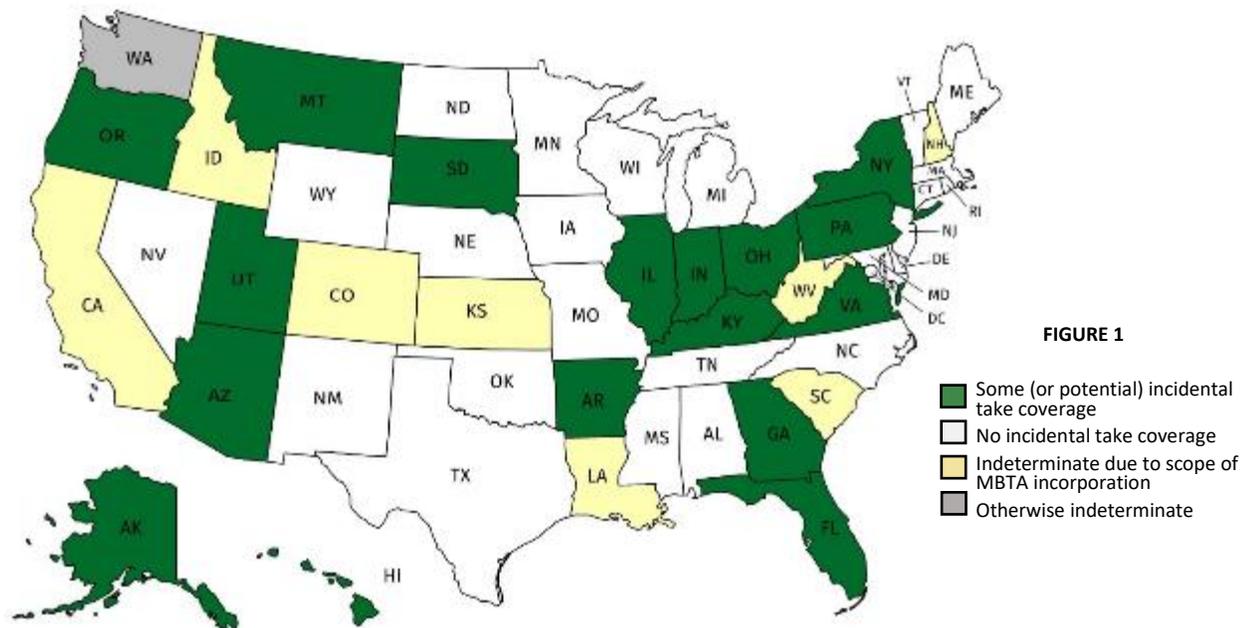
After receiving feedback on determinations from four states, AFWA legal staff reviewed relevant provisions in those states and updated this memo and spreadsheet in February 2019, resulting in the current version.

Results in brief

Of the 51 jurisdictions, seventeen (17) had provisions regulating some form of incidental, indirect, or accidental take, or potentially allowing commissions or agencies to make applicable rules (beyond take for scientific or religious purposes, or in response to predation or property damage); nine (9) were of indeterminate effect, and 25 had no such provisions (see Fig. 1 below). The provisions of the 17 states with possible coverage vary substantially in structure and come with unique limitations. A WestLaw search across these 17 states turned up zero cases where such provisions were enforced for incidental, indirect, or accidental take of migratory birds. These states are included even where potential authority may be narrow in order to foster as complete a discussion of the current state landscape as possible.

Below are brief explanations of each state that was determined to have laws with potential to fill, at least in part, the prosecutorial gap left by the S.O.

I. Positive Determinations



Alaska

Alaska defines “take” to mean “taking, pursuing, hunting, fishing, trapping, or *in any manner* disturbing, capturing, or killing or attempting” to do so for any fish or game. Ak. Stat. § 16.05.940(35) [emphasis added]. The “in any manner” formulation formed much of the basis for a reading of the MBTA as covering incidental take. (See M-37041, “Incidental Take Prohibited Under the Migratory Bird Treaty Act”, Jan. 10, 2017, at pp. 5-6 *et seq.*) Statutory prohibition in Alaska, however, centers around devices for, rather than manners of, taking. “A net, seine, lantern, snare, device, contrivance, and material while in use, had and maintained for the purpose of...taking...fish or game, contrary to law or regulation...is a public nuisance and is subject to abatement.” § 16.05.800. The use of the words “for the purpose of” may also preclude enforcement of incidental, indirect, or accidental take by way of any such device.

Arkansas

The Arkansas Game and Fish Commission (AGFC), under its state constitutional authority, conserves migratory birds by regulation, specifically through Ark. Admin. Code § 002.001-14.01. Section 14.01 generally prohibits the take, or attempt to take, wild birds or bird eggs except in compliance with federal permitting requirements under 50 C.F.R. § 21.12 (general), 21.43 (depredation), or for nuisance migratory birds. The chief statutory source for this authority appears to be Ark. Code § 15-45-210(a), which designates Arkansas a “sanctuary for wild fowl of all species except black birds, crows, and starlings” and provides that “[n]o person shall catch, kill, injure, pursue, or have in his or her possession, either dead or alive...any species of wild fowl except black birds, crows, and starlings unless authorized to do so by [AGFC] or by a federal regulation...”

Violation is a misdemeanor punishable by a fine of up to \$50. § 210(c).

Arizona

It is unlawful in Arizona to “take or injure any bird or harass any bird upon its nest, or remove the nests or eggs of any bird, except as may occur in normal horticultural and agricultural practices *and* except as authorized by commission order” (emphasis added). Ariz. Rev. Stat. § 17-236(A). The Game and Fish Commission is authorized to issue “regulations pertaining to taking migratory birds in accordance with the migratory bird treaty act [sic] and regulations issued thereunder...” § 17-235. Absent other specific penalties, anyone who “violates or fails to comply with a lawful order or rule of the commission, is guilty of a class 2 misdemeanor.” § 17-309(B). It is possible for Commission to make and enforce rules prohibiting take of migratory birds for certain industrial activities or issue incidental take permits under § 17-236(A) but, as currently written, this authority is limited. Section 17-235’s invocation of the MBTA may limit its reach as long as the S.O. limits the MBTA’s coverage.

NOTE: On a conference call in February 2018 an Arizona state attorney did not know of any statute criminalizing incidental or indirect take, and said the state had relied on federal enforcement.

Florida

Florida defines “take” to mean “taking, attempting to take, pursuing, hunting, molesting, capturing, or killing any wildlife...or their nests or eggs, *by any means*, whether or not such actions result in obtaining possession of such wildlife...or their nests or eggs.” Fla. Stat. Ann. § 379.101(38) [emphasis added]. While lacking “in any manner” language, this statute offers some latitude for FFWCC to regulate take along a sliding scale of state of mind. Only in regulation does prohibition of take appear, referring back not to statute but to Art. IV, sec. 9 of Florida’s constitution. Fla. Admin. Code § 68A-4.001(1) (“No wildlife...or their nests, eggs, young, homes or dens shall be taken...in any manner or quantity at any time except as specifically permitted by these rules...”). By regulation Florida adopts the MBTA and implementing

regulations. § 68A-16.001(1)(a), (2). As such, it may be easier for Florida than other states adopting the MBTA in statute to modify its approach in light of the S.O.

Georgia

Georgia defines “migratory game birds” to include brants, coots, cranes, doves, ducks, gallinules, geese, rails, snipe, swans, and woodcock. Ga. Code Ann. § 27-1-2(43). Under a statute presumably applicable to migratory birds, it is a misdemeanor violation to “disturb, mutilate, or destroy the dens, holes, or homes of any wildlife . . . in order to drive such wildlife out of such habitats.” §§ 27-1-30, 27-1-38. It is a separate offense to “hunt, trap, take, possess, ship, or transport any...bird or any part, nest, or egg thereof [with limited exceptions]...except as otherwise permitted by [Georgia] game and fish laws...” § 27-3-22. This section, however, is nested under the “Hunting” section of Georgia’s fish and game code and may not be intended to apply to incidental or accidental take pursuant to non-hunting activity. Any regulation of incidental take could have to target habitat destruction rather than take of individual migratory birds.

Hawaii

While the Hawaii Department of Land and Natural Resources’ (DLNR) general authority to issue take permits is limited to scientific, educational, distributional, captivity, or for crop destruction, Haw. Rev. Stat. § 183D-61, Hawaii’s take prohibition is broad enough to prosecute some instances of incidental take. Except as permitted under § 183D-61, “no person shall intentionally, knowingly, or *recklessly* take, catch, injure, *kill*, or *destroy*, or attempt to take, catch, injure, kill, or destroy, any wild bird . . . or to damage or destroy a nest of any wild bird. § 183D-62 [emphasis added]. Whether it be intentional, knowing, or reckless, a violation of §183D-62 is a misdemeanor punishable by a fine of at least \$200 and/or one year in prison. § 183D-5(b).

Recklessness is defined in Hawaii’s penal code as “consciously disregard[ing] a substantial and unjustifiable risk” of specified circumstances or of the likelihood of causing a certain result, “involv[ing] a gross deviation from the standard of conduct that a law-abiding person would observe in the same situation.” § 702-206(3)(b)-(d).

Illinois

Under Illinois statute: “It shall be unlawful to take, possess, transport or use migratory game birds except during such periods of time, and only in such manner and numbers, as may be permitted pursuant to the [MBTA]...and further as permitted by this Act and State regulations made pursuant to this Act. The Director shall give due notice of any regulations, or any administrative rule, issued pursuant to [the MBTA] and observe the provisions thereof in the enforcement of this Act.” 520 ILCS 5/2.18. The Wildlife Division of Illinois DNR has historically interpreted this provision to cover incidental take, but notes that the change in federal MBTA policy may cause a change in state interpretation.

Indiana

Unlike Georgia’s individual take prohibition, Indiana’s is not nested with provisions regulating hunting, and therefore may be construed as broadly applicable to the take of migratory birds for a range of purposes. “A person may not...take...a migratory bird designated in [Article 22] or a part, nest, or egg of a migratory bird except as otherwise permitted” Ind. Code Ann. § 14-22-6-2. A violation of this section is a civil infraction unless a person’s actions were knowing or intentional, in which case the actions are punishable as a criminal misdemeanor. § 14-22-38-1. Specifically during the closed season no one may “take or possess *for any purpose* . . . a migratory bird or [its] nest, eggs, or increase” without a permit or license. § 14-22-6-3 (emphasis added). Each single take is a separate offense, first punishable with a fine of \$20 and each subsequent offense punishable with a fine of \$35. § 14-22-38-5(a). Section 4-8-2-278 defines “take” to mean “to kill, shoot, spear, gig, catch, trap, harm, harass, or pursue a wild animal” or

attempt to do so. Separately, the Director of Indiana's Department of Natural Resources shall recover damages and restoration costs from the "accidental[], negligent[], or willful[]" release or discharge of waste materials, chemicals, or other substances into any state water or onto any public or private land which results in the killing of animals. § 14-22-10-6(a)-(b).

The sum total of these provisions appears to afford Indiana a relatively high degree of authority to regulate incidental take.

Kentucky

While Kentucky statute refers to the MBTA ("No person shall take...any migratory birds, except as authorized by the [MBTA] as amended and regulations under it." Ky. Rev. Stat. § 150.330(1)), Ky. Rev. Stat. § 150.320, according to a state biologist, is cited for general protection of native birds and may offer some protection from incidental take for many migratory birds. In relevant part the section reads: "No person shall take any wild bird except game birds or live raptors for which there is an open season, either under the laws of Kentucky and the regulations of the department or the laws of the United States...No person shall take, disturb, or destroy the nest or eggs of any wild birds except for raptors as prescribed by regulation. § 150.320(1), (3).

Montana

Montana does not differentiate according to migratory versus resident birds or among activities. Broadly, it is unlawful to "kill . . . any wild bird, other than a game bird, or any part of the plumage, skin, or body of the bird . . . or to take or destroy [its] nest or eggs . . . except under a certificate...or permit issued by the director" of Montana's Department of Fish, Wildlife and Parks. Mt. Code § 87-5-201(1). Violations of this section results in fines of \$50-\$1,000 and/or imprisonment of up to 6 months, and may result in relinquishment of hunting licenses or payment of restitution. § 87-6-301.

More than most states, the link between violation and penalty of loss of hunting license may indicate legislative intent to restrict prosecution to instances of deliberate take.

New York

New York prohibits take of any protected wildlife unless allowed in code or by permit. N.Y. Env'tl. Conserv. L. § 11-0107(1) (using "in any manner, number, or quantity" language). Nests of protected birds are also protected from intentional "rob[bing] or "willful" destruction, while nest boxes are protected from disturbance in general. § 11-0505(5), (7). "Take" is defined in § 11-0103(13) as "pursuing, shooting, hunting, killing, capturing, trapping, snaring and netting...wildlife...and all lesser acts such as disturbing, harrying or worrying, or placing, setting, drawing or using any net or other device commonly *used to take* any such animal." While the definition of take includes active means flagged by the S.O. as "active" and not evincing "passive" or unintentional states of mind, the general prohibition's "in any manner..." language may suffice.

While as of this writing the New York Department of Environmental Conservation is authorized by statute to "adopt rules and regulations...*no less restrictive than* federal regulations made under authority of the [MBTA,]" § 11-0307(1). [emphasis added], legislation will take effect on Dec. 31, 2018 directing NYDEC to "adopt rules and regulations...*consistent with* federal regulations made under authority of the [MBTA]" The extent to which NYDEC's statutory authority to regulate incidental take may shift on Dec. 31 could depend on whether pending litigation determines that the S.O. constitutes a final and binding regulation.

Ohio

More even than Indiana, Ohio's regulatory regime for migratory birds contemplates issuance of permits for industrial activities. The Chief of the Division of Wildlife may regulate the taking of wild animals "at any time and place or in any number, quantity, or length, and in any manner, and with such devices as the chief prescribes . . ." Ohio Rev. Code § 1531.08(A). (See also Ak. Stat. § 16.05.940(35) (using "in any manner"). Furthermore, no one may "catch, kill, injure, [or] pursue . . . any bird other than a game bird" or destroy its eggs, nest, or young, except as permitted by the Ohio's Division of Wildlife. § 1533.07. While accompanying statutes suggest that the Chief is primarily intended to regulate acceptable methods of taking for migratory game birds as pertains to hunting, see §§ 1531.02, 1531.101, 1533.02, permits are specifically provided for energy facilities "whose operation may result in the incidental taking of a wild animal . . ." § 1533.081. A violation of § 1533.07 is a first-degree misdemeanor that may result in a fine of up to \$1,000, § 1533.99(C), while a violation of § 1533.081 or other offenses in the same chapter is a fourth-degree misdemeanor that may result in a fine of up to \$250. *Id.*; § 2929.28(A)(2)(a)(iv). Restitution for the value of the birds may also be imposed. § 1533.99(G).

Finally, anyone who "caus[es] or allow[s] an unauthorized spill, release, or discharge of material into or on any land or any ground or surface water or into the air that results in the death of a wild animal" must pay the costs of an investigation into such a death. § 1531.202.

Oregon

Oregon's wildlife disturbance statutes are similar to Georgia's habitat disturbance statute, Ga. Code § 27-1-30, but are not indicated to apply mainly to hunting. Or. Rev. Stat. §§ 497.308, 498.006. The State Fish and Wildlife Commission may issue permits for the otherwise unlawful take of wildlife or removal from habitat, and determine the terms and conditions thereof. §§ 497.308(1)-(2), 498.012(1). A breach of these permitting conditions, as well as of Oregon's wildlife disturbance statute, is a Class A misdemeanor if the violator had a culpable mental state. § 496.992(1). If take or removal of a *non*-game migratory bird from its habitat is done without a culpable mental state, it is a Class A violation. § 496.992(3). If the take or removal is of a migratory *game* bird, it is a Class C violation if the offense is committed without a culpable mental state. § 496.992(4). Oregon's distinction between mental states for take or removal is relatively uncommon among states. While Indiana, Hawaii, and Utah invoke reckless or negligent states of mind, Oregon is the only state to explicitly distinguish between culpability and non-culpability.

Finally, section 498.012(2)(b) provides that, for wildlife damage and public health risks, "[n]othing . . . requires the [C]ommission to issue a permit for the taking of any wildlife species for which a [U.S. FWS] permit is required pursuant to the [MBTA.] But nothing in Oregon statute appears to restrict the commission from issuing permits where FWS permits are not required.

Pennsylvania

Pennsylvania statute states that the MBTA is "hereby made a part of" its conservation title. 34 Pa. Cons. Stat. § 2103(a). What distinguishes Pennsylvania from states like New York is the further provision that "[f]ederal regulations shall not apply if commission regulations or other provisions of this title prescribe stronger or more detailed restrictions for the taking of migratory birds . . ." *Id.* Violation of regulations made pursuant to section 2103(a) are fifth degree offenses punishable with fines of \$100-200. § 925(b)(9).

It is a first degree offense punishable by a \$1,000-1,500 fine and/or up to 3 months imprisonment to "drive or disturb game or wildlife except while engaged in the lawful activities set forth in this title." §§ 2162(a), 925(b)(5). A federal court in Connecticut read § 2162(a) to "prohibit[] any harassment of wildlife, regardless of intent, except in the course of a lawful hunt." *Dorman v. Satti*, 678 F.Supp. 375, 377 n.1 (D. Conn. 1988). Other than that, it is not cited in cases available on WestLaw. It is a fifth degree offense for

each bird to “kill or attempt or conspire to kill or take or attempt, assist, aid or abet in the taking of any protected birds” § 2164, or nest or egg. § 2165.

While Pennsylvania’s “take” definition does not use “in any manner” or “by any means”, § 102, the proviso in § 2103(a) implies a robust foundation for authority to exceed the MBTA’s protections in fulfillment of its purposes. However, statutory permitting authority currently exists only for collecting birds, nests or eggs for exhibition in museums, scientific study, or school instruction. § 2922.

South Dakota

Depending on the definition of “wanton”, South Dakota may be able to prosecute and issue permits for incidental take. Section 41-1-4 provides that it is a Class 2 misdemeanor to “wantonly waste or destroy any of the birds, animals, or fish of the kinds protected by the laws of this state.” One such protective law is section 41-11-2, which provides, with limited exceptions, that “no person may kill . . . any wild bird other than small game” Another is section 41-11-4, which provides that, aside from open season, “no person may hunt, *take*, [or] *kill* . . . any . . . wild duck of any variety, wild geese of any variety, brant, or any variety of aquatic fowl” § 41-11-4 [emphasis added]. The former appears more promising than the latter.

Next, “except as permitted by *statute*, no person may take . . . or break or destroy any nest or the eggs of the kinds of birds, the taking or killing of which is at any time or at all times prohibited.” § 41-11-7 (emphasis added). The restriction to statutory authority likely limits South Dakota’s ability to regulate certain forms of incidental take permit by rulemaking.

Finally, the definition of “wanton” captures some of the scenarios covered by an incidental-take-inclusive reading of the MBTA. The South Dakota Supreme Court has defined “willful and wanton misconduct” as “something more than ordinary negligence but less than deliberate or intentional conduct . . . [i.e.,] act[ing] or fail[ing] to act, with a conscious realization that injury is a *probable*, as distinguished from a *possible* . . . result of such conduct.” *VerBouwens v. Hamm Wood Products*, 334 N.W. 2d 874, 876 (S.D. 1983) [emphasis added]. The rescinded S.O., M-37041, similarly supported prosecuting incidental take where migratory bird deaths could be “reasonably anticipated or foreseen as a natural consequence” such that the action at issue was a proximate cause of the deaths. M-37041 at 20-22. *See also* Section 1(a) of the Bald and Golden Eagle Protection Act, codified at 16 U.S.C. § 668(a):

Whoever...without being permitted to do . . . shall knowingly, or with *wanton disregard* for the consequences of his act take . . . at any time or in any manner any bald eagle . . . or any golden eagle, alive or dead, or any part, nest, or egg thereof . . . or whoever violates any permit or regulation issued pursuant to this subchapter, shall be fined not more than \$5,000 or imprisoned not more than one year or both [emphasis added].

Utah

The Utah Wildlife Board has substantial authority to issue rules, proclamations, or orders prohibiting or regulating the taking of wildlife including migratory birds or parts thereof, by any “method, means, process or practice not specifically authorized” in Utah’s Wildlife Resources Code, or with any “weapon, ammunition, implement, tool, device, or any part of these not specifically authorized by the Code or the Board. Utah Code Ann. § 23-20-3(1). A violator is criminally negligent (under a standard set forth in §76-2-103(4), if s/he “ought to be aware of a substantial and unjustifiable risk that [a] result will occur . . . [to] a nature and degree that the failure to perceive it constitutes a gross deviation from the standard of care that an ordinary person would exercise in all the circumstances as viewed from the actor’s standpoint). § 23-20-3(2). Such criminal negligence, similar to Hawaii’s, is a Class B misdemeanor. *Id.*

Additionally, any take in violation of § 23-20-3(1) constitutes “wanton destruction of protected wildlife” punishable as a third-degree felony if the aggregate value of destroyed wildlife exceeds \$500. § 23-20-4(3). Restitution is \$100, \$15, or \$5 per animal for most specified migratory birds. *Id.*

- **NOTE:** Utah, like Arizona, felt that its statute did not prohibit incidental take. This could perhaps owe to the high bar for a criminally negligent state of mind.

Virginia

Virginia Code § 29.1-521(A)(10) makes it unlawful to “hunt, trap, take, capture, or kill...by any means whatever...at any time or in any manner, any wild bird...or the carcass or any part thereof, except as specifically permitted by law and only by the manner or means and within the numbers stated.” Violation of this provision or any implementing rules is a class 3 misdemeanor punishable with fines of up to \$500. §§ 18.2-11(c), 29.1-521(D), 29.1-505.

II. Indeterminate

To categorize Arkansas and Washington as “indeterminate” may overstate the suitability of the statutes of those states with positive determinations. But these two states uniquely have statutes that defy analysis on quite the same lines as the above states’. The others are assigned indeterminate status for the collective, simpler reason that they incorporate the MBTA into their statutes without providing for the authority their agencies to make stronger or more restrictive rules or regulations with accompanying permit systems.

Washington

For species that are not designated threatened or sensitive, Washington prohibits the unauthorized or unpermitted hunting, fishing, malicious taking, harassment, and possession of wildlife, and malicious destruction of nests and eggs thereof. Wa. Rev. Code § 77.15.130(1)(a). For threatened or sensitive species, Washington prohibits hunting, fishing, and intentional take, harassment, and possession of wildlife, and intentional destruction of nests and eggs without a permit. § 77.15.130(1)(c). For game birds worth less than \$250, it is an infraction to “recklessly allow the game birds to be wasted”. § 77.15.160(2)(c). For game birds worth over \$250, it is a gross misdemeanor to recklessly allow such waste. § 77.15.170.

Washington’s sensitive species list (<https://wdfw.wa.gov/conservation/endangered/list/Bird/>) includes many of the species protected under the MBTA at 50 C.F.R. § 10.13. But the intentional take standard likely precludes enforcement of incidental or accidental take under § 77.15.130(1)(c). The reckless waste statute could provide a hook for enforcement, but the list of game bird species has little overlap with the state sensitive species or federal MBTA lists.

California, Colorado, Idaho, Kansas, Louisiana, New Hampshire, South Carolina, and West Virginia

These states are distinct from others with indeterminate status because they explicitly refer to or incorporate the federal MBTA and its implementing regulations.

- **California:** “It is unlawful to take or possess any migratory nongame bird as designated in the [MBTA] or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the [MBTA].” Ca. Fish & Game Code §3513.

- **Colorado:** “Any change made by the [U.S. DOI], [FWS], or any new ruling made by the [S]ecretary of the [Interior] under said act which is applicable to the state of Colorado shall be in effect in the state of Colorado and shall be enforced by the division.” Co. Rev. Stat. § 33-1-115(1).
- **Idaho:** “No person shall hunt, take or have in possession any migratory birds except as provided by federal regulations made pursuant to the federal [MBTA], as amended, and in accordance with related rules and proclamations promulgated by the commission.” Id. Rev. Code § 36-1102(a)(1).
- **Kansas:** “It is unlawful to take...by any means or in any manner any migratory bird or birds in Kansas except as authorized and permitted by federal regulations now in force or hereafter adopted pursuant to authority provided by the [MBTA].” Ks. Stat. § 32-1008(b).
- **Louisiana:** “The open season for taking migratory game birds and the bag limit and other rules and regulations affecting migratory game birds shall conform to federal regulations promulgated under the treaty between the United States and Great Britain for a period of years in the case of certain species. No person shall take...a greater number of migratory game birds than specified under federal and state regulations.” La. Rev. Stat. § 56:115(C). “Notwithstanding any other provision of law to the contrary, any violation of the [MBTA] of 1972, as amended.” § 56.118(A).
- **New Hampshire:** “No person shall...take...any migratory game bird or part thereof, except during such time and in such manner and numbers as may be prescribed by regulations promulgated under the [MBTA], which regulations are hereby made a part of the game law of the state.” N.H. Rev. Stat. § 209:6(I).
- **South Carolina:** “The Federal [MBTA] and its implementing regulations are the law of this State...A violation of the [MBTA] or its implementing regulations or a violation of regulations set by the board is a misdemeanor.” S.C. Code § 50-11-10.
- **West Virginia:** “Except as authorized by the director or by law, it is unlawful at any time for any person to...(16) [h]unt, catch, take, kill, capture, pursue, transport, possess, or use any migratory game or nongame birds except as permitted by the [MBTA] and its regulations.” W. Va. Code § 20-2-5(a).

Having incorporated both the MBTA and regulations and rulings made by the Secretary of the Interior into statute, these states (with the possible exception of West Virginia) are more limited than those states with positive determinations to regulate incidental take of migratory birds.

III. States with bills pending

Three state legislatures have introduced bills in order to partially or fully adapt state codes to prosecute incidental, accidental, or indirect take of migratory birds.

California – A.B. 2627

Of the bills pending in state legislatures, California's would go the farthest in creating a statewide system for regulating and permitting the incidental take of migratory nongame birds. A.B. 2627 would permit any entity to take such birds if "incidental to otherwise lawful activity" upon "certification to the [California Department of Fish and Wildlife] of the entity's implementation of best management practices for avoiding, minimizing, and mitigating take" to avoid any "significant adverse impact". The bill would require permitted entities to submit annual status reports, revoke entities' permits if they fall out of compliance and do not cure after a grace period, and carve out limited circumstances where incidental take is generally lawful (routine and ongoing farming or ranch activity, or activities that result in take but have no significant adverse impact).

New York – A. 8779 / A. 11093

Two bills that were considered in the New York State Assembly would take more limited action to conserve migratory birds, neither of which involve regulating incidental take *per se*. A.B. 8779 would work to deter bird collisions on construction sites in New York City by requiring the adoption of rules establishing deterrent safety measures and creation of best practices for use of glass. A.B. 11093 would amend the state code by requiring the development of pamphlets on 1) the importance of using flashing lights rather than static lights on towers, and 2) for wind turbine operators, flight routes of migratory birds.

Maryland – H. 986 / S. 1009

Two companion bills in the Maryland legislature would establish standards for State buildings to minimize bird collisions, especially through restrictions on the use of glass or plexiglass, and encourage the inclusion of elements that preclude bird collisions (e.g., facades, netting, screens, or ultraviolet-reflective patterned glass). These bills did not make it out of their respective committees.

So far, only California's seeks to substantially fill the enforcement gap opened by the Solicitor's Opinion.

Appendix 2- Potential Options for State Regulation of Incidental Take of Migratory Birds

August 2019

AFWA Bird Conservation Committee | INCIDENTAL TAKE WORKING GROUP

APPENDIX TO THE FINAL REPORT OF THE WORKING GROUP

INTRODUCTION

This document seeks to provide states with legislative, executive, and regulatory options to regulate the incidental take of migratory birds in light of the Department of Interior's (DOI) [change in interpretation](#) of the Migratory Bird Treaty Act (MBTA) issued on Dec. 22, 2017. Because DOI no longer interprets the MBTA as prohibiting the accidental or incidental killing or other taking of migratory birds pursuant to otherwise lawful activities, many states are now evaluating what protections they may have available or what additional authorities may be worth pursuing.

Based on a survey of state statutory authorities conducted by the Association of Fish and Wildlife Agencies (AFWA) in 2018, and subsequent feedback from members of AFWA's Bird Conservation and Legal Committees, an Incidental Take Working Group comprising members of these committees decided to prepare this menu of options for distribution to the bird conservation community at large. This document pulls from existing statutory language, and also examines introduced legislation along with existing and proposed federal programs.

These examples are not exhaustive but seek to provide a range of options for states with gaps to fill.

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I. Executive Actions

a. *Advisory Opinion*

A state may choose to issue a statement through its governor, fish and wildlife agency, or attorney general's office, or some combination thereof, determining that state law prohibits incidental take. Such an opinion, or advisory memorandum, can outline the state's interest in protecting birds and include a summary and history of the existing statute and case law that provides the underlying legal authority. In December 2018, California issued a legal advisory, which may provide a useful model. **(See Appendix I.)**

b. *Agency Rulemaking*

For states that determine that they already possess the statutory authority to address incidental takes, a commission or agency may initiate a regulatory process to set up an incidental take permitting system. There is no current model for state regulatory action at this level, but such a rule could function similarly to language included in Section II, especially with regard to compliance and permitting.

c. *Executive Order*

A governor may direct an agency to take specific actions or direct its resources to certain priorities, including as follows:

The [AGENCY] shall:

- Use the full range of its management authority to [REQUIRE > AUTHORIZE > PRACTICE] take avoidance and minimization measures, as well as secure adequate mitigation when avoidance and minimization measures are insufficient by themselves, to avoid incidental take.
- Develop a comprehensive tracking system for [TYPE] activities occurring within migratory bird habitat...
- Conduct a thorough review of statutory and regulatory authorities pertaining to migratory bird conservation to identify best management practices and new opportunities for improved protection of migratory birds and their habitat based on site-specific data. This review shall be completed by [DATE].²

Regulatory agencies of the State shall prioritize the maintenance and enhancement of migratory bird habitats and populations. Incentives to accelerate or enhance required habitat restoration should be developed, including but not limited to [LISTED INCENTIVES].³

² See State of Colo., Office of the Gov., Exec. Order D 2015-003: Conserving Greater Sage-Grouse Habitat (May 15, 2015), available at <https://conservationco.org/wp-content/uploads/2015/05/Sage-Grouse-EO-Language.pdf>.

³ See State of Wyo., Office of the Gov., Exec. Order 2015-4: Greater Sage-Grouse Core Area Protection (July 29, 2015), available at https://wgfd.wyo.gov/WGFD/media/content/PDF/Habitat/Sage%20Grouse/SG_Executive_Order.pdf.

II. Legislative Actions

a. Prohibitions and permitting

A legislative approach would provide the most durable form of affirmation that birds will be covered by incidental take protections under state law and would open the door for the state to consider further regulations. Where state laws are currently connected to federal MBTA regulations, clarifying legislation could distinguish state law from federal regulation and insulate against external changes.

1. General prohibitions and permitting provisions

Depending on the language adopted, a robust statute might set forth the types of *actions* generally prohibited, prescribe a standard of *intent* or *responsibility*, restrict the use of certain instruments or release of certain substances, include or refer to a definition of “take”, or some combination thereof. In light of DOI’s interpretation of section 703 of the federal MBTA as highlighting “active” and not “passive” activities meant to be prohibited, we recommend that statutes achieve breadth in terms of situations and activities covered, and precision in drafting and creation of a legislative record.

The option of establishing an incidental take permitting system requires careful consideration and a prudent approach because it represents a major shift in conservation practice, from no allowance of incidental take to allowing incidental take under a regulatory framework that, ideally, is supported by robust regional or range-wide demographic trend data. The best example of a successful regulatory framework is the federal structure that determines annual migratory game bird harvest levels. This framework is underpinned by robust flyway-wide population estimates. The partitioning of allowable harvest is based on a variety of empirical data that are collected at the fly-way scale and fed into complex, continuously evolving predictive harvest rate models, which have taken decades to develop. Establishing a similar framework for nongame bird species will require considerable time, resources, and immediate cooperation and commitment from states and provinces to gather and compile regional, or in some cases, range-wide data necessary for establishing allowable take limits and measuring the cumulative effects of permitted take.

Another approach to permitting is to focus on minimizing risk within a given project, rather than focusing on mitigating population-level impacts to migratory birds, and provides an opportunity to enforce the use of best management practice guidelines for a given project. While this option avoids the immediate burden of collecting extensive demographic data and creating new population models, it lacks the ability to ensure mitigation commensurate with bird population losses, or to assess population-level impacts both of individual projects as well as across projects. States exploring permitting options will want to carefully consider the costs and benefits of different approaches and consider which, if any, approach best balances migratory bird conservation and management, state capacity, data access and needs, and other considerations.

Favored elements for general prohibitions include:

INTRODUCTION OF PROHIBITION

- “No person at any time shall [VERB]...”⁴

⁴ See, e.g., Ala. Code § 9-11-244.

- “It is unlawful for any person to cause through carelessness, neglect or otherwise...”⁵
- “No person shall take, or have in possession or under control, or wantonly interfere with or destroy...”⁶
- “Unless otherwise prescribed by this [TITLE/CHAPTER/SECTION], it is unlawful for a person to...[VERB] except as expressly permitted...”⁷

NO (OR OTHERWISE STATED) LIMITATION ON MEANS / PROXIMITY / RESULT

- “...directly or indirectly...”⁸
- “...by any means whatever/whatsoever...”
- “...at any time or in any manner”⁹
- “...unless authorized by a validly adopted regulation of the [COMMISSION/AGENCY]...”¹⁰
- “...whether or not such actions result in obtaining possession of such wildlife...or their nests or eggs...”¹¹

Favored elements for definitions of “take”, similarly to prohibitions, rely on deliberate statements of breadth and listing of actions that upon a plain reading fall short of “active” activities such as “shoot”, “trap”, “capture” or “possess”:

- “...in any manner disturbing...”¹²
- “...disturbs any active nest...”¹³
- “...place, set, aim, or use any device, animal, substance, or agency which may reasonably be expected to accomplish [a taking]...”¹⁴

If possible, avoid incorporating “attempt” into proposed language; doing so may replicate some of the ambiguity that enabled DOI to construe MBTA section 703 as covering only intentional actions. Also avoid a making a general exception for the open season in order to avoid a construction of the statute as intended to apply to hunting and not all intended categories of incidental take, recreational and non-recreational.

California’s proposed amendment to its incidental take statute, by removing the existing reference to section 703 of the federal MBTA and replacing it with a reference to its own state code, is another workable example. It reads as follows:

It is unlawful to take or possess any migratory nongame bird as designated in the federal Migratory Bird Treaty Act (16 U.S.C. Sec. 703 et seq.) as of January 1, 2017, any additional

⁵ Nev. Rev. Stat. § 503.050(1).

⁶ N.H. Rev. Stat. § 209:10.

⁷ Ak. Stat. § 16.05.940(35).

⁸ Ala. Code § 9-11-244.

⁹ N.M. Stat. § 17-2-7(A).

¹⁰ See, e.g., Ark. Code § 15-45-210(a).

¹¹ Fla. Stat. § 379.101(38).

¹² Ak. Stat. § 16.05.940(35).

¹³ See, e.g., Conn. Gen. Stat. § 26-93.

¹⁴ Ky. Rev. Stat. § 150.010(38).

migratory nongame bird that may be designated in that federal act after that date, or any part of a migratory nongame described in this section, except as provided by any provision of this code, or any rule, regulation, or order made or adopted pursuant to this code, that is consistent with, or more protective than, rules and regulations adopted by the United States Secretary of the Interior under that federal act.¹⁵

By referring to existing provisions in its own code, California's proposal would insulate its protections from regulatory or interpretive changes at the federal level.

2. Regulation of pollutants and other substances and devices

Regulation of non-recreational / industrial activity with the potential to result in incidental take is an area with less sample language than general prohibitions or recovery of damages. But Indiana has language on the books that is worth consideration:

A person who, whether or not the person has been issued a certificate of approval, license, permit, or other document of approval authorized by this article or any other Indiana law, discharges, sprays, or releases waste materials, chemicals, or other substances: (1) either accidentally, negligently, or willfully; (2) in any quantity, concentration, or manner onto or in any water of Indiana, the boundary waters of the state, or onto or in public or private land; and (3) so that wild animals are killed as a result; is responsible for the kill.¹⁶

Iowa's statute attaching liability for take of animals to pollution of habitat may also be useful to other states:

A person who is liable for polluting a water of this state in violation of state law, including this chapter, shall also be liable to pay restitution to the department for injury caused to a wild animal by the pollution.¹⁷

Arizona statute invokes specific examples but transitions to the general, prohibiting take with:

- "an explosive compound, poison or any other deleterious substance..."¹⁸

Naming many specific deleterious substances, like New York statute, may be worthwhile, but capturing all substances worth regulating may be difficult and result in unintentional exclusion of certain activities. See N.Y. Evtl. Conserv. L. § 11-0503(1) ("No dyestuffs, coal tar, refuse from a gas house, cheese factory, creamery, condensary or canning factory, sawdust, shavings, tan bark, lime, acid, oil or other deleterious or poisonous substance shall be thrown or allowed to run into any waters, either private or public, in quantities injurious to fish life, protected wildlife or waterfowl inhabiting those waters or injurious to the propagation of fish, protected wildlife or waterfowl therein.").

Naming specific industries, like Ohio statute, may be helpful in clarifying intended applicability, but may attract more targeted opposition. See Ohio Rev. Code § 1533.081(B) ("A person operating an energy

¹⁵ Ca. [A.B. 454](#) (Feb. 11, 2019).

¹⁶ Ind. Code § 14-22-10-6(a).

¹⁷ Ia. Code § 481A.151(1).

¹⁸ Ariz. Rev. Stat. § 17-309(A).

facility whose operation may result in the incidental taking of a wild animal shall obtain a permit to do so from the chief of the division of wildlife under this section.”).

b. Injunctions and monetary recovery

A recent civil case in Colorado offers a positive example of a general incidental take / recovery statute being construed broadly by a court, awarding substantial monetary recovery to the state from a fish kill by a commercial feedlot resulting in liability for over 14,000 fish.¹⁹ The statute in this case read:

It is unlawful for any person to hunt, take, or have in such person’s possession any wildlife that is the property of this state [except as permitted by rule or regulation].²⁰

Interestingly, state law defined “take” as referred to in that statute to mean “acquir[ing] possession” but “not includ[ing] the accidental wounding or killing of wildlife by a motor vehicle, vessel, or train.”²¹

However, set against other provisions in the relevant title requiring knowledge or willful intent, the trial court agreed with Colorado Parks & Wildlife and found on Jan. 26, 2018 that this statute (in part because it does not include criminal penalties) prohibited the taking of wildlife by release of waste from a feedlot. Looking at state case law and legislative history, the Court “determined that ‘take’ is synonymous with ‘kill’” and that it is a “strict liability offense.”

While a separate trial was required to determine damages, and the holding regarding the statute’s applicability to incidental take is still under appeal, this ruling highlights the importance of strong legislative history, a hard look at each state’s individual case law, and the importance of care in drafting and legislative testimony.

Other potentially useful language includes:

- “The [COMMISSION/AGENCY] is authorized to bring suit in the name of the state against any person, corporation, or government agency, to restrain or enjoin the person, corporation, or government agency from discharging or dumping into a[N] [AREA] in the state any deleterious substance which is injurious to wildlife”²²
- “Any person violating the provisions of this section shall [BE DEEMED GUILTY OF A MISDEMEANOR / ASSESSED A FINE] and upon [CONVICTION / FINDING OF CIVIL LIABILITY] fined in an amount not to exceed [## DOLLARS].”²³
- “A person who kills, injures, or possesses a [SPECIES/CATEGORY] in violation of the game and fish laws is liable to the state for the value of the wild animal as provided in this section.

¹⁹ *Colorado v. 5 Star Feedlot, Inc.*, Yuma Cty. Dist. Ct., 16-cv-30022 (May 2, 2018) (appeal pending at Colorado Court of Appeals) (holding that a feedlot owner is liable for a fish kill resulting from the inadvertent release of animal wastewater, regardless of intent or actual possession of the fish).

²⁰ Colo. Rev. Stat. § 33-6-109(1).

²¹ Colo. Rev. Stat. § 33-1-102(43).

²² Ariz. Rev. Stat. § 17-237.

²³ *See, e.g.*, Ark. Code § 15-45-210(c).

Species afforded protection include members of the following groups as defined by statute or rule...”²⁴

- “The amount of restitution shall be determined by a court by a preponderance of the evidence [IN CIVIL CASES]. In determining the amount of restitution, the court must consider the value of the wild animal under [APPLICABLE SECTION / OTHER REFERENCE MATERIAL].”²⁵

c. Compliance frameworks

A statutory or regulatory framework that links compliance certification with incidental take permitting could reinforce protections from substantial sources of mortality under state law and strengthen the adoption of best management practices and periodic reporting.

Depending on the position of courts and/or the administration, it is possible that a state incidental take permitting system would only be in compliance with the federal MBTA if clarifying legislation is passed by Congress. However, if courts uphold S.O. 37050 and the MBTA is understood to allow for incidental take, then states may create such systems in line with MBTA section 7 (16 U.S.C. § 708):

[N]othing in this Act shall be construed to prevent the several States and Territories from making or enforcing laws or regulations not inconsistent with the provisions of said conventions or of this Act, or from making or enforcing laws or regulations which shall give further protection to migratory birds, their nests, and eggs, if such laws or regulations do not extend the open seasons for such birds beyond the dates approved by the President in accordance with section three of this Act.

In the event that any state moves ahead by establishing such a system through regulation, population data should be sufficiently robust to withstand both state and federal judicial review.

Potential models include proposed legislation from the California Assembly (**see Appendix II-1 for relevant excerpts**), the U.S. Fish & Wildlife Service’s (FWS) 2015 preliminary proposal to create an incidental take framework for migratory birds²⁶, and FWS’s incidental take regulations for eagles and their nests (**see Appendix II-2**).²⁷

²⁴ Minn. Stat. § 97A.341.1.

²⁵ Minn. Stat. § 97A.341.4.

²⁶ U.S. Dep’t of Int., Fish & Wildlife Serv., Migratory Bird Permits; Programmatic Environmental Impact Statement – Notice of Intent, 80 Fed. Reg. 30,032 (May 26, 2015).

²⁷ 50 C.F.R. 22.26 – (incidental eagle take permits were [revised](#) in 2016 and are now called “incidental” rather than “nonpurposeful”; come in one category rather than standard and programmatic—which required differing and sometimes ambiguous levels of take avoidance activity; and are available for terms longer than 5 years subject to 5-year evaluations and adaptive management provisions).

APPENDIX I

CDFW / CA AG Advisory Opinion

California Department of Fish and Wildlife and California Attorney General Xavier Becerra Advisory Affirming California's Protections for Migratory Birds

The California Department of Fish and Wildlife (CDFW) and California Attorney General Xavier Becerra jointly provide this advisory to affirm that California law continues to provide robust protections for birds, including a prohibition on incidental take of migratory birds, notwithstanding the recent reinterpretation of the Migratory Bird Treaty Act (MBTA) by the U.S. Department of the Interior (DOI).

The Federal Government's Reinterpretation of MBTA

Section 2 of the MBTA makes it "unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, [or] kill ..." a wide variety of migratory birds, except as permitted by regulations. (16 U.S.C. § 703, emphasis added.) A bipartisan coalition of seventeen former leaders of DOI and the U.S. Fish and Wildlife Service recently confirmed that, since at least the 1970s, both agencies have consistently interpreted Section 2 of the MBTA to prohibit incidental take of migratory birds.¹ "Incidental take" is take that is incidental to but not the intended purpose of an otherwise lawful activity. (See 16 U.S.C. § 1539(a)(1)(B).) In January 2017, the DOI issued a memorandum affirming this longstanding interpretation.

In December 2017, the acting Solicitor of the DOI issued a new memorandum now disclaiming the DOI's longstanding interpretation of the MBTA as prohibiting incidental take of migratory birds. While three separate lawsuits, including one joined by the Attorney General, challenge the legality of the new memorandum and its consistency with the requirements of the MBTA, California's protections for migratory birds, including a prohibition against incidental take, remain clear and unchanged.

California Law's Protection for Birds

The protection of birds is of critical importance to both CDFW, which holds fish and wildlife resources in California in trust for the people of the State and has jurisdiction over the conservation, protection, and management of those resources (Fish and Game Code §§ 711.7(a) and 1802), and to the Attorney General, who enforces state law, including statutes protecting birds. (Cal. Gov. Code §§ 12607 and 12511.) California courts have affirmed the "legitimate and, indeed, vital nature of a state's interest in protecting its natural resources, including wildlife within the State," stressing the State's "obligation and duty to exercise supervision over such resources for the benefit of the public generally." (People v. Maikhio, 51 Cal.4th 1074, 1093-95 (2011).)

As identified below, California law contains a number of provisions prohibiting "take" of migratory birds. The California Fish and Game Code defines "take" for purposes of all of these statutes as "to hunt, pursue, catch, capture, kill, or attempt to hunt, pursue, catch, capture, or kill." (Fish and Game Code § 86.) California courts have held that take includes incidental take and is not limited to hunting and fishing and other activities that are specifically intended to kill protected fish and wildlife. (See Dept. of Fish and Game v. Anderson Cottonwood Irrigation Dist., 8 Cal.App.4th 1554, 1563-64 (1992) ("take" includes the killing of endangered species in the course of lawful activity; in that case, via unscreened

diversions of water), citing *Churchill v. Parnell*, 170 Cal.App.3d 1094, 1098 (1985) (“take” includes the application of pesticides in water that kills fish.) More recently, in *Center for Biological Diversity v. Department of Fish and Wildlife*, 62 Cal.4th 204, 235-36 (2015), the California Supreme Court specifically stated that:

The broad definition of “take” in Fish and Game Code section 86 ensures that DFW can maintain legal control over actions interfering with threatened, endangered and fully protected animals even where those actions may not have been intended to kill or hurt the animal.

Unless the Fish and Game Code or its implementing regulations provide otherwise, under California law it is unlawful to:

- Take a bird, mammal, fish, reptile, or amphibian (Fish and Game Code § 2000);
- Take, possess, or needlessly destroy the nest or eggs of any bird (Fish and Game Code § 3503);
- Take, possess, or destroy any bird of prey in the orders Strigiformes (owls) and Falconiformes (such as falcons, hawks and eagles) or the nests or eggs of such bird (Fish and Game Code § 3503.5);
- Take or possess any of the thirteen fully protected bird species listed in Fish and Game Code section 3511;
- Take any non-game bird (i.e., bird that is naturally occurring in California that is not a gamebird, migratory game bird, or fully protected bird) (Fish and Game Code § 3800);
- Take or possess any migratory non-game bird as designated in the MBTA² or any part of such bird, except as provided by rules or regulations adopted by the Secretary of the Interior under the MBTA (Fish and Game Code § 3513);
- Take, import, export, possess, purchase, or sell any bird (or products of a bird), listed as an endangered or threatened species under the California Endangered Species Act unless the person or entity possesses an Incidental Take Permit or equivalent authorization from CDFW (Fish and Game Code § 2050 et seq.).

California hosts an incredible diversity of bird species, and over 600 species of migratory birds live in or migrate through California. CDFW and the Attorney General will continue to implement and enforce California law to protect these birds.

For more information regarding permit requirements for activities that may affect bird species, please visit <https://www.wildlife.ca.gov/Conservation/Environmental-Review> or contact CDFW staff for your region. To report the illegal take of birds and other wildlife, please call the CalTIP hotline at 1-888-334-2258 or visit <https://www.wildlife.ca.gov/enforcement/caltip>.

Footnotes

1. See: <https://apps.washingtonpost.com/g/documents/national/letter-from-17-former-interior-officials-to-secretary-ryan-zinke-on-new-migratory-bird-treaty-act-policy/2708/>.
2. “Migratory bird” is defined in federal regulations implementing the MBTA at 50 C.F.R. § 10.12. The list of species protected under the MBTA is set forth at 50 C.F.R. § 10.13.

APPENDIX II-1

California [Assembly Bill 2627](#)

An act to amend Section 3513 of the Fish and Game Code, relating to migratory birds.

SECTION 1.

Section XX of the [*Fish and Game Code*] is amended to read:

(a) For purposes of this section, the following terms have the following meanings:

(1) "Best management practices" means best management practices for avoiding, minimizing, and mitigating take of migratory nongame birds that are intended to avoid significant adverse impacts to migratory nongame birds.

(2) "Migratory nongame bird" means a migratory nongame bird as designated in the federal Migratory Bird Treaty Act (16 U.S.C. Sec. 703 et seq.) as of January 1, 2017.

(3) "Significant adverse impact on a migratory nongame bird species" means an impact that has the potential, either individually or cumulatively, to significantly reduce the number or the range of a migratory nongame bird, as determined based on the best available scientific information.

(b) It is unlawful to take or possess any migratory nongame bird or any part of a migratory nongame bird, except as provided in subdivisions (c) or (k).

(c) Any person or entity that engages in otherwise lawful [*note: could limit to "commercial"*] activities that may result in incidental take that causes a significant adverse impact to migratory nongame birds shall be deemed in compliance with this section if that person or entity completes the self-certification requirements set forth in subdivision (d) and implements the best management practices set forth in that self-certification unless the department notifies the person or entity of the alleged noncompliance in writing as set forth in subdivision (g).

(d) To self-certify for purposes of subdivision (c), a person or entity shall do all of the following:

(1) Submit to the department a written self-certification that includes:

(A) The name and contact information of the person or entity.

(B) A description of the activity or activities for which best management practices will be implemented including the location, the nature, the date of commencement, and the duration of the activity or activities. For existing activities, the description may include best management practices already being implemented.

(C) A description of the best management practices to be implemented.

(2) Submit to the department, by January 31 of each calendar year after submitting the self-certification for the duration of the self-certification, a written annual report that includes:

(A) A description of all best management practices that were implemented during the preceding year.

(B) If any best management practices included in the self-certification were not implemented during the preceding year, an explanation for that failure to implement.

(C) A description of the scope and magnitude of any significant adverse impacts to migratory nongame birds as a result of the activity or activities.

(e) Except as provided in subdivision (f), an entity shall identify best management practices for purposes of subdivision (d) based on the best available scientific information and other relevant information, including, but not limited to, the following, as applicable:

- (1) Peer-reviewed scientific studies or reports.
- (2) Guidance documents accepted by state and federal agencies.
- (3) Documentation prepared to apply for permits and other approvals issued by public agencies.

(f) If an entity maintains a permit or approval issued by a public agency, the entity may rely on the permit or approval, or documents prepared to support the permit or approval, to demonstrate that its activities are not resulting in take that causes a significant adverse impact to migratory nongame birds or that it has implemented best management practices for purposes of subdivision (d), subject to the following conditions:

- (1) The permit or approval was issued pursuant to a process that included an assessment of the activity's impacts on migratory nongame birds and requires, when necessary, implementation of best management practices to address those impacts.
- (2) The department does not determine the permit or approval to be inconsistent with the purposes of this chapter.

(g) (1) Incidental take authority pursuant to subdivision (c) shall be effective immediately upon certification and shall continue in effect unless, no later than 120 days after the department receives the certification or an annual status report pursuant to subdivision (g), the department finds that the entity is not in compliance with this section and issues the entity a notification of noncompliance.

(2) A notification of noncompliance issued pursuant to paragraph (1) shall identify the reasons for the department's finding and specify a reasonable grace period for the entity to come into compliance with this section. The entity shall remain exempt from the prohibition in subdivision (b) during the specified grace period.

(3) For purposes of a finding pursuant to paragraph (1), in reviewing best management practices implemented by an entity, the department shall consider practical limitations to the implementation of certain best management practices at existing facilities, for ongoing operations, or for projects that have already received necessary permits or other approvals.

(h) (1) No later than December 31, 2019, the department shall, through a public stakeholder process, establish guidelines for compliance with this section.

(2) Guidelines established pursuant to this subdivision shall, at a minimum, specify the following:

(A) Procedures for the preparation and filing of certifications and annual status reports.

(B) Methods for verifying compliance over the time period during which take may occur.

(3) The department shall not establish guidelines that require entities to divulge information that would violate laws, rules, or policies established by the U.S. Department of Energy or the U.S. Department of Homeland Security for the physical security of infrastructure.

(4) The department shall not rely on the lack of guidelines established pursuant to paragraph (1) or (2) as grounds for the delay or denial of any permits or other approvals.

(5) Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code does not apply to the development, adoption, or amendment of guidelines or criteria pursuant to this section. These guidelines and criteria shall be posted on the department's Internet Web site.

(i) No later than 60 days after receiving a certification or annual report pursuant to subdivision (c) or (d), the department shall make the certification or report publicly available on its Internet Web site in a format that is readily accessible by members of the public.

(j) Nothing in this section is intended to or shall be construed to alter the department's authority under or the requirements and provisions of any of the following:

(1) The *[California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3).]*

(2) The *[California State Safe Harbor Agreement Program Act (Chapter 3.7 (commencing with Section 2089.2) of Division 3).]*

(3) The *[Natural Community Conservation Planning Act (Chapter 10 (commencing with Section 2800) of Division 3).]*

(4) Section 3511.

(k) (1) This section shall not apply to take of a migratory nongame bird if the take is authorized pursuant to another provision of this code, or any rule, regulation, or order made or adopted pursuant to this code.

(2) This section shall not apply to the take of a migratory nongame bird if:

(A) Take is authorized by a permit issued pursuant to federal law, unless the department determines that the permit is inconsistent with the purposes of this chapter and enforcement of this section against the federally permitted take would not violate clause 2 of Article VI of the United States Constitution.

(B) Take is authorized by an order issued pursuant to Part 21 (commencing with Section 21.1) of Subchapter B of Chapter I of Title 50 of the Code of Federal Regulations.

(C) Take is authorized in writing by the department or otherwise permitted under federal law for the retrieval, possession, storage, transportation, or care for the migratory nongame bird, nest, or eggs, including but not limited to for the purposes of scientific research and wildlife rehabilitation.

(l) Nothing in this section alters the department's authority to review, approve, or deny permits, orders.

SECTION 2.

[No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.]

APPENDIX II-2

50 CFR § 22.26

Permits for eagle take that is associated with, but not the purpose of, an activity

(a) Purpose and scope. This permit authorizes [take](#) of bald eagles and golden eagles where the [take](#) is compatible with the preservation of the bald eagle and the golden eagle; is necessary to protect an interest in a particular locality; is associated with, but not the purpose of, the activity; and cannot practicably be avoided.

(b) Definitions. In addition to the definitions contained in [part 10](#) of this subchapter, and § 22.3, the following definition applies in this section:

Eagle means a live bald eagle (*Haliaeetus leucocephalus*), live golden eagle (*Aquila chrysaetos*), a bald eagle egg, or a golden eagle egg.

(c) Permit conditions. In addition to the conditions set forth in [part 13](#) of this subchapter, which govern permit renewal, amendment, transfer, suspension, revocation, and other procedures and requirements for all permits issued by the Service, your authorization is subject to the following additional conditions:

(1) You must comply with all avoidance, minimization, or other mitigation measures specified in the terms of your permit to mitigate for the detrimental effects on eagles, including indirect and [cumulative effects](#), of the permitted [take](#).

(i) Compensatory mitigation scaled to [project](#) impacts will be required for any permit authorizing [take](#) that would exceed the applicable [eagle management unit take](#) limits. Compensatory mitigation for this purpose must ensure the preservation of the affected eagle species by reducing another ongoing form of mortality by an amount equal to or greater than the unavoidable mortality, or increasing the eagle population by an equal or greater amount.

(ii) Compensatory mitigation may also be required in the following circumstances:

(A) When cumulative authorized [take](#), including the proposed [take](#), would exceed 5 percent of the [local area population](#); or

(B) When available data indicate that cumulative unauthorized mortality would exceed 10 percent of the [local area population](#).

(iii) All required compensatory mitigation must:

(A) Be determined based on application of all [practicable](#) avoidance and minimization measures;

(B) Be sited within the same [eagle management unit](#) where the permitted [take](#) will occur unless the Service has reliable data showing that the population affected by the [take](#) includes individuals that are reasonably likely to use another [eagle management unit](#) during part of their seasonal migration;

(C) Use the best available science in formulating and monitoring the long-term effectiveness of mitigation measures and use rigorous compliance and effectiveness monitoring and evaluation to make certain that mitigation measures achieve their intended outcomes, or that necessary changes are implemented to achieve them;

(D) Be additional and improve upon the baseline conditions of the affected eagle species in a manner that is demonstrably new and would not have occurred without the compensatory mitigation (voluntary actions [taken](#) in anticipation of meeting compensatory mitigation requirements for an eagle [take](#) permit not yet granted may be credited toward compensatory mitigation requirements);

(E) Be durable and, at a minimum, maintain its intended purpose for as long as impacts of the authorized [take](#) persist; and

(F) Include mechanisms to account for and address uncertainty and risk of failure of a compensatory mitigation measure.

(iv) Compensatory mitigation may include conservation banking, in-lieu fee programs, and other third-party mitigation [projects](#) or arrangements. Permittee-responsible mitigation may be approved provided the permittee submits verifiable documentation sufficient to demonstrate that the standards set forth in [paragraph \(c\)\(1\)\(iii\)](#) of this section have been met and the alternative means of compensatory mitigation will offset the permitted [take](#) to the degree that is compatible with the preservation of eagles.

(2) *Monitoring.*

(i) You may be required to monitor impacts to eagles from the permitted activity for up to 3 years after completion of the activity or as set forth in a separate management plan, as specified on your permit. For ongoing activities and enduring site features that will likely continue to cause [take](#), periodic monitoring will be required for as long as the data are needed to assess impacts to eagles.

(ii) The frequency and duration of required monitoring will depend on the form and magnitude of the anticipated [take](#) and the objectives of associated avoidance, minimization, or other mitigation measures, not to exceed what is reasonable to meet the primary purpose of the monitoring, which is to provide data needed by the Service regarding the impacts of the activity on eagles for purposes of adaptive management. You must coordinate with the Service to develop [project-specific](#) monitoring protocols. If the Service has officially issued or endorsed, through rulemaking procedures, monitoring protocols for the activity that will [take](#) eagles, you must follow them, unless the Service waives this requirement. Your permit may require that the monitoring be conducted by qualified, independent third parties that report directly to the Service.

(3) You must submit an annual report summarizing the information you obtained through monitoring to the Service every year that your permit is valid and for up to 3 years after completion of the activity or termination of the permit, as specified in your permit. The Service will make eagle mortality information from annual reports available to the public.

(4) While the permit is valid and for up to 3 years after it expires, you must allow Service personnel, or other qualified persons designated by the Service, access to the areas where eagles are likely to be affected, at any reasonable hour, and with reasonable notice from the Service, for purposes of monitoring eagles at the site(s).

(5) The authorizations granted by permits issued under this section apply only to [take](#) that results from activities conducted in accordance with the description contained in the permit application and the terms of the permit. If the permitted activity changes after a permit is issued, you must immediately contact the Service to determine whether a permit amendment is required in order to retain [take](#) authorization.

(6) You must contact the Service immediately upon discovery of any unanticipated [take](#).

(7) Additional conditions for permits with durations longer than 5 years -

(i) Monitoring. Monitoring to assess [project](#) impacts to eagles and the effectiveness of avoidance and minimization measures must be conducted by qualified, independent third parties, approved by the Service. Monitors must report directly to the Service and provide a copy of the reports and materials to the permittee.

(ii) Adaptive management. The permit will specify circumstances under which modifications to avoidance, minimization, or compensatory mitigation measures or monitoring protocols will be required, which may include, but are not limited to: [Take](#) levels, location of [take](#), and changes in eagle use of the activity area. At a minimum, the permit must specify actions to be [taken](#) if [take](#) approaches or reaches the amount authorized and anticipated within a given time frame. Adaptive management terms in a permit will include review periods of no more than 5 years and may require prompt action(s) upon reaching specified conditions at any time during the review period.

(iii) Permit reviews. At no more than 5 years from the date a permit that exceeds 5 years is issued, and at least every 5 years thereafter, the permittee will compile, and submit to the Service, eagle fatality data or other pertinent information that is site-specific for the [project](#), as required by the permit. The Service will review this information, as well as information provided directly to the Service by independent monitors, to determine whether:

(A) The permittee is in compliance with the terms and conditions of the permit and has implemented all applicable adaptive management measures specified in the permit; and

(B) Eagle [take](#) does not exceed the amount authorized to occur within the period of review.

(iv) Actions to be taken based on the permit review.

(A) In consultation with the permittee, the Service will update fatality predictions, authorized [take](#) levels and compensatory mitigation for future years, taking into account the observed levels of [take](#) based on approved protocols for monitoring and estimating total [take](#), and, if applicable, accounting for changes in operations or permit conditions pursuant to the adaptive management measures specified in the permit or made pursuant to paragraphs (c)(7)(iv)(B) through (D) of this section.

(B) If authorized [take](#) levels for the period of review are exceeded in a manner or to a degree not addressed in the adaptive management conditions of the permit, based on the observed levels of [take](#) using approved protocols for monitoring and estimating total [take](#), the Service may require additional actions including but not limited to:

(1) Adding, removing, or adjusting avoidance, minimization, or compensatory mitigation measures;

(2) Modifying adaptive management conditions;

(3) Modifying monitoring requirements; and

(4) Suspending or revoking the permit in accordance with part 13 of this subchapter B.

(C) If the observed levels of [take](#), using approved protocols for monitoring and estimating total [take](#), are below the authorized [take](#) levels for the period of review, the Service will

proportionately revise the amount of compensatory mitigation required for the next period of review, including crediting excess compensatory mitigation already provided by applying it to the next period of review.

(D) Provided the permittee implements all required actions and remains compliant with the terms and conditions of the permit, no other action is required. However, with consent of the permittee, the Service may make additional changes to a permit, including appropriate modifications to avoidance and/or minimization measures or monitoring requirements. If measures are [adopted](#) that have been shown to be effective in reducing risk to eagles, appropriate adjustments will be made in fatality predictions, [take](#) estimates, and compensatory mitigation.

(v) Fees. For permits with terms longer than 5 years, an administration fee of \$8,000 will be assessed every 5 years for permit review.

(8) The Service may amend, suspend, or revoke a permit issued under this section if new information indicates that revised permit conditions are necessary, or that suspension or revocation is necessary, to safeguard local or regional eagle populations. This provision is in addition to the general criteria for amendment, suspension, and revocation of Federal permits set forth in §§ [13.23](#), [13.27](#), and [13.28](#) of this chapter.

(9) Notwithstanding the provisions of [§ 13.26](#) of this chapter, you remain responsible for all outstanding monitoring requirements and mitigation measures required under the terms of the permit for [take](#) that occurs prior to cancellation, expiration, suspension, or revocation of the permit.

(10) You must promptly notify the Service of any eagle(s) found injured or dead at the activity site, regardless of whether the injury or death resulted from your activity. The Service will determine the disposition of such eagles.

(11) You are responsible for ensuring that the permitted activity is in compliance with all Federal, Tribal, [State](#), and local laws and regulations applicable to eagles.

(d) Applying for an eagle take permit.

(1) You are advised to coordinate with the Service as early as possible for advice on whether a permit is needed and for technical assistance in assembling your permit application package. The Service may provide guidance on developing complete and adequate application materials and will determine when the application form and materials are ready for submission.

(2) Your application must consist of a completed application Form 3-200-71 and all required attachments. Send applications to the Regional Director of the Region in which the [take](#) would occur - Attention: Migratory Bird Permit Office. You can find the current addresses for the Regional Directors in [§ 2.2](#) of subchapter A of this chapter.

(3) Except as set forth in [paragraph \(d\)\(3\)\(ii\)](#) of this section, an applicant must coordinate with the Service to develop [project](#)-specific monitoring and survey protocols, [take](#) probability models, and any other applicable data quality standards, and include in the application all the data thereby obtained.

(i) If the Service has officially issued or endorsed, through rulemaking procedures, survey, modeling, or other data quality standards for the activity that will [take](#) eagles, you must follow them and include in your application all the data thereby obtained, unless the Service waives this requirement for your application.

(ii) Applications for eagle incidental [take](#) permits for wind facilities must include pre-construction eagle survey information collected according to the following standards, unless exceptional circumstances apply and survey requirements can be modified to accommodate those circumstances after consultation with, and written concurrence by, the Service:

(A) Surveys must consist of point-based recordings of bald eagle and golden eagle flight activity (minutes of flight) within a three-dimensional cylindrical plot (the sample plot). The radius of the sample plot is 2,625 feet (ft) (800 meters (m)), and the height above ground level must be either 656 ft (200 m) or 82 ft (25 m) above the maximum blade reach, whichever is greater.

(B) The duration of the survey for each visit to each sample plot must be at least 1 hour.

(C) Sampling must include at least 12 hours per sample plot per year for 2 or more years. Each sample plot must be sampled at least once per month, and the survey start time for a sampling period must be selected randomly from daylight hours, 1 unless the conditions in [paragraph \(d\)\(3\)\(ii\)\(F\)](#) of this section apply.

1 Daylight hours are defined as the hours between sunrise and sunset.

(D) Sampling design must be spatially representative of the [project](#) footprint, 2 and spatial coverage of sample plots must include at least 30 percent of the [project](#) footprint. Sample plot locations must be determined randomly, unless the conditions in [paragraph \(d\)\(3\)\(ii\)\(F\)](#) of this section apply.

2 The [project](#) footprint is the minimum-convex polygon that encompasses the wind-project area inclusive of the hazardous area around all turbines and any associated utility infrastructure, roads, etc.

(E) The permit application package must contain the following:

(1) Coordinates of each sample point in decimal degrees (specify projection/datum).

(2) The radius and height of each sample plot.

(3) The proportion of each three-dimensional sample plot that was observable from the sample point for each survey.

(4) Dates, times, and weather conditions for each survey, to include the time surveys at each sample point began and ended.

(5) Information for each survey on the number of eagles by species observed (both in flight and perched), and the amount of flight time (minutes) that each was in the sample plot area.

(6) The number of proposed turbines and their specifications, including brand/model, rotor diameter, hub height, and maximum blade reach (height), or the range of possible options.

(7) Coordinates of the proposed turbine locations in decimal degrees (specify projection/datum), including any alternate sites.

(F) Stratified-random sampling (a sample design that accounts for variation in eagle abundance by, for example, habitat, time of day, season) will often provide more robust, efficient sampling. Random sampling with respect to time of day, month, or [project](#) footprint can be waived if stratification is determined to be a preferable sampling strategy after consultation and approval in advance with the Service.

(iii) Application of the Service-endorsed data quality standards of paragraphs (d)(3)(i) and (ii) of this section may not be needed if:

- (A) The Service has data of sufficient quality to predict the likely risk to eagles;
- (B) Expediting the permit process will benefit eagles; or
- (C) The Service determines the risk to eagles from the activity is low enough relative to the status of the eagle population based on:
 - (1) Physiographic and biological factors of the [project](#) site; or
 - (2) The [project](#) design (*i.e.*, use of proven technology, micrositing, etc.).

(e) **Evaluation of applications.** In determining whether to issue a permit, we will evaluate:

- (1) Whether [take](#) is likely to occur based on the magnitude and nature of the impacts of the activity.
- (2) Whether the [take](#) is:
 - (i) Compatible with the preservation of the bald eagle and the golden eagle, including consideration of [indirect effects](#) and the [cumulative effects](#) of other permitted [take](#) and other additional factors affecting eagle populations;
 - (ii) Associated with the permanent loss of an important eagle use area;
 - (iii) Necessary to protect a legitimate interest in a particular locality; and
 - (iv) Associated with, but not the purpose of, the activity.
- (3) Whether the cumulative authorized [take](#), including the proposed [take](#), would exceed 5 percent of the [local area population](#).
- (4) Any available data indicating that unauthorized [take](#) may exceed 10 percent of the [local area population](#).
- (5) Whether the applicant has proposed all avoidance and minimization measures to reduce the [take](#) to the maximum degree [practicable](#) relative to the magnitude of the impacts to eagles.
- (6) Whether the applicant has proposed compensatory mitigation measures that comply with standards set forth under [paragraph \(c\)\(1\)](#) of this section to compensate for remaining unavoidable impacts after all appropriate and [practicable](#) avoidance and minimization measures have been applied.
- (7) Whether issuing the permit would preclude the Service from authorizing another [take](#) necessary to protect an interest of higher priority, according to the following prioritization order:
 - (i) Safety emergencies;
 - (ii) Increased need for traditionally practiced Native American tribal religious use that requires taking eagles from the wild;
 - (iii) Non-emergency activities [necessary to ensure public health and safety](#); and
 - (iv) Other interests.

(8) For [projects](#) that are already operational and have [taken](#) eagles without a permit, whether such past unpermitted eagle [take](#) has been resolved or is in the process of resolution with the Office of Law Enforcement through settlement or other appropriate means.

(9) Any additional factors that may be relevant to our decision whether to issue the permit, including, but not limited to, the cultural significance of a local eagle population.

(f) Required determinations. Before we issue a permit, we must find that:

(1) The direct and [indirect effects](#) of the [take](#) and required mitigation, together with the [cumulative effects](#) of other permitted [take](#) and additional factors affecting the eagle populations within the [eagle management unit](#) and the [local area population](#), are compatible with the preservation of bald eagles and golden eagles.

(2) The taking is necessary to protect an interest in a particular locality.

(3) The taking is associated with, but not the purpose of, the activity.

(4) The applicant has applied all appropriate and [practicable](#) avoidance and minimization measures to reduce impacts to eagles.

(5) The applicant has applied all appropriate and [practicable](#) compensatory mitigation measures, when required, pursuant to [paragraph \(c\)](#) of this section, to compensate for remaining unavoidable impacts after all appropriate and [practicable](#) avoidance and minimization measures have been applied.

(6) Issuance of the permit will not preclude issuance of another permit necessary to protect an interest of higher priority as set forth in [paragraph \(e\)\(7\)](#) of this section.

(7) Issuance of the permit will not interfere with an ongoing civil or criminal action concerning unpermitted past eagle [take](#) at the [project](#).

(g) We may deny issuance of a permit if we determine that [take](#) is not likely to occur.

(h) Permit duration. The duration of each permit issued under this section will be designated on its face and will be based on the duration of the proposed activities, the period of time for which [take](#) will occur, the level of impacts to eagles, and the nature and extent of mitigation measures incorporated into the terms and conditions of the permit. A permit for incidental [take](#) will not exceed 30 years.

(i) Applicants for eagle incidental [take](#) permits who submit a completed permit application by July 14, 2017 may elect to apply for coverage under the regulations that were in effect prior to January 17, 2017 provided that the permit application satisfies the permit application requirements of the regulations in effect prior to January 17, 2017. If the Service issues a permit to such applicants, all of the provisions and conditions of the regulations that were in effect prior to January 17, 2017 will apply.