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Dying for a Solution: Incidental Taking Under the Migratory Bird Treaty Act

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DYING FOR A SOLUTION: INCIDENTAL TAKING UNDER THE MIGRATORY BIRD TREATY ACT

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ABSTRACT

The almost century-old Migratory Bird Treaty Act ("MBTA") is straining to fulfill its statutory purpose of protecting migratory birds from the changing and growing threats of a modern industrial society. With approximately 600 million bird deaths per year from a host of anthropogenic activities and infrastructure, including alternative energy projects, oil and gas development, antennas, power lines and buildings, migratory bird populations are under stress that will increase significantly in the near future from a momentous growth in wind energy activity.

Since the 1970s, the Fish and Wildlife Service ("FWS") has attempted to reconcile the MBTA's conservation policy and strict liability taking prohibition, with the reality of growing bird deaths from taking incidental to industrial and other activities, and the lack of a broadly applicable program to permit incidental taking. To finesse a solution to this conundrum, the FWS has used its prosecutorial discretion to motivate compliance with various sets of voluntary conservation guidelines for certain industries, including wind energy, to reduce incidental taking and withhold prosecution of a cooperating party. The result has been the uneven enforcement of the MBTA's prohibitions, legal uncertainty for potential violators, lack of universal compliance with the voluntary guidelines, and steadily escalating bird deaths.

The goal of this Article is to encourage a meaningful dialogue that addresses the problem of rapidly growing anthropogenic threats to migratory birds protected by the MBTA. Specifically, how can existing law, policy, and practice be reshaped to provide for greater conservation of protected avian species while accommodating anthropogenic activities that

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kill birds, but are a vital part of our modern industrial society? Using wind energy development as a unique opportunity to formulate and implement a widely applicable solution to this problem, this Article explores the background, issues, and possible solutions to this question in three parts.

In the Introduction, this Article examines the history of the MBTA, and the past and present anthropogenic threats to migratory birds, specifically including the growing hazard from wind energy development. Part I of this Article reviews the relevant statutory, judicial, and regulatory authority establishing the applicability of the MBTA to incidental taking. Part II discusses the failure of current FWS enforcement practice to adequately and consistently prosecute violations for incidental taking, and to provide for the long-term conservation of MBTA-protected species by imposing mandatory provisions to mitigate incidental taking from various activities including wind energy projects. In Part III, this Article proposes a broadly applicable program to permit incidental taking under the MBTA, authorized by regulation and implemented through industry or activity-specific guidelines starting with the wind energy industry. The Article concludes by exploring future implementation of the incidental take permit program to other activities and infrastructure that cause incidental taking.

INTRODUCTION

It may be surprising that one of the nation's first wildlife laws, the almost century-old Migratory Bird Treaty Act of 1918 ("MBTA"),[1] is one that arguably continues to be the most unsettled of all the federal statutes that protect and regulate wildlife.[2] Deceptively succinct, under the MBTA

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[1] 16 U.S.C. §§ 703–711 (2006).
[2] The Lacey Act of 1900, 16 U.S.C. §§ 3371–3378, is commonly recognized as the nation's first wildlife conservation statute with a national scope. Robert S. Anderson, *The Lacey Act: America's Premier Weapon in the Fight Against Unlawful Wildlife Trafficking*, 16 PUB.

the Department of the Interior ("DOI"), through the U.S. Fish and Wildlife Service ("FWS"), administers a program that currently protects 1026 species of migratory birds that spend all or part of their lives in the United States, including iconic species such as the Sand Hill Crane, Northern Gannet, and Trumpeter Swan, as well as a host of ducks, warblers, plovers, gulls, shearwaters, chickadees, hummingbirds, and other species.[3]

History of the MBTA. The MBTA was enacted to implement a 1916 treaty with Great Britain,[4] acting on behalf of its then-province Canada, for the protection of birds that migrate between the two countries.[5] The MBTA was amended to implement later treaties between the United States and Mexico,[6] Japan,[7] and the former Soviet Union (now Russia).[8] The MBTA protects species that are native to the United States or its territories and belong to a family, group, or species covered by one of the four migratory bird conventions.[9]

LAND L. REV. 27, 29 (1995). The MBTA replaced the Weeks-McLean Migratory Bird Act, enacted in 1913, which was the first federal law to regulate the shooting of migratory birds. *A Guide to the Laws and Treaties of the United States for Protecting Migratory Birds*, U.S. FISH & WILDLIFE SERV., *available at* http://www.fws.gov/Migratorybirds/RegulationsPolicies/treatlaw.html. The Weeks-McLean Act was declared unconstitutional by two federal district courts and upheld by a third, but an appeal before the Supreme Court was dismissed as moot following the ratification of the Migratory Bird Treaty of 1916 and the enactment of the MBTA in 1918. DALE D. GOBLE & ERIC T. FREYFOGLE, WILDLIFE LAW CASES AND MATERIALS 459–60 (2010).

[3] *See* 50 C.F.R. § 10.13 (2013); *Birds Protected by the Migratory Bird Treaty Act*, U.S. FISH & WILDLIFE SERV., http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/mbtandx.html (last visited Dec. 11, 2013); 79 Fed. Reg. 65843 (Nov. 1, 2013), https://www.federalregistrar.gov/articles/2013/11/01/2013-26061/general-provisions-revised-list-of-migratory-birds.

[4] Convention Between the United States and Great Britain for the Protection of Migratory Birds, U.S.-Gr. Brit., Aug. 16, 1916, 39 Stat. 1702.

[5] *Digest of Federal Resource Laws of Interest to the U.S. Fish and Wildlife Service: Treaties List*, U.S. FISH & WILDLIFE SERV., http://www.fws.gov/laws/lawsdigest/treaty.html #MIGBIRDCAN (last visited Dec. 11, 2013).

[6] Convention between the United States of America and Mexico for the Protection of Migratory Birds and Game Mammals, U.S.-Mex., Feb. 7, 1936, 50 Stat. 1311. The MBTA was amended on June 20, 1936 to implement the treaty. 16 U.S.C. § 703 (2006).

[7] Convention Between the Government of the United States of America and the Government of Japan for the Protection of Migratory Birds and Birds in Danger of Extinction, and Their Environment, U.S.-Japan, Mar. 4, 1972, 25.3 U.S.T. 3329. The MBTA was amended on June 1, 1975 to implement the treaty. 16 U.S.C. § 703 (2006).

[8] Convention Between the United States of America and the Union of Soviet Socialist Republics Concerning the Conservation of Migratory Birds and Their Environment, U.S.-U.S.S.R., Nov. 26, 1976, 29.4 U.S.T. 4674. The MBTA was amended on November 8, 1978 to implement the treaty. 16 U.S.C. § 703 (2006).

[9] 50 C.F.R. § 10.13 (2013). Non-native human-introduced species that are covered by one or more of the conventions implemented by the MBTA are not protected, nor are species that are native but not covered by any of the four conventions. *See* John L. Trapp, *Bird*

The foundations of the 1916 Convention and the enabling MBTA were laid during the period of excessive exploitation of the nation's game and non-game birds during the late nineteenth and early twentieth centuries.[10] Fueled by the demand of a rapidly urbanizing United States, the widespread market hunting of waterfowl along the Eastern Seaboard was unchecked by regulations or any tinge of a conservation ethic, and was limited only by the skill of the market hunter, his supply of powder and shot, and the seasonable availability of waterfowl.[11] New technology speeded the commercial exploitation of seemingly inexhaustible populations of game birds such as the Passenger Pigeon. The westward extension of the railroads ferried hunters to distant nestings, refrigerated railcars preserved shipments of game to urban markets, and the telegraph quickly spread news to "pigeon netters" of where nestings of millions of adult birds and unfledged nestlings covering hundreds of square miles were located and available for killing.[12] Compounding market-driven exploitation was the demand

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Species of the United States and its Territories and Their Protection Under the Migratory Bird Treaty Act, U.S. FISH & WILDLIFE SERV. (Mar. 8, 2005), http://web.archive.org/web/20060902074933/http://www.fws.gov/migratorybirds/issues/nonnative/MBTA-Protected&NonprotectedSpecies.htm.

[10] *See* George Cameron Coggins & Sebastian T. Patti, *The Resurrection and Expansion of the Migratory Bird Treaty Act*, 50 U. COLO. L. REV. 165, 167–69 (1979). *See generally* PETER MATTHIESSEN, WILDLIFE IN AMERICA 157–82 (1987); CARL SAFINA, THE VIEW FROM LAZY POINT—A NATURAL YEAR IN AN UNNATURAL WORLD 184–87 (2011).

[11] GOBLE & FREYFOGLE, *supra* note 2, at 769 (quoting an excerpt from GUY A. BALDASSARRE & ERIC G. BOLEN, WATERFOWL ECOLOGY AND MANAGEMENT 517–20 (1994)).

[12] *Id.* at 28. One such nesting in 1878 at Petoskey, Michigan, was estimated to cover 750 square miles and include 136,000,000 birds. The award-winning author, Peter Matthiessen, described the killing that took place at this nesting as follows:

> [T]he predators, white, Indian, and animal, swarmed down upon the roosts from every direction. The recent invention of the telegraph had speeded the glad news into all the adjoining states, and there were literally thousands of hunter and trappers on hand, armed variously with net, fire, and shot, as well as with an assortment of homemade contrivances designed to perform the most heroic destruction in the shortest possible time. The area was laid waste. Hundred of thousands, indeed millions, of dead birds were shipped out at a wholesale price of fifteen to twenty-five cents a dozen, on the cars of the same railroads which, by opening the great eastern markets, were accommodating the exit of the bison. The season, commencing in April, was profitable for only a month, and by June the markets were glutted, the pigeons were scattered, and the hunters had largely departed, leaving behind a rancid wasteland of ground white with guano, of broken trees, nests, eggs, and blue-feathered, fly-blown forms too shattered to ship, of starving squabs, of maggots and silent fur-clawed and beaked prowlers.

MATTHIESSEN, *supra* note 10, at 159–60.

precipitated by ladies' fashion, which dictated that the well-dressed woman of the gilded age should wear elegant hats, gowns, capes, and parasols adorned with ornamental feathers from such exotic species as the roseate spoonbill, great white heron, and snowy egret.[13]

The scope of the slaughter led to the founding of the Audubon Society in 1886[14] by George Bird Grinnell,[15] and compelled conservationists such as Frank Chapman, the leading ornithologist in America, to champion the enactment of protective measures by the federal and state governments.[16] "[T]he framers of the MBTA were determined to put an end to the commercial trade in birds and their feathers that, by the early years of the twentieth century, had wreaked havoc on the populations of many native bird species."[17] The MBTA, as eventually enacted, "decreed that all migratory birds and their parts (including eggs, nests, and feathers) were fully protected" from exploitation.[18]

The MBTA has been remarkably successful in the abatement of over-exploitation from activities such as hunting and poaching.[19] For example, the Snowy Egret, once hunted extensively for its plumage, has rebounded due to the protections of the MBTA from dangerously low levels to an estimated current population of over 1.3 million individuals in the continental United States.[20] However, the numerous populations of bird species in the United States now face a far broader range of threats than posed by the market hunters and plumers of the late nineteenth and early twentieth centuries, most of which did not exist in that earlier era.[21]

Modern Threats to Birds. Today, all species of birds are far more likely to be killed by anthropogenic threats than the estimated fifteen

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[13] *See* DOUGLAS BRINKLEY, THE WILDERNESS WARRIOR: THEODORE ROOSEVELT AND THE CRUSADE FOR AMERICA 9–12 (2009).
[14] Jennifer Price, *Hats Off to Audubon*, AUDUBON MAG. (Dec. 2004), http://archive.audubonmagazine.org/features0412/hats.html.
[15] *See* BRINKLEY, *supra* note 13.
[16] *Id.* at 10–11.
[17] *A Guide to the Laws and Treaties of the United States for Protecting Migratory Birds*, U.S. FISH & WILDLIFE SERV., http://www.fws.gov/migratorybirds/RegulationsPolicies/treatlaw.html (last visited Dec. 11, 2013).
[18] *Id.*
[19] *See* Conrad A. Fjetland, *Possibilities for Expansion of the Migratory Bird Treaty Act for the Protection of Migratory Birds*, 40 NAT. RESOURCES J. 47, 48 (2000).
[20] *Snowy Egret*, NAT'L AUDUBON SOC'Y, http://birds.audubon.org/species/snoegr (follow "Conservation Status" tab) (last visited Dec. 11, 2013).
[21] *See* Fjetland, *supra* note 19, at 48–49; Umair Irfan, *Bats and Birds Face Serious Threats From Growth of Wind Energy*, N.Y. TIMES, Aug. 8, 2011, http://www.nytimes.com/cwire/2011/08/08/08climatewire-bats-and-birds-face-serious-threats-from-gro-10511.html.

million birds taken annually by hunters.[22] In 2002, the FWS *Migratory Bird Mortality Fact Sheet* identified the leading causes and estimated levels of mortality for the 10 to 20 billion birds that breed in the United States[23] (other than from habitat loss or degradation) to be collisions with building windows (estimated 97 to 976 million bird deaths per year), communications towers (4 to 5 million), high tension transmission and power lines (up to 174 million), electrocutions (tens of thousands), impacts with vehicles (60 million or more), pesticide poisoning (72 million), and wind turbine rotors (33,000).[24]

Recent research has more precisely estimated the levels of mortality in the United States from some of these anthropogenic causes.[25] Scientific studies have concluded that strikes with building windows cause 100 million to 1 billion bird deaths per year,[26] collisions with communications towers kill approximately 6.6 million birds per year,[27] and oil field production "skim pits" and wastewater disposal facilities kill 500,000 to 1 million birds annually.[28] Another study found that a bird is far more likely to be killed by a free-ranging domestic or feral house cat than any other "anthropogenic" threat.[29] Finally, a non-scientific investigation found

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[22] David Sibley, *Causes of Bird Mortality*, SIBLEY GUIDES (Jan. 15, 2010), http://www.sibleyguides.com/conservation/causes-of-bird-mortality (last updated Nov. 18, 2010).

[23] *Migratory Bird Mortality*: *Many Human-Caused Threats Afflict our Bird Populations*, U.S. FISH & WILDLIFE SERV. (Jan. 2002) [hereinafter *Migratory Bird Mortality*], *available at* http://www.fws.gov/birds/Mortality-Fact-Sheet.pdf; John L. Trapp, *How Many Birds Are There?*, BIRDS ETCETERA (July 23, 2002, 9:19 PM), http://birdstuff.blogspot.com/2002/07/how-many-birds-are-there.html.

[24] *Migratory Bird Mortality*, *supra* note 23.

[25] *See, e.g.*, Sibley, *supra* note 22.

[26] Daniel Klem, Jr., *Avian Mortality at Windows: The Second Largest Human Source of Bird Mortality on Earth*, PROCEEDINGS OF THE FOURTH INT'L PARTNERS IN FLIGHT CONF.: TUNDRA TO TROPICS 244, 246 (2009), *available at* http://training.fws.gov/CSP/Resources/mig_birds/handouts/avian_mortality_at_windows.pdf.

[27] Travis Longcore et al., An *Estimate of Avian Mortality at Communication Towers in the United States and Canada*, PLOS ONE, at 12 (Apr. 2012), *available at* http://www.plosone.org/article/info:doi/10.1371/journal.pone.0034025.

[28] *Migratory Bird Mortality in Oilfield Wastewater Disposal Facilities*, U.S. FISH & WILDLIFE SERV. (May 2009), *available at* http://www.fws.gov/mountain-prairie/contaminants/documents/COWDFBirdMortality.pdf.

[29] Scott R. Loss et al., *The Impact of Free-Ranging Domestic Cats on Wildlife of the United States*, NATURE COMM. Jan. 29, 2013, at 1, *available at* http://www.abcbirds.org/abcprograms/policy/cats/pdf/Loss_et_al_2013.pdf. Based on a systematic review of studies that estimated predation rates of owned and unowned cats, the authors of this study estimated that free-ranging house cats kill 1.4–3.7 billion birds annually across the contiguous United States (excluding Alaska and Hawaii). Unowned cats, as opposed to owned pets, cause the majority (~69%) of this mortality. The authors' findings suggest that free-ranging cats

that open PVC pipes used to mark many of the 3.4 million mining claims, mainly on federal public lands in the twelve western states, pose a significant risk to birds that become entrapped in their narrow smooth interiors.[30] This seemingly innocuous threat potentially kills as many as 10 to 20 million birds per year.[31]

The Special Case of Wind Energy. Wind energy development and all that it entails—turbines with rotors the size of airliner wings, high-tension power transmission lines, buildings, roads, fences and other structures—is possibly the largest influx of new infrastructure on a national scale since the construction of the interstate highway system.[32] Concern has been growing about bird deaths from the development and operation of wind energy projects because studies and environmental reviews indicate that these projects are a rapidly growing source of avian mortality.[33] In 2009, the FWS estimated that 440,000 birds were killed annually by wind turbines located in the United States.[34] A more recent analysis of available fatality monitoring reports from wind energy projects throughout North America estimated there were 573,000 bird deaths in 2012.[35] In 2013 the FWS forecast that bird deaths from wind energy operations will exceed one million by 2030.[36] Bird deaths at wind energy projects impact many species that are protected by the MBTA.[37]

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cause substantially greater wildlife mortality than previously thought and are likely the single greatest source of anthropogenic mortality for birds in the United States. *Id.* at 2.

[30] Rachel Nuwer, *Mine Markers Threaten Birds Out West*, N.Y. TIMES (Apr. 26, 2012, 7:39 AM), http://green.blogs.nytimes.com/2012/04/26/a-haven-that-proves-deadly-for-birds.

[31] *Id.*

[32] *See, e.g.*, *Big Wind Turbines Require Infrastructure Upgrades*, NAT'L RENEWABLE ENERGY LAB., http://www.nrel.gov/continuum/utility_scale/big_wind.cfm (last updated Sept. 26, 2012).

[33] *See, e.g.*, Robin Webster & Freya Roberts, *Bird Death and Wind Turbines: A Look at the Evidence*, THE CARBON BRIEF (Apr. 10, 2013, 4:30 PM), http://www.carbonbrief.org/blog/2013/04/wind-farms-and-birds.

[34] Albert M. Manville, II, *Towers, Turbines, Power Lines, and Buildings—Steps Being Taken by the U.S. Fish and Wildlife Service to Avoid or Minimize Take of Migratory Birds at These Structures*, PROCEEDINGS OF THE FOURTH INT'L PARTNERS IN FLIGHT CONF.: TUNDRA TO TROPICS 262, 268 (2008), *available at* http://www.pwrc.usgs.gov/pif/pubs/McAllenProc/articles/PIF09_Anthropogenic%20Impacts/Manville_PIF09.pdf.

[35] K. Shawn Smallwood, *Comparing Bird and Bat Fatality-Rate Estimates Among North American Wind-Energy Projects*, 37 WILDLIFE SOC'Y BULL. Mar. 2013, at 19, 26 (this estimate included 83,000 raptor fatalities).

[36] *Wind Power Could Kill Millions of Birds Per Year by 2030*, AM. BIRD CONSERVANCY (Feb. 2, 2011), http://www.abcbirds.org/newsandreports/releases/110202.html.

[37] *See, e.g.*, Thomas H. Kunz et al., *Assessing Impacts of Wind-Energy Development on Nocturnally Active Birds and Bats: A Guidance Document*, 71 J. WILDLIFE MGMT. 2449, 2450 (2007), *available at* http://www.nationalwind.org/assets/publications/Nocturnal_MM_Final-JWM.pdf.

Birds are killed by both the direct and indirect impacts of wind energy generation activities.[38] Direct impacts include deaths from collisions with rotating turbine blades and from "barotraumas," the apparent effect of sudden changes in air pressure from wind wake turbulence and blade tip vortices that results in collapsed lungs, often with no sign of blunt force trauma.[39] Collisions with towers, nacelles, meteorological tower guy wires, power lines, and the associated infrastructures can also kill birds, and "bird unfriendly" wiring can cause death by electrocution.[40] Significant indirect impacts include habitat fragmentation, the "barrier effect," and disturbance and disruption that prevent breeding and alter behavior.[41] Habitat fragmentation is of particular concern for grassland songbirds and "prairie grouse" species.[42] Noise from turbine blades can also adversely affect habitat by masking birds' communication and other biologically significant sounds, as well as from disturbance and acoustical fragmentation.[43] Finally, the cumulative effects of the various indirect impacts, and of the direct and indirect effects to normal mortality, will all increase as the wind industry expands.[44]

Although this Article proposes a broadly applicable solution to the problem of incidental taking by many anthropogenic threats, it focuses on the development and operation of wind energy projects for two reasons. First, it is the official policy of the Obama administration that wind energy is a key component of developing a mix of renewable energy generation sources, especially on public lands and certain offshore locations.[45] The commitment to this policy was first evidenced by the growth of installed wind power capacity from 20,000 MW in 2008 to over 60,000 MW at the end of 2012.[46] Further, a 2008 Department of Energy report calls for the

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[38] *See* Allan L. Drewitt & Rowena H. W. Langston, *Assessing the Impacts of Wind Farms on Birds*, 148 IBIS 29, 30–34 (2006).

[39] U.S. FISH & WILDLIFE SERV., DRAFT LAND-BASED WIND ENERGY GUIDELINES 9 (Feb. 2011), *available at* http://www.fws.gov/windenergy/docs/Final_Wind_Energy_Guidelines_2_8_11_CLEAN.pdf, *replaced by* U.S. FISH & WILDLIFE SERV., FINAL LAND-BASED WIND ENERGY GUIDELINES at 8 (Mar. 2012) [hereinafter FINAL WIND ENERGY GUIDELINES], *available at* http://www.fws.gov/windenergy/docs/WEG_final.pdf (emphasis added).

[40] Manville, *supra* note 34, at 269.

[41] *Id.*; FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 9–12.

[42] Manville, *supra* note 34, at 269–70.

[43] FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 11.

[44] Manville, *supra* note 34, at 269–70.

[45] *See* THE WHITE HOUSE, BLUEPRINT FOR A SECURE ENERGY FUTURE 32–36 (Mar. 30, 2011), *available at* http://www.whitehouse.gov/sites/default/files/blueprint_secure_energy_future.pdf.

[46] *See AWEA U.S. Wind Industry Annual Market Report Year Ending 2012 Executive Summary*, AM. WIND ENERGY ASS'N (2013), *available at* http://awea.files.cms-plus.com

United States to source twenty percent of domestic electricity from wind power by 2030.[47] The report estimates that achieving this goal will require a total of 305 gigawatts (305,000 MW) of installed land-based and offshore wind power capacity by 2030,[48] a fivefold increase from current capacity. Wind energy growth is also being driven by the adoption of renewable energy portfolio standards by thirty states and the District of Columbia, and renewable energy goals from an additional seven states.[49]

Second, even though the number of bird deaths from wind energy activities is currently small in comparison to other anthropogenic causes of mortality, as a new national industry it presents a unique opportunity to formulate and implement a system of planning, approval, oversight, and enforcement.[50] This system could, during the developmental phase of the wind industry and associated infrastructure, both improve the conservation of MBTA-protected species and at the same time provide legal certainty regarding liability for the inevitable incidental taking.[51] Once refined, such a system could be adapted and used to minimize incidental taking and provide legal certainty from other activities and infrastructure, such as oil and gas extraction, electricity transmission, communications and other towers, and window glass in buildings.[52]

The Issue and Outline of this Article. The available data for all sources of avian mortality, including wind energy activities, supports the conclusion that the avian resources of the United States currently suffer from an anthropogenic predation of approximately 600 million birds per year, or approximately 3% to 6% of the annual breeding population.[53] This

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/images/AWEA_USWindIndustryAnnualMarketReport2012_ExecutiveSummary(2).pdf.

[47] *See generally* U.S. DEP'T OF ENERGY, 20% WIND ENERGY BY 2030: INCREASING WIND ENERGY'S CONTRIBUTION TO U.S. ELECTRICITY SUPPLY 1–21 (2008), *available at* http://www.nrel.gov/docs/fy08osti/41869.pdf.

[48] *Id.* at 7, 10.

[49] *Most States Have Renewable Portfolio Standards*, U.S. ENERGY INFO. ADMIN. (Feb. 3, 2012), http://www.eia.gov/todayinenergy/detail.cfm?id=4850.

[50] *See, e.g.*, J.B. Ruhl, *Harmonizing Commercial Wind Power and the Endangered Species Act Through Administrative Reform*, 65 VAND. L. REV. 1769, 1770–76 (2012).

[51] The discussion of how to adapt other existing federal wildlife protection laws to the reality of a rapidly developing wind energy industry is also taking place. *See, e.g.*, *id.* at 1796.

[52] *See id.* at 1794, 1798–99.

[53] Calculated using a consensus estimate of a breeding population of between 10–20 billion birds in the U.S. (*see supra* note 23), and the averages of reliable mortality estimates for the major anthropogenic causes of avian mortality discussed above (*see supra* notes 24–31) totaling approximately 600 million bird deaths per year, excluding predation from domestic and feral cats. This estimate also does not include deaths from significant one-time natural and man-caused events. For example, a large oil spill such as the 2010 Deepwater Horizon accident can cause significant mortality from both immediate and long-term

significant level of mortality will increase from the anticipated growth of each of the anthropogenic activities that cause bird deaths as well as the cumulative effects of all activities on avian populations.[54]

The United States has a long-standing national interest in protecting and conserving migratory birds.[55] Given this well-established public policy and the significant bird mortalities caused by anthropogenic activities, how can existing law, policy, and practice be reshaped to provide for greater protection and conservation of protected avian species while accommodating those anthropogenic activities that are a vital part of our modern industrial society but that also cause bird deaths? With specific regard to wind energy activities, how can the federal policy of increasing wind energy generation capacity fivefold by 2030 be achieved without compromising the policy and law that protects migratory birds?

This Article explores and discusses the significant legal, policy and practical issues raised by these questions in three parts:

In Part I, this Article reviews the legal underpinnings, statutory provisions, and judicial interpretations of the MBTA to determine whether it prohibits "incidental taking" from conduct that is not intended to harm protected species. The Article concludes that the weight and trend of judicial authority hold that incidental takings are, within certain parameters, a violation of the MBTA.

In Part II, this Article explores enforcement of the MBTA for incidental taking, and finds that the FWS's current "carrot and stick" practice of incentivizing compliance with non-regulatory "guidelines" intended to mitigate incidental taking with vague assurances of prosecutorial discretion results in an uneven and inconsistent enforcement of the law. This Article questions whether the enforcement practice itself violates several provisions of administrative and environmental law, and concludes that such practice is a failure on two counts: first, it fails to adequately enforce the MBTA in a consistent manner by not prosecuting numerous violations for incidental taking. Second, it fails to provide for the long-term

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impacts to migratory birds that may affect ecosystems far removed from the area directly affected by the spill. *See, e.g.*, Jessica R. Henkel et al., *Large-Scale Impacts of the* Deepwater Horizon *Oil Spill: Can Local Disturbance Affect Distant Ecosystems Through Migratory Shorebirds?*, 62 BIOSCIENCE 676, 676–85 (July 2012), *available at* http://tulane.edu/news/newwave/upload/bio201262711_Forum_Henkel.pdf.

[54] U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-05-906, WIND POWER: IMPACTS ON WILDLIFE AND GOVERNMENT RESPONSIBILITIES FOR REGULATING DEVELOPMENT AND PROTECTING WILDLIFE, 43 (2005), *available at* http://www.gao.gov/new.items/d05906.pdf.

[55] *See* Missouri v. Holland, 252 U.S. 416, 435 (1920) ("Here a national interest of very nearly the first magnitude is involved."); United States v. FMC Corp., 572 F.2d 902, 908 (2d Cir. 1978) ("Congress recognized the important public policy behind protecting migratory birds.").

conservation of protected species by allowing the development and operation of activities in ways that increase incidental taking instead of implementing mandatory measures to help mitigate incidental taking at the project, landscape and population scales.

In Part III, recognizing that some level of incidental taking of MBTA-protected species from anthropogenic threats is inevitable, this Article discusses possible judicial, legislative, and agency actions to address the problems of uneven and inadequate enforcement of the MBTA regarding incidental taking from anthropogenic causes, notably wind energy development. After reviewing other incidental take permit programs, the Article concludes that a comprehensive incidental take permitting program implemented by regulation under the MBTA would best fulfill the dual policies of avian protection and wind energy development. The Article suggests certain provisions for the proposed regulation and industry-specific guidelines, and discusses the future application of the permit program to other activities and infrastructure that cause significant levels of bird deaths to mitigate such incidental taking.

Finally, before proceeding further, because the term "incidental taking" is not defined in the MBTA, it is important to establish a working definition for the purposes of this Article. Therefore, as used in this Article, the term "incidental taking" (or "incidental take" or "incidental takes," as the context requires) means "any taking [as defined in 50 C.F.R. § 10.12,[56]] if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity."[57] This definition is based on the definition of "incidental taking" under the FWS's regulations[58] for the Endangered Species Act ("ESA"),[59] but with a narrower definition of "taking" than provided in the ESA.[60]

I. BACKGROUND, STATUTORY AND REGULATORY PROVISIONS, AND JUDICIAL INTERPRETATION

A. The Migratory Bird Conventions

In 1916, the United States entered into the treaty with Great Britain on behalf of Canada to save migratory birds protected by the

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[56] 50 C.F.R. § 10.12 (2013) ("Take means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.").
[57] 50 C.F.R. § 17.3 (2012).
[58] *See id.* § 17.4 ("Incidental taking means any taking otherwise prohibited, if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.").
[59] 16 U.S.C. §§ 1531–1542 (2012).
[60] 16 U.S.C. § 1532(19) ("The term 'take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.").

treaty from "indiscriminate slaughter."[61] This 1916 treaty created a uniform system of protection for certain species of birds that migrate between the United States and Canada in order to assure the preservation of species. Its provisions allow hunting of certain otherwise protected species but set certain dates for closed seasons on migratory birds, prohibit the hunting of insectivorous birds, and allow the killing of birds under permit when injurious to agriculture.[62]

Later treaties with Mexico, Japan, and the U.S.S.R. between 1936 and 1976 are notable for the expansion of species protected and actions both prohibited and mandated, including provisions for the conservation of habitat and the prevention and abatement of pollution or detrimental alteration of the environment.[63]

Commentators have concluded the provisions of the conventions indicate that the treaty negotiators contemplated that the dominant purpose of the treaties was the general protection of listed species. This is evidenced by the inclusions of regulatory provisions controlling both hunting activities and non-hunting threats to species' populations.[64]

B. The Migratory Bird Treaty Act

1. Statutory Provisions

The MBTA begins with the following expansive declaration in Section 703(a):

> Unless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not

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[61] *See* Convention Between the United States and Great Britain for the Protection of Migratory Birds, *supra* note 4, at preamble.
[62] *Id.* at art. II.
[63] *See* Coggins & Patti, *supra* note 10, at 171–74.
[64] *Id.* at 174.

> manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof . . . .[65]

The MBTA is an unusual statute in two respects. First, it prohibits all taking of protected species, and then only allows taking as permitted by regulations promulgated by the enforcing agency.[66] Second, the MBTA articulates a strict liability standard for misdemeanor violations, which a large majority of circuit courts have upheld.[67] As stated by the Eighth Circuit, "[i]t has been long held that under the [MBTA] it is not necessary that the government prove that a defendant violated its provisions with guilty knowledge or specific intent to commit the violation."[68]

The penalties for a misdemeanor violation of the MBTA are found in Section 707(a):

> Except as otherwise provided in this section, any person, association, partnership, or corporation who shall violate any provisions of said conventions or of this subchapter, or

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[65] 16 U.S.C. § 703(a) (2012).

[66] GOBLE & FREYFOGLE, *supra* note 2, at 774; *Migratory Bird Permits*, U.S. FISH & WILDLIFE SERV. (Aug. 6, 2003) [hereinafter *Migratory Bird Permits*], *available at* http://www.fws.gov/policy/724fw2.pdf. FWS regulations prohibit all non-hunting intentional taking of protected species without a permit. 50 C.F.R. § 21.11 (2012). FWS regulations regulate the species that may be hunted, the permissible methods, places, and times for hunting, and bag limits which are then generally enforced by state wildlife agencies. 50 C.F.R. §§ 20.1, 20.11, 20.21–20.24 (2012). Permits are available for the intentional and incidental taking of protected species for the following activities: importation or exportation, 50 C.F.R. § 21.21 (2012); scientific banding or marking of specimens (from the U.S. Geological Survey), 50 C.F.R. § 21.22 (2012); scientific collecting, 50 C.F.R. § 21.23 (2012); taxidermy, 50 C.F.R. § 21.24 (2012); sale or disposal of captive-reared species, 50 C.F.R. § 21.25 (2012); Canada goose pollution management, 50 C.F.R. § 21.26 (2012); falconry, 50 C.F.R. § 21.29 (2012); raptor propagation, 50 C.F.R. § 21.30 (2012); rehabilitation, 50 C.F.R. § 21.31 (2012); depredation to prevent damage to personal property, agricultural interests, and natural resources, and for health and human safety, 50 C.F.R. § 21.41 (2012). Permits are also available for "special purpose activities" upon a showing of "compelling justification," and for the use of migratory birds in educational exhibits. 50 C.F.R. § 21.27 (2012). *See generally* Larry Martin Corcoran & Elinor Colbourn, *Shocked, Crushed and Poisoned: Criminal Enforcement in Non-Hunting Cases Under the Migratory Bird Treaties*, 77 DENV. U. L. REV. 359, 373–76 (1999) (describing the permitted exceptions for taking protected bird species).

[67] *See, e.g.*, 16 U.S.C. § 703(a); United States v. Engler, 806 F.2d 425, 431 (3d Cir. 1986), *cert. denied*, 481 U.S. 1019 (1987); Rogers v. United States, 367 F.2d 998, 1001 (8th Cir. 1966), *cert. denied*, 386 U.S. 943 (1967); United States v. Morgan, 311 F.3d 611, 616 (5th Cir. 2002); United States v. Corrow, 119 F.3d 796, 806 (10th Cir. 1997); United States v. Smith, 29 F.3d 270, 274 (7th Cir. 1994); United States v. Chandler, 753 F.2d 360, 363 (4th Cir. 1985); United States v. Catlett, 747 F.2d 1102, 1105 (6th Cir. 1984); United States v. FMC Corp., 572 F.2d 902, 904, 907 (2d Cir. 1978); United States v. Wood, 437 F.2d 91 (9th Cir. 1971).

[68] *Rogers*, 367 F.2d at 1001.

> who shall violate or fail to comply with any regulation made pursuant to this subchapter shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not more than $15,000 or be imprisoned not more than six months, or both.[69]

Section 707(b), which provides for felony penalties,[70] requires that the government prove a defendant knowingly acted in violation of the MBTA.[71] Incidental taking, by its nature, is an "unknowing" violation and therefore subject to the strict liability standards of Section 703(a) and the lesser misdemeanor penalties provided in Section 707(a).[72]

2. Regulations

Besides specifying permissible taking under Section 703(a), the regulations issued by the enforcing agency provide insight into the meaning of terms used in Section 703(a).[73] Specifically, FWS regulations define "migratory bird" is as follows:

> *Migratory bird* means any bird, whatever its origin and whether or not raised in captivity, which belongs to a species listed in § 10.13, or which is a mutation or a hybrid of any such species, including any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof.[74]

The FWS regulations define "take" as follows: "[*t*]*ake* means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect."[75]

3. Judicial Interpretations

Historically, criminal prosecutions under the MBTA focused on illegal hunting, poaching, and possessing of protected birds, which were

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[69] 16 U.S.C. § 707(a) (2012).
[70] 16 U.S.C. § 707(b) (2012) (providing for fines of up to $2,000 or imprisonment of up to two years, or both).
[71] United States v. Pitrone, 115 F.3d 1, 6 (1st Cir. 1997).
[72] *Id.* at 5.
[73] 16 U.S.C. § 707(b) (2012).
[74] 50 C.F.R. § 10.12 (2013).
[75] *Id.*

the initial problems addressed by the MBTA and the Conventions.[76] However, in the early 1970s, the federal government began to prosecute cases alleging violations of the MBTA for taking incidental to activities other than hunting, poaching, and other violations specifically enumerated in Section 703.[77] In *Andrus v. Allard* the Supreme Court stated, "[t]he fundamental prohibition in the Migratory Bird Treaty Act is couched in language as expansive as [the sweeping prohibition] employed in the Eagle Protection Act."[78] Notwithstanding its broad view of the scope of the MBTA's prohibitions, the Supreme Court has not been called upon to resolve the issue of whether incidental taking violates Section 703(a) of the MBTA.[79]

Federal judges have struggled with the question of whether to apply the MBTA to incidental taking and, if so applied, determining the scope of prohibited activity.[80] Because science is not a requirement for a misdemeanor conviction under Section 703(a) of the MBTA, courts have focused on the due process requirements for a conviction under the strict liability standard of Section 703(a), as well as the interpretation of the terms "take" and "kill" and the preceding phrase "by any means or in any manner."[81]

In the Federal Circuit Courts there is a split of authorities, with rulings in the Second and Tenth Circuits broadly establishing that incidental taking is a violation of the MBTA,[82] and the Eighth and Ninth Circuits finding that incidental taking is not a violation for certain types of activities.[83]

a. Second and Tenth Circuits

The first appellate decision addressing the MBTA's applicability to incidental taking was the 1978 ruling in *United States v. FMC Corp.*[84] In this case, the Second Circuit upheld a conviction for the killing of migratory

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[76] *See* Corcoran & Colbourn, *supra* note 66, at 385–86.
[77] See Coggins & Patti, *supra* note 10, at 183–85, for a history of early prosecutions of oil production operators for the killing of migratory waterfowl in uncovered oil sump pits under the MBTA.
[78] Andrus v. Allard, 444 U.S. 51, 60 (1979).
[79] *See* Anthony B. Cavender et al., *New Ruling Highlights Split on Strict Liability for Incidental 'Taking' of Migratory Birds*, PILLSBURY LAW, Jan. 30, 2012, at 2.
[80] *See* United States v. Pitrone, 115 F.3d 1, 6 (1st Cir. 1997).
[81] 16 U.S.C. § 703(a) (2012).
[82] United States v. FMC Corp., 572 F.2d 902, 902 (2d Cir. 1978); United States v. Apollo Energies Inc., 611 F.3d 679, 680 (10th Cir. 2010).
[83] Newton Cnty. Wildlife Ass'n v. United States Forest Serv., 113 F.3d 110, 115 (8th Cir. 1997); Seattle Audubon Soc'y v. Evans, 952 F.2d 297, 303 (9th Cir. 1991).
[84] Scott W. Brunner, *The Prosecutor's Vulture: Inconsistent MBTA Prosecution, Its Clash With Wind Farms, and How to Fix It*, 3 SEATTLE J. OF ENVTL. LAW 1, 14–15 (2012).

birds where the defendant manufactured pesticides and had unknowingly allowed lethal levels of a pesticide to accumulate in a waste water storage pond where migratory birds landed and died of pesticide poisoning.[85] In extending the scope of prohibited taking to those incidental to an industrial activity, the court found that the defendant both engaged in the affirmative act of manufacturing a highly toxic pesticide and failed to act to prevent the dangerous chemical from accumulating in the pond.[86] The court reasoned that, because the defendant was engaged in an "extrahazardous" activity, it was appropriate to impose strict liability for the killings under the MBTA even though the defendant was unaware of the "lethal-to-birds quality of the water in its pond."[87] Further, the Second Circuit noted that the disciplined use of prosecutorial discretion would address the problem of the MBTA's possible overbroad application to killings from everyday activities that "would offend reason and common sense."[88]

The most recent decision on the issue, *United States v. Apollo Energies*, is also the strongest authority in support of the proposition that Section 703(a) applies to incidental taking.[89] In *Apollo Energies*, the Tenth Circuit upheld the convictions of two oil and gas producers, Apollo Energies and Walker (doing business as Red Cedar Oil), for the deaths of migratory birds caught in the exhaust pipes of oil production equipment known as "heater-treaters."[90] On appeal, the defendants raised due process arguments that the MBTA was unconstitutional both facially and as applied to their case.[91] First, the defendants argued that the MBTA is unconstitutionally vague because it provides inadequate notice of what conduct is a violation of the MBTA because of the multiplicity of actions that are criminalized.[92] Second, the defendants argued that the "innocuous conduct" of predicate acts that may lead to a violation does not provide "fair notice" of what constitutes criminal conduct, and third, that the lower court erred in applying these required due process principals to their cases.[93]

Acknowledging that the "void-for-vagueness doctrine" requires definition of the criminal offense with sufficient definiteness so that an ordinary person can understand what conduct is prohibited, the court

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[85] *FMC Corp.*, 572 F.2d at 904–05.
[86] *Id.* at 907.
[87] *Id.* at 902.
[88] *Id.* at 905.
[89] United States v. Apollo Energies, Inc., 611 F.3d 679, 680 (10th Cir. 2010).
[90] *Id.* at 682.
[91] *Id.*
[92] *Id.* at 683.
[93] *Id.* at 688.

stated: "The MBTA is not unconstitutionally vague. It criminalizes a range of conduct that will lead to the death or captivity of protected migratory birds, including to 'pursue, hunt, take, capture, [and] kill. . . .' 16 U.S.C. § 703. The actions criminalized by the MBTA may be legion, but they are not vague."[94]

Regarding the defendants' "fair notice" argument, which contended that imposition of a strict liability standard would criminalize apparently innocent predicate acts such as driving a car, the court framed the question as one of "notice or causation," stating that such inquiries "go to the heart of due process constraints on criminal statutes."[95] Approving the district court's holding that the defendants must have "proximately caused" the MBTA violation,[96] and relying on Supreme Court cases holding that foreseeability is central to the due process constraints on criminal statutes, the *Apollo Energies* court held that "the MBTA requires a defendant to proximately cause the statute's violation for the statute to pass constitutional muster."[97] In so holding, the Tenth Circuit cautioned that, "[w]hen the MBTA is stretched to criminalize predicate acts that could not have been reasonably foreseen to result in a proscribed effect on birds, the statute reaches its constitutional breaking point."[98]

The court was careful to clarify the type of "foreseeability" that must be found for a conviction: it was not the defendants' knowledge of the MBTA's provisions, but the *knowledge* the defendants had or should have had that their activity could cause birds' death.[99]

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[94] *Id.* at 688–89.
[95] *Apollo Energies Inc.*, 611 F.3d at 689.
[96] *Id.* at 690 (noting the district court's heavy reliance on *United States v. Moon Lake Elec. Ass'n*, 45 F. Supp. 2d 1070 (D.Colo. 1999)). In *Moon Lake Elec. Ass'n*, Judge Babcock, in an extensively detailed and well-written opinion considering the liability of a rural electrical utility under the MBTA for incidental taking caused by high-voltage overhead power lines, addressed the issues of statutory interpretation, legislative history, contrary precedent from the Eighth and Ninth Circuits, *mens rea*, due process, "absurd results," and prosecutorial discretion. *Moon Lake Elec. Ass'n*, 45 F. Supp. 2d at 1072, 1084, 1088. In finding the utility liable for the incidental taking, Judge Babcock concluded that proximate cause is an "important and inherent limiting feature" of the MBTA, and that liability would attach where the injury "might be reasonably anticipated or foreseen as a natural consequence of the wrongful act." *Id.* at 1085 (internal citations omitted).
[97] *Apollo Energies, Inc.*, 611 F.3d at 690 ("Proximate causation is not a concept susceptible of precise definition. . . . We have recently said that proximate causation 'normally eliminates the bizarre,' and have noted its 'functionally equivalent' alternative characterizations in terms of foreseeability and duty." (quoting Babbitt v. Sweet Home Chapter of Cmtys. for a Great Or., 515 U.S. 687, 713 (1995) (O'Connor, J., concurring))).
[98] *Apollo Energies, Inc.*, 611 F.3d at 690.
[99] *Id.* at 691.

Applying these due process principals to the defendants' convictions, the Tenth Circuit upheld the conviction of defendant Apollo Energies, and one of the convictions of defendant Red Cedar Oil, based on evidence that the FWS had given them notice of the possibility that protected birds could enter and become trapped in unscreened exhaust pipes and other openings of the heater-treaters.[100] The court held that it was therefore reasonably foreseeable to Apollo that protected birds could be killed in unscreened heater-treaters.[101] The Tenth Circuit vacated Red Cedar's second conviction based on the lack of evidence that, prior to the FWS notice, it had any knowledge that would lead a reasonable person to conclude that the heater-treaters would be the cause of migratory bird deaths.[102]

To summarize the *Apollo Energies* decision, the court easily found that the MBTA is more than adequately specific in its statutory prohibition of a "range of conduct that will lead to the death or captivity of protected migratory birds."[103] Furthermore, the court concluded that if it is reasonably foreseeable to a defendant that its conduct has the potential to cause the death or captivity of a migratory bird, then the defendant can be held strictly liable for the taking of such birds actually caused by the conduct.[104] Applying this straightforward proposition, the court found that the defendants Apollo and Red Cedar had the requisite knowledge to foresee the potential bird deaths from their conduct because of their knowledge from the FWS notices warning of just such an outcome.[105] The *Apollo Energies* court's use of notice as a standard for determining what consequence are reasonablely foreseeable has been incorporated into guidelines for federal prosecution.[106]

b. Eighth and Ninth Circuits

The Eighth and Ninth Circuits have declined to extend the scope of the MBTA to include incidental taking.[107] These courts have found that the

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[100] *Id.* at 682, 689–91.
[101] *Id.* at 691.
[102] *Id.*
[103] *Id.* at 688–89.
[104] *Apollo Energies, Inc.*, 611 F.3d at 686, 689–90.
[105] *Id.* at 682–83, 691.
[106] *See* Robert S. Anderson & Jill Birchell, *Prosecuting Industrial Takings of Protected Avian Wildlife*, U.S. ATTY'S BULL., July 2011, at 65, 75, *available at* http://www.justice.gov/ej/docs/USA_Bulletin_072011.pdf (stating that "the government's approach to industrial avian takings" is to "provide notice to industry of the risks posed by facilities and equipment").
[107] Newton Cnty Wildlife Ass'n v. U.S. Forest Serv., 113 F.3d 110, 115 (8th Cir. 1997); Seattle Audubon Soc'y v. Evans, 952 F.2d 297, 302–03 (9th Cir. 1991).

MBTA's language and legislative history do not support an expansion of liability for taking that is caused an activity that is not expressly prohibited by the statute, such as hunting, shooting, trapping, and so on.[108]

In *Newton County Wildlife Ass'n*,[109] the Eighth Circuit considered whether the Forest Service's final action approving timber sales, which was subject to review under the National Forest Management Act, was arbitrary, capricious, or contrary to law because the agency ignored or violated its obligations under the MBTA.[110] Both the plaintiffs and the Forest Service agreed that logging under the timber sales would disrupt nesting migratory birds and kill some.[111] Noting the "MBTA's plain language" directed at migratory birds, the court concluded, "[s]trict liability may be appropriate when dealing with hunters and poachers. But it would stretch this 1918 statute far beyond the bounds of reason to construe it as an absolute criminal prohibition on conduct, such as timber harvesting, that *indirectly* results in the death of migratory birds."[112]

The Eight Circuit cited and agreed with the earlier decision in *Seattle Audubon Society*,[113] wherein the Ninth Circuit considered whether timber sales that would destroy suitable habitat for the northern spotted owl (at that time recently listed as "endangered" under the ESA) and would result in a taking under Section 703 of the MBTA.[114] The Ninth Circuit took note that the definition of "take" under the ESA included the word "harm,"[115] which was further defined to include "significant habitat modification or degradation where it actually kills or injures wildlife,"[116] and that the only cases that had, at that time, found liability under the MBTA reached as far as "direct, though unintended" bird killings from pesticide poisoning.[117] In declining to extend the prohibition on taking under the MBTA to an activity that caused habitat destruction that would "indirectly" lead to bird deaths, the court stated that "[h]abitat destruction causes 'harm' to the owls under the ESA but does not 'take' them within the meaning of the MBTA."[118]

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[108] *Newton Cnty. Wildlife Ass'n*, 113 F.3d at 115; *Seattle Audubon Soc'y*, 952 F.2d at 302–03.
[109] *Newton Cnty. Wildlife Ass'n*, 113 F.3d at 110.
[110] *Id.* at 114.
[111] *Id.* at 115.
[112] *Id.* (emphasis in original).
[113] *Id.*
[114] *Seattle Audubon Soc'y v. Evans*, 952 F.2d 297, 302 (9th Cir. 1991).
[115] *Id.* at 303.
[116] *Id.* (citing 50. C.F.R. 17.3) (internal citations omitted).
[117] *Id.*
[118] *Id.*

c. District Courts

Although *Apollo Energies* has been criticized for inserting a *mens rea*–like requirement into a strict liability crime,[119] it applied proximate causation as a limit on the potential due-process problems of strict liability under Section 703 and of "void-for-vagueness" or lack of "fair notice" regarding unspecified predicate crimes.[120] This builds upon the more circumscribed reasoning of the *FMC Corp.* decision by incorporating a flexible limitation that can and has been applied by a number of lower courts in the interpretation of the MBTA's taking prohibition to incidental taking from industrial activities.[121]

For example, most recently Judge John D. Rainey of the Southern District of Texas—part of the Fifth Circuit with no prior appellate decisions on incidental taking under the MBTA—adopted the Tenth Circuit's ruling in *Apollo Energies* that a defendant must have proximately caused the harm to MBTA-protected birds in order to be liable for a taking.[122] The court refused to vacate defendant CITGO's 2007 convictions under the MBTA,[123] finding that the bird deaths were reasonably foreseeable to CITGO when the evidence presented at trial established that it knew as far back as 1997 that birds were dying in uncovered oil tanks and did nothing to stop or prevent it.[124] The *CITGO* decision broke from the only other reported district court decision in the Fifth Circuit,[125] which held that the

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[119] *See, e.g.*, Kalyani Robbins, *Paved With Good Intentions: The Fate of Strict Liability Under the Migratory Bird Act*, 42 ENVTL. L. 579, 599–600 (2012) (criticizing the *Apollo Energies* decision for compromising the strict liability nature of the statute by adding a requirement that a defendant "knew or should have known" of the potential for bird deaths for a court to find that the outcome was or should have been reasonably foreseeable to the defendant); Kevin A. Gaynor et al., *Courts Seek Common-Sense Applications to Curb Prosecutions Under Bird Law*, 43 E.R. 974 (2012).

[120] United States v. Apollo Energies, Inc., 611 F.3d 679, 688–90 (10th Cir. 2010).

[121] *See, e.g.*, United States v. CITGO Petroleum Corp., 893 F. Supp. 2d 841, 847 (S.D. Tex. 2012).

[122] *Id.*

[123] *Id.* at 848.

[124] *Id.* at 847–48. Although the *CITGO* court discussed that the "unlawful nature" of CITGO's actions (failing to cover tanks in violation of the Federal Clean Air Act and Texas state laws) distinguished its conduct from incidental taking by defendant oil companies in other cases where no violation of the MBTA was found, as well as from "otherwise lawful conduct" such as driving a car or owning a cat or a building with windows, the ruling does not appear to rest on such a distinction. Rather, the court relied on the findings that the bird deaths were foreseeable and that the defendant was aware of the deaths and took no action to mitigate the hazard.

[125] *Id.*

imposition of criminal penalties on a strict liability basis was inappropriate where the birds died as an unintended consequence from the conduct of a legal commercial activity.[126]

The interesting back story to CITGO's 2012 attempt to vacate its 2007 convictions under the MBTA began in May 2011 when FWS Special Agent Richard Grosz found "two dead and oiled mallards" at a well site operated by Brigham Oil and Gas in North Dakota's Bakken Shale Oil Field.[127] The birds appeared to have died as a result of exposure to the mud-laden waste fluids from hydraulic-fracturing and other drilling activities held in an open "reserve pit" at the well site.[128] To migrating birds and other wildlife the open pits, when covered by a layer of rainwater, are indistinguishable from the numerous ponds and small lakes that dot the open North Dakota landscape.[129] During the same month, Special Agent Grosz found dead and oiled carcasses of various migratory birds at other well sites in the Bakken Field, all of which apparently died from exposure to the contents of the reserve pits.[130]

Shortly after each inspection, at the FWS's request the United States Department of Justice ("DOJ") commenced criminal proceedings against each company operating the well site where dead birds were found.[131] The DOJ charged each operator with an unlawful taking of migratory birds in violation of the MBTA.[132] In each case, a federal magistrate denied the government's request for an arrest warrant based on insufficient probable cause, and "raised another issue: whether 'migratory bird kills resulting from lawful commercial activity that is unrelated to hunting or poaching constitutes a crime under the Migratory Bird Act.'"[133]

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[126] United States v. Chevron USA, Inc., 2009 WL 3645170 at *3 (W.D. La. Oct. 30, 2009).
[127] United States v. Brigham Oil & Gas, 840 F. Supp. 2d 1202, 1203–05 (D.N.D. 2012) (internal citations omitted).
[128] *Id.* at 1205.
[129] *Id.* at 1211.
[130] *Id.* at 1205–06.
[131] *Id.*
[132] *Id.*
[133] *Brigham Oil & Gas*, 840 F. Supp. 2d at 1204 (internal citations omitted). However, it may be more accurate to state that the federal magistrate was unclear as to the extent that *Newton County Wildlife Ass'n* prohibited the criminal prosecution of the defendants' conduct alleged in the requests for summons. A review of the Order Denying Requests for Summons in *United States v. ConocoPhillips Co.* finds that the federal magistrate judge was actually questioning whether *Newton Cnty Wildlife Ass'n* should be distinguished on its facts from the cases before the magistrate. 2011 WL 4709887 (D.N.D. Aug. 10, 2011). The magistrate further stated, "it may not be absolutely clear from the Eight Circuit's discussion [in *Newton County Wildlife Ass'n*] whether lawful commercial activity that is unrelated to hunting or

Of the seven defendants, three entered into plea agreements and the charges against a fourth were dismissed.[134] Brigham and two other operators moved to dismiss the indictments in each of their cases, and the motions were consolidated to determine if a "taking" had occurred under the MBTA due to the defendants' conduct in maintaining the open oil pits.[135] All in all, the three defendants were alleged to have taken seven migratory birds protected under the MBTA.[136]

District Court Judge Daniel L. Hovland dismissed the criminal complaints against all of the defendants,[137] holding that the MBTA does not criminalize "lawful commercial activity which may indirectly cause the death of migratory birds."[138] In reaching his ruling, Judge Hovland found the decision in *Newton County Wildlife Ass'n v. United States Forest Service* to be controlling, wherein the Eighth Circuit held that "timber harvesting that indirectly resulted in the death of migratory birds was not within the scope of activity covered by the Migratory Bird Treaty Act."[139] Like timber harvesting, Judge Hovland found that oil development and production activities are not the sort of physical conduct engaged in by hunters and poachers,[140] and therefore such activities did not fall under the prohibitions of the MBTA.[141] Judge Hovland also noted that millions of protected migratory birds are killed each year by a wide variety of human activities,[142] and

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poaching is beyond the reach of the MBTA completely or only that strict liability cannot be imposed." *ConocoPhillips Co.*, 2011 WL 4709887 at *3.

[134] *Brigham Oil & Gas*, 840 F. Supp. 2d at 1203.

[135] *Id.* at 1202.

[136] *Id.* at 1202.

[137] *Id.* at 1214.

[138] *Id.* at 1214. However, it should be noted that at the Lippert site the reserve pit was neither netted nor flagged at the time of the inspection, although the criminal information did not allege the pit was open at the time of the taking. Under North Dakota law, reserve pits must be fenced, screened, or netted if the pit is not reclaimed within ninety days after completion of the well. Brigham had completed drilling at the Lippert site in mid-November 2010, approximately six months before Special Agent Grosz found the dead ducks. Therefore, it appears possible, if not likely, that Brigham may have been in violation of North Dakota law by not netting or reclaiming the reserve pit within ninety days of completion of the well, and consequently may not have been engaged in a "lawful commercial activity" as described by the court. *Id.* at 1204–05.

[139] *Brigham Oil & Gas*, 840 F. Supp. 2d at 1209, 1211.

[140] *Id.* at 1211.

[141] *Id.* Judge Hovland's opinion did acknowledge that there were a "few courts" outside of the Eighth Circuit that applied the MBTA to "indirect, unintentional commercial activity" including *Apollo Energies* but concluded that none of the decisions were controlling in the Eighth Circuit.

[142] *Id.* at 1212.

opined that "to extend the [MBTA] to reach other activities that indirectly result in the deaths of covered birds would yield absurd results."[143]

The government timely filed a notice of appeal of the *Brigham Oil and Gas* decision, but later moved to dismiss its own appeal.[144] Slightly more than a month after the *Brigham Oil and Gas* decision, CITGO filed its motion to vacate its 2007 conviction in *United States v. CITGO Petroleum Corp.*,[145] specifically highlighting the *Brigham Oil and Gas* court's narrow interpretation of the MBTA's statutory language and endorsement of the "absurd result" reasoning.[146] As discussed earlier, the District Court in *CITGO Petroleum Corp.* declined to follow the Eighth Circuit precedent and adopted the Tenth Circuit's opinion in *Apollo Energies*, dismissing defendant CITGO's motion to vacate its conviction under the MBTA.[147]

Both *CITGO* and *Brigham Oil and Gas* cite the decisions in *Seattle Audubon Society* and *Newton County Wildlife Ass'n* as support for the proposition that Section 703 of the MBTA does not apply to activities beyond the purposeful hunting, poaching, or possession of migratory birds.[148] However, these and other lower court cases that have relied on these two appellate rulings present significantly different factual situations that do not involve habitat modification.[149] As pointed out by the Tenth Circuit in *Apollo Energies*, the actions at issue in *Newton County Wildlife Ass'n* (and

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[143] *Id.*

[144] United States v. Brigham Oil & Gas, L.P., No.12-1376 (8th Cir.), Notice of Appeal filed January 14, 2012; Motion to Dismiss granted April 16, 2012. Although the reasons why the Department of Justice did not pursue the appeal are unclear, Stacey Mitchell, head of the DOJ's Environmental Crimes Section, stated at an American Law Institute–American Bar Association conference in April 2012 that, "[there] isn't any question" the MBTA "applies to these takings." Jeremy P. Jacobs, *Republicans Accuse DOJ of Anti-oil Bias in Migratory Bird Act Prosecutions*, E&E NEWS (Jan. 30, 2012), *available at* http://www.eenews.net/eenewspm/stories/1059975562.

[145] Defendants' Motion to Vacate, United States v. CITGO Petroleum Corp., 893 F. Supp. 2d 841 (S.D. Tex. 2012) (No. 766). Dick DeGuerin, the Houston lawyer representing CITGO in the motion, was reportedly "prompted to take action" by the decision in the *Brigham Oil and Gas* case. Lawrence Hurley, *Lawyers on Alert as Oil Company Challenges Conviction for Bird Kills*, GREENWIRE, May 21, 2012, *available at* http://www.eenews.net/stories/1059964700.

[146] *CITGO Petroleum Corp.*, 893 F. Supp. 2d at 845.

[147] *Id.* at 847–48.

[148] *Id.* at 843; *Brigham Oil & Gas*, 840 F. Supp. 2d at 1208.

[149] *See, e.g.*, *Brigham Oil & Gas*, 840 F. Supp. 2d at 1202 (deaths in drilling fluid waste ponds at oil production sites); United States v. Chevron USA, Inc., 2009 WL 3645170 (W.D. La. Oct. 30, 2009) (migratory bird deaths from entrapment in uncovered oil production equipment); United States v. Ray Westall Operating, Inc., 2009 WL 8691615 (D. N.M. Feb. 25, 2009) (deaths in oil evaporation pits at oil production facility).

other cases cited therein) involved an activity "that modified bird habitat in some way."[150] Finding this distinction dispositive, the court stated, "[w]hile the MBTA's scope, like any statute, can test the far reaches in application, we do not have that case before us. The question here is whether unprotected oil field equipment can take or kill migratory birds. It is obvious the oil equipment can."[151]

Some courts have attempted to sidestep the factual distinctions between actions that cause "habitat modification" and other non-hunting activities that are the actual cause of migratory bird deaths (such as maintaining drilling waste pits in oil and gas production) by creating a larger excluded category of "lawful commercial activity" that includes anything that is "unrelated to hunting and poaching."[152] However, not all "lawful, commercial activity" fits within the category of "habitat modification," and many lower courts which have relied upon the *Seattle Audubon Society* and *Newton County Wildlife Ass'n* decisions to further limit the statutory prohibition of Section 703(a) in cases that are distinguishable on their facts.[153]

Further, both the Eight Circuit in *Newton County Wildlife Ass'n* and the Ninth Circuit in *Seattle Audubon Society* attempted to differentiate criminal and legal conduct under the MBTA by discerning which activities "directly" or "indirectly" result in bird deaths.[154] The meaninglessness of such a distinction was clarified by the decision in *Moon Lake Electric Ass'n*,[155] wherein Judge Babcock explained:

> To the extent [*Seattle Audubon Society v. Evans*] may be read to say that the MBTA regulates only physical conduct normally associated with hunting or poaching, its interpretation of the MBTA is unpersuasive. Foremost, the Ninth Circuit Court of Appeals' distinction between an "indirect" and "direct" "taking" is illogical. By focusing on whether

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[150] United States v. Apollo Energies, Inc., 611 F.3d 679, 686 (10th Cir. 2010).
[151] *Id.*
[152] *Brigham Oil & Gas*, 840 F. Supp. 2d at 1210 ("Other courts have recognized that lawful commercial activity, such as logging, that is unrelated to hunting or poaching and not directed at birds does not constitute a crime under the federal [MBTA]."). *See also Chevron USA, Inc.*, 2009 WL 3645170 at *3 ("These regulations were clearly not intended to apply to commercial ventures where, occasionally, protected species might be incidentally killed as a result of totally legal and permissible activities, as happened here.").
[153] *See* United States v. CITGO Petroleum Corp., 893 F. Supp. 2d 841, 841 (S.D. Tex. 2012).
[154] Newton Cnty. Wildlife Ass'n v. United States Forest Serv., 113 F.3d 110, 115 (8th Cir. 1997); Seattle Audubon Soc'y v. Evans, 952 F.2d 297, 303 (9th Cir. 1991).
[155] United States v. Moon Lake Elec. Ass'n, 45 F. Supp. 2d 1070, 1076–77 (D. Colo. 1999).

> the taking is "direct" or "indirect," the Court conflates the causation element with the *actus reus* element. Although section 707(a) of the MBTA imposes strict liability, . . . the government must prove that Moon Lake's power lines constitute the cause in fact, as well as the proximate cause, of death. . . . While the proximate causation analysis necessarily requires the trier of fact to determine whether a particular type of physical conduct has a propensity to injure or kill a protected bird, that analysis is subsumed within the causation element and has no bearing on the particular types of physical conduct prohibited by the MBTA. The Ninth Circuit Court of Appeals' distinction between an "indirect" and "direct" taking or killing, therefore, is unpersuasive.[156]

After discussing the Supreme Court's analysis of the meaning of "take" in *Babbitt v. Sweet Home Chapter*,[157] and noting that the definitions of "kill" and "take" contemporaneous with the passage of the MBTA did not include the word "directly" or suggest in any way that only direct applications of force constitute "killing" or "taking,"[158] Judge Babcock concluded:

> The MBTA's language suggests that Congress intended the term 'kill' to serve a particular function, distinct from the functions of the other 18 types of proscribed conduct. To hold otherwise would deny the word "kill" independent meaning and essentially read that word out of the MBTA and the Secretary's definition of "take." . . . For these reasons, I decline to follow the Ninth Circuit's analysis. Again, I express no opinion regarding whether the MBTA is intended to preclude habitat modification or degradation. That issue is not before me. Rather, I reject here only that part of [*Seattle Audubon Soc'y v. Evans*] which may be read to hold that the MBTA regulates only the sort of physical conduct exhibited by hunters and poachers.[159]

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[156] *Id.* (citations omitted). The opinion also stated that making a distinction between "indirect" and "direct" conduct reads into the MBTA a *mens rea* of intent and ignores the strict liability nature of Section 707(a) under *United States v. Corrow*, 119 F.3d 796 (10th Cir. 1997).

[157] *Moon Lake Elec. Ass'n*, 45 F. Supp. 2d at 1077–78.

[158] *Id.* at 1078–79.

[159] *Id.* at 1079 (citations omitted). In his opinion, Judge Babcock dismissed *Newton County Wildlife Ass'n* and two other cases cited by defendant Moon Lake as merely citing S*eattle*

Therefore, to the extent that numerous courts have relied upon S*eattle Audubon Society* for the fundamental proposition that Section 703(a) of the MBTA does not apply to activities beyond purposeful hunting or possession of a migratory bird, the courts simply misread both the factual scope of *Seattle Audubon Society,* and incorporated a false dichotomy between "direct" and "indirect" actions.

d. Summary of Judicial Interpretations

To summarize the current law on incidental taking under the MBTA, a majority of appellate and lower courts have found that incidental taking of protected species is subject to misdemeanor liability under Section 703(a), so long as the conduct of such activity is both the actual and proximate cause of the taking. Although a minority of authorities would limit misdemeanor liability to only those actions associated with hunting or poaching, this position is based on an unwarranted extension of factually distinguishable precedent and questionable reasoning regarding the application of proximate causation.

The current trend of judicial authority is towards the expanded view of the MBTA's prohibitions to include incidental taking with an outer limit of activities that are too attenuated under a probable causation analysis.[160] Examples of this outer limit may include situations where the taking may be foreseeable but either highly unlikely (such as killing from a random impact with a bird while driving a car),[161] or more attenuated in the actual causation component of the analysis (such as the destruction or degradation of a species' habit without any actual taking of a member of the species in the course of such activity).[162]

Ultimately, it may be reasonable to conclude that the minority view is defending an untenable and shrinking argument against the maintenance of federal protections for the nation's bird and wildlife resources. These protections started with the passage of the MBTA and the Lacey Act,[163] and came to fruition in the 1970s and afterwards with the passage

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Audubon Society with approval as containing "no meaningful analysis of their own." He distinguished a fourth, *Mahler v. United States Forest Serv.*, 927 F. Supp. 1559 (S.D. Ind. 1996), as relying on legislative history that "reads into the MBTA ambiguities that do not exist," which is supported in the opinion with an exhaustive review of the legislative history. *Moon Lake Elec. Ass'n*, 45 F. Supp. 2d at 1079–82.

[160] *See, e.g.*, *Moon Lake Elec. Ass'n*, 45 F. Supp. 2d at 1070.

[161] United States v. Corbin Farm Serv., 444 F. Supp. 510, 535 (E.D. Cal. 1978).

[162] Seattle Audubon Soc'y v. Evans, 952 F.2d 297 (9th Cir. 1991).

[163] 16 U.S.C. §§ 703–712 (2006); 16 U.S.C. §§ 3771–3778.

of the ESA and the Marine Mammal Protection Act.[164] Absent a change in that long-standing policy, it seems unlikely that the nation's foremost avian protection law, which has been in force for nearly 100 years and is credited with the preservation of hundreds of species,[165] would lack the flexibility to protect migratory birds from both the exploitation of a bygone era and the man-made threats of the modern industrial age.

II. CURRENT PROSECUTIONS OF INCIDENTAL TAKING

The Secretary of the Interior ("Secretary") has the primary responsibility to administer and enforce the MBTA, which in turn is delegated to the FWS who enforces the taking prohibition in Section 703[166] through criminal prosecution by the DOJ.[167] Unlike some other federal laws that protect wildlife, the MBTA does not have a citizen suit provision,[168] and there is no statutory provision providing for the issuance of permits to allow any taking—incidental or otherwise—of individual specimens of a protected species without violating Section 703.[169] However, Section 703 does provide that the Secretary is authorized to issue regulations to allow taking that is compatible with the Migratory Bird Conventions.[170]

Although the Secretary has created a number of exceptions that permit incidental taking in specific limited circumstances or as directed by Congress,[171] she has not exercised her regulatory authority to create a broadly applicable permit for incidental taking.[172] Therefore, since there is no statutory or regulatory mechanism to exempt incidental taking from the prohibitions of Section 703, an "informal" or "unofficial" practice has developed over time to limit the prosecution of incidental taking under the MBTA.[173] The application of this practice as applied to non-federal actors is discussed in Part A, below, and issues concerning the prosecution of incidental taking by federal actors are discussed in Part B, below.

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[164] 16 U.S.C. §§ 1361–1407 (2012).
[165] 16 U.S.C. §§ 703–712 (2006).
[166] 16 U.S.C. §§ 703–704 (2012).
[167] 16 U.S.C. § 704 (2012).
[168] Flint Hills Tallgrass Prairie Heritage Found., Inc. v. Scottish Power, PLC, 147 Fed. Appx. 785 (10th Cir. 2005); Defenders of Wildlife v. EPA, 882 F.2d 1294, 1301 (8th Cir. 1989).
[169] 16. U.S.C. § 703 (2012).
[170] 16 U.S.C. § 704(a) (2012); Fund For Animals v. Norton, 281 F. Supp. 2d 209, 217 (D.D.C. 2003).
[171] *See supra* note 66.
[172] *See infra* Part II.B.2.
[173] FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 4.

A. Incidental Taking by Non-Federal Actors

1. Prosecutorial Discretion

Historically, the limiting mechanism on the prosecution of incidental taking under the MBTA by non-federal persons has been the exercise of prosecutorial discretion by the FWS.[174] This discretion has been used in conjunction with efforts to obtain the voluntary cooperation of certain parties and industries whose activities have caused, or have the potential to cause, incidental taking by consulting with the agency and taking steps to mitigate such taking. Indeed, prosecutorial discretion is the primary incentive for such cooperation, as reflected in various non-regulatory "guidelines" that the FWS has created as applicable to specific industries or activities to mitigate taking from the development and operations of their facilities. For example, in 2000 the FWS issued guidelines for the siting and operation of antenna towers, which provides:

> The Migratory Bird Treaty Act (16 U.S.C. 703–712) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. While the Act has no provision for allowing unauthorized take, it must be recognized that some birds may be killed at structures such as communications towers even if all reasonable measures to avoid it are implemented. The Service's Division of Law Enforcement carries out its mission to protect migratory birds not only through investigations and enforcement, but also through fostering relationships with individuals and industries that proactively seek to eliminate their impacts on migratory birds. *While it is not possible under the Act to absolve individuals or companies from liability if they follow these recommended guidelines, the Division of Law Enforcement and Department of Justice have used enforcement and prosecutorial discretion in the past regarding individuals or companies who have made good faith efforts to avoid the take of migratory birds.*[175]

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[174] *See infra* notes 175 and 178.

[175] Letter from Jamie Rappaport Clark, Director FWS, to Regional Directors, Service Guidance on the Siting, Construction, Operation and Decommissioning of Communications

The FWS recently incorporated this practice of fostering cooperation through discretionary enforcement of the MBTA into the 2013 Final Wind Energy Guidelines,[176] although use of the term "prosecutorial discretion" was not used:

> The Service urges voluntary adherence to the Guidelines and communication with the Service when planning and operating a facility. While it is not possible to absolve individuals or companies from MBTA or BGEPA [Bald and Golden Eagle Protection Act] liability, the Office of Law Enforcement focuses its resources on investigating and prosecuting those who take migratory birds without identifying and implementing reasonable and effective measures to avoid the take. The Service will regard a developer's or operator's adherence to these Guidelines, including communication with the Service, as appropriate means of identifying and implementing reasonable and effective measures to avoid the take of species protected under the MBTA and BGEPA. *The Chief of Law Enforcement or more senior official of the Service will make any decision whether to refer for prosecution any alleged take of such species, and will take such adherence and communication fully into account when exercising discretion with respect to such potential referral.*[177]

The FWS has also jointly issued guidelines for electrical transmission activities with an industry study group in 2005, known as the *Avian Protection Plan Guidelines*,[178] which provide that a violator's "disregard for their actions and the law" will be taken into account when a prosecution is being considered.[179]

Towers (Sept. 14, 2000) [hereinafter Service Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers], *available at* http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html (emphasis added).

[176] FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 6.

[177] *Id.*

[178] THE EDISON ELECTRIC INSTITUTE'S AVIAN POWER LINE INTERACTION COMMITTEE, U.S. FISH & WILDLIFE SERV., AVIAN PROTECTION PLAN (APP) GUIDELINES 15 (Apr. 2005), [hereinafter AVIAN PROTECTION PLAN (APP) GUIDELINES], *available at* http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/APP/AVIAN PROTECTION PLAN FINAL 4 19 05.pdf.

[179] *Id.*

> Unless the take is authorized, it is not possible to absolve individuals, companies, or agencies from liability even if they implement avian mortality avoidance or similar conservation measures. However, the Office

Statements by FWS personnel reinforce the agency's reliance on the practice or policy of discretionary prosecution to promote cooperation with agency guidelines. For example, in a 2012 meeting sponsored by the American Wind Wildlife Institute ("AWWI"), a senior FWS representative stated: "How do we deal with the fact that the Service doesn't issue MBTA permits? From our agency's perspective, if a company meets with us, develops a conservation plan, and follows our recommendations to avoid and minimize impacts to birds, then we are comfortable with not issuing take permits."[180]

The FWS practice of using discretionary prosecution to encourage compliance is also described in a 2011 article published in the *United States Attorneys' Bulletin* as internal guidance for Department of Justice prosecutors:

> The *Apollo* decision supports the government's approach to industrial avian takings that has developed over the past two decades: provide notice to industry of the risks posed by facilities and equipment, encourage compliance through remediation, adaptive management and, where possible, permitting, and reserve for prosecution those cases in which companies ignore, deny, or refuse to comply with a BMP approach to avian protection in conducting their business.[181]

In the context of renewable energy projects, the FWS's practice is currently being used to encourage developers to follow its voluntary guidelines for the siting, design, and operation of projects and associated infrastructure to mitigate incidental taking of protected species.[182] For example, in recent comments to a proposed solar electric generating facility in the Southern California desert, the FWS stated that the project "poses potentially significant levels of incidental take to numerous species of migratory birds,"[183] and recommended implementation of the Avian and Power Line

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> of Law Enforcement focuses on those individuals, companies, or agencies that take migratory birds with disregard for their actions and the law, especially when conservation measures have been developed but are not properly implemented.

[180] David Cottingham, *Policy and Regulation Update*, PROCEEDINGS OF THE WIND-WILDLIFE RESEARCH MEETING IX (2012), *available at* http://www.nationalwind.org/assets/research_meetings/NWCC_WWRM_IX_Proceedings__06-27-13_.pdf.

[181] Anderson & Birchell, *supra* note 106, at 75.

[182] *Id.* at 66, 81.

[183] Letter from Kennon A. Corey, Assistant Field Supervisor, FWS, to Pierre Martinez, Compliance Project Manager, Cal. Energy Comm'n, Request for Agency Participation on

Interaction Committee's guidelines to reduce the risks to birds.[184] The comments further stated that the proposed project was without a legal mechanism to permit such taking under the MBTA,[185] and cautioned that a "robust" Bird and Bat Conservation Strategy "that avoids and minimizes impacts to these trust resources is imperative" should be considered.[186]

The FWS has considerable discretion in deciding whom and when to prosecute for a violation of the MBTA.[187] Prosecutorial discretion has been recognized by the courts as a limiting factor on the enforcement of the MBTA to avoid prosecutions that "would offend reason and common sense."[188] It is, however, a mechanism that is disfavored by the courts to limit criminal prosecutions in general and under the MBTA in particular.[189] Further, as discussed below, its use as part of a practice to encourage compliance with voluntary guidelines is ineffective, possibly a violation of federal environmental laws, and fails to promote the conservation of conserve MBTA-protected species.

2. Prosecution of Incidental Taking from Wind Energy Activities

Although there have been numerous successful prosecutions under the MBTA for incidental taking,[190] to date there has been only one prosecution of a wind energy project developer or operator under the MBTA,[191] despite several documented cases of migratory bird taking at wind energy projects.[192] This stunning lack of referrals raises a number of important

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the Proposed Rio Mesa Solar Electric Generating Facility, Riverside County, California at 6 (Jan. 17, 2012), *available at* http://www.energy.ca.gov/sitingcases/riomesa/documents/others/2012-01-17_USFWS_Comments_TN-63403.pdf.

[184] *Id.* at 4.

[185] *Id.* at 6.

[186] *Id.*

[187] Alaska Fish & Wildlife Fed'n & Outdoor Council v. Dunkle, 829 F.2d 933, 938 (9th Cir. 1987).

[188] United States v. FMC Corp., 572 F.2d 902, 905 (2d Cir. 1978).

[189] *See, e.g.*, United States v. Moon Lake Electric Ass'n, 45 F. Supp. 2d 1070, 1084 (D. Colo. 1999); Mahler v. U.S. Forest Serv., 927 F. Supp. 1559, 1582–83 (S.D. Ind. 1996).

[190] *See supra* Part I.B.3.

[191] United States v. Duke Energy Renewables, Inc., 2:13-CR-00286-KHR-1 (D. Wyo., Nov. 22, 2013).

[192] *See* Lawrence Hurley, *Obama Admin Sweats Legal Response as Turbines Kill Birds*, GREENWIRE (Jan. 26, 2012), http://www.eenews.net/stories/1059959021; Press Release, Am. Bird Conservancy, Massive Bird Kill at West Virginia Wind Farm Highlights National Issue (Oct. 28, 2011), *available at* http://www.abcbirds.org/newsandreports/releases/111028.html.

issues and questions about the FWS's MBTA enforcement policy regarding wind energy projects.

Preliminarily, it is important to emphasize that compliance with the Final Wind Energy Guidelines, and with any advice or comments from the FWS regarding a particular project, is completely voluntary.[193] However, developers and operators are cautioned that, "[i]f they reject [FWS's advice], they should contemporaneously document with reasoned justification why they did so."[194] Developers and operators are further cautioned that the FWS may "refer for prosecution any unlawful take that it believes to be reasonably related to lack of incorporation of Service recommendations or insufficient adherence with the Final Wind Energy Guidelines."[195] Although the FWS released the Final Wind Energy Guidelines in 2012, it had previously issued guidance to address the impacts of wind energy development and a number of drafts of the wind guidelines, and since 2003 encouraged voluntary compliance with the provisions of these previous guidelines and prior drafts.[196]

As described below, the FWS's practice of using prosecutorial discretion to encourage compliance with non-regulatory guidance such as the Final Wind Energy Guidelines, as well as its actual exercise of prosecutorial discretion to limit enforcement of the MBTA as to wind energy activities, have several potential and documented adverse effects, and raised a number of significant legal issues.[197]

Adverse Effects. First, the failure to prosecute incidental taking by wind energy operators under the MBTA is likely resulting in the preventable deaths of thousands of protected migratory birds.[198] Although some incidental taking of protected birds is inevitable in the operation of wind energy facilities, at the very least the lack of prosecutions to enforce the MBTA allows continuing non-compliance with the various voluntary wind energy guidelines that have been in place since 2003.[199] If the threat of prosecution is to have any incentivizing effect at all, diligent enforcement of the MBTA's taking prohibition will be necessary for the Final Wind

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[193] FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 4.
[194] *Id.*
[195] *Id.*
[196] *Id.* at 1.
[197] AM. BIRD CONSERVANCY, RULEMAKING PETITION TO THE U.S. FISH & WILDLIFE SERVICE FOR REGULATING THE IMPACTS OF WIND ENERGY PROJECTS ON MIGRATORY BIRDS, at 77–78 (Dec. 14, 2011) [hereinafter RULEMAKING PETITION], *available at* http://www.abcbirds.org/abcprograms/policy/collisions/pdf/wind_rulemaking_petition.pdf.
[198] *Id.* at 76–77.
[199] *Id.* at 41.

Energy Guidelines to be effective as the principal tool for mitigating incidental taking as the wind energy industry expands.[200]

The recent and only criminal prosecution under the MBTA for taking at a wind energy project illustrates the ineffectiveness of using prosecutorial discretion to incentivize compliance with voluntary guidelines, and the adverse effects that result from prosecution after a wind energy developer has ignored the voluntary guidelines and developed a wind project in an inappropriate site. In *United States v. Duke Energy Renewables, Inc.*,[201] the defendant was charged with misdemeanor violations of Section 703 of the MBTA stemming from the deaths of 14 Golden Eagles and 149 other protected birds at the defendant's "Campbell Hill" and "Top of the World" wind energy projects in Wyoming between 2009 and 2013.[202] According to the charges and other information presented in court, the defendant failed to make all reasonable efforts to build the projects in a way that would avoid the risk of avian deaths by collision with turbine blades, despite prior warnings about potential takings from the FWS.[203]

The prosecution of Duke Energy Renewables was resolved by a plea bargain that demonstrates how the FWS's discretionary enforcement policy failed to deter non-compliance with the guidelines or remedy the adverse effects of such non-compliance on protected birds.[204] First of all, the threat of prosecution under the MBTA was an inadequate incentive for Duke Energy Renewables to pay heed to the FWS's direct feedback on the inadequacies of the pre-development wildlife surveys or its "continued . . . concerns" about impacts to avian wildlife from the siting and development of the projects.[205] Further, the threat of prosecution under the MBTA was an inadequate incentive to deter Duke Energy Renewables from proceeding with the development and commercial operation of both projects, without even the minimal effort of developing an avian conservation plan to mitigate the takings that were projected to occur.[206] Finally, as described below,

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[200] *Id.* at 79.
[201] United States v. Duke Energy Renewables, Inc., No. 2:13-cr-00268, 2013 BL (D. Wyo., Nov. 22, 2013) (Wyoming is located in the Tenth Circuit, which has upheld the prosecution of incidental takings from industrial activities under the MBTA. United States v. Apollo Energies, Inc., 611 F.3d 679, 688–89 (10th Cir. 2010)).
[202] Press Release, Dep't of Justice, Utility Company Sentenced in Wyoming for Killing Protected Birds at Wind Projects (Nov. 22, 2013), *available at* http://www.justice.gov/opa/pr/2013/November/13-enrd-1253 (last visited Dec. 11, 2013).
[203] *Id.*
[204] Plea Agreement, *Duke Energy Renewables, Inc.*, No. 2:13-CR-00268, 2013 BL (D. Wyo. Nov. 7, 2013) (No. 2) [hereinafter Plea Agreement].
[205] *Id.* at Statement of Facts, *5, 4–8.
[206] *Id.*

the terms of the sentence that Duke Energy Renewables received are unlikely to deter future violators from ignoring the voluntary guidelines.[207]

- The $1 million in fines and restitution to be paid by Duke Energy Renewables is a relatively inconsequential penalty, amounting to less than 0.3% of the two projects' minimum combined construction costs of $358 million.[208]
- Duke Energy Renewables is allowed to continue operations of the two wind energy facilities in spite of the fact that the projects do not comply with the criteria of the FWS's voluntary guidelines for the siting and development of such projects.[209]
- Although Duke Energy Renewables is obligated to develop and implement a "Migratory Bid Compliance Plan" ("MBCP") to conduct studies and implement a variety to measures to mitigate the taking of migratory birds and golden eagles (including an Eagle Conservation Plan and pursing an Eagle Take Permit under the Bald and Golden Eagle Protection Act[210]), the MBCP arguably does not require any practices, actions or cost to the defendant beyond what would likely have been required under the FWS's voluntary guidelines for mitigation and operation of similar high-risk projects.[211]

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[207] On November 22, 2013, the defendant's guilty plea to two misdemeanor violations of MBTA Section 703 was entered and the defendant was sentenced to monetary fines of $200,000 for each count, $600,000 restitution for both counts, and sixty months probation with "special conditions". Minute Entry, *Duke Energy Renewables, Inc.*, No. 2:13-CR-00268, at *2 (D. Wyo. Nov. 22, 2013) (No. 6).

[208] Although Duke Energy has not publicly disclosed the costs of the two projects, each project received a "Section 109 Permit" from the Wyoming Department of Environmental Quality Industrial Siting Council, which was then required only for projects with construction costs of $178.9 million or more. *See* WY. STAT. ANN. § 35-12-109(vii) (2012); Top of the World Wind Energy, LLC, Docket No. DEQ/ISC 09-03 (Dec. 31, 2009), http://deq.state.wy.us/isd/downloads/09-03_TopOfTheWorld.pdf; Section 109 Permit Application, Duke Energy Corp, Campbell Hill Windpower Project ES-1 (Jan. 2009), *available at* http://deq.state.wy.us/isd/downloads/Campbell_Hill_All_Combined_Final_010709.pdf; *Industrial Siting News*, WYO. DEP'T OF ENVTL. QUALITY, http://deq.state.wy.us./isd/isdnews.htm (scroll down to December 2009 and March 2009) (last visited Dec. 11, 2013).

[209] Plea Agreement, *supra* note 204, at Statement of Facts, *1–12.

[210] Bald and Golden Eagle Protection Act ("BGEPA"), 16 U.S.C. § 668–668d (2012); 50 C.F.R. § 22.26–22.27 (2013).

[211] Plea Agreement, *supra* note 204, at* Attachment B "Migratory Bird Compliance Plan."

- Finally, Duke Energy Renewables received a non-prosecution agreement from the DOJ for any takings at all four of the defendant's Wyoming wind energy projects under *both* the MBTA and the BGEPA *before or after the date of the Plea Agreement for a period of up to almost ten years*, so long as Duke Energy Renewables is in compliance with the terms of the Plea Agreement (including implementation of the MCBP) and is diligently pursuing an Eagle Take Permit.[212] In other words, Duke Energy Renewables received de facto permits for recurring incidental taking under the MBTA (even though there is not regulatory or other mechanism for the issuance of such a permit[213]) and under the BGEPA (even though it has not demonstrated that the incidental of protected eagles is "compatible with the preservation of the . . . golden eagle" and is "unavoidable" as required for such a permit[214]).

Finally, the prosecution and settlement of the *Duke Energy Renewables* case illustrates a fundamental flaw of the FWS's policy of incentivizing compliance with the threat of prosecution: preventative regulation (such as the siting analysis in the Final Wind Energy Guidelines) is effective only if it is enforced before the harm occurs.[215] Poorly sited projects such as the "Campbell Hill" and "Top of the World" wind projects will remain in operation killing protected birds for decades. As clearly demonstrated by the Duke Energy Renewables prosecution and plea agreement, fines may be paid and mitigation measures implemented, but poor siting of projects, and its adverse effect on avian conservation efforts, will not be corrected with after-the-fact prosecution.

Second, the FWS's use of voluntary guidelines and prosecutorial discretion to encourage compliance may be hurting the renewable energy industry more than it is helping it.[216] Given the risks to developers and investors in solar and wind energy projects, where the taking of migratory birds is almost certain to occur, it would be surprising if these parties

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[212] *Id.* at *10–12.
[213] *See supra* note 66 and accompanying discussion.
[214] *See infra* Part III.C.a(3).
[215] *See* RULEMAKING PETITION, *supra* note 197, at 83–84.
[216] *Id.* at 57.

would not prefer something more substantial than a vague promise that a prosecution will not follow an incidental taking if the voluntary guidelines are followed. Although the rapid growth of the wind energy industry may suggest that this uncertainty has not been a substantial drag on development, antidotal evidence implies that it may be adversely affecting the growth of the industry to the detriment of renewable energy and other policy goals.[217]

Third, the lack of prosecutions of wind energy developers or operators creates a strong inference that prosecutorial discretion is being exercised unevenly to favor wind energy over other activities such as the oil and gas industry.[218] Specifically, after the *Brigham Oil and Gas* decision in 2012, Republican Senators David Vitter and Lamar Alexander questioned the FWS's motivations for prosecuting MBTA cases against oil and gas producers in a letter to the Attorney General.[219] Senator, and then–Republican presidential candidate Newt Gingrich, requested that the House Judiciary Committee investigate how the Obama administration chooses to enforce the MBTA,[220] and then–Presidential candidate Mitt Romney brought up the subject of selective enforcement of the MBTA during the 2012 debates.[221]

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[217] *See* Ryan Tracy, *Wildlife Slows Wind Power—New U.S. Rules to Protect Bats and Birds Create Uncertainty in Growing Industry*, WALL ST. J., Dec. 10, 2011, at A3, *available at* http://online.wsj.com/article/SB10001424052970203501304577088593307132850.html.

[218] *See* Letter from Sen. David Vitter, Ranking Member of Sen. Energy & Pub. Works Comm., & Sen. Lamar Alexander, to Atty. Gen. Eric Holder (Jan. 30, 2012), *available at* http://www.epw.senate.gov/public/index.cfm?FuseAction=Minority.PressReleases&ContentRecord_id=8c84134d-a36c-2155-a554-dc81eaded88a.

[219]
> We find it absurd that the Department of Justice, in conjunction with the Fish and Wildlife Service, could reasonably conclude that three oil and gas operators should face prosecution for the incidental killing of seven birds at the same time it considers permits [to a wind energy farm in southeastern Minnesota] to kill between eight and fifteen bald eagles. . . . Please explain the apparent targeting of oil and gas producers for violations of the MBTA.

Id.

[220] *See* Press Release, The American Presidency Project, Gingrich Requests House Investigation of DOJ over Potential Abuse of Power against ND Oil Companies (Feb. 22, 2012), *available at* http://www.presidency.ucsb.edu/ws/?pid=99783#axzz2hpUSE7UM ("The government's case was a clear abuse of the justice system, and amounted to harassment of oil companies for motives unrelated to migratory birds," Gingrich said. "It is deeply disturbing that the Justice Department would abuse its authority in such a manner.").

[221] Transcript of Second Presidential Debate (Oct. 16, 2012), http://debates.org/index.php?page=october-1-2012-the-second-obama-romney-presidential-debate.

> ROMNEY: So where'd the increase [in oil production] come from? Well a lot of it came from the Bakken Range in North Dakota. What was [President Obama's] participation there? The administration brought

Although these complaints may be more about politics than plovers, they do raise the valid question of what is the FWS's policy that dictates when, where, and against whom will an enforcement action for an incidental taking under the MBTA be referred for prosecution? From its own statements, the FWS has an internal practice that a violator's adherence to guidelines and implementation of FWS's recommendations will result in a lower likelihood of prosecution.[222] But, the lack of clear guidelines for many industrial activities, and the failure to bring enforcement actions against wind energy producers when FWS guidelines may have been violated, give the appearance that prosecutorial discretion is being applied unevenly and with the possible intention of favoring a specific industry.[223] In short, an enforcement policy that relies on prosecutorial discretion without clear guidelines for its application, and the consistent and vigorous enforcement of the law against wind energy, oil and gas, or any other industry when violations do occur, undermine the credibility of both the policy and the enforcement agency.

Legal Issues. First, the practice of using prosecutorial discretion may constitute a violation of the National Environmental Policy Act ("NEPA"),[224] which requires federal agencies to conduct an environmental review of "major Federal actions significantly affecting the quality of the human environment."[225] A failure to comply with NEPA, if applicable, would circumvent the statute's primary purpose of requiring all federal agencies to take a "hard look" at the environmental consequences of their actions.[226]

Although a detailed discussion of this topic is beyond the scope of this Article, it is important to note that there are several bases upon which the exercise of prosecutorial discretion may be considered to be a "[m]ajor [f]ederal action" subject to NEPA, including the following:

> a criminal action against the people drilling up there for oil, this massive new resource we have. And what was the cost? 20 or 25 birds were killed and brought out a migratory bird act to go after them on a criminal basis.

Id.

[222] *See* FINAL WIND ENERGY GUIDELINES, *supra* note 39.

[223] *See, e.g.*, *Obama Administration Gives Wind Farms a Pass on Eagle Deaths, Prosecutes Oil Companies*, ASSOCIATED PRESS, May 14, 2013; Michael Bastasch, *Obama Doesn't Punish Wind Industry for Bird Deaths, Goes After Oil Companies*, THE DAILY CALLER (May 14, 2013, 11:25 AM), http://dailycaller.com/2013/05/14/obama-doesnt-punish-wind-industry-for-bird-deaths-goes-after-oil-companies/.

[224] 42 U.S.C. §§ 4331–4370 (2012).

[225] 42 U.S.C. § 4332(C) (2012); 40 C.F.R. § 1508.18(b) (2013).

[226] Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989).

- The development and promulgation of the various guidelines expressly incorporating the practice of factoring compliance or non-compliance into the considerations for prosecution of violations under the MBTA may considered a "[m]ajor [f]ederal action" to the extent such documents are deemed to be "formal documents establishing an agency's policies which will result in or substantially alter agency programs."[227]
- The systematic use of prosecutorial discretion may be considered to be a "[m]ajor [f]ederal action" to the extent such action is deemed to be the "[a]doption of programs, such as a group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive."[228]
- The exercise of discretion not to prosecute a MBTA violation for incidental taking may be functionally equivalent to the granting of a "special purpose permit" that permits taking "for special purpose activities related to migratory birds . . . which are otherwise outside the scope of the standard form permits . . . ."[229] The FWS has acknowledged that the processing of an application for a special purpose permit requires compliance with NEPA.[230]
- Some commentators argue that the very act of exercising discretion not to prosecute a violation of federal law that may affect the environment may itself be a "[m]ajor [f]ederal action," even though NEPA regulations define "[m]ajor [f]ederal actions" as

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[227] 40 C.F.R. § 1508.18(b)(1) (2013).
[228] 40 C.F.R. § 1508.18(b)(3) (2013).
[229] 50 C.F.R. § 21.27 (2013).
[230] *See* U.S. FISH & WILDLIFE SERV., PACIFIC REGION, FINAL ENVIRONMENTAL ASSESSMENT—ISSUANCE OF AN MBTA PERMIT TO THE N.M.F.S. AUTHORIZING TAKE OF SEABIRDS IN THE HAWAII-BASED SHALLOW-SET LONGLINE FISHERY 9 (July 27, 2012) [hereinafter FINAL ENVIRONMENTAL ASSESSMENT], *available at* http://www.fws.gov/pacific/migratorybirds/pdf/NMFS Permit Final EA.pdf ("This assessment is produced in compliance with NEPA as well as to formalize our decision process for this permit."); 40 C.F.R. § 1508.18(b)(4) (2013).

> excluding "bringing judicial or administrative civil or criminal enforcement actions."[231]

Second, some commentators have questioned whether the FWS's conduct could rise to the level of an ongoing "pattern of non-enforcement of clear statutory language" that amounts to "an abdication of its statutory responsibilities,"[232] which may be a violation of the Administrative Procedures Act.[233]

Third, prosecutorial discretion is, by its very nature, discretionary, which may result in the "under-enforcement" or "over-enforcement" of the MBTA. The problem of under-enforcement was discussed by the court in *Center for Biological Diversity v. Pirie*,[234] as well as the need for a "private attorney general" to enforce the MBTA when the FWS fails to prosecute clear violations of its provisions.[235] On the other hand, some commentators have raised the concern of over-enforcement by an administration that favors a broad interpretation of the statute,[236] or the "overcriminalization" of a law by a "self-righteous prosecution."[237]

The result of such inaction, allegations, ambiguity, and opacity undermines the FWS's credibility, and possibly its legal authority, as the unbiased enforcer of the nation's wildlife laws in general and of the MBTA in particular. Further, the FWS's uneven enforcement of the MBTA is possibly causing significant and continuing harm to the nation's avian resources. Therefore, the FWS's current MBTA enforcement policy that relies

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[231] 40 C.F.R. § 1508.18(a) (2013). *But see* DANIEL R. MANDELKER, NEPA LAW AND LITIG. § 8:26 (2012).

> This exemption is not justified. The applicability of the impact statement requirement to agency enforcement adjudication does not raise questions qualitatively different from those raised by the application of this requirement to other federal agency actions. . . . Exemption of enforcement adjudication from the impact statement requirement would allow agencies to avoid their impact statement responsibilities by proceeding through adjudication rather than rule making.

Id.

[232] *See* RULEMAKING PETITION, *supra* note 197, at 77 (citing Heckler v. Chaney, 470 U.S. 821, 833, n.4 (1985)).

[233] *Id.*

[234] Ctr. for Biological Diversity v. Pirie, 191 F. Supp. 2d 161 (D.D.C. 2002), *vacated on other gds. by* Ctr. for Biological Diversity v. England, 2003 WL 179848 (D.C. Cir. 2003).

[235] *Ctr. for Biological Diversity*, 191 F. Supp. 2d at 177.

[236] Benjamin Means, Note, *Prohibiting Conduct, Not Consequences: The Limited Reach of the Migratory Bird Treaty Act*, 97 MICH. L. REV. 823, 834–36 (1998).

[237] Norman L. Reimer, *When It Comes to Overcriminalization, Prosecutorial Discretion Is for the Birds*, CHAMPION, Sept./Oct. 2012, at 9.

principally on prosecutorial discretion is indefensible and unsustainable. In Part III, several possible legislative and regulatory solutions are discussed to fill the vacuum created by the FWS's current enforcement policy.

B. Incidental Taking by Federal Actors

1. Federal Agencies Other than Armed Forces

For some time there was a question of whether the MBTA applied to federal agencies and personnel.[238] This long-standing controversy was resolved in *Humane Society v. Glickman*,[239] where the plaintiffs brought action against the Department of Agriculture ("USDA") to enjoin implementation of a management plan for Canadian geese in Virginia.[240] The management plan sought to control the geese population by various measures, including killing some geese.[241] The USDA contended that it did not need to seek a permit under the MBTA before taking or killing such birds, which was supported by the FWS following a reversal of its prior long-standing position that the MBTA applied to federal agencies.[242]

The *Glickman* court held that the USDA was not exempt from the MBTA's prohibition on taking, and that its taking and killing of Canadian geese in the implementation of the management plan without obtaining a permit violated Section 703.[243] In reaching this conclusion, the court stated:

> As § 703 is written, what matters is whether someone has killed or is attempting to kill or capture or take a protected bird, without a permit and outside of any designated hunting season. Nothing in § 703 turns on the identity of the perpetrator. There is no exemption in § 703 for farmers, or golf course superintendents, or ornithologists, or airport officials, or state officers, or federal agencies.[244]

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[238] *See* Newton Cnty. Wildlife Ass'n v. U.S. Forest Serv., 113 F.3d 110, 115 (8th Cir. 1997); Sierra Club v. Martin, 110 F.3d 1551, 1555 (11th Cir. 1997).
[239] Humane Soc'y v. Glickman, 217 F.3d 882 (D.C. Cir. 2000).
[240] *Id.* at 883.
[241] *Id.* at 884.
[242] *Id.* at 884–85.
[243] *Id.* at 888. The *Glickman* court also stated, "we disagree with the 'tentative conclusion' in *Newton County Wildlife Ass'n v. U.S. Forest Serv.*, and the holding in *Sierra Club v. Martin*, that § 703 does not apply to federal agencies." *Id.* (internal citations omitted).
[244] *Id.* at 885.

It should be noted that the *Glickman* court also held that private parties can use the Administrative Procedure Act ("APA")[245] to seek an injunction against a federal agency for actions that violate the MBTA.[246]

On January 10, 2001, President Clinton issued Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds," which provides in relevant part:

> Each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations is directed to develop and implement, within 2 years, a Memorandum of Understanding (MOU) with the Fish and Wildlife Service (Service) that shall promote the conservation of migratory bird populations.[247]

In addition to directing each federal agency to enter into a MOU with the FWS, the agencies are mandated to incorporate bird conservation considerations (including NEPA analysis) into agency planning,[248] and to promote the conservation of migratory birds within the limits of the agency's mission and budget.[249] The Executive Order also directs the Secretary of Interior to establish an interagency "Council for the Conservation of Migratory Birds" to oversee implementation of the order.[250]

To date, the FWS has entered into MOUs with nine federal departments and agencies,[251] including the Department of Defense,[252] Department

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[245] 5 U.S.C. § 551 *et seq.* (2012).

[246] *Glickman*, 217 F.3d at 886. *See also* Ctr. for Biological Diversity v. Pirie, 191 F. Supp. 2d 161, 175 (D.D.C. 2002), *vacated by* United States v. Moon Lake Electric Ass'n, 45 F. Supp. 2d 1070, 1084 (D. Colo. 1999), *vacated by* Ctr. for Biological Diversity v. England, 2003 WL 179848 (D.C. Cir. 2003); Hill v. Norton, 275 F.3d 98, 103 (D.C. Cir. 2001).

[247] Exec. Order No. 13186 § 3(a), 66 Fed. Reg. 3853 (Jan. 10, 2001). The Executive Order also clarified that the MBTA applies to intentional and unintentional taking, and defined "unintentional take" as that which "results from, but is not the purpose of, the activity in question." *Id.* § 2(c).

[248] *Id.* § 3(c).

[249] *Id.* § 3(e).

[250] *Id.* § 4.

[251] *See generally Council for the Conservation of Migratory Birds*, U.S. FISH & WILDLIFE SERV., http://www.fws.gov/migratorybirds/CCMB.htm (last updated Dec. 4, 2013).

[252] Memorandum of Understanding Between the United States Dep't of Defense & the United States Fish & Wildlife Serv. to Promote the Conservation of Migratory Birds (2006), *available at* http://www.fws.gov/migratorybirds/Partnerships/DoDMOUfinalSignature.pdf.

of Energy,[253] Forest Service,[254] Minerals Management Service,[255] Federal Energy Regulatory Commission,[256] National Park Service,[257] Bureau of Land Management,[258] National Marine Fisheries Service,[259] and the Animal and Plant Health Inspection Service.[260]

Information on the effectiveness of the MOUs in promoting the conservation of migratory bird populations has not been readily available. However, the Council is preparing the first-ever report to provide information on the progress of Council agencies implementing the Executive Order. The Council will be developing subsequent reports on a three-year cycle to more accurately track implementation of the Executive Order, recognizing that bird conservation strategies require more than one year

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[253] Memorandum of Understanding Between the United States Dep't of Energy & the United States Fish & Wildlife Serv. Regarding Implementation of Exec. Order 13,186, "Responsibilities of Federal Agencies to Protect Migratory Birds" (2013), *available at* http://energy.gov/sites/prod/files/2013/10/f3/Final%20DOE-FWS%20Migratory%20Bird%20MOU.pdf.

[254] Memorandum of Understanding Between the United States Dep't of Agric. Forest Serv. & the United States Fish & Wildlife Serv. to Promote the Conservation of Migratory Birds (2008), *available at* http://www.fws.gov/migratorybirds/Partnerships/MOU%20USFS Final.pdf.

[255] Memorandum of Understanding Between the United States Minerals Mgmt. Serv. & the United States Fish & Wildlife Serv. Regarding Implementation of Exec. Order 13,186, "Responsibilities of Federal Agencies to Protect Migratory Birds" (2009), *available at* http://www.fws.gov/migratorybirds/Partnerships/MMS-FWS_MBTA_MOU_6-4-09.pdf.

[256] Memorandum of Understanding Between the Fed. Energy Regulatory Comm'n & the United States Dep't of the Interior United States Fish & Wildlife Serv. Regarding Implementation of Exec. Order 13,186, "Responsibilities of Federal Agencies to Protect Migratory Birds" (2011), *available at* http://www.ferc.gov/legal/mou/mou-fws.pdf.

[257] Memorandum of Understanding Between the United States Dep't of the Interior Nat'l Park Serv. & the United States Fish & Wildlife Serv. to Promote the Conservation of Migratory Birds (2010), *available at* http://www.fws.gov/migratorybirds/Partnerships/NPSEO13186Signed 4.12.10.pdf.

[258] Memorandum of Understanding Between the United States Dep't of the Interior Bureau of Land Mgmt. & the United States Fish & Wildlife Serv. to Promote the Conservation of Migratory Birds (2010), *available at* http://www.fws.gov/migratorybirds/Partnerships/BLM%20EO13186MOU.pdf.

[259] Memorandum of Understanding Between the United States Dep't of Commerce Nat'l Marine Fisheries Serv. & the United States Dep't of the Interior Fish & Wildlife Serv. (2012), *available at* http://www.fws.gov/migratorybirds/Partnerships/NMFS MOU.pdf.

[260] Memorandum of Understanding Between the United States Dep't of Agric. Animal & Plant Health Inspection Serv. & the United States Dep't of the Interior Fish & Wildlife Serv. (2012), *available at* http://www.fws.gov/migratorybirds/Partnerships/APHIS MOU.pdf.

to implement and measure progress.[261] Perhaps more significant is the evolution of the MOUs themselves, which according to one FWS biologist, "are being developed to become more implementation based, giving [f]ederal agencies a clear path to success for bird conservation while meeting their stated mission."[262]

2. Incidental Taking by Armed Forces

In the 2002 decision *Center for Biological Diversity v. Pirie*,[263] a District Court considered whether use by the Air Force and the Navy of a small island in the Northern Mariana Islands as an "aircraft and ship ordnance impact target area"[264] for "live-fire target training"[265] which incidentally killed migratory birds violated the MBTA.[266] The Navy had applied for a permit under the MBTA, 50 C.F.R. § 21.41, which authorizes permits for depredation control but does not include taking incidental to another activity.[267] The permit request was denied, and the FWS advised the Navy that "'[t]here are no provisions for the Service to issue permits authorizing UNINTENDED conduct on the part of a permittee.'"[268] However, after initiation of the legal action, the FWS advised the Navy "that it has long employed 'enforcement discretion' for activities that may be prosecuted pursuant to the MBTA but are not covered by the MBTA permitting regulations, that in this case it would 'exercise its discretion not to take enforcement action' against the Navy and DOD."[269]

After clarifying that *Glickman* was controlling regarding the MBTA's applicability to federal agencies, the *Pirie* court dismissed the Navy's argument that "the prosecution of unintentional killings of migratory birds is a matter properly left to the prosecutorial discretion of the FWS"[270] as "simply defendants' disagreement with the *Glickman* holding in sheep's clothing."[271] Addressing the defendant's argument that the court

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[261] Interview with Dr. Eric Kershner, Wildlife Biologist, United States Fish & Wildlife Serv., Div. of Migratory Bird Mgmt. (Sept. 18, 2013) (on file with author).
[262] *Id.* (Dr. Kershner identified the MOU with NOAA, *supra* note 259, as an example of such an "implementation based" MOU).
[263] Ctr. for Biological Diversity v. Pirie, 191 F. Supp. 2d 161 (D.D.C. 2002).
[264] *Id.* at 165.
[265] *Id.* at 168.
[266] *Id.* at 165, 168, 176.
[267] 50 C.F.R. § 21.41 (2013).
[268] *Pirie*, 191 F. Supp. 2d at 167 (emphasis in original).
[269] *Id.* at 168.
[270] *Id.* at 177.
[271] *Id.*

should defer to the FWS's exercise of its prosecutorial discretion, the court stated that whether the FWS may have in the past exercised its discretion not to prosecute or permit unintentional violations of the MBTA is irrelevant because "[p]laintiffs have not sued the prosecutors, they have sued the violators."[272] The *Pirie* court held that the Navy violated both the MBTA and the APA.[273]

In December 2002, in response to the *Pirie* decision, a post-9/11 Congress enacted Section 315 of the 2003 National Defense Authorization Act.[274] This directed the Secretary of the Interior to exercise her authority under Section 704(a) of the MBTA to promulgate regulations to exempt the Armed Forces for any incidental taking of migratory birds during military-readiness activities.[275] The Final Rule was published in 2007,[276] and it exempts taking "incidental to military readiness activities"[277] as that term is defined in the Final Rule.[278] The Final Rule only authorizes taking incidental to "military readiness activity;" other takings by the military are not exempted and are thus prohibited by the MBTA.[279] If the activities may "result in a significant adverse effect on a population of a migratory bird species, the Armed Forces must confer and cooperate with the Service to develop and implement appropriate conservation measures to minimize

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[272] Interestingly, the *Pirie* court stated that the FWS' discretionary enforcement of the MBTA is another reason for permitting private parties to bring legal action, stating: [f]inally, if FWS exercises its discretion and generally does not prosecute 'unintentional' violations of the MBTA, when such activity clearly violates the law, this is even more reason for plaintiff to proceed with its action here. FWS is on record in this case stating that they will not prosecute defendants' activities on [the target range island]. Without plaintiff acting as a 'private attorney general,' no one would prevent these violations from occurring.

Id. (internal citations omitted).

[273] *Id.* at 177–78.

[274] Bob Stump National Defense Authorization Act for Fiscal Year 2003, Pub. L. 107-314, § 315, 116 Stat. 2458, 2509–10 (2002).

[275] *Id.* § 315(d).

[276] *Migratory Bird Permits*; *supra* note 66; Take of Migratory Birds by the Armed Forces, 72 Fed. Reg. 8931-01 (2007) (codified at 50 C.F.R. § 21.15 (2013)).

[277] *Id.*

[278] *Migratory Bird Permits*. *supra* note 66; Take of Migratory Birds by the Armed Forces, 72 Fed. Reg. at 8944 (codified at 50 C.F.R. § 21.3 (2013)). Authorization of take under this rule applies to take of migratory birds incidental to "military readiness activity," including "all training and operations of the Armed Forces that relate to combat, and the adequate and realistic testing of military equipment, vehicles, weapons, and sensors for proper operation and suitability for combat use." *Id.*

[279] *Id.*

or mitigate such significant adverse effects."[280] The Final Rule also directs the Armed Forces to assess the effects of military readiness activities on migratory birds in accordance with NEPA.[281]

Although the Department of Defense ("DOD") has initiated coordination with other federal agencies to establish a "Coordinated Bird Monitoring Plan" as a step in the assessment of its compliance with the MBTA, the MOU, and the Final Rule,[282] the efficacy of the DOD's effort to conserve migratory birds is unclear.

III. POSSIBLE SOLUTIONS

To reiterate the question posed by this Article, how can existing law, policy, and practice be reshaped to provide for greater conservation of protected avian species while accommodating anthropogenic activities that kill birds but are a vital part of our modern industrial society? In this final part, a number of possible legislative, judicial, and regulatory solutions to that question are proposed, the last is the focus of this Article: A broadly applicable program to permit incidental taking under the MBTA, created by the Secretary's exercise of her regulatory authority and implemented by rules and guidelines created for those specific activities and industries that pose the most significant threats to protected avian species, starting with the wind energy industry.

A. Legislative

The MBTA was last amended in 1998 when Congress removed strict liability for baiting violations and added the requirement of a knowing *mens rea* under Section 704(b).[283] Although the likelihood of any present-day Congressional action to amend the MBTA is remote given the lack of bipartisan cooperation in general and specifically on environmental issues, it is still a worthy exercise to consider what changes could be made at the statutory level to address the issue of incidental taking. Specifically, there are three possible legislative changes that merit consideration and discussion.

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[280] 50 C.F.R. § 21.15(a)(1) (2013).
[281] Take of Migratory Birds by the Armed Forces, 72 Fed. Reg. at §§ 8943–8944.
[282] *See* U.S. DEP'T OF THE INTERIOR, U.S. GEOLOGICAL SURVEY, COORDINATED BIRD MONITORING: TECHNICAL RECOMMENDATIONS FOR MILITARY LANDS (U.S.G.S. Open File Report 2010-1078) (2012) [hereinafter COORDINATED BIRD MONITORING], *available at* http://pubs.usgs.gov/of/2010/1078/pdf/ofr20101078.pdf.
[283] 16 U.S.C. § 704(b) (2012).

First, Congress could "update" the statutory definition of "take" in the MBTA. This amendment could be modeled on existing statutory and regulatory definitions that include incidental taking and have been interpreted to exclude taking where the actual or proximate causation is too attenuated.[284] Because the definition would be applicable only to avian species, it could be drafted to be both sufficiently broad to cover the range of conduct necessary to protect any form of wildlife (e.g., "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb"), and at the same time adequately specific as to certain actions that are likely to cause a taking of a protected bird (e.g., "nest abandonment").[285] This change would resolve any remaining doubts on whether the MBTA's prohibition applies to incidental taking and underscore the broad protection and conservation intent of the MBTA.

Second, the current criminal penalties for incidental taking could be replaced with civil penalties, which would resolve the due process concerns about applying strict liability to criminal proceedings for incidental taking, as well as concerns about the possibility of imprisonment and the potential stigma from having a criminal conviction on a defendant's record. Civil penalties could include monetary fines, as well as injunctive relief to cease the action or remedy the condition causing the taking, mitigate past and future taking, and impose requirements to monitor and report any future taking.

Third, if the MBTA is amended to provide for civil remedies, the addition of a "citizens suit" provision should be considered to allow any person to bring a civil action to enjoin an alleged violation of the MBTA that results in an incidental taking and to compel enforcement of the taking prohibition of the MBTA.[286] This addition would address the need for a "private attorney general" to prosecute "unintentional violations" under the

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[284] *See, e.g.*, Babbitt v. Sweet Home Chapter of Cmtys. for a Great Or., 515 U.S. 687, 687 (1995).

[285] For example, the definition of "take" under the BGEPA is defined to mean "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest or disturb." 16 U.S.C. §§ 668–668d (2012). "Disturb" is defined to mean:

> To agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

50 C.F.R. § 22.3 (2009).

[286] The ESA contains a broad citizen suit provision that could be used as a model for such a provision in the MBTA. *See* 16 U.S.C. § 1540(g) (2012).

MBTA if the FWS fails to enforce the statute's taking prohibitions.[287] To encourage citizen participation in the vigorous enforcement of the MBTA, this amendment should include provisions for the award of attorneys' fees and costs to prevailing parties at the discretion of the court.[288]

The enactment of these statutory changes would address some of the current difficulties in applying the MBTA to incidental taking. Further, such statutory changes would also bring the scope, enforcement, and penalty provisions of the MBTA into alignment with other major and more "modern" federal wildlife laws.

B. Judicial

As discussed above, the opinion of a majority of courts and commentators is that incidental taking is within the taking prohibition of Section 703(a) of the MBTA subject to limitations of actual and proximate causation.[289] However, a few lower courts continue to limit the taking prohibition based on Eighth and Ninth Circuit precedent.[290] Obviously, should a case come before the Supreme Court, a definitive ruling approving the *Apollo Energies* reasoning and holding would resolve any lingering uncertainties on this issue.

In the meantime, hopefully other federal appellate and district courts outside of the Tenth Circuit that have the opportunity to rule on the incidental taking issue will adopt *Apollo Energies*' foreseeability reasoning.[291] Such rulings would reinforce the prevailing view and would also bring the treatment of incidental taking under the MBTA nearer to other major federal wildlife laws.

C. Regulatory

1. FWS's Regulatory Authority to Permit Incidental Taking Under the MBTA

The authors of the MBTA envisioned an important role for the Secretary to implement the statute through regulations permitting taking

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[287] *See* Ctr. for Biological Diversity v. Pirie, 191 F. Supp. 2d 161, 177 (D.D.C. 2002).
[288] *See, e.g.*, 16 U.S.C. § 1540(g)(4).
[289] *See infra* Part I.B.3.
[290] *Id.*
[291] United States v. Apollo Energies, Inc., 611 F.3d 679, 689–90 (10th Cir. 2010).

under certain circumstances as an exception to the broad prohibition of Section 703.[292] Section 704(a) provides:

> Subject to the provisions and in order to carry out the purposes of the conventions, referred to in section 703 of this title, *the Secretary of the Interior is authorized and directed*, from time to time, having due regard to the zones of temperature and to the distribution, abundance, economic value, breeding habits, and times and lines of migratory flight of such birds, *to determine when, to what extent, if at all, and by what means, it is compatible with the terms of the conventions to allow* hunting, *taking*, capture, killing, possession, sale, purchase, shipment, transportation, carriage, or export of any such bird, or any part, nest, or egg thereof, and to adopt suitable regulations permitting and governing the same, in accordance with such determinations, which regulations shall become effective when approved by the President.[293]

Section 704(a) makes it clear that regulations also have the essential function of assuring compliance with the provisions of the Migratory Bird Conventions.[294] Additionally, regulations moderate the interpretation of the broad taking prohibition of Section 703(a) as described by Corcoran & Colbourn:

> The MBTA in many ways acts as a skeleton upon which the implementing regulations necessarily place the flesh. For example, the MBTA initially sets forth a sweeping prohibition against taking, killing or possessing "at any time, by any means or in any manner," migratory birds, parts, nests, eggs or products thereof. While it is seemingly overreaching on its face, this prohibition was written in contemplation of modifying its regulations.[295]

Finally, the regulations provide the FWS's interpretation of the MBTA's statutory provisions. In the context of the MBTA and other federal wildlife laws, such agency interpretations have provided courts with

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[292] 16 U.S.C. § 703(a) (2012) ("Unless and except as permitted by regulations made as hereinafter provided in this subchapter . . . .").
[293] 16 U.S.C. § 704(a) (2012) (emphasis added).
[294] *Id.*
[295] Corcoran & Colbourn, *supra* note 66, at 370.

important guidelines in construing a statutory provision that is not clear on its face,[296] and are often accorded *Chevron* deference by the courts.[297]

As previously noted, the FWS has exercised its broad rule-making authority by authorizing permits for taking from a diverse range of activities,[298] and by specifying the scope and conditions for such permits, such as record-keeping, reporting, compliance with applicable laws, and the suspension or revocation of permits.[299] Of particular interest are three instances where this rule-making authority has been recognized by Congress, the FWS, and the courts to permit incidental taking.

First, Congress recognized the Secretary's authority to permit incidental taking by the Armed Forces when it enacted the 2003 National Defense Authorization Act.[300] Section 315 of this Act specifically provides that "the Secretary of the Interior shall exercise the authority of that Secretary [under Section 704(a)] to prescribe regulations to exempt the Armed Forces for incidental taking of migratory birds during military readiness activities."[301] This provision indicates that Congress did not find it necessary to expand the authority of the Secretary to regulate incidental taking by the Armed Forces. Further, the legislative history to this Act indicates that the House of Representatives' version of the legislation provided for a statutory exemption for military readiness activities by the Armed Forces.[302] This provision was modified in conference with a compromise agreement to use the Secretary's regulatory authority to permit and mitigate the impact of such activities on migratory birds.[303]

Second, the FWS has recognized its own authority by issuing an MBTA "special purpose permit" for incidental taking in several situations.[304] First, the National Marine Fisheries Service ("NMFS") filed an application for a special purpose permit "to take birds incidental to the operations associated [with the shallow-set longline fishery based in

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[296] *See, e.g.*, United States v. Boynton, 63 F.3d 337, 343–46 (4th Cir. 1995) (interpretation of agency regulation to be harmonious with statutory provisions and providing a constitutionally adequate objective standard for enforcement); Babbitt v. Sweet Home Chapter of Cmtys. for a Great Or., 515 U.S. 687, 703 (1995) (Regulatory interpretation of the term "harm" in the ESA's statutory definition of "take." 50 C.F.R. § 17.3 (2013), 16 U.S.C. § 1532(19) (2012)).
[297] Chevron v. Natural Res. Def. Council, 467 U.S. 837, 838 (1984).
[298] 50 C.F.R. §§ 21.21–21.41 (2013).
[299] *See Migratory Bird Permits*, *supra* note 66.
[300] Bob Stump National Defense Authorization Act for Fiscal Year 2003, Pub. L. 107-314, § 315, 116 Stat. 2458, 2509–10 (2002).
[301] *Id.*
[302] 148 CONG. REC. S10858-01, S10861 (Nov. 13, 2002) (statement of Sen. Carl Levin).
[303] *Id.*
[304] 50 C.F.R. § 21.27 (2013).

Hawaii]."[305] According to the Final Environmental Assessment, the NMFS sought a special purpose permit in connection with its management and regulation activities under the Fishery Ecosystem Plan for Pacific Pelagic Fisheries for the Western Pacific Region developed by the Western Pacific Regional Fishery Management Council under the Magnuson-Stevens Act.[306] As stated in NMFS's application, "[s]eabirds (as well as sea turtles and other non-target species) can be killed or injured on either the set or the haul when they are unintentionally hooked or entangled in fishing gear. Injury and mortality meet the definition of 'take' for the purposes of the MBTA."[307]

Section 21.27 of the regulations provides the criteria for the issuance of a special purpose permit:

> Permits may be issued for special purpose activities related to migratory birds, their parts, nests, or eggs, which are otherwise outside the scope of the standard form permits of this part. A special purpose permit for migratory bird related activities not otherwise provided for in this part may be issued to an applicant who submits a written application containing the general information and certification required by Part 13 and makes a sufficient showing of benefit to the migratory bird resource, important research reasons, reasons of human concern for individual birds, *or other compelling justification*.[308]

As stated in the Final Environmental Assessment, "[t]he nature of the activity for which a permit is sought, the regulation of a commercial fishery, may qualify only under the 'other compelling justification' of the above permitting criteria[,]"[309] and specifies the reasons why the applicant cannot meet the other possible criteria.[310] Noting that the term "compelling justification" is not defined in the MBTA, implementing regulations, or in current FWS policy or guidance, the Final Environmental Assessment stated that the term will be applied by the FWS "on a case by case basis."[311]

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[305] FINAL ENVIRONMENTAL ASSESSMENT, *supra* note 230, § 1.2.
[306] *Id.*
[307] *Id.* (internal citation omitted).
[308] 50 C.F.R. § 21.27 (emphasis added).
[309] FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 5, § 1.4.
[310] *Id.*
[311] *Id.*

The Final Environmental Assessment also stated that all of the information contained in the application would be considered, including both the environmental and economic impacts of the alternatives considered in the Final Environmental Assessment.[312]

Although it is unclear from the Final Environmental Assessment's "compelling justification" for the permit,[313] the FWS issued a Finding of No Significant Impact and a special purpose permit to the NMFS.[314] The FWS's action indicates that it is willing to exercise its existing regulatory authority under the MBTA to issue a permit for incidental taking by a commercial enterprise when it finds the environmental impacts are low, the economic effects are not insignificant, and mitigation efforts are reducing the incidental take of a protected species.

A second example of the FWS's permitting of incidental taking under Regulation Section 21.27 is found in its policy of issuing a special purpose permit for the incidental taking of a migratory bird species that is both protected under the MBTA and also listed under the ESA (other than bald or golden eagles) if an Incidental Take Permit ("ITP") has been issued for such species under Section 10 of the ESA.[315] In this situation, it is reasonable to assume that the FWS is willing to issue the special purpose permit based on the analysis and mitigation provisions found in the

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[312] *Id.*

[313] After extensive review of the adverse and beneficial impacts of each alternative considering each of the issues listed in the Council on Environmental Quality regulation (40 C.F.R. § 1508.27(b) (2013)), and reaching the conclusion that none of the alternatives would lead to significant impacts to the affected species during the three-year term of the permit, the Final Environmental Assessment identified Alternative 2 (issuance of the requested permit with conditions), "because it best meets the purpose and need for our permitting action, would provide better information on seabird mortality and causes than under the no-action alternative, and would have minimal operational impacts and no economic costs to the fishery within the permit term." FINAL ENVIRONMENTAL ASSESSMENT, *supra* note 230, at 43, § 5. *See also* U.S. FISH & WILDLIFE SERV., QUESTIONS AND ANSWERS FINAL ENVIRONMENTAL ASSESSMENT: ISSUANCE OF AN MBTA PERMIT TO THE NMFS AUTHORIZING INCIDENTAL TAKE OF SEABIRDS IN THE HAWAII-BASED SHALLOW-SET LONGLINE FISHERY [hereinafter QUESTIONS AND ANSWERS: FINAL ASSESSMENT], *available at* http://www.fws.gov/pacific/migratorybirds/pdf/NMFS Permit Final EA Q&A.pdf.

[314] *See* U.S. FISH & WILDLIFE SERV., FINDING OF NO SIGNIFICANT IMPACT (FONSI)—ISSUANCE OF AN MBTA PERMIT TO THE NATIONAL MARINE FISHERIES SERVICE AUTHORIZING TAKE OF SEABIRDS IN THE HAWAII-BASED SHALLOW-SET LONGLINE FISHERY (Aug. 16, 2012) [hereinafter FINDING OF NO SIGNIFICANT IMPACT (FONSI)—ISSUANCE OF AN MBTA PERMIT], *available at* http://www.fws.gov/pacific/migratorybirds/pdf/NMFS Permit FONSI.pdf.

[315] U.S. FISH & WILDLIFE SERV., HABITAT CONSERVATION PLANNING AND INCIDENTAL TAKE PERMIT PROCESSING HANDBOOK 3-39 to 3-40 & Appendix A (1996) [hereinafter HABITAT CONSERVATION PLANNING AND INCIDENTAL TAKE PERMIT PROCESSING HANDBOOK].

Habitat Conservation Plan ("HCP") that is required to issue an ITP, and to promote the species and habitat conservation measures contained in the HCP by removing the threat of a MBTA violation for an incidental taking from the implementation of such measures.

Finally, federal courts have recognized that the FWS has broad powers under the MBTA to promulgate regulations to minimize incidental taking.[316] For example, in *National Rifle Ass'n of America v. Kleppe*,[317] the district court upheld regulations requiring the use of steel shotgun shot in certain hunting situations to limit taking of migratory waterfowl from ingesting lead shot as based on the agency's authority under Section 704 of the MBTA and within its discretion.[318]

2. Proposal for MBTA Incidental Take Permitting Program by Regulation

As discussed above, the FWS has the regulatory authority to promulgate regulations to permit taking otherwise prohibited by the MBTA, and has already exercised such authority by permitting incidental taking by the Armed Forces and to issue special purpose permits for incidental taking.[319] Therefore, to solve the many problems created by using "voluntary guidance" and "prosecutorial discretion" as described above to address the issue of incidental taking, this Article proposes that the FWS promulgate a comprehensive regulation to create a program for permitting incidental taking from industrial and commercial activities and from infrastructure that create a significant threat to MBTA-protected species.

This Article further proposes that the FWS take the necessary steps to promptly implement the MBTA incidental take permitting program for wind energy development and operations by creating the necessary rules and guidelines as described in the proposed regulation. This permit program, once implemented, would replace the current method for "regulating" wind energy activities based on voluntary adherence to guidelines

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[316] *See* RULEMAKING PETITION, *supra* note 197, at 71.

[317] Nat'l Rifle Ass'n of Am. v. Kleppe, 425 F. Supp. 1101 (D.D.C. 1976), *aff'd*, Nat'l Rifle Ass'n of Am. v. Andrus, 571 F.2d 674 (Table) (D.C. Cir. 1978).

[318] *Id.* at 1110–11. *See also* United States v. Catlett, 747 F.2d 1102, 1105 n.5 (6th Cir. 1984) ("The Secretary was given plenary power to allow the taking of migratory birds, which is otherwise *wholly unlawful*.").

[319] *See Migratory Bird Permits*, *supra* note 66; Take of Migratory Birds by the Armed Forces, 72 Fed. Reg. 8931-01 (2007) (codified at 50 C.F.R. § 21.15 (2013)); FINDING OF NO SIGNIFICANT IMPACT (FONSI)—ISSUANCE OF AN MBTA PERMIT, *supra* note 314; HABITAT CONSERVATION PLANNING AND INCIDENTAL TAKE PERMIT PROCESSING HANDBOOK, *supra* note 315; COORDINATED BIRD MONITORING, *supra* note 282.

by the developers and operators incentivized by the FWS's practice of exercising prosecutorial discretion in the event an incidental taking occurs.

As described below, several different regimes are already in use to permit incidental taking from industrial and commercial activities and infrastructure under different statutes. Therefore, before discussing the specific features and content of the proposals made in this Article, it would be useful to examine briefly these existing regimes and assess their suitability as a model for an incidental take permitting system under the MBTA.

a. Existing Incidental Take Permitting Regimes

1) MBTA Regulation § 21.27 Special Purpose Permits

First, it is possible that an incidental take permitting program could be accomplished through the existing MBTA Regulation Section 21.27 authorizing "special purpose permits."[320] As discussed above, the FWS has already exercised its authority under this regulation to issue a special purpose permit for incidental taking by a commercial fishery.[321] However, it remains to be seen if the NMFS's fishery permit satisfies the criteria set forth in Regulation Section 21.27, specifically including the requirement of a "compelling justification" for the permit.[322] Further, the permit issued in this situation was a "programmatic permit" to the NMFS, who is the regulatory authority responsible for the development and enforcement of regulations that specify procedures for the minimization and mitigation of incidental taking, eliminating the need for the application and processing of individual permits for each fishing operator.[323]

Using the special purpose permit regulation as a vehicle upon which to base a broadly applicable program for permitting incidental taking by industrial and commercial activities, and by wind energy activities in particular, has the advantage of being in place with the legal authority to proceed immediately. However, existence of the regulation by itself is inadequate to create a comprehensive incidental take permitting program. Its implementation would still require the creation of comprehensive new (or coordination with existing) policies, regulations, and guidelines to implement mitigation measures and other permit conditions necessary to satisfy the conservation mandates of the MBTA and the migratory bird

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[320] 50 C.F.R. § 21.27 (2013).
[321] *See* FINDING OF NO SIGNIFICANT IMPACT (FONSI)—ISSUANCE OF AN MBTA PERMIT, *supra* note 314.
[322] 50 C.F.R. § 21.27 (2013).
[323] *See* QUESTIONS AND ANSWERS: FINAL ASSESSMENT, *supra* note 313.

conventions, the regulatory requirements for a special purpose permit, and the practical considerations of processing and enforcing such permits. Therefore, the creation and implementation of industry-specific rules and guidelines as proposed by this Article would still be necessary under Regulation Section 21.27, and would be subject to NEPA and APA rulemaking procedures.[324]

Other requirements of Regulation Section 21.27 and how it has been previously applied create additional issues. For example, the "compelling reason" criteria for the fishery permit was based on an undefined case-by-case subjective standard, which creates an ambiguity which on review could be more difficult for the agency to defend than a permit issued under a more precisely drafted regulation.[325] Also, as discussed below, although general "area" or "regional" permits are a possible option for permitting incidental taking for certain activities, such a "permit-by-rule" approach is not appropriate for all types of activities that threaten protected birds.[326]

Therefore, while using special purpose permits to permit incidental taking under the MBTA is a credible alternative, its drawbacks argue for more precisely tailored regulations and rules to address the specific issues that would be presented by a broadly applicable permitting program.

2) ESA Section 10 Incidental Take Permits

Should the FWS decide to draft new regulations under the MBTA to create a broadly applicable incidental take permitting program, it could look for guidance at the ITP regime under Section 10(1)(a)(B) of the ESA.[327] Section 10 is an attempt to balance the interests of endangered or threatened species conservation and the reality that incidental taking of listed species will occur from the conduct of commercial, farming, industrial, and other activities by non-federal persons.[328] The Section 10 ITP permitting

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[324] *See* 42 U.S.C. § 4332(2)(C) (2012); 40 C.F.R. § 1508(B)(1) (2013).
[325] *See* QUESTIONS AND ANSWERS: FINAL ASSESSMENT, *supra* note 313.
[326] *See infra* Part III.C.2.b(4).
[327] 16 U.S.C. § 1539(1)(a)(B) (2012) ("The Secretary may permit, under such terms and conditions as he shall prescribe—[] any taking otherwise prohibited by section 1538(a)(1)(B) of this title if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.").
[328] H.R. Rep. No. 97-567, at 31 (1982), *reprinted in* 1982 U.S.C.C.A.N. 2807, 2831 ("[The ITP] addresses the concerns of private landowners who are faced with having otherwise lawful actions not requiring federal permits prevented by the section 9 prohibitions against taking.") An ITP is available to non-federal persons for incidental taking where the applicant can satisfy the requirements of 50 C.F.R. § 17.22(b) for endangered species, or § 17.32

process has been recognized as an appropriate vehicle to resolve the potential conflict between the two federal policies of protecting endangered species and encouraging development of renewable energy resources.[329]

This balancing of interests in the case of listed bird and bat species threatened by wind energy development is playing out as applications for ITPs by wind energy developers are being processed.[330] The major stumbling block for wind energy development to obtain an ITP is the requirement under Section 10 that an applicant must prepare an HCP describing, among other items, how listed species are affected and mitigation measures to address harm to such species.[331] The development, studies, monitoring and public comment components of an HCP can make it a time-consuming and expensive process, often taking several years.[332]

How to apply the ESA to the rapidly developing wind energy industry, and possible changes that may be made to accommodate issues raised by the wind energy industry, is the subject of a current ongoing discussion.[333] For example, to "streamline" the regulatory approval process for wind energy projects, the DOI has introduced several initiatives to facilitate the permitting processes for onshore and offshore wind energy projects.[334] The 2010 "Smart from the Start" initiative is intended to promote the development and permitting of wind projects off the Atlantic coastline.[335] Onshore, the collaborative development of "regional HCPs"

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for threatened species. Federal agencies and other persons can obtain an "incidental take statement" for incidental taking as part of the Section 7(a)(2) consultation process which will occur whenever a federal agency, federal funding or a federal permit is involved. 16 U.S.C. §§ 1536(a)(2) & (b)(4).

[329] RULEMAKING PETITION, *supra* note 197, at 84.

[330] *See, e.g.*, *U.S. Fish and Wildlife Service Approves Habitat Conservation Plan for Proposed Ohio Wind Farm*, U.S. FISH & WILDLIFE SERV. (July 18, 2013), *available at* http://www.fws.gov/midwest/news/664.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+FwsMidwestNewsroom+%28FWS+Midwest+News+and+Highlights%29; U.S. FISH & WILDLIFE SERV., *Issuance of an Incidental Take Permit to Shell Wind Energy for Construction and Operation of the Bear River Ridge Wind Power Project (Multiple Species Habitat Conservation Plan), Humboldt County, CA*, 74 Fed. Reg. 68073-01 (Dec. 22, 2009); Chris Clarke, *Another Endangered Species Kill Permit Issued to Make Way for Wind Energy*, REWIRE (July 22, 2013), http://www.kcet.org/news/rewire/wind/another-endangered-species-kill-permit-for-wind-turbines.html.

[331] 50 C.F.R. § 17.22(b) (2013).

[332] *See, e.g.*, Ruhl, *supra* note 50, at 1782.

[333] *Id.*

[334] *Id.* at 1783.

[335] *See* Press Release, U.S. Dep't of Interior, Frequently Asked Questions: 'Smart from the Start' Atlantic OCS Offshore Wind Initiative (Nov. 23, 2010), http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&PageID=73317; Press Release, Bureau of

("RHCPs") is intended to facilitate the issuance of ITPs for listed species common to certain regions where wind energy development is particularly active.[336] However, the use of RHCPs to address the problems for wind energy development created by the ESA are in a developmental stage with significant legal and practical issues to be resolved.[337]

The suitability of Section 10 as a model for permitting incidental taking under the MBTA in general, and by wind energy projects in particular, is questionable due to several key issues. The first issue is a systemic one, which asks whether a system created to minimize and mitigate the taking of a few specimens of relatively small populations of one or several listed species is an appropriate model for permitting incidental taking of greater numbers of larger populations of many species that are not in danger of extinction or threatened with extinction. For example, further study and analysis is necessary to determine if RHCP area permitting would be an appropriate conservation approach for minimizing and mitigating taking of the greater number of MBTA-protected species, or for larger local populations of a single species. A second issue arises out of the apparent tension between implementation of the federal policy promoting the rapid development of wind energy generation capacity[338] and the time-consuming requirements of the current ITP/HCP process.[339] A third related issue is the implementation and effect of the DOI's initiatives to "reduce the regulatory burden" involved in obtaining an ITP, which would need to be resolved to see how the ITP program is applied to the wind energy industry.[340] As with the RHCPs, it is an open question whether such

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Safety & Envtl. Enforcement, BOEMRE Director Delivers Opening Remarks for Renewable Energy Workshop (July 14, 2011), http://www.boem.gov/BOEM-newsroom/press-releases/2011/press0714.aspx (Remarks of Bureau of Ocean Energy Management, Regulation and Enforcement Director Michael R. Bromwich to the Atlantic Wind Energy Workshop explaining the "Smart from the Start" wind energy initiative as it applies to offshore wind energy development).

[336] *See, e.g.*, News Release, U.S. Fish & Wildlife Serv., Fish & Wildlife Serv. Evaluates Landmark Wind Energy Corridor from Canada to Gulf of Mexico (July 13, 2011), *available at* http://www.fws.gov/southwest/es/Documents/FWSBiregionalwindenergyITPNR7-11-11.pdf; WIND ENERGY WHOOPING CRANE ACTION GROUP, GREAT PLAINS WIND ENERGY HCP FACT SHEET, *available at* http://www.greatplainswindhcp.org/documents/fact_sheet.pdf (Regional HCP for a 1,500-mile-long, 200-mile-wide corridor from Texas to North Dakota, covering parts of 9 states and 3 ESA-listed avian species (whooping crane, interior least tern, and piping plover) and ESA-candidate avian species (lesser prairie-chicken)).

[337] *See* Ruhl, *supra* note 50, at 1783–85.

[338] *See supra* notes 45–48.

[339] *See* Ruhl, *supra* note 50.

[340] *Id.*

"streamlining" initiatives are appropriate to conserve MBTA-protected species and populations.

3) Bald and Golden Eagle Protection Act Non-Purposeful Take Permits

A third possible model for an MBTA permitting regime is the recently implemented incidental take permit program under the BGEPA.[341] Under this program, the Secretary is authorized to permit the taking of eagles protected under the BGEPA upon a determination ". . . that [taking] is compatible with the preservation of the bald eagle or the golden eagle . . . ."[342] The requirements for a permit for the non-purposeful taking of bald and golden eagles are described in Regulation Section 22.26,[343] and for the removal or relocation of bald and golden eagle nests in Regulation Section 22.27.[344]

Guidance to assist applicants in determining whether an eagle take permit is necessary and, if so, in meeting the regulatory requirements, can be found in the "Eagle Conservation Plan Guidance" ("ECPG").[345] The "eagle-specific" guidance provided by the ECPG is intended to integrate

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[341] 50 C.F.R. §§ 22.26–22.27 (2013).

[342] 16 U.S.C. § 668a (2012). The definition of "take" under the BGEPA is defined to mean "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest or disturb." 50 C.F.R. § 22.3 (2013). "Disturb" is defined to mean:

> To agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

Id.

[343] 50 C.F.R. § 22.26 (2013). In addition to the preservation mandate set forth in 16 U.S.C. § 668a, the Regulations require that for the issuance of an incidental eagle take permit the FWS must find that, "The direct and indirect effects of the take and required mitigation, together with the cumulative effects of other permitted take and additional factors affecting eagle populations, are compatible with the preservation of bald eagles and golden eagles . . . ." *Id.*

[344] 50 C.F.R. § 22.27 (2013).

[345] *See* U.S. FISH & WILDLIFE SERV., MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE: MODULE 1—LAND-BASED WIND ENERGY, VERSION 2 (Apr. 2013), http://www.fws.gov/migratorybirds/PDFs/Eagle Conservation Plan Guidance-Module 1.pdf [hereinafter MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE]. *See also Bald Eagle Permit: Non-Purposeful Take Application and Fee Schedule*, U.S. FISH & WILDLIFE SERV., http://www.fws.gov/midwest/midwestbird/eaglepermits/baeatake/application.html (last updated July 17, 2013) [hereinafter *Bald Eagle Permit*].

with the more general guidance and the "tiered" approach set forth in the Final Wind Energy Guidelines:

> This document [ECPG] provides specific in-depth guidance for conserving Bald and Golden eagles in the course of siting, constructing, and operating wind energy facilities. The ECPG guidance supplements the Service's Land-Based Wind Energy Guidelines (WEG). WEG provides a broad overview of wildlife considerations for siting and operating wind energy facilities, but does not address the in-depth guidance needed for the specific legal protections afforded to bald and golden eagles. The ECPG fills this gap.[346]

The regulations authorize the FWS to issue permits for both isolated takes and for "programmatic take," which is defined as "take that is recurring, not caused solely by indirect effects, and that occurs over the long term or in a location or locations that cannot be specifically identified."[347] To qualify for a permit, an isolated taking must be a taking that "cannot practicably be avoided,"[348] and recurring taking must be "unavoidable" even after the implementation of conservation measures including advanced conservation practices ("ACPs").[349] The specific permit requirements and conditions, including conservation measures and compensatory mitigation measures, may be described in an Eagle Conservation Plan ("ECP"),

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[346] MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345, at ii.

[347] 50 C.F.R. § 22.3 (2013). *See also* MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345, at 36. Note that the ECPG's definition of "programmatic" is somewhat different than the term that is used by other authors and in this Article. *See infra* Part III.C.2.b(4).

[348] *Bald Eagle Permit*, *supra* note 345.

[349] 50 C.F.R. § 22.26(a) (2013). *See also* MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345, at 34. The ECPG provides that "advanced conservation practices" ("ACPs") are defined as "scientifically supportable measures that are approved by the Service and represent the best available techniques to reduce eagle disturbance and ongoing mortalities to a level where remaining take is unavoidable. ACPs are a special subset of conservation measures that must be implemented where they are applicable." *Id.* at iv. However, the ECPG also states, "[b]ecause the best information currently available indicates there are no conservation measures that have been scientifically shown to reduce eagle disturbance and blade-strike mortality at wind projects, the Service has not currently approved any ACPs for wind energy projects." *Id.* The ECPG discusses working with developers on implementing ACPs on an "experimental basis" and evaluated on their effectiveness, and the possibility of using "other conservation measures" that should be applied as a condition to a permit, but all such ACPs and other measures should be subject to a "cost cap" established by the FWS and the developer. *Id.* Further, the implementation of any ACPs that move beyond the "experimental" stage will not be required on a retroactive basis. *Id.* at v.

a document produced by the developer or operator in coordination with the FWS that supports the issuance of an eagle take permit, or demonstrates that such a permit is unnecessary.[350]

As noted above, the ECPG is intended to coordinate with the recommendations and methodology of the Final Wind Energy Guidelines. The ECPG incorporates the "staged-tiered" approach of the Final Wind Energy Guidelines for the siting, analysis, monitoring, operation and mitigation of wind energy projects, and adds additional provisions and details to tailor the risk assessment and decision-making process specifically to bald and golden eagles.[351] Like the Final Wind Energy Guidelines, adherence to the methods and approaches "suggested" by the ECPG is not required to obtain an eagle take permit.[352] But unlike the Final Wind Energy Guidelines, the ECPG does not provide assurances that adherence to the ECPG-suggested methodology will be considered in a decision whether to prosecute an unpermitted taking of a bald or golden eagle.[353]

The BGEPA incidental take permit program has both structural and substantive features that should be considered when structuring an MBTA incidental take permit program. For example, the eagle take permit system is implemented by FWS regulations under specific statutory authority, and further relies on FWS guidance that incorporates and builds upon the existing Final Wind Energy Guidelines for implementation.[354] In addition, the eagle permit program provides for specific project permit applications and ECPs using species-specific and geographically specific provisions for assessing risk and establishing take thresholds that satisfy the conservation requirements of the statutory authority, provides for permits for recurring taking, and provides for the use of compensatory mitigation

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[350] *See* MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345. The ECP is similar to, and may be a part of, the "Bird and Bat Conservation Strategies" ("BBCS," formerly called "Avian and Bat Protection Plans") provided for in the Final Wind Energy Guidelines, that ". . .will explain the analysis, studies, and reasoning that support progressing from one tier to the next in the tiered approach [and is] a document or compilation of documents that describes the steps a developer could or has taken to apply these Guidelines to mitigate for adverse impacts and address the post-construction monitoring efforts the developer intends to undertake." FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 55. A BBCS may be reviewed by the FWS, but "[such review] is advisory only, and does not constitute a federal agency action subject to [NEPA]." MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345, at 34.

[351] MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345. *See* FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 7–11.

[352] MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345, at iii.

[353] *See* FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 4.

[354] *See* MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345.

measures to achieve a zero net-loss management policy.[355] As discussed below, a number of these provisions are incorporated in the proposed incidental take permit program under the MBTA.

b. Components of Proposed MBTA Incidental Take Permit Program

As described in greater detail below, the proposed *MBTA Incidental Take Permit Regulation* ("Proposed Regulation")[356] would create a program for permitting incidental taking by a wide range of industrial and commercial activities, including wind energy development and operations. To create a broadly applicable solution, this proposal works within the structure of the MBTA by having the implementing agency exercise its statutory authority to promulgate a regulation to provide the basic framework for permitting incidental taking, and to produce "step-down" implementation plans and guidelines to provide the rules for permits to authorize take incidental to a specific industrial or commercial activity or infrastructure, such as developing and operating a wind energy project. The Proposed Regulation would expressly provide that the issuance of such plans and guidelines would be subject to the notice and comment and other procedures applicable to administrative rule making procedures and to the environmental review requirements of NEPA.

It should be noted that similar proposals have previously been made, including the 2011 American Bird Conservancy's petition for rule making with the DOI ("ABC Petition"),[357] a "permit-by-rule" proposal by a pipeline industry trade organization,[358] and by several commentators in various academic journals.[359] However, all of these proposals only apply to incidental taking by wind energy or other specific industrial activity, and do not propose a program that could be applicable to a broad range of industrial and commercial activities and infrastructure. As such, this proposal

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[355] *Id.* at iv.

[356] A "working title" for the regulation proposed in this Article.

[357] RULEMAKING PETITION, *supra* note 197. The ABC Petition is the most comprehensive of all the proposals, with substantial justification of the need and authority for an incidental take program and a draft regulations to implement the proposal.

[358] *See* AM. BIRD CONSERVANCY, BIRD-FRIENDLY BUILDING DESIGN (2011), *available at* http://www.abcbirds.org/newsandreports/BirdFriendlyBuildingDesign.pdf.

[359] *See, e.g.*, Meredith Blaydes Lilley & Jeremy Firestone, *Wind Power, Wildlife, and the Migratory Bird Treaty Act: A Way Forward*, 38 ENVTL. L. 1167, 1210 (Fall 2008); John Arnold McKinsey, *Regulating Avian Impacts Under the Migratory Bird Treaty Act and Other Laws: The Wind Industry Collides with One of Its Own, the Environmental Protection Movement*, 28 ENERGY L.J. 71, 91 (2007).

is more comprehensive than any prior proposals or any existing permit program under the MBTA or BGEPA.

Also, although this proposal focuses on developing a wholly new incidental take permitting program, it incorporates elements from the special purpose permit program under Regulation Section 21.27, ITPs under Section 10 the ESA, the eagle take permit regime,[360] and a variety of other sources including the ABC Petition,[361] various commentators' proposals,[362] and stakeholders' policy statements.[363]

1) MBTA Incidental Take Permit Regulation

The proposed regulation for a MBTA incidental take permit program should include the following basic provisions:

Defining "take." The Proposed Regulation should add a new definition of "take" applicable to the MBTA, modeled upon the current definition in the BGEPA eagle permit regulations[364] with additional language modeled on the ESA definition[365] of incidental taking: "Take means pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest or disturb, and includes any taking incidental to, and not the purpose of, the carrying out of an otherwise lawful activity."[366]

The Proposed Regulation should also add a definition of "disturb" based on the BGEPA regulations to incorporate actions that cause avian-specific types of harm that would result in a taking.[367] The Proposed Regulation's definition of "take" should not significantly expand the scope of prohibited taking beyond the *Apollo Energies*' ruling, and would clarify the nature and types of proscribed conduct under Section 703(a) of the MBTA.[368]

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[360] *See infra* Part III.C.2.a(3).
[361] RULEMAKING PETITION, *supra* note 197.
[362] *See infra* Part III.C.2.a(3).
[363] *See American Bird Conservancy's Policy Statement on Wind Energy and Bird-Smart Wind Guidelines*, AM. BIRD CONSERVANCY, http://www.abcbirds.org/abcprograms/policy/collisions/wind_policy.html (last visited Dec. 11, 2013) [hereinafter *Policy Statement on Wind Energy and Bird-Smart Wind Guidelines*].
[364] 50 C.F.R. § 22.3 (2013). *See Migratory Bird Treaty Act*, 16 U.S.C. § 703 (2012).
[365] 50 C.F.R. § 17.3 (2013).
[366] 50 C.F.R. § 22.3; 50 C.F.R. § 17.3.
[367] 50 C.F.R. § 22.3. It would be necessary in the Proposed Regulation to change references to eagles in 50 C.F.R. § 10.13 to a member of a species protected under the [MBTA], and modify the definition to be applicable to those actions that would affect a broader range of species.
[368] This new regulatory definition would only be applicable under the MBTA, and would not supersede the more general definition found in 50 C.F.R. § 10.12 (2013) for other purposes.

Authority and Purpose. The Proposed Regulation should specify that:

- The Secretary is exercising her regulatory authority under MBTA Section 704(a) to issue permits for taking incidental to, and not the purpose of, otherwise lawful activities when necessary to protect an interest in a particular locality, or for the purpose of conserving the migratory bird resources of the United States or the habitat upon which they depend, when the Secretary determines that such taking is unavoidable through the implementation of rules and guidelines established by the Secretary to mitigate such taking.
- A permit issued under the Proposed Regulation would be a *Migratory Bird Treaty Act Incidental Take Permit* ("MBTAITP").
- It is the purpose of the Proposed Regulation to authorize both recurring and isolated taking, with the specific requirements necessary to determine if a taking is "unavoidable" in the rules and guidelines.
- It is the intent of the Proposed Regulation to authorize both individual permits on a project-by-project basis, and "general permits" for certain types of activities when deemed appropriate by the Secretary.[369]

Net-Zero Taking Policy. The Proposed Regulation should specify that the Secretary has determined that the conservation standard required by the MBTA to comply with the statute's purpose and the Migratory Bird Conventions is to maintain stable or increasing breeding populations of MBTA-protected species, and to satisfy such standard the Secretary establishes a "net-zero taking policy" for taking under MBTAITPs on species-by-species basis.[370]

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[369] *See infra* Part III.C.2.b(4).

[370] *See* 16 U.S.C. § 701 (2012) (Duties and powers of the DOI include "the preservation, distribution, introduction, and restoration of game birds and other wild birds."); Fund for Animals v. Williams, 246 F. Supp. 2d 27, 40 (D.D.C. 2003) ("[The U.S.-Canada Convention] directs the parties to manage migratory bird populations to, *inter alia,* ensure a variety of sustainable uses, sustain healthy populations for harvesting needs, and restore depleted populations."); Humane Soc'y of U.S. v. Watt, 551 F. Supp. 1310, 1319 (D.D.C. 1982), *aff'd*,

MBTAITP Criteria. The Proposed Regulation should specify criteria for the issuance of a MBTAITP, which could be modeled on the criteria included in the BGEPA eagle permit rule,[371] including criteria that the permit issuance is compatible with the preservation and conservation of MBTA-protected species, that the taking is necessary to protect or promote a legitimate interest in a particular locality, and that the taking is incidental and unavoidable even with implementation of the mitigation and other measures specified in the applicable rules and guidelines.[372] The criteria should also specify that a MBTAITP permit will not authorize the taking of any species also protected under the ESA, the BGEPA or any other statute unless also subject to a taking permit issued under such statute and, if so, the MBTAITP will not authorize greater impacts from the taking than allowed under such other permit.

MBTAITP Conditions and Fees. The Proposed Regulation should specify that each MBTAITP will include conditions to issuance, renewal, revocation, and termination of the permit as deemed advisable and necessary by the Secretary—including the payment of all fees, the initial and continued implementation of all mitigation, monitoring, management, and reporting requirements imposed by the applicable rules and regulations. A flat fee will be imposed on each applicant for each new permit application and on permittee for each renewal application. Variable fees will be imposed for the review, consultation, and processing of each new permit application, for the ongoing periodic review, evaluation, and inspection of a permittee's studies, assessments, data, physical site, and facility to ensure continuing permit compliance, for the review, consultation, and processing of a renewal permit application, and for the review, monitoring, and inspection upon the decommissioning of a project. The variable fees for the processing of applications for new permits, renewal of permits, and decommissioning of a facility upon termination, expiration, or surrender of a permit would be an amount based upon a calculation of size, impact, and amount of agency resources necessary to process the permit or periodic review, renewal, or decommissioning according to a formula to be detailed in the rules and guidelines for each activity.[373]

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713 F.2d 865 (D.C. Cir. 1983) ("The treaty demonstrates an interest in preserving sufficient numbers of birds to provide an ample stock of game for hunting in future years.").

[371] 50 C.F.R. § 22.26(f) (2013).

[372] *Id.* Also, the issuance of an MBTAITP would be a major federal action requiring NEPA analysis. 50 C.F.R. § 1508.18(b)(4) (2013).

[373] Fees based on the estimated cost to the agency to process incidental take permit applications, and to develop and monitor the effectiveness of the terms and conditions of the permit, have already been proposed by the FWS for permits under the BEGPA eagle take

Permit Duration. The Proposed Regulation should specify that all MBTAITPs will be issued for a maximum period of five years, subject to continuing compliance with all conditions imposed by the permit. A MBTAITP would be renewable in five year increments up a maximum of thirty years if the permittee is in compliance with all conditions specified in the permit, as such conditions may be modified by any changes in the Proposed Regulation or in the applicable rules and regulations since the last issuance or renewal of the permit, which may include required upgrades to mitigation standards, practices, procedures, and technology.[374]

Step-Down Rules and Guidelines. The Proposed Regulation should provide that to fulfill its purpose and directive, the implementing agency shall establish "Step-Down Rules and Guidelines" ("SDRG") for activities that the agency determines in its discretion to be "significant" threats to migratory bird resources by causing or having the potential to cause significant incidental taking of MBTA-protected species.[375] All SDRGs should

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permits regulations. 50 C.F.R. § 22.26; Eagle Permits: Changes in the Regulations Governing Eagle Permitting, 77 Fed. Reg. 22267 (Apr. 13, 2012). Similar fees based on the projected cost to the agency of processing and monitoring MBTAITP applications and permits would offset the costs of implementing and maintaining the MBTAITP program, which is a common objection to such a permitting regime. In addition to capturing the direct administration costs for the MBTAITP program, the fees would also capture some of the indirect costs for agency resources that are currently not recouped under the Final Wind Energy Guideline, such as for reviewing plans, consulting, and making recommendations to developers to project developers.

[374] The five-year maximum permit term is the same as specified in the BGEPA eagle take permit regulations. 50 C.F.R. § 22.26(h) (2013). However, on April 13, 2012, the FWS published a proposed change to the regulation, extending the maximum term of programmatic take permits from five to thirty years for renewable energy and other projects designed to operate for many decades. Eagle Permits: Changes in the Regulations Governing Eagle Permitting, 77 Fed. Reg. 22267 (Apr. 13, 2012). The FWS stated, "[i]t has become evident that the 5-year term limit imposed by the 2009 regulations . . . is not long enough to enable many . . . project proponents to secure the funding, lease agreements, and other necessary assurances to move forward with their projects." *Id.*; *Eagle Conservation, Research, and Wind Energy*, AM. WIND WILDLIFE INST. (2013), http://awwi.org/uploads/files/AWWI-Eagle-Issue-Brief-%28June2013%29.pdf. This proposal has produced strong objections, for example, that such long permits would make changes in mitigation next to impossible for projects whose actual taking have exceeded projected levels. *See* AM. BIRD CONSERVANCY, FWS-R9-MB-2011-0054, COMMENTS ON EAGLE PERMITS: CHANGES IN THE REGULATIONS GOVERNING EAGLE PERMITTING (2012), *available at* http://www.abcbirds.org/abcprograms/policy/collisions/pdf/CLC-ABC_EaglePermitDuration_Comments.pdf; Chris Clarke, *Federal Agency Slammed Over 'Secretive' Eagle–Wind Energy Policy*, REWIRE (Feb. 19, 2013, 4:54 PM), http://www.kcet.org/news/rewire/wildlife/groups-slam-fish-and-wildlife-over-undemocratic-eagle-policy.html.

[375] *See infra* Part III.C.2.b(2).

be based on best available scientific information, should incorporate best management practices ("BMPs") and best available technology ("BAT") standards for project design, development, mitigation, and monitoring, and should include an adaptive management component.[376]

NEPA and APA. The Proposed Regulation should specify that the SDRG are legislative rules subject to the notice and comment requirements of APA Section 553,[377] and that their adoption is a major federal action that affects the quality of the human environment subject to the environmental review requirements of NEPA Section 4332(2)(C).[378]

Enforcement Policy. The Proposed Regulation should include an unambiguous statement that it is the DOI's policy to prosecute any taking prohibited by MBTA Section 703 and applicable law including, but not limited to, any incidental taking including an incidental taking by persons conducting a lawful activity for which an MBTAITP is available under any SDRG but who have not obtained an MBTAITP.[379] The Proposed Regulation should also state that incidental taking which violates the conditions of a MBTAITP (such as incidental taking that exceeds permitted levels) will be subject to prosecution, unless such violation is occurring notwithstanding the full compliance and implementation of all other permit conditions and applicable SDRG.

Transitional Rule. The Proposed Regulation should provide a two-year "safe harbor" from prosecution for incidental taking under the MBTA for currently operating and under-development wind energy projects that are in compliance with the Final Wind Energy Guidelines and implement all FWS recommendations regarding the development or operation of the project.[380] The safe harbor would be available until all required administrative law and environmental review processes for the SDRG for wind energy activities are complete and the SDRG is finalized. It is possible that this transitional rule could be drafted to also apply to other activities that have existing voluntary guidelines, such as for towers and antennas,[381] in

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[376] Although not a part of this proposal, it is likely that inclusion of a "cost-benefit" or other method of economic analysis will be advocated by industries and commercial activities that will be subject to the cost of implementing BMPs and complying with BAT standards.
[377] 5 U.S.C. § 553 (2012). *See* Am. Mining Congress v. Mine Safety & Health Admin., 995 F.2d 1106, 1109 (D.C. Cir. 1993) (agency "intent to exercise" legislative power delegated by Congress as distinguishing between substantive and interpretive rules).
[378] 42 U.S.C. § 4332(2)(C) (2012); 40 C.F.R. § 1508.18(b)(1) (2013).
[379] 16 U.S.C. § 703 (2012).
[380] *See* FINAL WIND ENERGY GUIDELINES, *supra* note 39.
[381] *See, e.g.*, Service Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers, *supra* note 175.

contemplation of the MBTAITP program being available for such activities in the future.

2) Step-Down Rules and Guidelines

Generally, so-called "step-down" plans describe specific strategies, schedules, and criteria that follow in the "stepping down" from the broader goals, objectives, directives, and provisions in an authorizing statute, regulation, or other directive.[382] Step-down plans often provide targeted procedures, rules, and guidelines to implement their more specific strategies, schedules, and criteria.[383] New step-down plans or substantial changes to existing plans typically require compliance with the environmental review requirements of NEPA and other policies and an opportunity for public review through the notice-and-comment procedures of the APA.[384]

As provided in the Proposed Regulation, a specific SDRG will be issued for each industrial or commercial activity, or type of infrastructure, that the implementing agency determines to be a "significant" threat by causing or having the potential to cause significant incidental taking of MBTA-protected species. This proposal calls for the first SDRG to be issued under the Proposed Regulation and applied to the onshore wind energy industry because of the importance of promptly addressing incidental taking from wind energy activities, and is used in this section as an example of a SDRG that, with modifications, could be adapted to other industrial activities.

This proposal contemplates that the Onshore Wind Energy Rules and Guidelines ("Onshore Wind SDRG") should incorporate and build upon the Final Wind Energy Guidelines' "tiered approach" for assessing impacts on species and habitats, and the provisions relating to site evaluation, single or multiple site characterization, field studies to document wildlife and predict impacts, and post-construction studies to estimate impacts.[385] However, to fully implement the MBTAITP program for the onshore wind energy industry, the Onshore Wind SDRG would need to be more comprehensive, addressing issues of development, construction, operation, management, monitoring, and decommissioning of wind energy projects during all phases of the project's life.[386] Therefore, the proposed Onshore

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[382] *See, e.g.*, GEORGE CAMERON COGGINS & ROBERT L. GLICKSMAN, 2 PUB. NAT. RES. L. § 16:16 (2d ed. 2007) (describing the use of "step-down management plans" in the National Wildlife Refuge System planning process).
[383] *Id.*
[384] *Id.*
[385] *See* FINAL WIND ENERGY GUIDELINES, *supra* note 39, at vi–vii.
[386] *See Policy Statement on Wind Energy and Bird-Smart Wind Guidelines*, *supra* note 363.

Wind SDRG not only incorporates key elements from the Final Wind Energy Guidelines, but also policies and provisions from the American Bird Conservancy's *Bird-Smart Wind Guidelines*,[387] the American Wind Wildlife Institute ("AWWI"),[388] the Council on Environmental Quality *Guidance on the Appropriate Use of Mitigation and Monitoring*,[389] and other sources.

The proposed Onshore Wind SDRG should include the following basic provisions:

Application and Scope. The Onshore Wind SDRG would apply to land-based wind energy projects that seek to comply with the requirements and criteria for an MBTAITP for isolated and/or recurring taking of one or more MBTA-protected species.[390] Compliance with the SDRG would be necessary for, among other things, a determination by the FWS that any taking for which a MBTAITP is sought is "unavoidable," one of the criteria for the issuance of a permit.[391]

Net-Zero Taking Determination. The Onshore Wind SDRG should provide that whether a permittee is in compliance with the net-zero taking policy established by the Proposed Regulation will be determined by the FWS on a species-by-species, region-by-region, and population-by-population basis, monitored and calculated over a reasonable period of time to achieve an accurate average census of populations and levels of actual taking.[392]

Permits. The Onshore Wind SDRG would provide guidance for the issuance of a MBTAITP to cover all MBTA-protected species that are customarily found in the project area, with specific levels of allowed taking for individual species, or for groups of species with common characteristics such that mitigation measures to minimize and avoid taking are common to all species in the group. A MBTAITP will also include specific provisions in an Avian Conservation Plan (discussed below) for the mitigation of taking through avoidance and minimization, use of best available technologies, compensatory mitigation, and providing financial guarantees to fund the mitigation and other permit conditions.

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[387] *Id.*
[388] *Building Mitigation Best Practices*, AM. WIND WILDLIFE INST., http://www.awwi.org/initiatives/mitigation.aspx (last visited Dec. 11, 2013).
[389] Council on Environmental Quality, Final Guidance for Federal Departments and Agencies on the Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact, 76 Fed. Reg. 3843 (Jan. 21, 2011).
[390] *See supra* Part III.C.b(1); 16 U.S.C. § 703 (2012).
[391] *See supra* Part III.C.b(1).
[392] *Id.*; 16 U.S.C. § 701 (2012).

Avian Conservation Plan. The Onshore Wind SDRG contemplates the creation of an Avian Conservation Plan ("ACP") for each project or group of projects to be covered by a MBTAITP. The ACP would be developed incorporating the provisions and following the procedures of the Onshore Wind SDRG and in consultation with the FWS. It would incorporate the provisions and measures necessary to mitigate direct, indirect, and cumulative impacts, provide for compensatory mitigation as necessary to achieve net-zero taking level, and would require final review and approval by the FWS prior to or simultaneously with the issuance of the MBTAITP. The ACP may include provisions or be incorporated into plans relating to other avian or non-avian species protected by other federal or state laws (such as an HCP for an ESA Section 10 ITP for a listed avian species). An ACP could cover more than one project if all covered projects are under common operational and financial control, and are in a region with similar geography, landscape, vegetation, weather, wildlife, and other features as to make a common ACP practical, applicable, conservation-effective, and cost-efficient.

The ACP contemplated by this proposal fulfills a different purpose than the Bird and Bat Conservation Strategy discussed in the Final Wind Energy Guidelines, which is more a record of mitigation measures considered and rejected or applied by the developer, and not a wildlife conservation plan approved by the FWS and subject to NEPA procedures.[393] Rather, the ACP should be more like an ECP developed under the ECPG which states that "[the ECP] should provide detailed information on siting, configuration, and operational alternatives that avoid and minimize eagle take to the point any remaining take is unavoidable and, if required, mitigates that remaining take to meet the statutory preservation standard."[394] Like an ECP, an ACP will provide the basis for the FWS to develop a MBTAITP for the applicant, or determine that the risk is too high to meet the statutory and regulatory criteria for such a permit.[395]

Mitigation Through Avoidance and Minimization. Perhaps the most important component of the Onshore Wind SDRG will be the guidance and requirements for mitigation of adverse impacts from onshore wind energy projects. In this discussion, mitigation has been separated into two different sections: mitigation through avoidance and minimization discussed in this section, and compensatory mitigation which is discussed in the section immediately following.[396]

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[393] *See* FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 55.
[394] MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345, at 29.
[395] *Id.* at 29–31.
[396] *See infra* Part III.C.b(2).

There is widespread consensus that the starting point for avoidance and minimization is property siting of projects and "micro-siting" of turbines within each project.[397] The Final Wind Energy Guidelines provide a solid basis for site evaluation and assessment upon which to develop the minimization and avoidance provisions for the Onshore Wind SDRG.[398] Generally, this is accomplished by establishing a tiered decision-making framework for the preliminary site evaluation, site characterization, and documentation of site wildlife and habitat to predict impacts, followed up by post-construction monitoring to estimate actual impacts and to determine the need for other studies and research.[399] At each tier, the Final Wind Energy Guidelines provide decision points with criteria for determining whether to proceed to the next tier, what additional information may be necessary before proceeding, what actions or combination of actions are indicated as necessary, and whether the risk is determined to be unacceptable resulting in abandonment of the site.[400] The tiered approach was adopted in the ECPG[401] and should also be incorporated in the Onshore Wind SDRG.

In addition to the tiered approach for the proper siting of projects and micro-siting of turbines, avoidance, and minimization mitigation can be achieved through the specification and implementation of BMPs for the siting, construction, operation, monitoring, and decommissioning of wind energy facilities.[402] The Final Wind Energy Guidelines include broad overarching BMPs focused on avoidance and minimization in site construction and operation, as well as retrofitting, and decommissioning,[403] and the American Bird Conservancy's *Bird-Smart Wind Guidelines* provide additional information on developing effective BMPs.[404] For example, pre-construction collision-risk modeling has been shown to be effective in predicting collisions and is already widely used for project siting and micro-siting of turbines within a project.[405]

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[397] FINAL WIND ENERGY GUIDELINES, *supra* note 39.
[398] *Id.* at 12–48.
[399] *Id.*
[400] *Id.* at 7–8.
[401] MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345, at vi–ix.
[402] *See, e.g.*, *Policy Statement on Wind Energy and Bird-Smart Wind Guidelines*, *supra* note 363.
[403] FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 49–52. *See also* MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345, at 78–79.
[404] *Policy Statement on Wind Energy and Bird-Smart Wind Guidelines*, *supra* note 363.
[405] *See, e.g.*, Christopher Nations & Wallace Erickson, *A Simulation Model for Assessing Bird–Wind Turbine Collision Risk*, WEST INC. (2003) , *available at* http://www.nationalwind

However, the general BMPs provided in the Final Wind Energy Guidelines[406] can be significantly improved in a number of areas, specifically including those applicable to operations and post-construction mitigation. For example, the ECPG provides for BMPs and Advanced Conservation Practices ("ACPs")[407] that may be implemented to include:

- Seasonal, daily, or midday shut-downs (particularly relevant in situations where eagle strikes are seasonal in nature and limited to a few turbines, or occur at a particular time of day).[408]
- Turbine removal or relocation.[409]
- Adjustment of turbine cut-in speeds.[410]
- Use of automated detection devices (e.g., radar, thermal infrared imaging, etc.) to control the operation of turbines.[411]

After proper siting, "operational curtailment" BMPs (such as turbine cut-in speeds) represent the best possible methods for improving mitigation through avoidance and minimization.[412] Specifically, the continued development and implementation of these BMPs have the potential to avoid or minimize impacts by creating models based on species-specific population densities, migration patterns, flight patterns, landscape features, and other data to create cost-effective protocols for turbine shutdowns or cut-in speeds to minimize collisions.[413] Operational curtailment has proved to be successful in reducing impacts on birds by curtailing operations during migration periods when unusual weather conditions changed flight patterns,[414] and for bats by reducing turbine operating hours during

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.org/assets/research_meetings/Research_Meeting_VIII_Nations.pdf; Drewitt & Langston, *supra* note 38, at 36.

[406] Final Wind Energy Guidelines, *supra* note 39, at 49–52.

[407] *See* MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345, at iv, 78–79.

[408] *Id.*

[409] *Id.*

[410] *Id.*

[411] *Id.*

[412] GEORGE C. LEDEC ET AL., GREENING THE WIND: ENVIRONMENTAL AND SOCIAL CONSIDERATIONS FOR WIND POWER 45 (2011).

[413] *See, e.g.*, *id.* at 52; Karamvir Singh, Development of a Cost Minimizing Strategy to Mitigate Bird Mortalities in a Wind Farm (May 2012) (unpublished Master of Science thesis, University of Massachusetts Amherst), *available at* http://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1907&context=theses.

[414] LEDEC ET AL., *supra* note 412, at 50–52.

low wind periods when bats were most active.[415] Operational curtailment does affect the economics of wind projects that may, in circumstances where curtailments for wildlife mitigation and other purposes (including "local congestion" from oversupply or distribution capacity, oversupply of generating capacity and non-wildlife-related operational management) will be substantial, make the development of certain projects economically unfeasible.[416]

Other technologies also hold promise for mitigation by avoidance and minimization, including the use of marine and other types of radar, thermal infrared imaging, acoustic detection, and night-vision observations.[417] Improved detection technologies hold the promise of improving avoidance and minimization by integrating real-time detection of bird flocks or migrations with automated operational curtailment protocols and deployment of deterrent technologies.[418]

Compensatory Mitigation. The term "compensatory mitigation" is generally defined as "compensating for the impact by replacement or providing substitute resources or environments."[419] The Final Wind Energy Guidelines further clarify the definition by dividing compensatory mitigation mechanisms into "in-kind" and "out-of-kind" as follows: "in-kind" refers to the actual replacement of the resource lost with a substitute resource that is physically and biologically the same or closely approximate to that which is lost, and "out-of-kind" refers to replacement with substitute resources that are physically or biologically different.[420] However, compared to other environmental quality issues such as air pollution and wetlands preservation, regulatory processes for mitigating wind-wildlife impacts is in its infancy.[421]

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[415] *See, e.g.*, EDWARD B. ARNETT ET AL., EFFECTIVENESS OF CHANGING WIND TURBINE CUT-IN SPEED TO REDUCE BAT FATALITIES AT WIND FACILITIES: 2008 ANNUAL REPORT, BATS AND WIND ENERGY COOPERATIVE (2009), *available at* http://www.batsandwind.org/pdf/Curtailment_2008_Final_Report.pdf; Press Release, Bats & Wind Energy Coop., Scientists Demonstrate Solution to Reduce Bat Deaths at Wind Turbines (May 12, 2009), *available at* http://www.batsandwind.org/pdf/BWEC%20Curtailment%20Press%20Release%205-12-09.pdf.

[416] *See* Jonathan Cheszes, *Impact of Curtailment on Wind Economics*, RENEWABLE ENERGY WORLD (Mar. 20, 2012), http://www.renewableenergyworld.com/rea/news/article/2012/03/impact-of-curtailment-on-wind-economics.

[417] LEDEC ET AL., *supra* note 412, at 43 (marine radar proven effective for detecting approaching daytime bird flocks and nocturnally migrating birds); M. Desholm et al., *Remote Techniques for Counting and Estimating the Number of Bird–Wind Turbine Collisions at Sea: A Review*, IBIS Vol. 148, Issue Supplement s1 76–89 (2006).

[418] FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 47.

[419] 40 C.F.R. § 1508.20(e) (2013).

[420] FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 54.

[421] *Building Mitigation Best Practices*, *supra* note 388.

Net-zero taking will require compensatory mitigation to offset the direct and indirect effects of wind energy development by MBTAITP permittees at both the project level and cumulative effects level.[422] The "quantity" of compensatory mitigation necessary to achieve a net-zero taking under the MBTAITP program is likely be significant due to a large number of permittees, a potentially high volume of takes by each permittee due to the large number MBTA-protected species and populations, and from potentially significant cumulative effects of multiple projects on regional and ecosystem scales.[423]

Some projects may present unique prospects for "in-kind" compensatory mitigation, such as an opportunity to preserve or restore nearby off-site replacement habitat to offset the indirect effects of habitat loss or degradation from the project. However, it will also be necessary to have other mitigation programs in which permittees can participate in addition to project-specific in-kind mitigation opportunities. Establishing such programs would require taking the assessment and quantification of quantity and types of impacts that require compensatory mitigation from projections developed through the permitting process and adjusted from data acquired through monitoring and adaptive management. Such assessment of impacts would be used to determine the quantity and type of "mitigation units" necessary to offset the anticipated and actual impacts. These units could then be offset by participation in one or more compensatory mitigation programs available from a suite of such programs developed to implement conservation measures that will satisfactorily compensate for the variety of impacts on MBTA-protected species.

One existing option for compensatory mitigation for habitat loss or degradation, or for actual taking of protected species, is the establishment of "species-specific" conservation or mitigation banks[424] for MBTA-protected species using guidelines established by the FWS regarding conservation banking for listed and candidate species under the ESA,[425]

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[422] FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 47.
[423] *Id.* at 10.
[424] *See generally* SOLANO PARTNERS, ENABLING PROGRESS: COMPENSATORY MITIGATION SCENARIOS FOR WIND ENERGY PROJECTS IN THE U.S. 3–5 (Sept. 17, 2009), *available at* http://www.awwi.org/uploads/files/AWWI Mitigation Report Enabling Progress.pdf; SPECIES BANKING, http://us.speciesbanking.com/pages/dynamic/banks.landing_page.php?category=banks (last visited Dec. 11, 2013).
[425] U.S. FISH & WILDLIFE SERV., GUIDANCE FOR THE ESTABLISHMENT, USE AND OPERATION OF CONSERVATION BANKS (May 2, 2003), *available at* http://www.fws.gov/endangered/esa-library/pdf/Conservation_Banking_Guidance.pdf. *See Endangered Species: For Landowners—Conservation Banking*, U.S. FISH & WILDLIFE SERV., http://www.fws.gov/endangered

or mitigation banking modeled on the federal guidance for mitigation of Clean Water Act Section 404 permits.[426] Another option is establishing a program for in-lieu payments to an authorized recipient, such as the FWS or a state wildlife agency, for offsetting mitigation units.[427] The proceeds from issuance of the units could be used for the creation, expansion, or improvement of National Wildlife Refuges, or habitat acquisition or restoration by state or non-governmental land conservation trusts or groups in the region.[428] Other possible beneficiaries of in-lieu programs could include avian research programs and captive breeding and propagation programs for MBTA-protected species of concern, such as the effort to establish two additional breeding populations of whooping cranes called for under the ESA recovery plan for the species.[429]

Monitoring and Adaptive Management. In the ECPG the FWS stated, "The purpose of adaptive management is to improve long-term management outcomes, by recognizing where key uncertainties impede decision making, seeking to reduce those uncertainties over time, and applying that learning to subsequent decisions."[430]

The ECPG went on to further explain the applicability of adaptive management to the development of wind energy projects by stating,

> In the context of wind energy development and eagle management under the ECPG, there are four specific sets of decisions that will be approached through adaptive management: (1) adaptive management of wind project operations; (2) adaptive management of wind project siting and design recommendations; (3) adaptive management of compensatory mitigation; and (4) adaptive management of population-level take thresholds.[431]

/landowners/conservation-banking.html (last updated Nov. 12, 2013); HABITAT CONSERVATION PLANNING AND INCIDENTAL TAKE PERMIT PROCESSING HANDBOOK, *supra* note 315, at 3–21.

[426] U.S. ARMY CORPS OF ENGINEERS et al., *Federal Guidance for the Establishment, Use and Operation of Mitigation Banks*, 60 Fed. Reg. 58605-14 (Nov. 28, 1995).

[427] *See* SOLANO PARTNERS, *supra* note 424.

[428] *See id.* at 44.

[429] *See* U.S. FISH & WILDLIFE SERV., WHOOPING CRANE (GRUS AMERICANA) 5-YEAR REVIEW: SUMMARY AND EVALUATION (Feb. 13, 2012), *available at* http://www.fws.gov/southwest/es/Documents/R2ES/Whooping_Crane_5-yr_Review_Feb2012.pdf.

[430] MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345, at 28.

[431] *Id.*

The FWS also incorporated adaptive management principals into the Final Wind Energy Guidelines, stating, "Comprehensively applying the tiered approach embodies the adaptive management process."[432]

The proposed Onshore Wind SDRG should include the principals and techniques of adaptive management in all aspects of developing and operating a wind energy project that is covered by the MBTAITP program. This will require clear guidelines for the employment of adaptive management to address the four sets of decisions specified in the ECPG, which also supplies specific guidance on the implementation of adaptive management that may used as a model for the Onshore Wind SDRG.[433]

In addition to the four decision sets identified in the ECPG, the Onshore Wind SDRG should address the use of post-construction adaptive management to assess and modify avoidance and minimization mitigation through operational protocols, such as operational curtailment and the deployment of new BAT. At least one proposal has been put forth to develop a progressive tiered approach to operational mitigation to model the costs associated with each higher tier, thereby reducing the financial uncertainty of applying adaptive management to post-siting mitigation.[434]

Finally, it is important to emphasize that for adaptive management to be effective, significant resources are required, not only on the part of the permittee but also by the permitting agency. The agency will need adequate resources for conducting in-depth review and verification of monitoring and reporting by the permittee, and will need to work with the permittee to implement improved mitigation techniques throughout the life of the project. Without the commitment and availability of adequate agency resources, the steady improvement in mitigation through the improvement and deployment of BMP and BAT is unlikely to occur.

"Best Available Technology" Standard. As described in the preceding sections, many BMPs are technology-based which, for maximum effectiveness, require deployment of the most developed version of the technology.[435] Further, many of these technologies are steadily advancing, holding the

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[432] FINAL WIND ENERGY GUIDELINES, *supra* note 39, at 59 (defining "adaptive management" as "[a]n iterative decision process that promotes flexible decision-making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood").

[433] MIGRATORY BIRDS: EAGLE CONSERVATION PLAN GUIDANCE, *supra* note 345, at 44 (Appendix A: Adaptive Management).

[434] ERIC KOSTER, A REAL WORLD APPROACH TO ADAPTIVE MANAGEMENT FOR WIND ENERGY PROJECTS (May 20, 2011), *available at* http://www.swca.com/images/uploads/A_Real_World_Approach_to_Adaptive_Management_for_Wind_Energy_Projects.pdf.

[435] *Supra* Part III.B.1.

promise of increased mitigation through improved pre-construction surveys, operations, detection and monitoring, and possibly alternative turbine design.[436] However, to capture the increased effectiveness, technologies must be upgraded as they are improved or replaced with newer, more effective technologies.

Therefore, a key component of this proposal for a MBTAITP program is inclusion of a BAT standard applicable to: (1) all new wind energy projects; (2) all permit renewals and significant modifications or upgrades for existing projects; and (3) when actual taking is exceeding levels specified in a MBTAITP. Technology standards have long been a part of pollution control programs,[437] but they have not been widely incorporated into wildlife conservation programs.

The inclusion of a BAT standard in the MBTAITP program would require resolution of significant issues including determining the effectiveness of available technologies, the economic costs that would be reasonable to impose on owners and operators to meet such standards, and the resulting benefits from specifying a BAT in a particular application or circumstance.[438] In spite of such implementation issues, making a BAT standard part of the BMP mitigation component should result in improved mitigation over the life of projects and provide incentives for the development of improved technologies.[439]

3) Application to Other Activities that Cause Incidental Taking

The MBTAITP program proposed by this Article could be expanded to incorporate other infrastructure, activities, and industries that are significant causes of incidental taking of protected avian species, including

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[436] Although "triblade horizontal-axis" wind turbines have proven to be the most effective turbine design available at this time, alternative wind turbine designs may have less adverse impacts on protected avian species and be better suited in some applications. *See, e.g.*, Mike Barnard, *What is the Most Efficient Design for a Wind Generator?*, BARNARD ON WIND (Feb. 22, 2013) http://barnardonwind.com/2013/02/22/what-is-the-most-efficient-design-for-a-wind-generator/; David Ferris, *Innovate: Look Ma, No Blades!*, SIERRA, Mar./Apr. 2013, at 22, *available at* http://www.sierraclub.org/sierra/201303/innovate-wind-turbines/.

[437] *See, e.g.*, Oliver A. Houck, *The Regulation of Toxic Pollutants Under the Clean Water Act*, 21 ENVTL. L. REP. 10528, 10536–39 (1991).

[438] *See, e.g.*, Entergy Corp. v. Riverkeeper, Inc., 556 U.S. 208 (2009); ConocoPhillips Co. v. EPA., 612 F.3d 822 (5th Cir. 2010) (interpretation of EPA rule under Clean Water Act § 316(b), 33 U.S.C. § 1326(b) (2012), requiring BAT for minimizing adverse environmental impacts from offshore intake structures from the trapping and uptake of aquatic species).

[439] Michael C. Dorf, *Why the Supreme Court Decision Upholding Cost-Benefit Analysis Under the Clean Water Act Should Not Be Used to Discredit Best-Practice Standards*, FINDLAW.COM, Apr. 6, 2009, http://writ.news.findlaw.com/dorf/20090406.html.

offshore wind energy projects, solar and other non-wind renewable energy projects, oil and gas production, transportation and refining, and buildings. The expansion of the program would be implemented through the creation of comprehensive SDRG for the specific infrastructure, activity, or industry.

Future SDRG for other activities could also incorporate existing FWS guidelines, such as those created for electrical transmission facilities[440] and for antennas and towers,[441] in addition to provisions necessary for MBTAITP applicants to satisfy the criteria required under the Proposed Regulation and those specific to the infrastructure, activity, or industry. These specific provisions could include long-term phase-in periods and requirements for the retrofitting or upgrading of existing infrastructure, such as building glass, to address the significant costs and practical issues presented by large-scale threats created by thousands of individual pieces of infrastructure.[442]

4) Alternative "Permit-by-Rule" Approach for Certain Activities and Infrastructure

As used in this proposal, the term "programmatic permits" refers to tools that set activity-based, project development impact thresholds, and provide a streamlined permitting process for projects that fall within those thresholds.[443] Because the potential impacts of projects are identified in advance through negotiations at the programmatic level, the need to repeat the process at the project level is greatly reduced. This results in reduced demands on both the permit applicant and the reviewing agency. These "general permits" are designed to protect the environment while also facilitating implementation of projects that individually have "minor effects on the environment," and, "are most commonly used in the transportation and infrastructure contexts."[444]

This proposal for an MBTAITP program does not contemplate the universal use of programmatic permits for several reasons. First of all, many of the anthropogenic activities that present the greatest threats to MBTA-protected species are "active" types of activities; that is, facilities and projects where the potential hazard is created not only by the existence of

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[440] *See* AVIAN PROTECTION PLAN (APP) GUIDELINES, *supra* note 178.
[441] *See* Service Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers, *supra* note 175.
[442] *See* AVIAN PROTECTION PLAN (APP) GUIDELINES, *supra* note 178.
[443] *See* SOLANO PARTNERS, *supra* note 424, at Appendix 3-1.
[444] *Id*.

infrastructure but also by the activity itself, such as spinning wind turbine blades. Many of the most effective mitigation measures for these types of activities involve site-specific operational mitigation measures incorporating adaptive management principals that may not lend themselves to broadly applicable BMPs. Second, given the diversity of protected species under the MBTA and differences in each species' population size, migration patterns, habitat requirements, activity patterns, and other characteristics, a significant question exists whether impacts could be adequately identified for such activities across a wide geographical range. General impacts may lend themselves to a broad view, such as identification of "hot spots" where due to migration and other patterns the siting of any projects may not be indicated,[445] but like individual siting and micro-siting analysis, the specific impacts of each project will vary greatly.[446] Further, given the potential size of individual projects and their operational lifespan, it is unlikely that any long-term adverse impacts on one or more MBTA-protected species will be "minor."

However, the programmatic or general permit approach does have two possible applications in the development and implementation of an MBTAITP program. First, if the Secretary is unable or unwilling to develop a MBTAITP program as proposed above, an alternative would be to develop a programmatic permit program to promote migratory bird conservation through the imposition of broadly applicable BMPs for different activities, industries, and infrastructure, for mitigation through avoidance and minimization of take, and perhaps compensatory mitigation as well. At least one industry association has proposed the development of programmatic permits under the MBTA modeled on the "permit-by-rule" Corps of Engineers' Nationwide Dredge and Fill Program under Section 404 of the Clean Water Act.[447]

Second, even if the MBTAITP program is put into effect as proposed by this Article, by their nature some significant anthropogenic threats to birds lend themselves to the application of the permit-by-rule approach. Specifically, activities where the potential hazard is created by the existence of static infrastructure rather than an industrial activity may be an appropriate use of the "general permit" approach.[448]

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[445] *See Wind Development Bird Risk Map*, AM. BIRD CONSERVANCY, http://www.abcbirds.org/extra/windmap.html (last visited Dec. 11, 2013).
[446] *See* RULEMAKING PETITION, *supra* note 197.
[447] HOLLAND & HART LLC, F-2010-02, DEVELOPMENT OF A PERMIT PROGRAM FOR INCIDENTAL TAKE OF MIGRATORY BIRDS 37–38 (2010), http://www.ingaa.org/Foundation/Foundation-Reports/Studies/8099/11060.aspx.
[448] *See* SOLANO PARTNERS, *supra* note 424.

For example, once it is built, a multi-story office building does not conduct an "activity" that threatens birds, but creates a hazard by its presence. The severity and potential impact of that hazard may be mitigated in the siting, design parameters, and materials specifications, such as discouraging development of certain structures in key avian hot spots, specifying building heights, bird-safe building glass or non-glass materials to reduce collisions, and providing guidelines for lighting that does not confuse nocturnally active birds.[449]

This example illustrates one situation where the "general permit" approach to implementing the MBTAITP program to largely passive infrastructure types of "activity" has several advantages over the individual permit approach described above. Specifically, the general permit approach would be more easily applicable to a significant threat that is caused by a large number of disbursed pieces of infrastructure, such as privately owned multi-story buildings. Further, the general permit approach would create less demand on both private and agency resources to implement, but would still promote avian conservation by establishing "bird-friendly standards"[450] for buildings and other types of infrastructure that are currently unregulated at the national level if at all.[451] Finally, given the highly disbursed nature of structures and other infrastructure that may be suitable for this approach, enforcement could be enhanced significantly with the creation of a "citizen reporting hotline" or other mechanism where ordinary people could report incidents of bird deaths and possible violations of the MBTA.

CONCLUSION

The intent of this proposal is to broaden the discussion of incidental taking of MBTA-protected species from the problems created by the prosecution or non-prosecution of specific cases to a dialogue focused on finding a widely applicable solution that builds upon the statute's broad avian conservation intent, its recognized prohibition of incidental taking, and the Secretary's authority to permit incidental taking when compatible with the migratory bird conventions and the statute's conservation standards. In promoting this discussion, it would be constructive for all participants to

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[449] *See generally* AM. BIRD CONSERVANCY, *Bird-Friendly Building Design* (2011), *available at* http://www.abcbirds.org/newsandreports/BirdFriendlyBuildingDesign.pdf.
[450] *Id.* at 9.
[451] *Id.* at 35. Federal legislation adopting bird-friendly standards for governmental buildings has been proposed, and Minnesota, New York, and several cities have proposed or adopted bird-friendly standards.

recognize that it was not the primary intent of the migratory bird conventions or the MBTA to outlaw the hunting of migratory birds, but to prevent abuses that threatened the existence of healthy sustainable populations of all protected species. As happened with the threat created by market-driven and technology-assisted overhunting in the late nineteenth and early twentieth centuries, through cooperation, comment, and compromise a solution can be forged in the twenty-first century to address the modern threats to birds posed by both rapidly expanding new technologies as well as established activities and infrastructure.

For some time FWS has been administering the MBTA through the issuance of non-regulatory guidelines created outside of the notice-and-comment and environmental review processes, and incentivizing compliance through prosecutorial discretion, all of which have led to the problems discussed above. The era of "shadow regulations" should come to an end, and be replaced with open and unimpeachable implementation processes that build on the FWS's knowledge and expertise in wildlife conservation and management, as demonstrated in the BGEPA eagle take permit system and the Final Wind Energy Guidelines. By having a clear regulatory framework in which to do what it does best, the FWS can fulfill its mission as steward of the nation's wildlife, and fulfill the conservation vision of the MBTA and migratory bird conventions for another hundred years and more.