OVER-CRIMINALIZING THE MIGRATORY BIRD TREATY ACT: IMPLICATIONS OF STRICT LIABILITY FOR WIND DEVELOPERS

ALYSSA MASTIC*

The Migratory Bird Treaty Act ("MBTA" or "the Act") makes it a misdemeanor violation to pursue, hunt, take, capture, or kill protected migratory birds. The MBTA only provides criminal liability for violations of the Act. Depending on a court's interpretation of what constitutes an MBTA violation and whether a court interprets the MBTA as a strict liability statute, the results may have grave effects on renewable energy development in a given geographic area. United States v. Apollo Energies, Inc.*, a recent 10th Circuit Court of Appeals decision, illustrates a problematic trend among some courts in prime wind states, establishing a broad reading of MBTA takings and imposing strict liability beyond the context of hunting and poaching. This article discusses the scope of takes under the MBTA and ensuing criminal liability, with particular focus on implications for renewable energy development. First, this article discusses the MBTA, strict liability generally, and explains the MBTA interpretation set forth in* Apollo Energies*. Second, this article applies the Apollo Energies framework to the wind industry specifically and investigates the MBTA legal landscape. Third, this article discusses current MBTA compliance and permitting procedures and problems. Finally, it makes recommendations to resolve the MBTA's regulatory gaps and statutory ambiguities to ensure that the statute strikes an appropriate balance between wildlife conservation concerns and renewable energy development interests.*

---

* Alyssa Mastic is a 2014 J.D. candidate at Lewis & Clark Law School. She received a B.A. in Linguistics from the University of Michigan in 2010. She would like to thank her family for their love and support. She would also like to express her deep gratitude to Ioulia Kovelman for her academic guidance over the years, and to Melissa Powers for her academic guidance on this article in particular.

TABLE OF CONTENTS

INTRODUCTION

The Migratory Bird Treaty Act ("MBTA" or "the Act"), 16 U.S.C. §§ 703-712, implements four international treaties between the United States and Great Britain (for Canada),[1] Mexico, Japan, and Russia. Its goal is to protect and conserve migratory bird populations in the United States.[2] Of the billions of birds in the United States, a vast number face substantial survival threats due to human activities.[3] Poisoning, predator attacks, and collisions with human structures kill millions of birds annually.[4] While precise mortality rates are unknown, studies estimate that annually, cats kill hundreds of millions of birds, building impacts kill 97-970 million birds, pesticides kill 72 million birds, automobile collisions kill 60 million birds, and communication towers kill as low as 4-5 million and as high as 40-50 million birds.[5] The rate of bird mortality due to collisions with wind turbines—estimated in the thousands,[6] rather than millions—pales in comparison to these other threats.[7] Despite substantially lower mortality rates,

---

[1] Great Britain signed the treaty that the MBTA implements because Canada is part of the British monarchy, but the treaty is for the protection of migratory birds in Canada. Convention between the United States and Great Britain for the Protection of Migratory Birds, U.S.-Gr. Brit., Aug. 16, 1916, 39 Stat. 1702.

[2] *See* U.S. FISH & WILDLIFE SERV., MIGRATORY BIRD MORTALITY: MANY HUMAN-CAUSED THREATS AFFLICT OUR BIRD POPULATIONS 1 (2002), *available at* www.fws.gov/birds/mortality-fact-sheet.pdf (estimating that there are a minimum of 10 billion birds breeding in North America); U.S. FISH & WILDLIFE SERV., MIGRATORY BIRD MANAGEMENT INFORMATION: LIST OF PROTECTED BIRDS 1 (2010), *available at* www.fws.gov/migratorybirds/RegulationsPolicies/mbta/43603%20QA%201013 rule.pdf (stating that as of 2010, the MBTA protects 1007 bird species).

[3] MIGRATORY BIRD MORTALITY, *supra* note 2, at 1.

[4] *Id.*

[5] *Id.*; *see* Meredith Blaydes Lilley & Jeremy Firestone, *Wind Power, Wildlife, and the Migratory Bird Treaty Act: A Way Forward*, 38 ENVTL. L. 1167, 1172-73 (2008) (explaining previous studies estimating bird mortality rates); Larry Martin Corcoran, *Migratory Bird Treaty Act: Strict Criminal Liability for Non-Hunting, Human Caused Bird Deaths*, 77 DENV. U. L.REV. 315, 347 (1999) (same).

[6] A recently published study conducted by researchers at the Smithsonian Conservation Biology Institute's Migratory Bird Center and the U.S. Fish and Wildlife Service estimates that between 140,000 and 328,000 birds are killed annually by collisions with monopole turbines in the U.S. Scott R. Loss et al., *Estimates of Bird Collision Mortality at Wind Facilities in the Contiguous United States*, BIOLOGICAL CONSERVATION 168 (2013). This study is novel in that it differentiates between monopole towers and lattice towers. *Id.* at 202. The vast majority of wind turbines in the U.S. are monopole turbines. *Id.* This suggests that this is a more meaningful estimate of wind turbine-related bird mortality going forward than previous estimates. *Id.*

[7] MIGRATORY BIRD MORTALITY, *supra* note 2, at 1; *see* AMERICAN WIND ENERGY ASS'N, WIND ENERGY AND WILDLIFE 2 (May 2011), *available at* http://awea.files.cms-plus.com/FileDownloads/pdfs/Wind-Energy-and-

the MBTA treats all violations the same.[8] Consequently, this opens up wind producers to disproportionate liability.[9] While wildlife conservation concerns are real and legitimate, green energy liability concerns are also real and legitimate. Further complications arise where prime-wind areas overlap with high numbers of species.[10]

Under § 703(a) of the MBTA, it is unlawful to "pursue, hunt, take, capture, [or] kill" any protected migratory bird.[11] The MBTA only provides for criminal liability. Section 707(a) provides that anyone who violates a provision of the MBTA is guilty of a misdemeanor and subject to a fine of up to $15,000, six months in prison, or both.[12] If an MBTA violator takes one bird or takes a hundred birds, the liability is the same.[13]

The Secretary of the Interior has the express authority under § 704 to permit hunting, taking, capturing, killing, and possession of migratory birds that § 703 would otherwise prohibit.[14] In turn, the Secretary of the Interior has delegated enforcement and permitting authority to the U.S. Fish and Wildlife Service ("FWS").[15] The MBTA does not provide for a private right of action, leaving FWS with prosecutorial discretion.[16] FWS provides permits for

---

Wildlife_May-2011.pdf ("The National Academy of Sciences estimated in 2006 that wind power is responsible for less than 0.003% (3 of every 100,000) of bird deaths caused by humans and pets.").

[8] *See* 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, 77-78 (2007) (explaining that unauthorized killing of any MBTA species constitutes a violation, and that several cases allowed strict liability for migratory bird takes including unintentional conduct).

[9] *See id.* at 78 ("Because the MBTA's scope is so expansive, its authority reaches probably every wind energy project.").

[10] Lilley & Firestone, *supra* note 5, at 1174 (explaining the elevated concerns over wind-related wildlife impacts due to wind development in migratory flyways and that rapid development in these areas pose a threat to bird and bat species).

[11] 16 U.S.C. § 703(a) (2012).

[12] *Id.* § 707(a).

[13] Benjamin Means, *Note, Prohibiting Conduct, Not Consequences: The Limited Reach of the Migratory Bird Treaty Act*, 97 MICH. L. REV. 823, 842 (1998) (explaining that no *de minimis* exception appears to apply, because the MBTA makes the taking of a single migratory bird unlawful).

[14] 16 U.S.C. § 704(a); *see* 16 U.S.C. § 712(b) (authorizing Secretary of the Interior to issue regulations necessary to implement the MBTA).

[15] 16 U.S.C. § 706; *see* Purpose of Regulations, 50 C.F.R. 10.1 (indicating the purpose of the regulations are to implement statutes enforced by FWS, including the MBTA).

[16] 16 U.S.C. §§ 703-712; McKinsey, *supra* note 8, at 78.

scientific collecting, banding and marking, falconry, raptor propagation, depredation, import, export, taxidermy, waterfowl sale and disposal, and special purposes.[17] Yet importantly, FWS does not provide for incidental take permits ("ITPs").[18] An ITP is a permit that allows an activity that results in an incidental take of a protected species, as opposed to a willful take, which would otherwise be a statutory violation.[19] Without incidental take permits allowing for some takes of migratory birds, FWS places wind developers in a precarious position in terms of both potential criminal liability and financial risk concerns.[20]

Once FWS decides to prosecute an MBTA violation, the issue of liability hangs on how broadly or narrowly a court interprets the MBTA—whether a § 704 "take" includes indirect lawful commercial activity, and if so, whether the MBTA has an intent or *mens rea* requirement to trigger liability.[21] If a court reads the MBTA as a strict liability statute under the plain meaning of the MBTA, violators are *criminally* liable.[22]

Strict liability does not require *mens rea*; the law punishes the act itself because the act is evil or immoral.[23] The MBTA does not expressly include an intent requirement nor does it exclude an intent requirement.[24] Generally, criminal liability requires *mens rea* under common

---

[17] *See* U.S. FISH & WILDLIFE SERV., LEAVING A LASTING LEGACY: PERMITS AS A CONSERVATION TOOL 2 (2002), *available at* http://library.fws.gov/IA_Pubs/permits_legacy02.pdf.
[18] MIGRATORY BIRD MORTALITY, *supra* note 2, at 2.
[19] *See* U.S. FISH & WILDLIFE SERV., ENDANGERED SPECIES PERMITS: FACT SHEET (Oct. 24, 2012), *available at* http://www.fws.gov/midwest/endangered/permits/hcp/hcp_wofactsheet.html (explaining ITPs in context of habitat conservation plans).
[20] *See* McKinsey, *supra* note 8, at 88-89 (explaining that wind investors face financial risk due to the MBTA); PHILLIP BROWN & MOLLY F. SHERLOCK, ARRA SECTION 1603 GRANTS IN LIEU OF TAX CREDITS FOR RENEWABLE ENERGY: OVERVIEW, ANALYSIS, AND POLICY OPTIONS 17 (2012), *available at* https://www.fas.org/sgp/crs/misc/R41953.pdf (discussing risks for tax equity investors that a project performs and operates as expected).
[21] *See* OXFORD ENGLISH DICTIONARY: ONLINE VERSION, *mens rea* (June 2012) (defining *mens rea* as "the particular state of mind required to make an action criminal; a criminal state of mind; (more generally) criminal intent").
[22] *See* 16 U.S.C. § 407 (providing only misdemeanor or felony penalty violations of the MBTA).
[23] Kalyani Robbins, Symposium, *Paved with Good Intentions: The Fate of Strict Liability under the Migratory Bird Treaty Act*, 42 ENVTL. L. 579, 586 (2012); Jeremy M. Miller, *Mens Rea Quagmire: The Conscience of Consciousness of the Criminal Law*, 29 W. ST. U. L. REV. 21, 27 (2001); *see* Robbins, *Paved with Good Intentions*, at 588 (explaining that the classic example of strict liability is statutory rape).
[24] 16 U.S.C. §§ 703-712.

law, and courts require some indication of congressional intent to forego it.[25] In *Staples v. United States*, the Supreme Court stated that criminal liability should create a statutory presumption favoring *mens rea*.[26] Rather than follow this presumption, the 10th Circuit in *United States v. Apollo Energies, Inc.* interpreted the MBTA as a strict liability statute, showing strict liability for indirect takes is a threat under the MBTA.[27]

The continuation of MBTA strict liability in many jurisdictions illustrates the need for improvements to current policies and procedures to better protect wind developers from potential criminal violations and achieve a proper balance between wildlife conservation concerns and green energy development.[28] Although FWS has not brought an enforcement action against a wind farm yet, decisions like *Apollo Energies* make wind developers aware that MBTA liability is a threat and they should plan projects with criminal liability in mind. However, as the discussion below illustrates, strict liability may not be as strict in practice as it is in theory. Notwithstanding strict liability, wind developers practically face increased costs and financial risks under the MBTA that Congress and FWS need to address.

To remedy the statutory ambiguity of the MBTA and the resulting inconsistent court approaches, Congress needs to amend the MBTA. However, outside of a major legislative change to the MBTA itself, FWS can make enforcement changes to MBTA administration to avoid disproportionately punishing wind developers. FWS and the wind industry itself must also act to remedy the undue burden on the wind energy industry to meet this increasingly important concern. After an increase in wind development, the Department of the Interior established the

[25] *See Staples v. United States*, 511 U.S. 600, 602 (1994).
[26] *Id.*
[27] 611 F.3d 679, 684 (10th Cir. 2010).
[28] *See, e.g.*, *United States v. Hogan*, 89 F.3d 403, 404 (7th Cir. 1996); *United States v. Boynton*, 63 F.3d 337, 343 (4th Cir. 1995); *United States v. Engler*, 806 F.2d 425, 431 (3d Cir. 1986).

Wind Turbine Guidelines Committee.[29] On March 23, 2012, FWS released its finalized *Land-Based Wind Energy Guidelines* aimed at helping the industry to avoid and minimize impacts to protected migratory birds and other wildlife. The *Guidelines* use a tiered approach to suggest communication points between FWS and wind developers throughout the life of a project, which in turn helps developers properly select, construct, operate and maintain wind energy facilities.[30] While these tiered guidelines help the wind industry create a comprehensive MBTA compliance plan, they do not do enough to mitigate the prosecutorial uncertainty, financial risks, and criminal liability wind developers face. In light of potentially strict criminal liability, wind developers need ITPs or a substantially equivalent alternative to provide adequate protections.

Part I of this paper gives an overview of the MBTA and strict liability, and explains the *Apollo Energies* decision and its MBTA framework. Part II discusses the *Apollo Energies* MBTA framework in the context of the wind industry. It determines that courts are unlikely to hold wind developers liable, but that developers face significant practical risks under the MBTA. Part III discusses current FWS enforcement and permitting procedures, explains the inadequacy of these procedures, and makes recommendations to address wind industry needs. This paper concludes that current procedures are inadequate to protect the wind industry, and that Congress and FWS need to make significant statutory and regulatory changes to fix this inadequacy. The wind industry also needs to take steps to mitigate avian impacts under current FWS *Guidelines*, in order for the legislature, courts, and administrators to consider them good actors worthy of protection from the MBTA's harsh criminal sanctions.

---

[29] U.S. FISH & WILDLIFE SERV., U.S. FISH AND WILDLIFE SERVICE LAND-BASED WIND ENERGY GUIDELINES 1 (Mar. 23, 2012), *available at* www.fws.gov/windenergy/docs/weg_final.pdf.

[30] *Id.*; *see also* Alexandra B. Klass, *Energy and Animals: A History of Conflict*, 3 SAN DIEGO J. CLIMATE & ENERGY L. 159, 185-186 (2011-2012) (explaining the purpose of the draft version of the *Land-Based Wind Energy Guidelines*).

I. THE WIND INDUSTRY'S MBTA DILEMMA

Collisions with wind turbines kill a relatively low number of migratory birds, yet wind developers face the same harsh potential liability under the MBTA as anyone else. Under the MBTA, wind developers face a serious dilemma. They are subject to potential criminal liability but have no way to actually comply with the statute. FWS has offered some instruction to the wind industry in the form of its *Land-Based Wind Guidelines*, but these guidelines do not resolve the industry's MBTA dilemma. The *Guidelines* only address how the industry can work to avoid avian collisions, and do not change the MBTA's criminal sanctions or FWS's enforcement policy.[31]

A. Interpreting the MBTA

Wind power is a rapidly growing energy source.[32] Since the 1980s, development in the United States has boomed from almost none to 60,007 MW of installed wind capacity in 2012.[33] In part due to increasing climate change concerns in the U.S., wind development has become vital to the U.S. energy future.[34] Although wind is an abundant natural resource,[35] wind power is not without environmental impacts. Collisions with wind turbines kill thousands of birds annually,[36] a number of which include federally protected species.[37] Depending on how a court interprets the MBTA, wind developers could face liability for these bird deaths under the MBTA.[38] The following sections present key issues under the MBTA.

---

[31] *See generally* LAND-BASED WIND ENERGY GUIDELINES, *supra* note 29.
[32] Lilley & Firestone, *supra* note 5, at 1169.
[33] *Id.* (citing NAT'L RESEARCH COUNCIL, ENVIRONMENTAL IMPACTS OF WIND-ENERGY PROJECTS at 1 (2007)); AM.WIND ENERGY ASS'N, AWEA U.S. WIND INDUSTRY FOURTH QUARTER 2012 MARKET REPORT 3 (2013), *available at* http://www.awea.org/learnabout/publications/reports/AWEA-US-Wind-Industry-Market-Reports.cfm.
[34] Lilley & Firestone, *supra* note 5, at 1169.
[35] *Id.*
[36] *Id.* at 1171.
[37] *See id.* at 1175 (noting that wind development in migratory flyways and other areas containing high numbers of species could threaten them).
[38] *See* U.S. FISH & WILDLIFE SERV., MIGRATORY BIRD PERMITS: AUTHORIZED ACTIVITIES INVOLVING MIGRATORY BIRDS 2 (2002). Much like the MBTA, this Act creates potential liability for wind developers for takings of protected birds. *Id.* While the BGEPA imposes additional regulatory obligations on the wind industry, this paper

1. MBTA Overview

Due to serious threats of extinction because of overexploitation of migratory birds, Congress enacted the MBTA in 1918.[39] The MBTA implements four international treaties between the United States and Great Britain (for Canada), Mexico, Japan, and Russia.[40] Its goal is to protect and conserve migratory bird populations in the United States.[41] Although Congress enacted the MBTA out of hunting concerns, administration of the statute has reached beyond this narrow scope to any activity that results in "purs[uing], hunt[ing], tak[ing], captur[ing], or kill[ing] any protected migratory bird."[42] This language is ambiguous, as evidenced by the strong disagreement among courts about what activities § 703(a)'s "pursue, hunt, take, capture, kill" language covers.[43] Some courts have interpreted the "take" and "kill" language to mean physical conduct engaged in by hunters and poachers rather than incidental takes.[44] Other courts have interpreted this language to include a range of conduct that leads to the death of protected migratory birds.[45]

The MBTA only provides for criminal liability. Section 707(a) holds violators of any provision of the MBTA guilty of a misdemeanor and subjects violators to a fine of up to

---

focuses on the MBTA, not the BGEPA. For more information about BGEPA, *see Federal Laws that Protect Bald Eagles*, U.S. FISH & WILDLIFE SERV. (Mar. 18, 2013), http://www.fws.gov/midwest/eagle/ protect/laws.html.

[39] Lilley & Firestone, *supra* note 5, at 1176-77.

[40] List of Migratory Birds, 50 C.F.R. 10.13(a) (Mar. 23, 2010); *see* Lilley & Firestone, *supra* note 5, at 1179 (explaining the history of MBTA treaty ratification).

[41] *See* MIGRATORY BIRD MORTALITY, *supra* note 2 (estimating that there are a minimum of 10 billion birds breeding in North America); LIST OF PROTECTED BIRDS, *supra* note 2 (stating that as of 2010, the MBTA protects 1007 bird species).

[42] Lilley & Firestone, *supra* note 5, at 1177; Migratory Bird Treaty Act of 1918, 16 U.S.C. § 703(a) (2012).

[43] *E.g., Mahler v. U.S. Forest Serv.*, 927 F. Supp. 1559 (S.D. Ind. 1996) (MBTA didn't apply to bird deaths caused indirectly by logging activities.); *United States v. Rollins*, 706 F. Supp. 742 (D. Idaho 1989) (MBTA unconstitutionally vague as applied to farmer with no notice of criminalization of farming activity); *compare with Apollo Energies*, 611 F.3d 679 (MBTA did apply to migratory birds trapped in oil equipment exhaust system).

[44] *See Newton Cnty Wildlife Ass'n v. U.S. Forest Serv.*, 113 F.3d 110, 115 (8th Cir. 1997); *accord Seattle Audubon Soc'y v. Evans*, 952 F.2d 297, 302 (9th Cir. 1991).

[45] *See Apollo Energies*, 611 F.3d at 688-89 (birds trapped in heat vents in heater-treater systems); *United States v FMC Corp.*, 572 F.2d 902, 908 (2d Cir. 1978) (birds killed by toxic pond waters after pesticide leak).

$15,000, up to six months in prison, or both.[46] Section 707(b) makes it a felony to willfully take a migratory bird with intent to sell or barter the migratory bird.[47] Violators face a fine of $2,000, up to two years in prison, or both.[48] MBTA sanctions apply not only to individuals, but also to "corporations, associations and partnerships."[49] In contrast, the Endangered Species Act ("ESA"), another federal wildlife protection statute, provides for civil enforcement and criminal enforcement of its provisions.[50] Generally, it reserves criminal sanctions only for the most serious willful violations.[51]

FWS has enforcement and permitting authority under the MBTA, delegated by the Secretary of the Interior.[52] The MBTA does not provide for citizen suits, leaving FWS with sole prosecutorial discretion.[53] Permitting allows hunting, taking, capturing, killing, and possession of migratory birds that § 703 would otherwise prohibit.[54] Section 704 of the MBTA allows the Department of the Interior to make "necessary permitting changes as it sees fit."[55] Under this power, FWS provides permits for scientific collecting, banding and marking, falconry, raptor propagation, depredation, import, export, taxidermy, waterfowl sale and disposal, and other special purposes.[56] Wind power does not qualify for any of these categorical permits, or any other type of permit currently available under the MBTA.[57]

---

[46] 16 U.S.C. § 707(a).
[47] *Id.* § 707(b).
[48] *Id.*
[49] *Id.* at § 707(a); *see FMC Corp.*, 572 F.2d at 903-904 (corporation prosecuted under the MBTA).
[50] *Enforcement Basic Information*, U.S. ENVTL. PROT. AGENCY (Jan. 1, 2013), www.epa.gov/enforcement/basics.html.
[51] *Id.*
[52] 16 U.S.C. 706; *see* Purpose of Regulations, 50 C.F.R. 10.1 (indicating the purpose of the regulations are to implement statutes enforced by FWS, including the MBTA).
[53] 16 U.S.C. §§ 703-712; McKinsey, *supra* note 8, at 78.
[54] 16 U.S.C. § 704(a); *see id.* at § 712(b) (authorizing Secretary of the Interior to issue regulations necessary to implement the MBTA).
[55] *Id.* at § 704(a).
[56] *See* LEAVING A LASTING LEGACY, *supra* note 17, at 2.
[57] *See* Lilley & Firestone, *supra* note 5, at 1180-81 (explaining FWS permitting generally, and the fact that FWS does not provide for an ITP for wind under the MBTA).

2. Strict Liability

Most courts that have decided MBTA issues have held that the MBTA is a strict liability statute.[58] This means that in most jurisdictions, a court may convict someone for a taking a protected bird in violation of the MBTA, whether or not the violator intended the taking. On the face of the MBTA, there is no intent requirement to trigger prosecution under § 707(a).[59] It neither expressly includes an intent requirement, nor expressly excludes an intent requirement.[60] Some courts have read an intent requirement into the MBTA in spite of persuasive strict liability precedent of other jurisdictions.[61] Other courts, like the 8th Circuit in *Newton County Wildlife Association v. United States Forest Service*, recognize the appropriateness of imposing strict liability depends on the circumstances of a case; finding it more suitable in hunting and poaching cases, but to stretch strict liability beyond these cases to impose absolute criminal liability in other instances is "beyond the bounds of reason."[62] *Newton* illustrates that although most courts treat the MBTA as a strict liability statute, strict liability under the MBTA is not a settled issue.[63]

Strict liability is controversial because it has the potential to convict morally innocent people.[64] Even if an activity is not morally wrong, it is arguably legally wrong to engage in conduct labeled as criminal.[65] Section 703(a)'s "take" ambiguity creates a notice problem, and makes it difficult to use this legal justification to impose strict liability. People have a general right to not have their choices restricted through criminalization, particularly because harmful

[58] *E.g., United States v. Pitrone*, 115 F.3d 1, 5 (1st Cir. 1997); *Hogan*, 89 F.3d at 404 (7th Circuit); *Boynton*, 63 F.3d at 343 (4th Circuit); *Rollins*, 706 F. Supp. at 744 (9th Circuit); *Engler*, 806 F.2d at 431 (3d Circuit); *United States v. Catlett*, 747 F.2d 1102, 1105 (6th Cir. 1984); *FMC Corp.*, 572 F.2d at 907-08 (2d Circuit); *Rogers v. United States*, 367 F.2d 998, 1001 (8th Cir. 1966).
[59] 16 U.S.C. § 703(a) (According to this section, it is a violation to "pursue, hunt, take, capture, [or] kill" any protected migratory bird.).
[60] 16 U.S.C. §§ 703-712.
[61] *See Newton Cnty Wildlife Ass'n*, 113 F.3d at 115.
[62] *Id.*
[63] *Compare, e.g.*, *Apollo Energies*, 611 F.3d 679; *with Newton Cnty Wildlife Ass'n*, 113 F.3d 110.
[64] A.P. Simester, *Is Strict Liability Always Wrong?*, *in* APPRAISING STRICT LIABILITY 21, 21 (A.P. Simester ed., 2005).
[65] Dennis J. Baker, THE RIGHT NOT TO BE CRIMINALIZED: DEMARCATING CRIMINAL LAW'S AUTHORITY 2 (2011).

criminalizing conduct results in stigmatization, fines, and other penalties.[66] While in some cases, strict liability would not seem to violate principles of justice, in other cases it would.[67]

Generally, criminal liability requires *mens rea* (criminal intent[68]) under common law rule.[69] In *Staples*, the Supreme Court stated that courts generally disfavor offenses that do not require *mens rea*, and that the statute must provide some indication of congressional intent to dispense of the *mens rea* element of a crime.[70] Staples involved a federal statute that required registration for all automatic weapons, but not for semi-automatic or non-automatic weapons.[71]

The Bureau of Alcohol, Tobacco, Firearms and Explosives prosecuted Staples for failing to register an automatic weapon.[72] Staples owned a semi-automatic weapon, which became an automatic weapon either through mischief or in the course of normal use.[73] As with the MBTA, the statute at issue in *Staples* had no explicit *mens rea* requirement.[74] The Court construed the statute to require knowledge of the nature of the weapon, because construing the statute otherwise would risk incriminating too many innocent people.[75] The *Staples* Court also noted "the penalty imposed under a statute has been a significant consideration in determining whether the statute should be construed as dispensing with *mens rea*."[76]

This case presents two factors that indicate when courts may find strict liability appropriate in "public welfare" cases: 1) the level of penalty involved, and 2) whether or not the

---

[66] *Id.*
[67] Douglas Husak, *Strict Liability, Justice, and Proportionality*, *in* APPRAISING STRICT LIABILITY, *supra* note 64, at 93.
[68] OXFORD ENGLISH DICTIONARY, *supra* note 21.
[69] *Staples*, 511 U.S. at 606.
[70] *Id.*
[71] *Id.* at 602-03; 18 U.S.C. § 922; 26 U.S.C. §§ 5495, 5841.
[72] *Staples*, 511 U.S. at 602; Husak, *supra* note 67, at 89.
[73] *Staples*, 511 U.S. at 602-604; Husak, *supra* note 67, at 89.
[74] *See Staples*, 511 U.S. at 605.
[75] Husak, *supra* note 67, at 90 (citing *Staples*, 511 U.S. 600).
[76] *Staples*, 511 U.S. at 616.

statute involves regulating potentially harmful or injurious items.[77] Under these factors, courts find strict liability more appropriate if a statute involves low-level penalties and a heavily regulated industry that deals with harmful activities.[78] *Staples* involved gun regulation arising out of public safety concerns.[79] Beyond *Staples*, the Supreme Court has endorsed strict criminal liability in cases involving statutes that omitted a *mens rea* requirement.[80] *United States v. X-Citement Video, Inc., et al.*, a companion case to *Staples*, involved retail sale and distribution of child pornography.[81] The Court endorsed the *Staples* analysis, and based on that analysis, found that one element of the crime at issue required *mens rea*.[82] *X-Citement Video* supports using the *Staples* factors in determining if strict liability should apply, and along with other "public welfare" case law,[83] shows that "public welfare" encompasses more than guns—and likely includes activities within the scope of MBTA regulation.[84] As discussed *infra* in Section II.A-B, these factors point to courts treating the MBTA as a strict liability statute in general, but not a strict liability statute as applied to the wind industry.

3. Section 703(a) Take Language

Section 703(a) presents another key MBTA issue. This section defines what conduct violates the Act. According to § 703(a), it is a violation to "pursue, hunt, take, capture, [or] kill" a protected migratory bird.[85] Courts disagree about the scope of this language. Some courts interpret "take" narrowly to mean only active activities like hunting and poaching, rather than

[77] *Id.* at 600-601, 616.
[78] Corcoran, *supra* note 5, at 318-30.
[79] *Staples*, 511 U.S. at 601, 611.
[80] *See, e.g.*, *United States v. Park*, 421 U.S. 658 (1975) (food contamination); *United States v. Int'l Mineral & Chemicals Corp.,* 402 U.S. 558 (1971) (hazardous waste labels); *Shevlin-Carpenter Co. v. Minnesota*, 218 U.S. 57 (1910) (trespass in context of timber cutting).
[81] 513 U.S. 64, 66-67 (1994).
[82] *Id.* at 68-73, 78.
[83] *See, e.g.*, *Park*, 421 U.S. 658 (food contamination); *Int'l Mineral & Chemicals Corp.,* 402 U.S. 558 (hazardous waste labels); *Shevlin-Carpenter Co*., 218 U.S. 57 (trespass in context of timber cutting).
[84] *See* Corcoran, *supra* note 5, at 327-28.
[85] 16 U.S.C. § 703(a).

incidental takes.[86] Other courts interpret "take" broadly to include any active or passive activity that leads to the death of protected migratory birds.[87]

a. Canons of Statutory Interpretation

How far the MBTA reaches depends on which canons of statutory construction a court uses to inform its interpretation of "take." The following sections discuss canons of statutory interpretation a court might use and how these would affect the meaning of "take" under § 703(a).

1) Plain Meaning

Plain meaning is appropriate when a statute is unambiguous.[88] However, the meaning of "take" and the language of § 704 as a whole are ambiguous, as illustrated by the various MBTA approaches among jurisdictions.[89] Some courts view § 703 as limited to hunting and poaching activities, based on the legislature's concern in 1918 when Congress enacted the MBTA.[90] Other courts view § 703 as opening up liability to any conduct that leads to the death or captivity of protected migratory birds, based on the statute's silence with regard to state of mind.[91] The word "take" may include a wide range of activities based on its plain meaning.

The statute itself does not define "take," leaving it open to reasonable interpretation.[92] Black's Law dictionary defines "take" as "[t]o obtain possession or control, whether legally or illegally" or "[t]o seize with authority . . . ."[93] Webster's Third International Dictionary lists

[86] *See Newton Cnty Wildlife Ass'n,* 113 F.3d at 115; *accord Seattle Audubon Soc'y*, 952 F.2d at 302.
[87] *See Apollo Energies*, 611 F.3d at 688-89 (birds trapped in heat vents in heater-treater systems); *FMC Corp.*, 572 F.2d at 908 (2d Cir. 1978) (birds killed by toxic pond waters after pesticide leak).
[88] *See Brotherhood of R. R. Trainmen v. Baltimore & O. R. Co.,* 331 U.S. 519, 529 (1947) (explaining that factors can't undo or limit what text makes plain, but are of use when shedding light on an ambiguous word or phrase).
[89] *See generally, e.g.*, *Apollo Energies*, 611 F.3d 679; *contrast with Brigham Oil & Gas L.P.,* 840 F. Supp. 2d 1202 (N.W. N.D. 2012).
[90] *See Newton Cnty Wildlife Ass'n*, 113 F.3d at 115.
[91] *E.g.*, *Apollo Energies*, 611 F.3d at 688-89.
[92] 16 U.S.C. §§ 703-712.
[93] BLACK'S LAW DICTIONARY 1590 (9th ed. 2009).

numerous definitions for "take." These definitions include: "to get into one's hands or into one's possession, power or control by force or stratagem; to lay or get hold of with arms, hands, or fingers or with a hand or an instrument; to get into one's . . . hold or possession by physical act . . . ."[94] Both definitions indicate that "take" means reducing animals to human control by killing or capturing them, and not passive activities indirectly aimed at birds,[95] yet some courts have found "take" under the MBTA to include indirect activities like pesticide use in farming.[96]

Other federal wildlife legislation and treaty definitions of "take" align with this idea, including the ESA (defines "take" to mean to "harass, harm, pursue," " wound," or "kill,"),[97] and the Agreement on the Conservation of Polar Bears (defining "taking" as "hunting, killing and capturing").[98] As Justice Scalia notes in *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, the overall wildlife regulatory scheme covers "all the stages of the process by which protected wildlife is reduced to man's dominion and made the object of profit."[99] He also explains that looking at "take" as a term of art embedded in the statutory and common law concerning wildlife, shows that it "describes a class of acts (not omissions) done directly and intentionally (not indirectly and by accident) to particular animals (not populations of animals)."[100] Although the overall wildlife regulatory scheme indicates the general bounds of what "take" means, it does not unambiguously resolve the meaning of "take" in the MBTA specifically. The ESA's violations include the terms "harm" and "harass" in addition to the terms

[94] WEBSTER'S THIRD INTERNATIONAL DICTIONARY (UNABRIDGED) 2329-30 (2002).
[95] *See Babbitt v. Sweet Home Chapter of Comty. for a Great Oregon*, 515 U.S. 687, 717-18 (1995) (Scalia, J., dissenting) (citing WEBSTER'S NEW INTERNATIONAL DICTIONARY OF THE ENGLISH LANGUAGE (2d ed. 1949), which defines "take" as "to catch or capture by trapping, snaring, etc., or as prey," and arguing that "take" means to reduce animals to human control by killing or capturing them).
[96] *United States v. Corbin Farm Service*, 444 F. Supp. 510 (E.D. Cal. 1978); *see also Apollo Energies*, 611 F.3d 679 ("take" applied to oil refinery equipment).
[97] 16 U.S.C. § 1532(19) (2012).
[98] Agreement on Conservation of Polar Bears, Nov. 15, 1973, art. I, 27 U.S.T. 3918, 3921, T.I.A.S. No. 8409.
[99] 515 U.S. at 718 (Scalia, J., dissenting).
[100] *Id.*

"pursue," "hunt," "take," "capture," and "kill," found in the MBTA.[101] This indicates that while they overlapping terms, the meaning of "take" in the MBTA may differ from the meaning of "take" in the ESA.

Because the MBTA does not define "take," and neither the dictionary definitions nor the overall wildlife regulatory scheme conclusively resolve the precise meaning of "take," this leaves its meaning open to other canons of statutory interpretation.

2) Noscitur a Sociis

Noscitur a sociis is an interpretational doctrine that stands for the proposition that a word is known by the company it keeps;[102] a court should determine the possible meaning of a word based on its fit with the words it is closely associated with.[103] In this case those words are "pursue," "kill," "hunt," and "capture."[104] Black's Law Dictionary defines **"**pursuit" as "[t]he act of chasing to overtake or apprehend;"[105] "kill" means "[t]o end life; to cause physical death;"[106] and Webster's defines "hunt" as "to follow or search for (game or prey) for the purpose and with the means of capturing or killing; to pursue, follow, or track . . . with the object of capture;"[107] and "capture" to mean "the act of catching and holding by force, show of strength, stratagem, or guile often despite attempt to resist or to escape."[108] These definitions use terms like "cause," "with the object of capture," and "by force," which suggests that "take" requires an active participant.[109] FWS generally defines "take" to mean "to pursue, hunt, shoot, wound, kill, trap,

[101] 16 U.S.C. § 1532(19) (ESA); 16 U.S.C. § 703(a) (MBTA).
[102] *Russell Motor Car Co. v. United States*, 261 U.S. 514, 519 (1923).
[103] *Alioto v. Hoiles*, 341 Fed.Appx. 433, 440 n.12 (10th Cir. 2009).
[104] 16 U.S.C. § 704.
[105] BLACK'S LAW DICTIONARY 1356 (9th ed. 2009).
[106] *Id.* at 948.
[107] WEBSTER'S THIRD INTERNATIONAL DICTIONARY (UNABRIDGED) 1103 (2002).
[108] *Id.* at 334.
[109] *See Newton Cnty. Wildlife Ass'n*, 113 F.3d at 115 (holding that "take" and "kill" in § 703 are ambiguous and determined they mean "physical conduct of the sort engaged in by hunters and poachers").

capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect,"[110] words indicating a focus on hunting in particular. Some courts, including the *Apollo Energies* court, have wrongly found that "take" encompasses a broad range of activities.[111] Courts that have reached this conclusion have done so with little analysis, yet courts that have done an in-depth analysis of "take" and its neighboring words have reached the conclusion that the MBTA requires an active activity, not a passive one to trigger a violation.[112]

3) Avoiding Absurdity

The *Apollo Energies* court argued that even if Congress was primarily motivated to quell uncontrolled hunting when it enacted the MBTA in 1918, this was not the only possible motivation.[113] However, if courts expand the scope of the MBTA too broadly, they may reach absurd results. The absurd results doctrine requires courts to avoid statutory interpretations that would produce absurd and unjust results if alternative interpretations consistent with the legislative purpose are available.[114] *Newton* held that it would stretch the MBTA "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.[115] Section 703 provides that "pursu[ing], hunt[ing], tak[ing], captur[ing], [or] kill[ing]" "by any means or in any manner" violate the MBTA.[116] Because this language is so far-reaching, if "take" is interpreted too broadly *any* activity could trigger MBTA liability. Under this interpretation, FWS could prosecute someone for owning a cat, driving a car, or owning a building.[117]

---

[110] Definitions, 50 C.F.R. § 10.12 (2007).
[111] *Apollo Energies*, 611 F.3d 688-89; *United States v. Citgo Petroleum Corp.,* 2012 WL 3866857 (S.D. Tex. 2012); *Corbin Farm Service*, 444 F. Supp. at 510.
[112] *Compare id.*; *with Newton Cnty Wildlife Ass'n*, 113 F.3d 110.
[113] *See Apollo Energies*, 611 F.3d at 685.
[114] *Griffin v. Oceanic Contractors, Inc.*, 458 U.S. 564, 573 (1982).
[115] *Newton Cnty. Wildlife Ass'n*, 113 F.3d. at 115.
[116] 16 U.S.C. § 703(a).
[117] *Brigham Oil*, 840 F. Supp. 2d at 1212-13.

4) Expressio Unius

Under the maxim of *expressio unius*, a court presumes that Congress acts intentionally and purposely in including or excluding particular statutory language.[118] This maxim suggests that inclusion of one provision implies the exclusions of others.[119] The MBTA and the ESA are both federal wildlife conservation statutes, focused on protecting species.[120] Like the MBTA, the ESA prohibits the unauthorized takes of certain designated species.[121] Although *expressio unius* does not always apply across statutes,[122] it may inform the meaning here because the ESA and the MBTA are both federal wildlife conservation statutes that include "take" prohibitions, which contain many overlapping terms.[123] The ESA defines "take" to include "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect."[124] Because the MBTA only includes "pursue, hunt, take, capture, kill," these ESA's additional terms are impliedly excluded under *expressio unius*.[125] Under the ESA "harm" includes incidental habitat modification or degradation.[126] The MBTA does not expressly include "harm" or "harass," and no federal court has imposed MBTA liability for incidental habitat modification or degradation alone, suggesting that courts do not read "harm" and "harass" into the MBTA.[127] Significantly, since enacting the MBTA, Congress

[118] John F. Manning, *What Divides Textualists and Purposivists?*, 106 COLUM. L. REV. 70, 93 (2006) (quoting *Russello v. United States*, 464 U.S. 16, 23 (1983)).
[119] *Elwell v. Oklahoma ex rel. Bd. of Regents of University of Oklahoma*, 693 F.3d 1303, 1309 (10th Cir. 2012)
[120] *See* J.B. Ruhl, *Harmonizing Commercial Wind Power and the Endangered Species Act through Administrative Reform*, 65 VAND. L. REV. 1769, 1792 (2012) (discussing the ESA); Lilley & Firestone, *supra* note 5, at 1180 (discussing the MBTA).
[121] *See* McKinsey, *supra* note 8, at 75.
[122] *See, e.g.*, Deborah A. Widiss, *Shadow Precedents and the Separation of Powers: Statutory Interpretation of Congressional Overrides*, 84 NOTRE DAME L. REV. 511, 531 (2009).
[123] Victoria Sutton & Nicole Tomich, *Harnessing Wind Is Not (by Nature) Environmentally Friendly*, 22 PACE ENVTL. L. REV. 91, 113-114 (2005).
[124] 16 U.S.C. § 1532(19).
[125] 16 U.S.C. § 703(a).
[126] Definitions, 50 C.F.R. § 17.3 (2013).
[127] Vicky J. Meretsky et al., *Migration and Conservation: Frameworks, Gaps, and Synergies in Science, Law, and Management*, 41 ENVTL. L. 447, 486-87 (2011).

has not revised the MBTA to reflect the terms used in the ESA,[128] further suggesting congressional intent to exclude these terms from the interpretation of the MBTA.

5) Summary

Canons of statutory construction reflect practical experience in interpreting statutes.[129] Practically speaking, the MBTA offers a harsh possibility of strict liability,[130] and these canons ensure courts properly guard against unjust results. Because the MBTA fails to define "take," and "take" is ambiguous, courts should look beyond plain meaning.[131] The general, and correct, approach is to resolve the ambiguity of § 703(a) through other canons of interpretation.[132] The canons of construction discussed in this section highlight alternative approaches courts might use. All of these canons support a narrower reading of "take." Noscitur a sociis implores courts to look at words in context to ensure an appropriate definition is met, like the active action words of § 703(a).[133] The avoiding absurdity canon allows courts to weigh due process considerations to avoid unjust or absurd results, like making owning a cat a potential violation.[134] And *expressio unius* suggests that the MBTA is narrower than the ESA's notion of "take," excluding habitat modification.[135] At least one court has treated the MBTA "take" provision as broad but unambiguous.[136] While courts *should* narrowly interpret a § 703(a) "take," in reality not all courts *will*.

4. Section 704 Power & ITPs

---

[128] 16 U.S.C. §§ 703-712.
[129] *Erlenbaugh v. United States*, 409 U.S. 239, 244 (1972).
[130] *See, e.g.*, *Apollo Energies*, 611 F.3d at 679.
[131] *C.f. id.* at 688-89 (summarily deciding that the meaning of "take" is broad but unambiguous).
[132] *See United States v. Thompson*, 281 F.3d 1088, 1094 (10th Cir. 2002) (stating that because there is no plain meaning for the particular word at issue, the court must resort to the canons of statutory construction to resolve the ambiguity in the language.).
[133] *See Alioto*, 341 Fed.Appx. at 440 n.12.
[134] *See, e.g.*, *Rollins*, 706 F. Supp. at 742.
[135] *See* Elwell, 693 F.3d at 1309.
[136] *Apollo Energies*, 611 F.3d at 688-89.

The MBTA does not expressly provide for an incidental take permit,[137] creating yet another crucial issue. Section 704 of the MBTA directs the Secretary of the Interior to adopt suitable regulations, including allowing hunting, taking, capturing, and killing migratory birds as the agency deems appropriate.[138] Permitting allows these activities that § 703 otherwise prohibits.[139] Under this 704 power, FWS has created categorical permits for scientific collecting, banding and marking, falconry, raptor propagation, depredation, import, export, taxidermy, waterfowl sale and disposal, and other special purposes.[140] FWS regulations also allow for daily bag limits, which allow hunters to take a specified number of birds that would otherwise violate the MBTA.[141] These MBTA exceptions show that FWS does have power to create an ITP under § 704, but so far has not done so.[142]

C. MBTA Issues through the Lens of the Apollo Energies Decision

Apollo Energies, a 2010 10th Circuit Court of Appeals case, illustrates that strict liability remains a real threat under the MBTA, yet also demonstrates that strict liability may not be as strict in practice as it is in theory. While not a wind energy decision per se, it involved industrial actors committing takes incidentally to their lawful activities. The generally applicable MBTA principles from *Apollo Energies* inform how courts will look at similarly situated actors.

1. Case Overview

[137] MIGRATORY BIRD MORTALITY, *supra* note 2, at 2.
[138] 16 U.S.C. § 704(a).
[139] *Id.*; *see id.* at § 712(b) (authorizing Secretary of the Interior to issue regulations necessary to implement the MBTA).
[140] *See* LEAVING A LASTING LEGACY, *supra* note 17, at 2.
[141] Scope of Regulations, 50 C.F.R. § 20.1; Relation to Other Provisions, 50 C.F.R. § 20.2(a) (noting that permitting "shall not be construed to alter the terms of any permit or other authorization issued pursuant to [50 C.F.R. § 21]").
[142] MIGRATORY BIRD MORTALITY, *supra* note 2, at 2.

A magistrate judge convicted two Kansas oil-drilling operators of violating the MBTA after FWS agents discovered dead birds in the exhaust pipes of their heater-treaters.[143] After an anonymous tip, FWS inspected defendant Apollo's heater-treaters and found more than 300 dead birds, which included ten species protected under the MBTA.[144] After this investigation, FWS sent letters as part of an educational campaign to oil companies to alert them of the dangers of heater-treaters for birds, but the record did not show whether one of the defendants, Walker, had received a letter during the campaign.[145] FWS suspended prosecution for MBTA heater-treater violations while it conducted the educational campaign, but brought suit against the defendants after the campaign ended and FWS found more dead migratory birds in the defendants' heater-treaters.[146]

The trial court convicted both defendants of misdemeanor violations and fined Apollo Energies $1,500 for one violation, and fined Walker $250 for each of two violations. Both defendants appealed, challenging the lower court's interpretation of the MBTA as a strict liability statute for indirect takes.[147] The 10th Circuit upheld Apollo Energies' conviction but vacated Walker's conviction based on the record.

2. The *Apollo Energies* Court's MBTA Determinations

The 10th Circuit agreed with the lower court's interpretation of the MBTA as a strict liability statute and found that the MBTA did reach indirect takes.[148] At the same time, the court found that due process notice concerns might limit the application of strict liability.[149]

a. Strict Liability

[143] *Apollo Energies*, 611 F.3d at 682. A heater-treater is a type of oil drilling equipment that separates oil from water when the mixture is pumped from the ground. *Id.*
[144] *Id.*
[145] *Apollo Energies*, 611 F.3d at 682.
[146] *Id.* at 683.
[147] *Id.* at 682-83.
[148] *Id.* at 684-85.
[149] *Id.* at 691.

In its decision upholding strict liability under the MBTA, the court relied heavily on a previous 10th Circuit case, *United States v. Corrow*, which involved the purchase of Navajo ceremonial artifacts in violation of the MBTA and the Native American Graves Protection and Repatriation Act.[150] This case expressly held that the MBTA does not have a *mens rea* requirement.[151] Additionally, the *Apollo Energies* court looked to MBTA precedent from other jurisdictions. It found that the majority of jurisdictions, at least at the time of the *Corrow* decision, treated the MBTA as a strict liability statute.[152]

b. The MBTA Does Apply to Indirect Takes

Based on the plain language of the statute, the *Apollo Energies* court found that the MBTA applies to both active and passive activities.[153] While overhunting sparked Congress to pass the MBTA originally, the court argued, this did not foreclose other activities from falling under the Act.[154] Briefly looking at dictionary definitions of the word "take," as well as other jurisdictions' approaches, the court found "take" under the MBTA broad reaching, but unambiguous.[155] Although recognizing the 8th Circuit's narrow hunting-specific approach in *Newton*, the court found the decision unpersuasive.[156]

c. Due Process Concerns & Proximate Cause

Reasonable notice is fundamental to the concept of due process.[157] The *Apollo Energies* court recognized the importance of proximate cause limits on the application of the MBTA.[158] Proximate cause, or legal cause, requires that an injury be reasonably foreseeable as a natural

[150] 119 F.3d 796, 798 (10th Cir. 1997).
[151] *Id.* at 805.
[152] *Apollo Energies*, 611 F.3d at 686.
[153] *Id.* at 685.
[154] *Id.* at 685-86.
[155] *Id.* at 688-89.
[156] *Id.* at 685.
[157] *Lambert v. California*, 355 U.S. 225, 228 (1957).
[158] *Apollo Energies*, 611 F.3d at 688-91.

consequence of someone's act. The court found the defendant Apollo Energies had notice of the heater-treater problem because of the previous inspection on its property.[159] In contrast, the record did not clearly indicate whether the defendant Walker received a letter from FWS, thus the court found that no reasonable person in Walker's situation could conclude the equipment at issue would have proximately caused the deaths of migratory birds.[160] Similarly, in *United States v. Rollins*, the court held that because the MBTA did not expressly prohibit poisoning by pesticide, it did not give fair notice to farmers of what constituted illegal conduct.[161] Through the *Apollo Energies* decisions, the 10th Circuit recognized that foreseeability is a central due process constraint on criminal statutes, including the MBTA.[162]

II. THE MBTA AS APPLIED TO WIND

The continuation of MBTA as a strict liability statute signaled by *Apollo Energies* is not necessarily a death knell for the wind industry, but it could have potentially crippling effects that MBTA administrators need to address. However, even in jurisdictions following a strict liability approach, "strict liability" may be less strict in application.[163] Furthermore, decisions preceding and following the 10th Circuit's *Apollo Energies* decision in prime wind jurisdictions[164] have treated the MBTA restrictively.[165] Based on the trends among these jurisdictions, courts will not likely find good faith wind developers liable under the MBTA, in spite of the continuation of

[159] *Id.* at 691.
[160] *Id.*
[161] *Rollins*, 706 F. Supp. at 745.
[162] *Id.*
[163] *E.g.*, *id.* at 742.
[164] Prime wind jurisdictions refer to Circuits in the areas of the United States with most wind potential, as determined by wind resource monitoring, and installed and planned wind capacity. These areas are: the 10th Circuit, 9th Circuit, 8th Circuit, 7th Circuit, and the 5th Circuit. For material supporting this determination, see the Appendix.
[165] *See, e.g.*, *Brigham Oil*, 840 F. Supp. 2d 1202 (post-*Apollo Energies* decision); *Newton Cnty. Wildlife Ass'n*, 113 F.3d 110 (pre-*Apollo Energies* decision); *Rollins*, 706 F. Supp. 742 (pre-*Apollo Energies* decision).

strict liability interpretations in many jurisdictions.[166] The following section applies the *Apollo Energies* MBTA framework to the context of wind development, and highlight general trends among prime wind jurisdictions. First, it will determine if the MBTA is a strict liability statute. Second, it will determine if the MBTA should include migratory bird wind turbine collisions and if strict liability should apply to these incidental takes. Third, it will discuss due process limitations on strict liability. Finally, it will present practical implications for wind.

A. Is the MBTA a Strict Liability Statute?

According to the Supreme Court in *Staples*, criminal liability should create a statutory presumption requiring *mens rea*,[167] which conflicts with the strict liability interpretation of the MBTA. However, a court may read strict liability into a statute depending on two factors: 1) the level of penalty involved, and 2) whether the statute involves regulating potentially harmful or injurious items.[168] Even though the MBTA does not involve regulating guns, food contamination, or hazardous materials like statutes at issue in previous cases,[169] courts should consider the MBTA a "public welfare" statute that fits the factors identified in *Staples*.[170]

Looking at the first *Staples* factor, the level of punishment at issue here does not rise to the level of punishment that concerns the Supreme Court. Under § 707(a), violators only face misdemeanor convictions, including a potential fine and up to six months in jail, whereas the defendant in *Staples* faced a felony conviction and up to ten years in jail for violating § 5861(d) of the National Firearms Act.[171] Moving to the second *Staples* factor, the industry actors that

---

[166] *See, e.g.*, *Brigham Oil*, 840 F. Supp. 2d 1202; *Newton Cnty. Wildlife Ass'n*, 113 F.3d 110; *Mahler*, 927 F. Supp. 1559; *compare with Apollo Energies*, 611 F.3d 679; *Rollins*, 706 F. Supp. 742; *Corbin Farm Service*, 444 F. Supp. 510.
[167] *Staples*, 511 U.S. at 606.
[168] *Id.* at 600-601, 616.
[169] *See Staples*, 511 U.S. 600 (guns); *Park*, 421 U.S. 658 (food contamination); *Int'l Minerals & Chemical Corp.,* 402 U.S. 558 (hazardous materials).
[170] Corcoran, *supra* note 5, at 324 (discussing fact that "public welfare" doctrine likely applies to environmental contexts); *see also id.* at 321 n. 27 (explaining the application of strict liability in tort cases).
[171] *Staples*, 511 U.S. at 604.

FWS has prosecuted under MBTA § 707(a) thus far have all come from regulated industries (e.g. *Corbin Farm Service* (farming), *Apollo Energies* (oil refinery and production), *Moon Lake* (electricity distribution)) and involve potentially dangerous activities (e.g. *Corbin Farm Services* (pesticides), *Apollo Energies* (poorly maintained oil refinery equipment), *Moon Lake* (poorly maintained high voltage power lines)).[172] This enforcement pattern, combined with the comparatively low-level of punishment that § 707(a) violators face, means courts are more likely to interpret the MBTA as a strict liability statute. Like these industries, the wind industry faces extensive regulation from both state and federal agencies.[173] Because of the potential for wind turbine collisions, a court could consider wind development a "dangerous activity." Moreover, as *Moon Lake* shows, electricity itself may be considered a "dangerous activity."[174] Based on this "regulation" factor, courts could interpret the MBTA as a strict liability statute against the wind industry.

Prime wind jurisdiction case law confirms that most courts treat the MBTA as a strict liability statute, depending on the context.[175] Of these jurisdictions, the 10th, 8th, 7th, and 5th Circuits have binding case law regarding MBTA strict liability. In both *United States v. Corrow* and *Apollo Energies*, the 10th Circuit upheld strict liability under the MBTA for non-hunting activities.[176] The 8th Circuit took the opposite approach; in *Newton County Wildlife Association v. United States Forest Service*, the court held that the MBTA requires *mens rea* for non-hunting activities. Both the 7th Circuit, in *United States v. Hogan*, and the 5th Circuit, in *United States v.*

[172] *Apollo Energies*, 611 F.3d 679; *United States v. Moon Lake Electric Ass'n, Inc.,* 45 F.Supp.2d 1070 (D. Colo. 1999); *Corbin Farm Service*, 444 F. Supp. 510.
[173] *See generally, e.g.*, U.S. FISH & WILDLIFE SERV., MEMORANDUM OF UNDERSTANDING BETWEEN THE FEDERAL ENERGY REGULATORY COMMISSION AND THE U.S. DEPARTMENT OF THE INTERIOR 2 (2011) (explaining FERC's involvement in the energy regulation).
[174] *Moon Lake*, 45 F.Supp.2d 1070.
[175] *See Pitrone*, 115 F.3d 1 (1st Circuit); *Hogan*, 89 F.3d 403 (7th Circuit); *Boynton*, 63 F.3d 337 (4th Circuit); *Engler*, 806 F.2d 425 (3d Circuit); *Catlett*, 747 F.2d 1102 (6th Circuit); *FMC Corp.,* 572 F.2d 902 (2d Circuit) (2d Cir.); *Rogers*, 367 F.2d at 1001 (8th Circuit); *c.f. Newton Cnty. Wildlife Ass'n*, 113 F.3d at 115 (9th Circuit).
[176] *Apollo Energies*, 611 F.3d 679; *United States v. Corrow*, 119 F.3d 791 (10th Cir. 1997).

Morgan, have binding precedent interpreting the MBTA as a strict liability statute in the context of hunting.[177] It is unclear how far these interpretations reach, but at least in the 5th Circuit this strict liability interpretation has extended beyond hunting.[178] Prime wind jurisdictions disagree about the appropriate liability standard outside of hunting and poaching, but they all agree that strict liability is appropriate for interpreting the MBTA in the context of hunting and poaching.[179]

B. Is Strict Liability Appropriate for Indirect Takes?

Even if the MBTA is *generally* considered a strict liability statute and strict liability could *theoretically* apply to the wind industry based on the *Staples* factors, depending on the jurisdiction, a court may not apply strict liability to indirect takes like wind turbine collisions.[180] Prime wind jurisdictions take varying approaches to the MBTA, and consequently disagree about which liability standard is suitable for non-hunting and non-poaching activities.[181] This in turn leads to a spectrum of decisions, with some courts finding strict liability appropriate for indirect takes and others finding it inappropriate.[182]

The 10th Circuit represents the harshest end of this spectrum. In *Apollo Energies*, the 10th Circuit held that MBTA strict liability applies to a broad range of conduct that leads to the death or captivity of a migratory bird.[183] While the defendants argued that strict liability should not apply to passive conduct, the court disagreed, finding that "[n]othing in the structure or logic of [the 10th Circuit's prior interpretation of the MBTA] lends itself to carving out an exception

---

[177] *United States v. Morgan*, 311 F.3d 611 (5th Cir. 2002); *Hogan*, 89 F.3d 403.
[178] *Compare Mahler*, 927 F. Supp. 1559 (7th Circuit case after *Hogan* that did not recognize strict liability for indirect takes); *with Citgo Petroleum Corp*., 2012 WL 3866857 (5th Circuit case after *Morgan* that recognized and followed *Morgan*'s strict liability interpretation).
[179] *See* James Lockhart, *Validity, Construction, and Application of Migratory Bird Treaty Act, 16 U.S.C.A. §§ 703 to 712, and its Implementing Regulations*, 3 A.L.R. F.2d 465. § 26 (2005) (highlighting and explaining MBTA precedent in various jurisdictions). With exception of the baiting offenses, which have been statutorily amended to require *mens rea*. *Id.*
[180] *E.g.*, *Newton Cnty Wildlife Ass'n*, 113 F.3d 110.
[181] *Compare, e.g.*, *Mahler*, 927 F. Supp. 1559; *with Apollo Energies*, 611 F.3d 679.
[182] *E.g.*, *Brigham Oil*, 840 F. Supp. 2d 1202 (holding strict liability does not apply for indirect takes); *Corbin Farm Service*, 444 F. Supp. 510 (holding strict liability does apply for indirect takes).
[183] *Apollo Energies*, 611 F.3d at 689.

for different types of conduct."[184] The 8th Circuit represents the other end of the spectrum. In *Newton County*, a case involving migratory bird deaths due to habitat destruction from logging operations, the 8th Circuit held that applying strict liability beyond hunting and poaching activities "would stretch this 1918 statute far beyond the bounds of reason."[185]

Of the two prime wind jurisdiction MBTA § 707(a) cases decided since *Apollo Energies*, one district court decision followed the *Newton County* court's *mens rea* approach and one district court decision followed the *Apollo Energies* court's strict liability approach.[186] Following *Newton County*'s binding precedent, an 8th Circuit district court held in *United States v. Brigham Oil & Gas. L.P.* that "take" refers to deliberate not accidental conduct and finding the MBTA inapplicable to incidental takings through lawful commercial activity.[187] According to the *Brigham* court, holding the six oil companies liable for "taking" dead birds found in their oil reserve pits in violation of § 703 would reach too far.[188] Any other result would make *any* conduct that proximately results in the death of a migratory bird an MBTA violation, because of the potentially expansive "pursue, hunt, take, capture, kill" language of § 703(a) and the large number of species protected under the MBTA (including common birds like pigeons and starlings).[189] To be consistent, the court argued, the government would "have to criminalize driving, construction, airplane flights, farming, electricity and wind turbines . . . ."[190] In contrast to the *Brigham* decision, a 5th Circuit district court in *United States v. Citgo Petroleum Corp.* followed the *Apollo Energies* approach, finding strict liability applicable to indirect takes.[191] The

[184] *Id.* at 685.
[185] *Newton Cnty. Wildlife Ass'n*, 113 F.3d at 115.
[186] *Citgo Petroleum Corp*., 2012 WL 3866857 (following *Apollo Energies*); *Brigham Oil*, 840 F. Supp. 2d 1202 (following *Newton*, requiring evidence of specific intent to violate the MBTA).
[187] *Id.* at 1208-09, 1211-13.
[188] *Brigham Oil*, 840 F. Supp. 2d at 1204-06.
[189] *Id.* at 1212.
[190] *Id.* at 1213.
[191] *Citgo Petroleum Corp.*, 2012 WL 3866857 at *5-7.

Citgo Petroleum court denied Citgo's motion to vacate after the district court convicted the defendant oil company of three violations of the MBTA for deaths caused by open-air oil tanks.[192] Based on the factual similarities to *Apollo Energies*, the court found it "obvious that 'unprotected oil field equipment can take or kill migratory birds.'"[193]

Beyond the context of oil production, courts have also taken differing approaches to indirect take liability. For example, in *United States v. Corbin Farm Service*, a 9th Circuit district court held that MTBA strict liability applied to accidental pesticide poisoning of an alfalfa field, noting that § 703 made it illegal to kill migratory birds "by any means or in any manner."[194] After *Corbin*, the 9th Circuit Court of Appeals determined the meaning of "take" under the MBTA as it applied to timber harvesting, in *Seattle Audubon Society v. Evans*.[195] The court contrasted the meaning of "take" under the MBTA with the meaning of "take" under the ESA, specifically noting that the MBTA did not include "harass" or "harm" as the ESA did.[196] Concluding that the MBTA only applied to hunting and poaching activities, it found that habitat destruction indirectly leading to bird deaths did not amount to a "taking" within the meaning of the MBTA.[197] A timber salvage case out of the 7th Circuit, *Mahler v. United States Forest Service*, similarly held that timber salvage during nesting season did not constitute a "take" within the meaning of the MBTA.[198] The *Mahler* court did not distinguish between indirect takings (habitat modification) and direct takings (birds nesting in trees when cut).[199] According to the court, the language of the MBTA, and its legislative history, did not indicate Congress

[192] *Id.* at *1.
[193] *Id.* at *7 (quoting *Apollo Energies*).
[194] *Corbin Farm Service*, 444 F. Supp. at 531; *see Citgo Petroleum Corp.,* 2012 WL 3866857 at *3 (discussing the *Corbin Farm Service* decision).
[195] 952 F.2d 297. Note that this case largely focuses on an appeal from a permanent injunction under the National Forest Management Act, and only briefly discusses the MBTA.
[196] *Id.*at 302-03.
[197] *Id.*
[198] *Mahler*, 927 F. Supp. at 1579-81; *see Newton Cnty. Wildlife Ass'n*, 113 F.3d 110.
[199] *Mahler*, 927 F. Supp. at 1576, 1579-81.

intended to reach migratory bird deaths that resulted incidentally from human activities not intended to kill or capture birds.[200]

Despite this back and forth case law, wind developers probably would not face a strict liability standard for indirect takes in most prime wind jurisdictions. Of the cases discussed, only *Apollo Energies* establishes binding precedent that strict liability applies to indirect takes under the MBTA.[201] Although the *Corbin Farm Service* and *Citgo Petroleum* decisions also held strict liability appropriate for indirect takes, these cases come out of jurisdictions with little guiding MBTA case law.[202] Both the 8th Circuit and the 9th Circuit have binding precedent rejecting strict liability, which *Brigham Oil* and *Mahler* followed.[203] As the examination of "take" discussed *supra* in Section I.A.3.a.1 illustrated, courts should find that "take" means reducing animals to human control by killing or capturing them, which does not include passive activities that indirectly affect birds such as wind development.[204] Additionally, courts may consider the wind industry's comparatively low impact on birds and the climate mitigation benefits associated with wind energy when deciding what MBTA liability standard to apply.[205] Taking these factors into account, most courts would likely not hold wind developers to a strict liability standard. However, if a court does finds strict liability applicable to indirect takes, wind developers still have a due process safeguard.

---

[200] *Id.* at 1574, 1576-1581.
[201] *See Citgo Petroleum Corp.,* 2012 WL 3866857; *Apollo Energies*, 611 F.3d 679; *Corbin Farm Service*, 444 F. Supp. 510.
[202] *See* Lockhart, *supra* note 179 (giving an overview of MBTA case law).
[203] *Newton Cnty. Wildlife Ass'n*, 113 F.3d at 115 (8th Circuit); *Seattle Audubon Soc'y*, 952 F.2d at 302 (9th Circuit).
[204] *See Sweet Home*, 515 U.S. at 717-18 (Scalia, J., dissenting) (citing WEBSTER'S NEW INTERNATIONAL DICTIONARY OF THE ENGLISH LANGUAGE (2d ed. 1949), which defines "take" as "to catch or capture by trapping, snaring, etc., or as prey," and arguing that "take" means to reduce animals to human control by killing or capturing them).
[205] *See supra* Introduction for discussion of comparatively low impact on bird populations; AM.WIND ENERGY ASS'N, WIND POWER AND CLIMATE CHANGE (2013), *available at* http://www.awea.org/learnabout/publications/upload/Climate_Change.pdf (explaining the climate benefits of wind).

C. What are the Due Process Limitations on Strict Liability?

Due process requires that defendants have notice that their specific conduct could kill migratory birds.[206] As one court explained, "[a]ny statute which does not give fair notice as to what constitutes illegal conduct so that an individual may conform his conduct to the law violates the first essential of due process of law." Even in a potentially harsh jurisdiction like the 10th Circuit, strict liability may not be strict in application. The *Apollo Energies* court held that the MBTA unambiguously criminalized any activity that leads to the death or captivity of protected migratory birds, but it also emphasized that due process underlies the MBTA.[207] Relying on the prior 10th Circuit district court opinion *United States v. Moon Lake Elec. Association, Inc.*, the *Apollo Energies* court held that defendants must have notice of their potentially criminal actions and this conduct must proximately cause the migratory bird deaths.[208] Based on the record, the court said, one of the two defendants did not have proper notice that heater-treaters could trap migratory birds to be held liable under the MBTA.[209] In contrast to the due process relief given in *Apollo Energies*, the *Moon Lake* court held an electricity distributor liable under § 707(a) of the MBTA for migratory birds electrocuted by its high-voltage power lines.[210] Like *Apollo Energies*, *Moon Lake* recognized proximate cause as "an important and inherent limiting feature" on misdemeanor MBTA violations.[211] Because the defendant company in *Moon Lake* could reasonably foresee bird deaths would result from its

[206] *Apollo Energies*, 611 F.3d at 682.
[207] *Id.* at 689-91.
[208] *Id.* at 682.
[209] *Id.*
[210] *Moon Lake*, 45 F. Supp.2d at 1085; *see Apollo Energies*, 611 F.3d at 690 (discussing *Moon Lake* in the context of proximate cause).
[211] *Moon Lake*, 45 F. Supp.2d at 1085; Lilley & Firestone, *supra* note 5, at 1185; *see* Robbins, *supra* note 23, at 603.

improperly protected power lines and failed to safeguard the lines, the court found the defendant company guilty under MBTA § 707(a).[212]

Apollo Energies and *Moon Lake* are just two of many MBTA cases that stress the importance of being a good actor. For example, in *Citgo Petroleum*, the court held that the oil tanks at issue proximately caused the birds' deaths and that Citgo kept the tanks in a manner that violated both the Clean Air Act and Texas state law.[213] Because of these violations, the court denied the defendant due process relief.[214] Whereas, in *United States v. Rollins*, a pesticide case out of the 9th Circuit, the court found the MBTA unconstitutionally vague as applied to the defendant farmer.[215] Since the MBTA did not expressly prohibit poisoning by pesticide, and the farmer used appropriate amounts of legally approved pesticides, the court held that the MBTA did not give fair notice to farmers of what constituted illegal conduct.[216] Due process may prove an important legal foothold for wind developers going forward, especially in the 10th Circuit, where the court recently reaffirmed its commitment to MBTA strict liability.[217]

Fitting under this due process safe harbor may prove problematic for wind developers, since birds are known to collide with wind turbines, putting them on general notice.[218] FWS provides steps for wind developers to properly plan and operate a wind project in its *Land-Based Wind Guidelines*, discussed *infra* Section III.A, and helps give developers a potential due process defense in spite of this general notice. If wind developers make good faith mitigation efforts to minimize harm to migratory bird populations and work to comply with the *Land-Based Wind Guidelines*, this will show a court that they are good actors worthy of due process relief.

---

[212] *Moon Lake*, 45 F. Supp.2d 1070; Lilley & Firestone, *supra* note 5, at 1197-98; Robbins, *supra* note 23, at 603.
[213] *Citgo Petroleum Corp.,* 2012 WL 3866857, at *6-8.
[214] *Id.*
[215] 706 F. Supp. at 744-45.
[216] *Id.* at 745.
[217] *See Apollo Energies*, 611 F.3d at 684-86 (explaining that it is following the *Corrow* decision).
[218] *See, e.g.*, Lilley & Firestone, *supra* note 5, at 1171-73 (explaining that thousands of birds die due to collisions with wind turbines annually).

D. Summary: Will Courts Find Wind Developers Liable?

Pragmatically, most prime wind jurisdictions will not hold wind developers liable for indirect takes under the MBTA.[219] Most prime wind jurisdictions have held either that the MBTA is *not* a strict liability statute as applied to non-hunting and non-poaching activities, or that it *is* a strict liability statute but leniently apply it to accommodate lawful commercial activities.[220] MBTA case law as a whole shows a defendant-friendly trend among circuits.[221] Even among harsh strict liability circuits, proximate cause and due process considerations limit strict liability. [222] If wind developers act prudently and follow current FWS *Guidelines*, they will likely avoid liability.[223]

E. Practical Implications for the Wind Industry

While wind developers may escape legal liability under the MBTA, the threat of strict criminal liability will deleteriously affect wind development on a practical level. As protection increases for migratory birds, so too does potential liability for industry actors.[224] The MBTA

---

[219] *See* McKinsey, *supra* note 8, at 78.
[220] *See* Appendix 1 (summarizing key questions in prime wind jurisdictions).
[221] *See, e.g.*, *Brigham Oil*, 840 F. Supp. 2d 1202; *Apollo Energies*, 611 F.3d 679; *Newton Cnty Wildlife Ass'n*, 113 F.3d 110, 115; *Mahler*, 927 F. Supp. 1559; *Rollins*, 706 F. Supp. 742.
[222] *E.g.*, *Rollins*, 706 F. Supp. at 744.
[223] On November 23, 2013, the Department of Justice criminally prosecuted a wind facility for the first criminal under the MBTA. Press Release, Department of Justice, Utility Company Sentenced in Wyoming for Killing Protected Birds at Wind Projects (Nov. 22, 2013), *available at* www.justice.gov/opa/pr/2013/November/13-enrd-1253.html. Duke Energy Renewables, Inc. pleaded guilty to violating the MBTA after 163 protected birds were killed at two of its wind facilities in Wyoming. *Id.* Although this prosecution could mean that FWS will now openly and freely prosecute wind developers under the MBTA—at least in the 10th Circuit where Wyoming sits—it instead seems to signal FWS's reluctance to prosecute wind developers, except in egregious cases. In this case, the Department of Justice claimed that Duke "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 this issue from the U.S. Fish and Wildlife Service." *Id.* This reemphasizes the importance of being deemed a good faith developer by following the current FWS *Guidelines* to avoid prosecution.
[224] *See, e.g.*, Lilley & Firestone, *supra* note 5, at 1174 (noting the increase in wind development will likely increase bird and bat mortality due to turbine collisions).

may have a significant negative effect on wind farm siting and operation, because of the potential chilling effect of looming criminal liability, compliance costs, and increased financial risks.[225]

Developing a wind energy project is a financially delicate enterprise.[226] Discord among courts about MBTA liability only increases the business risk in an already risky industry.[227] Increased legal and regulatory uncertainty means that investors may be deterred, making it difficult for wind developers to find investors.[228] If developers do find investors, they will face higher costs to develop a project at less competitive and less attractive rates to compensate for this increased risk.[229] Besides financial risks, projects encounter other risks like uncertainty about whether the MBTA applies to a site at all.[230] If the MBTA does apply, developers may be unable to quantify the time and costs of compliance.[231] For example, if developers discover an MBTA species in a project area, they may have to do acoustic monitoring to understand the composition of the local bird population and assess the project's impact on that population.[232] This not only increases costs, but also pushes a project's construction timeline back until the project can determine the extent of the actual threat.[233] Developers also face a risk that FWS will list new protected MBTA species previously unaccounted for during the life of the project, further

[225] Ruhl, *supra* note 120, at 1771-72 (stating that because of potential for bats and birds to collide or feel harmful effects from wind turbines, the ESA and other federal statutes are implicated, and that scholars identify the ESA as a potentially significant constraint on siting and operating of wind facilities).
[226] *See generally* McKinsey, *supra* note 8, at 88-89 (explaining that wind investors face financial risk due to the MBTA); BROWN & SHERLOCK, *supra* note 20, at 17 (discussing risks for tax equity investors that a project performs and operates as expected).
[227] McKinsey, *supra* note 8, at 88-89 (explaining that wind investors face financial risk due to the MBTA).
[228] Ruhl, *supra* note 120, at 1795.
[229] *Id.*; McKinsey, *supra* note 8, at 88 ("Uncertainty of the ability of the project to obtain permits can, and often does, prevent funding. . . . The uncertainty brought on by unknown avian impacts, unknown possible consequences to the ability of the project to operate, and unknown mitigation costs can reach all these categories of uncertainty in a wind energy project and can be an unbearable burden on project financing.").
[230] Ruhl, *supra* note 120, at 1795.
[231] *Id.*
[232] *See generally* LAND-BASED WIND ENERGY GUIDELINES, *supra* note 29, at 9, 36 (outlining the *Guidelines'* tiered system, and explaining methods to satisfy Tier 3).
[233] *See id.* at ii (giving a compliance timeline for the various tiers).

increasing costs.[234] Indeed, between 2002 and 2010, the protected species listed in the MBTA jumped from 836 to 1007.[235]Together, these risks could overburden wind projects that successfully secure financing and undermine a project's contracts.[236] They could affect future revenue, operation and maintenance costs, disrupt existing project finances, and potentially lead to litigation over contracts.[237]

With millions of dollars at stake in the development of a new wind project and potential criminal liability under the MBTA, administrators must ensure proper compliance mechanisms are in place to adequately protect lawful good faith wind developers.[238] Administrators must also make the compliance process accessible to these wind developers in order to properly balance wildlife conservation concerns and renewable energy development.

III. MBTA ENFORCEMENT & SOLUTIONS TO THE WIND INDUSTRY'S MBTA DILEMMA

Currently, the MBTA has no compliance mechanism in place for wind developers. FWS does not allow ITPs and only allows permits for specified categories of activities, which do not include renewable energy.[239] This section discusses the need for an ITP for the wind industry and makes recommendations to remedy the current MBTA compliance and enforcement system.

A. OVERVIEW OF CURRENT COMPLIANCE & ENFORCEMENT

[234] *See id.* (detailing financial constraints on wind projects in context of the ESA); *see also* McKinsey, *supra* note 8, at 88-90 (explaining the general uncertainties resulting from avian impact risk).
[235] MIGRATORY BIRD MORTALITY, *supra* note 2, at 1 (836 species as of 2002); U.S. FISH & WILDLIFE SERV., REVISED LIST OF MIGRATORY BIRDS AND YOUR PERMIT QUESTIONS AND ANSWERS 1 (2010), *available at* www.fws.gov/migratorybirds/regulationspolicies/mbta/Part 10.muscovy Fact Sheet.11-1-2010.pdf (1007 species as of 2010).
[236] Ruhl, *supra* note 120, at 1787, 1795 (providing an example of this litigation after complications arose from ESA regulation after a deal collapsed and buyer exercised its contractual termination rights).
[237] *Id.*
[238] *See* McKinsey, *supra* note 8, at 88 ("The development of a modern wind project costs tens of millions, and often hundreds of millions of dollars.").
[239] MIGRATORY BIRD MORTALITY, *supra* note 2, at 2 (explaining there are no ITPs under the MBTA); *see* McKinsey, *supra* note 8, at 77-78 (outlining the MBTA's lack of compliance mechanisms for wind).

The MBTA is the nation's oldest wildlife conservation statute, and it is starting to show its age.[240] Under the MBTA, FWS has sole enforcement and permitting authority;[241] the Act does not provide a citizen suit provision.[242] FWS's permitting scheme provides categorical permits for scientific collecting, banding and marking, falconry, raptor propagation, depredation, import, export, taxidermy, waterfowl sale and disposal, and other special purposes.[243] Yet, the MBTA has no compliance mechanism for incidental takes, unlike both the ESA and the Bald and Golden Eagle Protection Act, two other federal conservation statutes that protect endangered birds.[244] Arguably, the MBTA does not need ITP protection because currently there are no citizen suits like the ESA, which makes wind developers less vulnerable to arbitrary enforcement.[245] Yet, because of the MBTA's peculiar and antiquated combination of strict criminal liability, broad scope, and no compliance mechanism, the wind industry needs protection just as much, if not more, under the MBTA.[246] The MBTA protects a broader range of birds than either the ESA or the BGEPA; rather than just protecting endangered birds, it includes common species like pigeons and starlings.[247] FWS resolves the MBTA's statutory peculiarities by way of non-enforcement, which does little to alleviate the wind industry's concerns, especially since criminal, not just civil, liability looms.[248] The industry is left with risk management concerns and

[240] Lilley & Firestone, *supra* note 5, at 1176; *see* McKinsey, *supra* note 8, at 90 (explaining the MBTA is archaic and lacks compliance tools).
[241] 16 U.S.C. §§ 703-712; McKinsey, *supra* note 8, at 78.
[242] 16 U.S.C. § 706; *see* 50 C.F.R. 10.1 (indicating the purpose of the regulations are to implement statutes enforced by FWS, including the MBTA); McKinsey, *supra* note 8, at 78.
[243] *See* LEAVING A LASTING LEGACY, *supra* note 17, at 1-2.
[244] McKinsey, *supra* note 8, at 90.
[245] *See id.* at 78 (explaining that MBTA has no private right of action, which gives selective enforcement its value since if FWS does not enforce, no one will enforce); Ruhl, *supra* note 120, at 1786 (discussing the ESA's citizen suit provision).
[246] *See* McKinsey, *supra* note 8, at 90 (giving an overview of the MBTA's problems).
[247] *Brigham Oil*, 840 F. Supp. 2d at 1212.
[248] *See* Lilley & Firestone, *supra* note 5, at 1199 (comparing judicial review under the MBTA to the sword of Damocles); McKinsey, *supra* note 8, at 90 (MBTA resolved by not being enforced).

financial constraints.[249] With such a broad list of species protected and no *de minimis* exception, seemingly every wind project could violate the MBTA.[250] With wind development projected to continue expanding over the next century, this prosecutorial uncertainty leaves the industry in a precarious position.[251]

The MBTA's ITP oversight not only unfairly burdens the wind industry, but it also goes against the MBTA's treatment of hunting activities. The text of the MBTA does not expressly provide ITPs, but § 704 allows the Department of the Interior to make necessary permitting changes, which could include ITPs.[252] Because of the inevitability of hunting, FWS deemed hunting bag limits one such "necessary permitting change."[253] Congress originally enacted the MBTA out of concerns over migratory bird extinction due to rampant uncontrolled hunting.[254] Today, the MBTA's scope goes well beyond preventing migratory bird extinction, and now serves to unfairly punish lawful industry actors.[255] On the other hand, hunting, the primary conduct that concerned Congress, receives relatively lax treatment.[256] Under the MBTA, hunters may qualify for a categorical permit, subject to a daily bag limit.[257] Because Congress saw fit to permit active conduct directly aimed at migratory birds, such as hunting, in a controlled way, it

---

[249] *See supra* Section II.E.
[250] Lilley & Firestone, *supra* note 5, at 1180-81, 1199; *see* Jeffrey C. Dobbins, *Structure and Precedent*, 108 MICH. L. REV. 1453, 1460-66 (2009) (saying no *de minimis* exception).
[251] Lilley & Firestone, *supra* note 5, at 1199.
[252] 16 U.S.C. § 704.
[253] *See* 16 U.S.C. § 707(b); 50 C.F.R. § 20.11(k). Daily bag limits allow hunters to take a set number of migratory birds (one person in one day during open season in any one geographic area where bag limits are prescribed). What terms do I need to understand?, 50 C.F.R. § 20.11(c) (defining bag limits); *Id.* at § 20.24 (stating that the daily bag limit applies to any 1 calendar day period).
[254] Lilley & Firestone, *supra* note 5, at 1176-77.
[255] *See id.* at 1209; *see also Corbin Farm Service*, 444 F. Supp. 510 (pesticide case where farm company held liable).
[256] *See* Lilley & Firestone, *supra* note 5, at 1176-77 (explaining original impetus for the MBTA was hunting concerns); Lockhart, *supra* note 179, § 26 (bait cases require specific intent, no longer strict liability).
[257] *See* 16 U.S.C. § 707(b); 50 C.F.R. § 20.11(k). Daily bag limits allow hunters to take a set number of migratory birds (one person in one day during open season in any one geographic area where bag limits are prescribed). What terms do I need to understand?, 50 C.F.R. § 20.11(c) (defining bag limits); *Id.* at § 20.24 (stating that the daily bag limit applies to any 1 calendar day period).

logically follows that Congress and FWS should accommodate an activity, such as wind energy production, that incidentally results in "takes."[258]

Congress and FWS have made attempts to harmonize wind energy and the MBTA, but these efforts fall short of this goal.[259] One such attempt, FWS's recently released *Land-Based Wind Energy Guidelines*, aimed to help the wind industry comply with federal wildlife conservation statutes like the MBTA.[260] These *Guidelines* focus on changes at an industry level to avoid and minimize impacts on wildlife throughout the various stages of wind project development: from site selection and construction, to operation and maintenance.[261] While the *Guidelines* are a step in the right direction, they do not achieve the systematic overhaul needed to avoid over-criminalizing and unduly burdening wind developers.[262] These voluntary guidelines lack the force of law and focus largely on reducing avian impacts at the industry level, rather than providing much needed compliance security or providing proper compliance mechanisms.[263] They do not fix the substantial regulatory and statutory problems rooted in the MBTA.[264] Although following the *Guidelines* would allow a wind developer to argue a due process defense,[265] they leave open the question of what specific actions developers need to take to actually satisfy them. The *Guidelines* focus on how the industry can avoid takes, not on FWS

---

[258] *See* Lilley & Firestone, *supra* note 5, at 1209 (arguing it is unconscionable for wind developers who are conscientious and proactively seeking to minimize avian impacts to have the threat of criminal sanction hanging overhead given the strict liability treatment of the MBTA).
[259] *See, e.g.*, *Impacts of Wind Turbines on Birds and Bats: Oversight Hearing Before the Subcomm. on Fisheries, Wildlife, & Oceans of the H. Comm. on Natural Resources*, 110th Cong. 1, (2007) (debating potential solutions to wind turbine impact on birds and bats).
[260] LAND-BASED WIND ENERGY GUIDELINES, *supra* note 29, at 1.
[261] *Id.*; *see also* Klass, *supra* note 30, at 185-186 (explaining the purpose of the draft version of the *Land-Based Wind Energy Guidelines*).
[262] *See* Ruhl, *supra* note 120, at 1796 (reduce risks of take, but don't address compliance security or allow industry to expedite attaining compliance status and maintaining it long term).
[263] *Id.*
[264] *Id.* at 1795-96 (explaining that the *Land-Based Wind Energy Guidelines* are not the equivalent of following incidental take authorization and falls short of an overall risk management strategy); *see* Lilley & Firestone, *supra* note 5, at 1209 (criticizing the interim *Land-Based Wind Energy Guidelines* because they are just voluntary and arguing the industry needs an overarching framework instead).
[265] *See supra* Section II.C (explaining the *Guidelines* offer a potential due process defense).

policies and procedures. Wind developers need more than just protection after FWS decides to prosecute. Lawsuits are expensive and cumbersome and the industry already suffers from increased risk and financial uncertainty because of the shadowy threat of suit.[266]

Even though FWS has yet to bring suit against a wind industry actor, the threat that FWS will prosecute an industry actor becomes increasingly problematic as development continues to expand.[267] Practically, FWS is unlikely to bring suit against wind developers because FWS has limited enforcement resources.[268] In choosing to prosecute an MBTA violation, FWS must weigh factors like the seriousness of the transgression and the deterrent value of prosecuting.[269] The more a wind project implements appropriate measures to prevent reasonably foreseeable incidental migratory bird takes, the less likely FWS is to prosecute that project (and the more likely a developer would have a due process defense).[270] However, what measures FWS will deem *enough* to satisfy MBTA obligations remains an open question. Because FWS is unlikely to charge good faith and conscientious wind developers with MBTA violations, either Congress or FWS needs to make this policy express by remedying the MBTA's currently inadequate policies and procedures.[271]

B. Recommendations

No energy resource is truly green.[272] Even though wind power has fewer wildlife impacts than many other forms of energy, it still needs to take steps to minimize its impact on avian

---

[266] *See generally* McKinsey, *supra* note 8, at 88-89 (explaining that wind investors face financial risk due to the MBTA); BROWN & SHERLOCK, *supra* note 20, at 17 (2011) (discussing risks for tax equity investors that a project performs and operates as expected).
[267] Lilley & Firestone, *supra* note 5, at 1209; *see also* McKinsey, *supra* note 8, at 90 ("It will not suffice to merely declare renewable energy as being valued and provide incentives for wind energy.").
[268] Lilley & Firestone, *supra* note 5, at 1197.
[269] *Id.*
[270] *Id.*
[271] *See id.* at 1209; Ruhl, *supra* note 120, at 1797.
[272] Sutton & Tomich, *supra* note 123, at 121 (quoting Elizabeth Thomas, *The Myth of a single, "Green" Power Resource*, 10 NAT. RESOURCES & ENV'T 65, 80 (1996)).

populations.[273] The MBTA must weigh the industry's need for compliance security and overall stability against FWS's interest in protecting and conserving migratory bird populations.[274] To properly mesh the modern green technology with the MBTA's conservation goals, Congress must step in to fix the statutory language of the MBTA and FWS must change current enforcement procedures and policies. Leaving FWS with prosecutorial discretion, without express concrete enforcement policies, simply does not protect the wind industry enough, and does not fix the MBTA's underlying problems.

Today wind might need protection from overly burdensome MBTA liability, but the MBTA's limitations could have far-reaching consequences beyond the wind industry. It could lead to liability for future technologies, or even now for everyday things like hitting a bird while driving a car, or owning a building, or having a cat.[275] The MBTA needs the statutory tools to adapt to modern technology issues and modern societal needs going forward. In order to breed conscientious wind developers, the Congress and FWS must allow developers the opportunity and tools to comply with the Act in the first place. This section explores and recommends changes at congressional, regulatory, and industry levels to strike a proper balance between wildlife conservation and wind industry concerns without diluting the MBTA's migratory bird protections.[276]

1. Congress

The Legislature should take responsibility for resolving the ambiguity of the MBTA, since Congress is best suited to clarify the legislative intent of a statute and can deal with

[273] Lilley & Firestone, *supra* note 5, at 1205.
[274] *Id.* at 1209-10.
[275] *See Brigham Oil*, 840 F. Supp. 2d at 1204-06.
[276] *See* Ruhl, *supra* note 120, at 1793 (discussing this balance in the context of the ESA); McKinsey, *supra* note 8, at 90 (asking how much energy a bird is worth).

statutory change on a larger scale than FWS.[277] Congress should amend the MBTA's definition of "take," and amend the MBTA to allow for civil sanctions in addition to existing criminal sanctions.

a. Statutorily Amend the MBTA "Take" Definition

Congress should amend § 703(a) of the MBTA to explicate the activities § 703(a)'s "pursue, hunt, take, capture, kill" language covers. At the moment, courts in prime wind jurisdictions do not agree what the language of § 703(a) means or whether it is even ambiguous.[278] These jurisdictional variances only serve to confuse conscientious wind developers who are trying to comply with complex statutory obligations.[279] Congress should amend the Act to clarify the scope of the MBTA and if strict liability is the appropriate standard beyond hunting and poaching activities. This will greatly reduce jurisdictional variances among courts, and help alleviate the wind industry's prosecution concerns.

b. Statutorily Amend the MBTA to Allow for Civil Sanctions

Congress should also amend the MBTA to allow for tiered levels of sanctions, including civil sanctions (e.g. fines rather than prison, temporary injunction) as well as criminal sanctions. In contrast to the MBTA, the ESA provides for both criminal and civil sanctions, and has proved less problematic for the wind industry.[280] Creating tiered levels of enforcement including civil sanctions will remove the threat of criminal liability for good faith wind developers.[281] Changing the MBTA sanction system at the congressional level rather than relying on courts to tailor

[277] McKinsey, *supra* note 8, at 91; *see generally* U.S. CONST. art. I (overviewing Congress's numerous and substantial powers).
[278] *Compare, e.g.*, *Apollo Energies*, 611 F.3d 679 *with Newton Cnty. Wildlife Ass'n*, 113 F.3d 110.
[279] *See generally* McKinsey, *supra* note 8, at 75-80 (giving overview of wildlife protection statutes wind developers must comply with)
[280] *Id.* at 75 (declaring the MBTA is the most problematic wildlife protection law for wind as compared to the other federal protections statutes); *see Enforcement Basic Information*, U.S. ENVTL. PROT. AGENCY (Jan. 1, 2013), http://www.epa.gov/enforcement/basics.html.
[281] *See, e.g.*, Lilley & Firestone, *supra* note 5, at 1187 (arguing that a judge would be unlikely to impose MBTA liability on conscientious wind developers).

appropriate remedies will alleviate prosecution concerns and helps avoid criminalizing the wind industry.[282]

2. FWS

In addition to MBTA changes at the congressional level, FWS should make changes at the agency level to rectify the MBTA's shortcomings and inequities. Because FWS is responsible for MBTA enforcement and permitting, it is better suited than Congress to deal with filling in the details of MBTA permitting and migratory bird-specific issues.

a. Establish ITPs & Clarify Permit Obligations

The wind industry should not get a "green pass" automatically absolving developers from MBTA liability.[283] However, the environmental benefits of wind power should count for something.[284] FWS should allow wind developers to apply for ITPs (granted at the discretion of FWS according to objective criteria) or provide a solution equivalent to an ITP. An equivalent solution could include an official FWS policy statement or interpretive statement, explicitly explaining the agency's non-enforcement scheme and allowing FWS or state agencies to set minimum enforcement thresholds for project sites within specified geographic areas. The current *Guidelines* offer some procedures for wind developers to follow, but do not offer a concrete non-enforcement policy.[285] They only give vague tiers that estimate how long compliance for a specific tier should take,[286] which leaves the wind industry wondering when enough is enough to avoid prosecution. This would provide the wind industry with standardized, objective criteria to take into account when evaluating compliance demands for potential project sites.[287]

---

[282] *See id.*
[283] Ruhl, *supra* note 120, at 1790-91.
[284] *Id.* at 1798.
[285] *See* Lilley & Firestone, *supra* note 5, at 1209 (criticizing the interim *Land-Based Wind Energy Guidelines* because they are just voluntary and arguing the industry needs an overarching framework instead).
[286] *Id.*
[287] *See id.* at 1797 (explaining need for comprehensive mitigation strategies including standardized cost evaluations).

As noted above, § 704 authorizes the Department of Interior to modify permitting from time to time, as it deemed necessary and consistent with migratory bird needs.[288] Thus far, FWS does not offer any ITPs under the MBTA,[289] but it has the statutory power to do so. Section 704 statutorily authorizes the Department of Interior to make necessary permitting changes, which would likely include creating an ITP for wind development.[290] The Department of the Interior should deem implementing ITPs and clarifying wind industry obligations "necessary permitting changes" under § 704, because otherwise it will be impossible for wind developers to comply with the MBTA.[291]

b. Permit Protocols

Once FWS allows for an ITP permit under the MBTA through its § 704 authority, the agency should establish a system to monitor permit compliance at wind project sites, both pre-construction and post-construction. Either FWS itself or state level agencies under FWS supervision should manage this supervisory system. State level agencies may have greater ability to conduct site specific monitoring, since FWS manages many wildlife issues across the entire U.S. it may have limited resources to dedicate to migratory bird permit compliance.[292] This will keep agencies better informed on a project site's particular impact on migratory bird species, and allow for greater communication and understanding between agency and industry regarding permitting conditions and potential enforcement actions.[293] Because the MBTA protects a very broad range and number of birds and thus creates a lot of potential liability, the level of allowable take at a given site should vary depending on the bird species at issue. The agencies

[288] 16 U.S.C. § 704.
[289] MIGRATORY BIRD MORTALITY, *supra* note 2, at 2.
[290] *See* McKinsey, *supra* note 8, at 77-78 (outlining the MBTA's lack of compliance mechanisms for wind).
[291] *See generally id.* at 75-80 (discussing federal statutes the wind industry must comply with).
[292] MEMORANDUM OF UNDERSTANDING, *supra* note 173, at 2-3.
[293] Lilley & Firestone, *supra* note 5, at 1211-12 (recommending increased coordination between wind facilities and FWS).

should look at both level of local species threat (a particular area may have fragile bird populations) and level of national species threat (whether species are endangered or common). FWS should allow more takes of common birds with little local and national threat of endangerment (e.g. starlings).[294]

c. Standardized Avian Impact Monitoring Methodology

Besides the MBTA, wind developers must comply with the ESA, BGEPA, plus state level permitting and regulations, which may vary from the MBTA's requirements.[295] Because wind developers face potential liability under multiple statutes, it is crucially important that the government establishes a clear standard for assessing avian impacts.[296] As evidenced by the current inability to estimate accurate annual migratory bird mortality rates, scientific research in this area needs to improve.[297] Avian researchers have yet to study many wind facilities in the United States, and even where they have, researchers have used varying methods that have resulted in inconsistent findings.[298] To better understand the wind industry's impact on migratory birds, FWS should establish standardized methods to monitor migratory bird collisions.[299] Hand-in-hand with these standardized methods, FWS should conduct site-specific monitoring to properly gauge factors like bird abundance, habitat quality, migratory movements, and night activity.[300] By adopting a standardized methodology, FWS may use it beyond the context of the

[294] *See generally Brigham Oil*, 840 F. Supp. 2d at 1204-06.
[295] *See* Lilley & Firestone, *supra* note 5, at 1175-76 (explaining BGEPA and ESA generally); *see* MIGRATORY BIRD PERMITS, *supra* note 38 (explaining that eagles are covered by the MBTA, but that the BGEPA also applies and is more restrictive, and that most states require additional state level permits).
[296] *See* McKinsey, *supra* note 8, at 92; *see generally id.* at 75-80; AUTHORIZED ACTIVITIES INVOLVING MIGRATORY BIRDS, *supra* note 38, at 2.
[297] *See* Lilley & Firestone, *supra* note 5, at 1208; MIGRATORY BIRD MORTALITY, *supra* note 2, at 1.
[298] Lilley & Firestone, *supra* note 5, at 1208.
[299] *Id.*; McKinsey, *supra* note 8, at 92.
[300] Sutton & Tomich, *supra* note 123, at 120.

MBTA, in monitoring impacts under the ESA or BGEPA.[301] States may also choose to adopt this standardized methodology, leading to more meaningful research at a greater scale.[302]

3. Industry

Finally, wind developers themselves can work to alleviate migratory bird impacts. It is in the wind industry's best interest to make efforts to mitigate impacts in the first place, rather than face potential FWS enforcement action.

a. Comply with Current Mitigation Guidelines

FWS's recent *Land-Based Wind Guidelines* provide a fairly comprehensive guide to help wind developers minimize takes. Wind developers should use these *Guidelines* to reduce potential liability under the MBTA. When selecting a project site, a developer must consider potential migratory bird issues. After project site selection, a developer needs to stay aware of a project's effect on migratory bird populations, and consult with FWS.[303] At bottom, to be considered a good faith wind developer, a developer must in fact act conscientiously and in good faith by taking proper recommended steps. Staying mindful of a project's effect on wildlife and proactive in mitigating potential harm will decrease the chances that a developer will run afoul of the MBTA.[304]

b. Research and Development

In addition to following FWS's final *Land-Based Wind Guidelines*, the wind industry should be proactive in seeking out solutions to its MBTA problems. The industry should continue to invest in research and development to improve technology and help mitigate avian mortality at project sites. These improvements may include modifications to turbine design and

[301] McKinsey, *supra* note 8, at 92.
[302] *See id.*; Lilley & Firestone, *supra* note 5, at 1210; *see also* Sutton & Tomich, *supra* note 123, at 120.
[303] *See* Lilley & Firestone, *supra* note 5, at 1212; McKinsey, *supra* note 8, at 91-92.
[304] *See* Lilley & Firestone, *supra* note 5, at 1209 (discussing likelihood of prosecution based on mitigation efforts).

operation, acoustic wildlife monitoring, and reducing the use of equipment like guy wires that birds roost on.[305]

CONCLUSION

The MBTA is the most problematic of federal conservation statute for wind developers, and strict liability under it even more so.[306] Assuming a court interpret the MBTA as a strict liability statute in general, it should not use strict liability as the appropriate standard for wind turbine collisions. Strict liability potentially over-criminalizes wind developers engaged in otherwise lawful and encouraged renewable energy activities.

Apollo Energies, illustrates that strict liability is alive and well under the MBTA.[307] At the same time, this case emphasizes that even courts that apply strict liability for incidental takes recognize the unfairness of imposing harsh criminal liability on good actors.[308] *Apollo Energies* and other prime wind jurisdiction cases show that courts will not likely to hold wind developers liable under the MBTA;[309] but escaping legal liability does not resolve the practical problems the wind industry arising out of MBTA strict liability. Because of the threat of strict liability, developers still face increased financial and business risks because of the uncertainty of FWS prosecutorial discretion and non-enforcement, and non-existent incidental permit procedures.[310]

The MBTA is an antiquated statute in need of repair.[311] Congress, FWS, and the wind industry need to work together to fix the its statutory and regulatory problems, and institute proper remedies and avoid criminalizing wind development. They can achieve this by amending

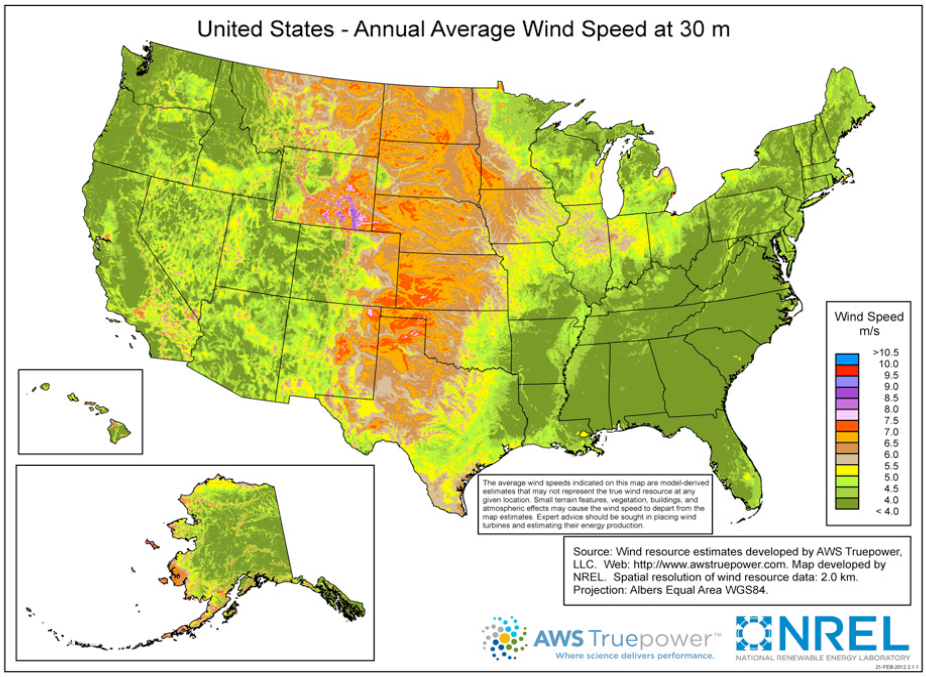
---

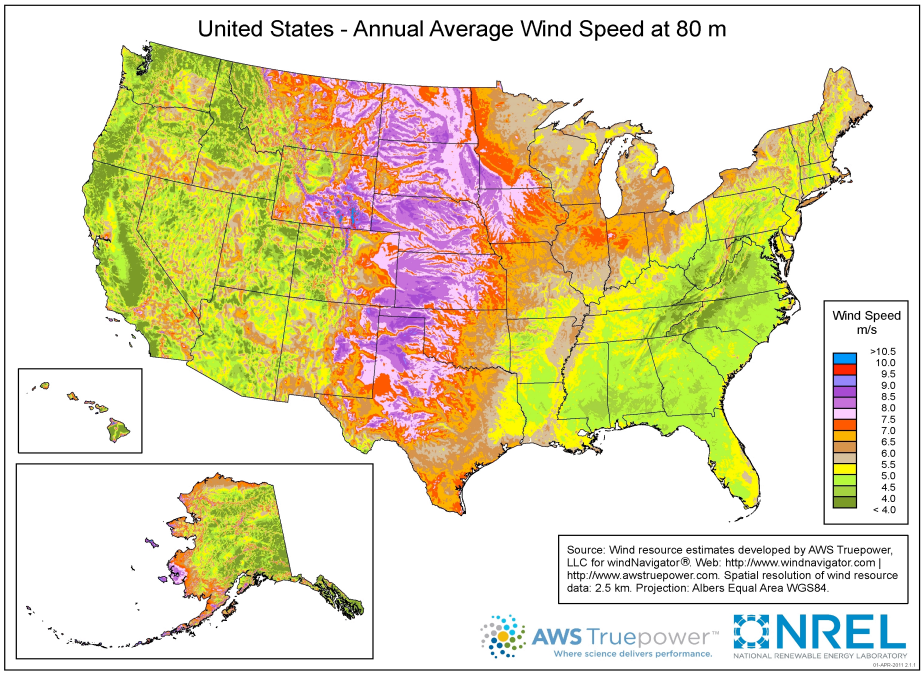
[305] *Id.* at 1211 (discussing turbine design, operation, and reduction of equipment like guy wires); LAND-BASED WIND ENERGY GUIDELINES, *supra* note 29, at 26 (discussing acoustic monitoring).
[306] *See* McKinsey, *supra* note 8, at 75.
[307] *See generally Apollo Energies*, 611 F.3d 679.
[308] *Id.*; *see also Rollins*, 706 F. Supp. 742.
[309] *E.g.*, *Apollo Energies*, 611 F.3d 679; *Newton Cnty. Wildlife Ass'n*, 113 F.3d 110; *Rollins*, 706 F. Supp. 742.
[310] *See generally* McKinsey, *supra* note 8, at 90.
[311] *See id.*

the MBTA and updating the FWS permitting scheme. These changes will bring the MBTA into the 21st century and ensure fairness to the wind industry.

APPENDIX

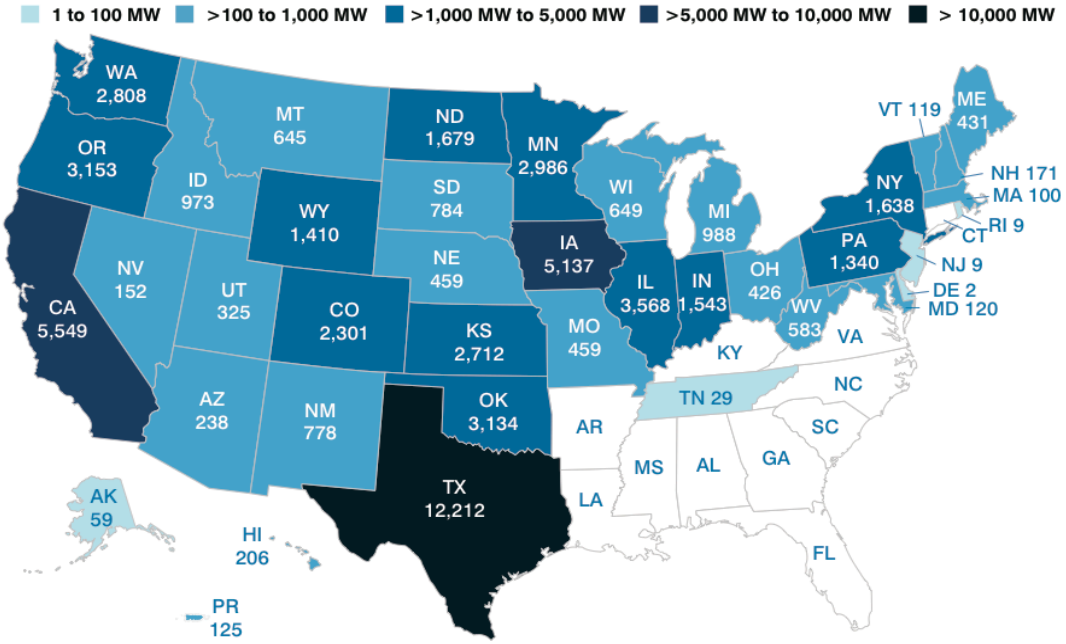
Appx. 1(a): Wind Speeds[312]



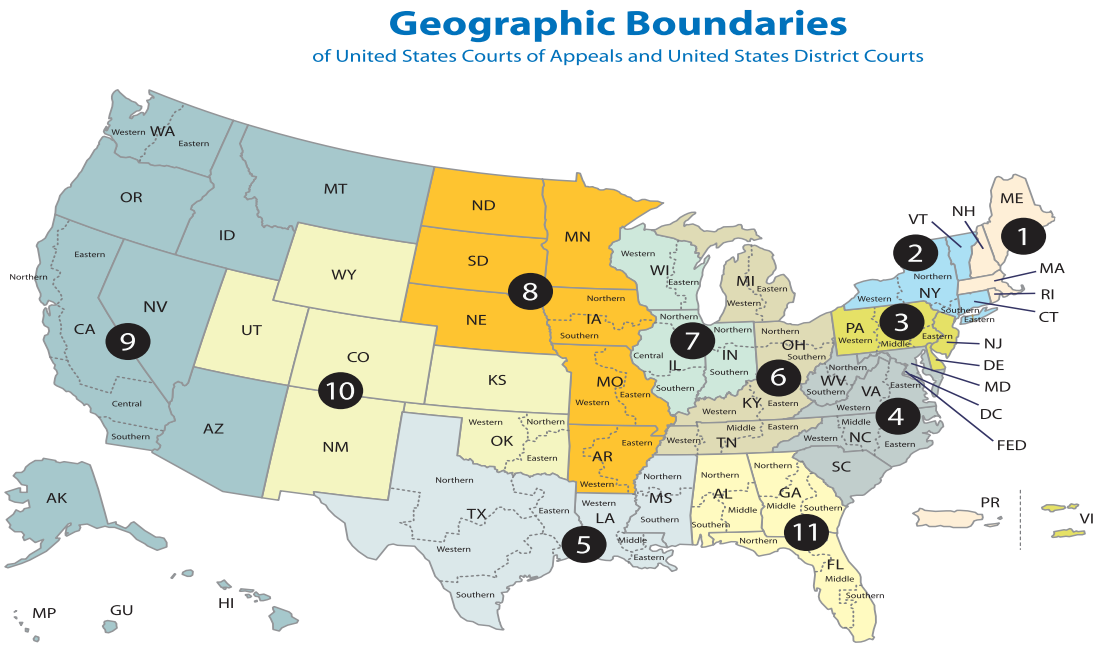


[312] NATIONAL RENEWABLE ENERGY LABORATORY, DYNAMIC MAPS, GIS DATA, & ANALYSIS TOOLS (Aug. 31, 2012), http://www.nrel.gov/gis/wind.html.

Appx. 1(b): Wind Capacity Installations[313]



Appx 1(c): Circuit Map[314]



[313] AM. WIND ENERGY ASS'N, AWEA U.S. WIND INDUSTRY FOURTH QUARTER 2012 MARKET REPORT 8 (2013), *available at* http://www.awea.org/learnabout/publications/reports/AWEA-US-Wind-Industry-Market-Reports.cfm.
[314] ADMINISTRATIVE OFFICE OF U.S. COURTS, COURT LOCATOR, http://www.uscourts.gov/uscourts/images/CircuitMap.pdf.

Appx. 2: Table of key decisions in prime wind jurisdictions

	Is the MBTA a Strict Liability Statute?	**Does Strict Liability Apply to Indirect Takes?**	**Are there Recognized Due Process Limits?**
10th Circuit	Yes	Yes	Yes - Notice & Proximate Cause
Case(s)	U.S. v. Corrow; Apollo Energies	Apollo Energies	Moon Lake (not binding); Apollo Energies
9th Circuit	Maybe	Maybe	Yes - Void as Applied to Defendant (Notice)
Case(s)	U.S. v. Rollins (yes) (not binding); U.S. v. Corbin Farm Service (yes) (not binding)	U.S. v. Corbin Farm Service (yes) (not binding); Seattle Audubon Society (no) (primarily NFMA case)	U.S. v. Rollins (not binding)
8th Circuit	No	No	N/A
Case(s)	Newton County Wildlife Ass'n	Newton County Wildlife Ass'n; Brigham Oil (applying Newton) (not binding)	If MBTA doesn't apply, no need for Due Process limit
7th Circuit	Maybe	Maybe	N/A
Case(s)	U.S. v. Hogan (strict liability in the context of hunting); Mahler (no) (did not extend Hogan to context of timber salvage) (not binding)	Mahler (no) (language and legislative history of MBTA did not indicate Congress intended MBTA to cover incidental takes) (not binding)	If MBTA doesn't apply, no need for Due Process limit
5th Circuit	Probably yes	Maybe	Yes - Notice & Proximate Cause
Case(s)	U.S. v. Morgan (strict liability in the context of hunting); Citgo Petroleum (yes) (held Morgan applied to § 703 in general) (not binding)	Citgo Petroleum (yes) (adopted Apollo Energies approach) (not binding)	Citgo Petroleum (adopted Apollo Energies approach) (not binding)