CONTINGENT DELISTING

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INTRODUCTION

The Endangered Species Act (ESA) is among the strongest biodiversity protection laws anywhere in the world. Its animating principle is that we, as a society, should do whatever it takes to prevent the extinction of the plants and animals that share our planet —a moral intuition shared by most Americans. As preventative medicine, the ESA has been a wild success. A recent study found that less than 1 percent of the 1,747 species listed as threatened or endangered have gone extinct. So far, the Act has proven less effective at rehabilitation. Only fifty-four species have been delisted because of recovery, although that

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^{1.} See Federico Cheever, The Road to Recovery: A New Way of Thinking About the Endangered Species Act, 23 Ecology L.Q. 1, 3 (1996).

^{2.} See 16 U.S.C. § 1531(c)(1) (2018).

^{3.} See Jeremy T. Bruskotter et al., Most Americans Support the Endangered Species Act, HIGH COUNTRY NEWS (July 24, 2018), https://www.hcn.org/articles/endangered-species-most-americans-support-the-endangered-species-act [https://perma.cc/W63B-KWNS].

^{4.} Noah Greenwald et al., Extinction and the U.S. Endangered Species Act, PEERJ LIFE & ENVT. 1, 2–3 (2019), https://peerj.com/articles/6803.pdf [https://perma.cc/84Z2-M43W].

^{5.} See U.S. FISH & WILDLIFE SERVICE, DELISTED SPECIES, https://ecos.fws.gov/ecp0/reports/delisting-report (last visited Aug. 23, 2019) [https://perma.cc/6ARX-D2SU] [hereinafter FWS DELISTING REPORT].

number may increase as recovery efforts mature.6

Despite its popularity and effectiveness, vocal critics of the ESA remain, arguing that it places unfair and undue restrictions on development, as well as other economic activities, and that the dearth of delistings reveals its inability to achieve its objectives. While legislative proposals appear unlikely to succeed in the current political environment, the Trump Administration is poised to make significant changes to the manner in which the federal government implements the ESA as part of a broader deregulatory agenda.

The U.S. Fish and Wildlife Service (FWS), which administers the ESA for terrestrial species, is no stranger to the controversy engendered by the Act. The agency has demonstrated a capacity to innovate in response, albeit sometimes only after coaxing and encouragement from political leadership. 10 Responding to concerns about potential infringement of private property rights, Secretary Bruce Babbitt wrote, "[t]he ESA is not the problem. The problem is that the people who have been charged with administering the ESA have not explored imaginative and creative ways to arrange possibilities to give effect

^{6.} See Kieran Suckling et al., Ctr. for Biological Diversity, On Time, On Target: How the Endangered Species Act Is Saving America's Wildlife 9 (2012).

^{7.} See Kellie Lunney, ESA Is '8-Track Law in Spotify World'—GOP, E&E DAILY (July 13, 2018), https://www.eenews.net/eedaily/2018/07/13/stories/1060088989 [https://perma.cc/WM4D-88HG]; Congressman Rob Bishop, The Endangered Species Act Has Failed, ENDANGERED SPECIES WATCH (Sept. 27, 2013), http://esawatch.org/the-endangered-species-act-has-failed/ [https://perma.cc/H2R5-694Q].

^{8.} See Bruskotter et al., supra note 3. There remains, however, the potential for Congress to enact species-specific legislation to relax or remove the protections of the ESA. See Zachary Bray, The Hidden Rise of Efficient (De)Listing, 73 MD. L. REV. 389, 394 (2014).

^{9.} See, e.g., Coral Davenport & Lisa Friedman, Lawmakers, Lobbyists and the Administration Join Forces to Overhaul the Endangered Species Act, N.Y. TIMES, July 22, 2018, at A1

^{10.} The National Marine Fisheries Service (NMFS) administers the ESA for marine and anadromous species. See 16 U.S.C. § 1532(15) (2018); Justin R. Pidot, Public-Private Conservation Agreements and the Greater Sage-Grouse, 39 PUB. LAND & RESOURCES L. REV. 165, 170 n.17 (2018). Because the political debate over regulatory burdens imposed by the ESA tends to focus on land use and, perhaps as a result, the FWS has been the locus of historical innovation, this Article focuses on the FWS's administration. See John D. Leshy, The Babbitt Legacy at the Department of the Interior: A Preliminary View, 31 ENVIL. L. 199, 214 (2001). Contingent delisting could, however, also be pursued by NMFS in appropriate circumstances.

to a wonderful, expansive Act." ¹¹ Following Babbitt's "call for innovation," the FWS developed new approaches to facilitate conservation of unlisted but declining species and to enable economic interests to obtain discrete, specific, and predictable legal obligations. ¹²

These efforts at reform have largely ignored the persistent demand by critics of the ESA for increased attention to delisting. 13 The FWS has previously announced an intention to devote more resources to delisting. 14 Yet delisting remains rare, and, even when attempted, it has proven challenging and contentious. 15 This is due in part to the fact that the recovery for many species remains elusive because it has proven easier to prevent species from disappearing entirely than to revitalize them. 16 It is also true that recovery takes time, and some observers predict that delisting will increase considerably in the coming decade as recovery plans reach maturity. 17 Even for those species that appear to have recovered, however, the FWS may be hard-pressed to ensure that their viability will persist once protections afforded by the ESA have been removed. Take, for example, the northern Rocky Mountain gray wolf. During a decades-long delisting process, the number of wolves greatly exceeded the number that biologists believed were necessary to sustain a viable population. But wolf advocates worried that the species' population could swiftly dwindle once hunting, trapping, and poisoning of wolves resumed. 18 These concerns proved well-

^{11.} Bruce Babbitt, The Endangered Species Act and "Takings": A Call for Innovation Within the Terms of the Act, 24 ENVIL. L. 355, 366 (1994).

^{12.} See Pidot, supra note 10, at 182–83 ("Under the leadership of Secretary of the Interior Bruce Babbitt, the FWS developed a number of regulatory initiatives to reduce uncertainty for private actors."); Leshy, supra note 10, at 214 (discussing administrative reform initiated by the FWS during the tenure of Secretary Bruce Babbitt).

^{13.} See, e.g., Bishop, supra note 7.

^{14.} See Federico Cheever, The Rhetoric of Delisting Species Under the Endangered Species Act: How to Declare Victory Without Winning the War, 31 ENVTL. L. REP. 11,302, 11,302 (2001); Holly Doremus, Delisting Endangered Species: An Aspirational Goal, Not a Realistic Expectation, 30 ENVTL. L. REP. 10,434, 10,434–35 (2000).

^{15.} See, e.g., Humane Soc'y of the U.S. v. Jewell, 76 F. Supp. 3d 69 (2014); FWS DELISTING REPORT, supra note 5.

^{16.} See Cheever, supra note 1, at 4.

^{17.} See SUCKLING ET AL., supra note 6, at 5–6, 9 (identifying recovery time frames included in recovery plans and predicting rise in delisting as plans have sufficient time).

^{18.} See Jason Bittel, Is the Gray Wolf Still Endangered? Depends Who You Ask, NAT'L GEOGRAPHIC (Mar. 18, 2019), https://www.nationalgeographic.com/animals/

founded, as huge numbers of wolves have been killed following delisting.¹⁹

This Article proposes a new regulatory reform effort, specifically aimed at the delisting process. Delisting has historically been viewed as binary in nature: either federal protection is removed altogether or it remains in force. This Article recommends contingent delisting as a third option that, in appropriate circumstances, may allow the FWS to accommodate both wildlife conservation and economic interests. Contingent delisting would render a listing dormant—rather than extinguished—and subject to restoration if certain foreseeable events materialize that signal renewed danger to a species' viability. Deploying this tool would withdraw ESA jurisdiction over a species, thereby allowing local and state governments to assume responsibility for conservation and lifting restrictions placed on property owners. At the same time, contingent delisting would provide for rapid and predictable return of federal protection, thereby alleviating concerns that a species' recovery might falter once the protections of the ESA have lifted. Contingent delisting for the gray wolf could have included, for example, a provision to restore the listing should the wolf count fall below the number needed for viability or should states allow unsustainable killing.

The proposal for contingent delisting draws from extensive literature on the design of mechanisms to enable environmental and natural resources law to account for uncertainty.²⁰ Regulatory contingencies are a mechanism that may provide an efficacious means to address foreseeable circumstances.²¹ Contingent delisting also responds to a growing need for innovation with respect to the mechanisms of deregulation, or as Professors J.B. Ruhl and Jim Salzman term it, "regulatory exit."²² Individual

 $^{2019/03/\}mathrm{gray}\text{-wolves-endangered-species-united-states/}$ [https://perma.cc/879Y-8LLF].

^{19.} See id.

^{20.} See, e.g., Alejandro E. Camacho, Can Regulation Evolve? Lessons from a Study in Maladaptive Management, 55 UCLA L. REV. 293, 329–34 (2007); Justin R. Pidot, Governance and Uncertainty, 37 CARDOZO L. REV. 113, 122–23 (2015); J.B. Ruhl, Thinking of Environmental Law as a Complex Adaptive System: How to Clean Up the Environment by Making a Mess of Environmental Law, 34 HOUS. L. REV. 933, 940–41 (1997); Annecoos Wiersema, A Train Without Tracks: Rethinking the Place of Law and Goals in Environmental and Natural Resources Law, 38 ENVTL. L. 1239, 1248–53 (2008).

^{21.} See Pidot, supra note 20, at 164-72.

^{22.} J.B. Ruhl & James Salzman, Regulatory Exit, 68 VAND. L. REV. 1295 (2015). Ruhl and Salzman describe regulatory exit as tied to the goals endemic to a

political preferences may lead to vastly different appetites for deregulation, but even the most ardent supporter of the administrative state should recognize that legal rules can outlive their usefulness.²³ Thus, deregulation is not inherently ideological and sometimes it is unquestionably desirable. The question is, can it occur in a manner that maximally preserves the social benefits accrued during a regulation's life?

Delisting provides fertile ground to consider innovation with respect to regulatory exit because delisting is a high-risk endeavor. A mistake may mean extinction if a species disappears without the protections afforded by the ESA. Retaining listings too long, however, imposes unnecessary burdens on economic activities, generates political opposition, and undermines public confidence. The ESA also crowds out state and private conservation efforts. Allowing experimentation with conservation may be too risky for species on the brink of extinction—when the cost of error is high—but can yield substantial benefits for species in better condition.²⁴ Administering the ESA for a listed species also consumes the limited resources of the FWS, which could redeploy staff and funds to address needier species following recovery and delisting. Moreover, a realistic possibility of delisting can create incentives for states and private parties to invest in additional wildlife conservation efforts to secure relief from federal regulation.

If delisting is an all-or-nothing proposition, the risk may simply be too high for stakeholders and courts to tolerate. It is, of course, true that the FWS can relist a species if it declines after delisting. Yet relying on that possibility may prove scant succor because the listing process is notoriously slow, unpredict-

particular body of regulation. Id. at 1299. Thus described, it may diverge from efforts at deregulation that simply reject regulatory goals.

^{23.} Cf. J.B. Ruhl & James Salzman, Mozart and the Red Queen: The Problem of Regulatory Accretion in the Administrative State, 91 GEO. L.J. 757, 763 (2003) (arguing that the efficacy of the regulatory system will decline as the number of regulations increase).

^{24.} As an example of the potential benefits that could accrue from delisting, a state might invest in conservation efforts designed to offset impacts associated with activities on private lands. Because the ESA generally ties mitigation obligations directly to activities affecting a species, this sort of landscape-scale approach could be foreclosed. See 16 U.S.C. § 1536 (b)(4)(C)(ii) (2018) (requiring the FWS to identify "reasonable and prudent measures . . . to minimize [the] impact" of a federal action to a listed species); § 1539(a)(2)(A) (establishing as a prerequisite for incidental take permits that a permit applicant engage in mitigation).

able, and fraught;²⁵ one report estimates that eighty-three species have become extinct while the FWS considered listing petitions.²⁶ The extinction of a species following delisting would be a high-profile tragedy likely to produce considerable political and public backlash. Contingent delisting moderates the risk facing a delisted species by establishing specific triggers for foreseeable threats that would swiftly restore the ESA's protections.

To explore contingent delisting, this article proceeds in four parts. Part I describes the architecture of the ESA as set forth in the statute. Part II describes the mechanism for, and historical experience with, delisting. Part III identifies historic examples of successful innovation. Implementing contingent delisting will require the FWS to embrace similarly creative thinking. Part IV proposes contingent delisting as an innovation to improve implementation of the ESA, drawing on both real and imagined examples. It then evaluates the benefits contingent delisting could provide and offers preliminary thoughts about the conditions necessary for it to succeed.

I. THE ARCHITECTURE OF THE ENDANGERED SPECIES ACT

The ESA is remarkably short and straightforward.²⁷ Its substantive provisions are laid out in four sections: Section 4 creates a process for listing species to bring them within the jurisdiction of the Act.²⁸ Sections 7, 9, and 10 define obligations owed to listed species.²⁹ These four sections are amplified by congressional findings and a strong statement of purpose and policy contained in section 2, various definitions contained in section 3, and citizen suit and enforcement provisions contained in section 11.³⁰ These seven sections serve as the primary foundation for the federal project of preventing the extinction of species.³¹

^{25.} See Karrigan S. Börk, An Evolutionary Theory of Administrative Law, 72 S.M.U. L. REV. 81, 104 (2019); Doremus, supra note 14, at 10.436.

^{26.} KIERAN SUCKLING ET AL., EXTINCTION AND THE ENDANGERED SPECIES ACT 2 (2004).

^{27.} See Pidot, supra note 10, at 166.

^{28. 16} U.S.C. § 1533.

^{29.} Id. §§ 1536, 1538, 1539.

^{30.} Id. §§ 1531, 1532, 1540.

^{31.} See Robert B. Keiter, Conservation Biology and the Law: Assessing the Challenges Ahead, 69 CHI-KENT L. REV. 911, 914–15 (1994) (noting that the ESA "represents an unambiguous federal commitment to saving the nation's biological resources from extinction" and that "[o]ther federal preservation and conservation laws extend only limited legal protection to biological resources").

The ESA extends only to species designated as threatened or endangered; therefore, jurisdiction formally commences when the FWS issues a listing decision.³² Professor Peter Byrne has described this sharp jurisdictional demarcation as a regulatory "precipice" with the potential to create perverse incentives for landowners to drive species from their properties before a listing can be completed.³³ Some regulatory efforts discussed below, like the development of Candidate Conservation Agreements, have sought to blur the demarcation between listed and unlisted species to address this unintended consequence of the listing process.34 The Act defines the term "species" broadly to encompass subordinate taxons, including subspecies and distinct population segments,³⁵ and the FWS enjoys substantial discretion to determine the taxonomic unit at which a listing will operate.³⁶ An "endangered species" is one "in danger of extinction throughout all or a significant portion of its range," and a threatened species is one "likely to become an endangered species within the foreseeable future."37

Section 4 establishes the process for listing a species to bring it within the ESA's protection. It requires the FWS to consider five listing factors to decide whether a species qualifies as threatened or endangered: (1) "the present or threatened destruction, modification, or curtailment of [a species'] habitat or range"; (2) "overutilization for commercial, recreational, scientific, or educational purposes"; (3) "disease or predation"; (4) "the inadequacy of existing regulatory mechanisms"; and (5) "other natural or manmade factors affecting [a species'] continued existence." These factors are the exclusive basis for listing decisions, and, notably, they do not include potential economic ram-

^{32.} See Doremus, supra note 14, at 10,436 ("Listing brings species within the scope of the ESA's powerful protective provisions; delisting removes those protections.").

^{33.} See J. Peter Byrne, Precipice Regulations and Perverse Incentives: Comparing Historic Preservation Designation and Endangered Species Listing, 27 GEO. INT'L ENVTL. L. REV. 343, 358 n.84 (2015). Professor Holly Doremus refers to listing and delisting as keystone decisions. See Doremus, supra note 14, at 10,436.

^{34.} See infra Part III.

^{35. 16} U.S.C. § 1532(16) (2018).

^{36.} See NW Ecosystem All. v. U.S. Fish & Wildlife Serv., 475 F.3d 1136, 1150 (9th Cir. 2007) (deferring to the FWS's decision declining to list a distinct population segment of gray squirrel because "we must defer to the agency's interpretation of complex scientific data").

^{37. 16} U.S.C. §§ 1532(6), (20).

^{38.} *Id.* § 1533(a)(1)(A)–(E).

ifications.³⁹ Section 4 also specifies the types of information upon which the FWS must rely in considering these factors, requiring that the FWS exclusively consider the best available science.⁴⁰ This requirement is powerful, but scientific information cannot always dictate decisions.⁴¹ Decisions necessarily require policy choices that transcend scientific assessment, such as how to account for uncertainty.⁴² Finally, section 4 requires that the FWS render listing decisions through the notice-and-comment rule-making procedures established by the Administrative Procedure Act,⁴³ meaning that the FWS makes listing decisions in the same manner that it promulgates regulations.

In addition to addressing the listing process, section 4 directs the FWS to designate critical habitat for listed species, although critical habitat decisions—unlike listing decisions—may account for potential economic impacts.⁴⁴ It also directs the FWS to develop and implement recovery plans for listed species.⁴⁵ Recovery plans must identify management actions necessary for recovery, describe the cost and time required to undertake them, and establish "objective, measurable criteria which, when met,

See N.M. Cattle Growers Ass'n v. U.S. Fish & Wildlife Serv., 248 F.3d 1277, 1282 (10th Cir. 2001). Professor Zachary Bray argues that Congress has attempted to smuggle cost-benefit considerations into the listing process through speciesspecific legislation. See Bray, supra note 8, at 394–96. The FWS recently promulgated a regulation to allow the agency to conduct an economic analysis of listing decisions, purportedly to inform the public about the costs of conservation efforts, although the agency acknowledges that it may not rely on that information. See Revision of the Regulations for the Listing Species and Designating Critical Habitat, 84 Fed. Reg. 45,020, 45,026 (Aug. 27, 2019) (to be codified at 50 C.F.R. pt. 424); Revision of the Regulations for the Listing Species and Designating Critical Habitat, 83 Fed. Reg. 35,193, 35,194 (proposed July 25, 2018) (to be codified at 50 C.F.R. pt. 424). Conservationists fear that the Trump Administration will strategically deploy economic analysis to generate public opposition and the change will likely face a legal challenge. Darryl Fears, New Trump Rules Weaken Wildlife Protections, WASH. POST (Aug. 12, 2019), https://www.washingtonpost.com/climateenvironment/2019/08/12/new-trump-rules-weaken-wildlife-protections/ perma.cc/HCN3-G933].

^{40. 16} U.S.C. § 1533(b)(1)(A).

^{41.} See Holly Doremus, The Purposes, Effects, and Future of the Endangered Species Act's Best Available Science Mandate, 34 ENVTL. L. 397, 420 (2004) ("The tools of science alone are inadequate to determine the level of extinction risk society is willing to tolerate.").

^{42.} See id.

^{43. 16} U.S.C. § 1533(b)(4) (cross-referencing 5 U.S.C. § 553 (2018)).

^{44. 16} U.S.C. § 1533(a)(3)(A)(i), (b)(2); see N.M. Cattle Growers Ass'n, 248 F.3d at 1280.

^{45. 16} U.S.C. § 1533(f).

would result in [delisting]."46

The FWS may commence the process to list species and designate critical habitat on its own initiative.⁴⁷ It must also review petitions filed by interested parties seeking such actions.⁴⁸ Once the FWS receives a petition, strict statutory deadlines apply. Within ninety days, the FWS must determine whether a petition includes substantial supporting information.⁴⁹ If so, the agency has twelve months to determine whether the requested action is "warranted," "not warranted," or "warranted but precluded" by other listing priorities.⁵⁰ The FWS's failure to adhere to these deadlines has led to substantial litigation and controversial settlements between the FWS and environmental-group plaintiffs.⁵¹

Listed species are subject to the protections of sections 7 and 9, which are prohibitory in nature, rather than requiring affirmative conservation actions. Section 7 requires all federal agencies, through consultation with the FWS, to ensure that their actions do not jeopardize listed species or "result in the destruction or adverse modification of critical habitat of such species."⁵² If the FWS finds jeopardy, section 7 prohibits the proposed federal action from proceeding; conversely, if the FWS finds no jeopardy, the action may proceed.⁵³ Section 7 includes a third option. If the FWS finds jeopardy, but can identify a "reasonable and prudent alternative" to the proposed action that will avoid jeopardy, that alternative may proceed.⁵⁴ The consultation process established by section 7 focuses on the health of a species as a whole, rather than the fate of any individual plant or animal.⁵⁵

^{46.} *Id*.

^{47.} See Doremus, supra note 14, at 10,435.

^{48. 16} U.S.C. § 1533(b)(3)(A).

^{49.} *Id*

^{50.} Nat'l Ass'n of Home Builders v. U.S. Fish & Wildlife Serv., 786 F.3d 1050, 1051 (D.C. Cir. 2015) (citing 16 U.S.C. § 1533(b)(3)(B)).

^{51.} See GOV'T ACCOUNTABILITY OFFICE, ENVIRONMENTAL LITIGATION: INFORMATION ON ENDANGERED SPECIES ACT DEADLINES SUITS (2017); Courtney R. McVean & Justin R. Pidot, Environmental Settlements and Administrative Law, 39 HARV. ENVIL. L. REV. 191, 224–26 (2015).

^{52. 16} U.S.C. § 1536(a)(2).

^{53.} *Id.* For simplicity, I use the term "jeopardy finding" to encompass both a finding of jeopardy and a finding of adverse modification or destruction of critical habitat because both trigger the same consequences under section 7. *Id.*

^{54.} Id. § 1536(b)(3)(A).

^{55.} Compare 16 U.S.C. § 1536(a)(2) (prohibiting actions "likely to jeopardize the continued existence of any endangered species or threatened species") with 50 C.F.R. § 17.3 (2010) (defining "harm" for purposes of section 9 take prohibition as

Section 7 also requires all federal agencies to exercise their statutory authorities to "carry[] out programs for the conservation of [listed] species," 56 although this affirmative obligation has proven more aspirational than actual.

Section 9 addresses harms to the individuals that make up a species, prohibiting the "take" of endangered fish and wildlife as well as offering lesser protection to endangered plants.⁵⁷ As defined in implementing regulations, the term "take" encompasses direct and indirect mechanisms through which harm may occur, including "significant habitat modification or degradation [that]... actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering."⁵⁸ While section 9 directly protects only endangered species, the FWS is authorized to issue regulations to apply the take prohibition to threatened species.⁵⁹ For decades, FWS regulations automatically extended the section 9 take prohibition to threatened species unless the FWS issued a special rule withdrawing or limiting those protections; however, the Trump administration recently eliminated this default.⁶⁰

The prohibitory provisions of sections 7 and 9 are not absolute because the ESA includes provisions authorizing exemptions. A federal agency may seek an exemption from a cabinet-level committee for an action that will jeopardize a species or adversely modify critical habitat.⁶¹ This process, however, has been so rarely used that the exemption primarily exists as a formal matter, rather than one of practical significance.⁶² In other

including "significant habitat modification or degradation where it actually kills or injures wildlife").

^{56. 16} U.S.C. § 1536(a)(1).

^{57.} *Id.* § 1538(a).

^{58. 50} C.F.R. § 17.3; see Babbitt v. Sweet Home Chapter of Cmtys. for a Great Or., 515 U.S. 687, 703–04 (1995) (upholding regulation).

^{59. 16} U.S.C. § 1533(d).

^{60.} Regulations for Prohibitions to Threatened Wildlife and Plants, 84 Fed. Reg. 44,753 (Sept. 26, 2019) (to be codified at 50 C.F.R. pt. 7).

^{61. 16} U.S.C. § 1536(e).

^{62.} See M. LYNNE CORN ET AL., CONG. RESEARCH SERV., ENDANGERED SPECIES ACT (ESA): THE EXEMPTION PROCESS 1 (2017) (identifying "six instances in which an exemption was sought, and only two in which it was granted"); Patrick A. Parenteau, The Exemption Process and the "God Squad," in ENDANGERED SPECIES ACT: LAW, POLICY AND PERSPECTIVE 143, 151 (Donald C. Bauer & W.M. Robert Irvin eds., 2002) (describing exemption process as a "non-factor"). The process could become a significant component of the ESA should an administration decide to use it to exempt projects. Yet even the broadly deregulatory fervor of the Trump Administration has, so far, stayed away from this tool.

words, a finding of jeopardy is the death knell for the agency action under examination.

Exemptions from section 9's take prohibition are much more significant. Through the consultation process, federal agencies may obtain an "incidental take statement" authorizing the take of individual members of a species, so long as jeopardy will not occur and efforts to mitigate impacts are implemented. 63 This authorization extends to private activities intertwined with the federal action; for example, an incidental take statement for a Bureau of Land Management (BLM) decision to issue an oil drilling permit on federal land would extend to the private company who secured the permit.⁶⁴ Private parties may individually secure similar authorization through "incidental take permits" issued under section 10.65 Section 10 provides that an incidental take permit may issue only if the FWS has approved a habitat conservation plan for the relevant species and finds that the effects of the proposed take will be mitigated and will not harm a species' prospects for recovery.66

As has been described, the ESA extensively protects listed species through sections 7 and 9, and obtaining an exemption from those protections may be difficult or impossible in many circumstances. Put differently, it matters a great deal if a species is listed under the ESA. It also matters a great deal if a species is delisted to withdraw the ESA's protections, the topic to which the remainder of this Article attends.

II. THE DELISTING PROCESS

Species need not remain listed forever. Federal protection can be removed through delisting.⁶⁷ Conceptually, delisting

^{63. 16} U.S.C. § 1536(b)(4).

^{64.} See Pidot, supra note 10, at 170.

^{65. 16} U.S.C. § 1539.

^{66.} Id. § 1539(a)(2); see Alejandro E. Camacho et al., Lessons from Areawide, Multiagency Habitat Conservation Plans in California, 46 ENVTL. L. REP. NEWS & ANALYSIS 10,222, 10,223–24 (2016).

^{67.} While not the focus of this Article, endangered species can also be reclassified as threatened through a downlisting process that tracks delisting. See U.S. Fish & Wildlife Serv., Reclassified Species, ENVTL. CONSERVATION ONLINE SYS., https://ecos.fws.gov/ecp0/reports/reclassified-species-report (last visited Aug. 28, 2019) [https://perma.cc/QVA3-N2D2] [hereinafter FWS Reclassification Report]. Downlisting does not, however, remove a species from the ESA's jurisdiction.

should be viewed as a successful outcome,⁶⁸ at least when it results from the species' recovery. In such circumstances, the risks facing a species have abated and property owners and the business community no longer need worry about the regulatory restrictions imposed by the ESA. In reality, delisting decisions are rare, and when they occur, they typically engender significant controversy and litigation.⁶⁹

As its name suggests, delisting is the inverse of listing. The FWS's authority stems from a provision in section 4 directing the agency to publish lists of threatened and endangered species in the Federal Register and review the status of the species included in such lists at least once every five years to determine if conditions warrant perpetuating the listings. 70 The statute does not enumerate specific procedures for delisting but rather directs that such determinations "be made in accordance with the provisions" governing listing. 71 As a result, delisting decisions consider the same factors that govern listing and also rely upon a notice-and-comment rulemaking process. 72

Delisting terminates federal protection under the ESA, although the FWS—in cooperation with relevant state agencies—must monitor the species for at least five years.⁷³ Monitoring

^{68.} See Holly Doremus & Joel E. Pagel, Why Listing May Be Forever: Perspectives on Delisting Under the U.S. Endangered Species Act, 15 CONSERVATION BIOLOGY 1258, 1266 (2001). Even if a species has undisputedly recovered and the threats it faces have abated, some may prefer for it to remain listed as a means to achieve other objectives, such as restricting development or preserving ecosystems otherwise beyond the reach of federal law. This Article has little to offer those who view the ESA as an important tool for achieving other environmental objectives apart from conserving imperiled species, although I fear that misusing the listing process in this manner may engender public cynicism that could undermine the viability of the statute over the long term.

^{69.} See, e.g., Bittel, supra note 18; FWS DELISTING REPORT, supra note 5.

^{70. 16} U.S.C. § 1533(c).

^{71.} *Id*.

^{72.} See, e.g., Removing the Greater Yellowstone Ecosystem Population of Grizzly Bears from the Federal List of Endangered and Threatened Wildlife, 82 Fed. Reg. 30,502 (June 30, 2017).

^{73. 16} U.S.C. § 1533(g). While the procedure for delisting mirrors that for listing, the two processes operate against different backdrops. As Professor Dale Goble has explained, listing may occur at a time when little scientific information exists about a species, while at the point that a species is a candidate for delisting, "there is a body of information on the species and the management actions that have proven to be successful in recover[y]." Dale D. Goble, *The Endangered Species Act: What We Talk About When We Talk About Recovery*, 49 NAT. RESOURCES J. 1, 16 (2009). Moreover, delisting requires assessment of whether the protections afforded by the ESA are "all that is preventing the species' downward spiral into extinction." *Id.*

falls to FWS's regional offices, albeit under national guidance.⁷⁴ That guidance recommends, but does not require, the development of a post-listing monitoring plan.⁷⁵ As a result, monitoring may proceed in an ad hoc and inconsistent fashion.⁷⁶ If monitoring reveals that the species is again in decline, the FWS could, in theory, initiate a new proceeding to relist the species,⁷⁷ creating an incentive—albeit one weakened by the unpredictability of the listing process—for conservation even after federal protections have lifted.

While the ESA plainly contemplates delisting, it has been rare. The status of more than 90 percent of species has remained unchanged since their listing. The federal list of threatened and endangered species includes more than two thousand species, and interested parties have petitioned for additional listings of more than one thousand species.⁷⁸ Just eighty-five species have

^{74.} See U.S. FISH & WILDLIFE SERV. & NAT'L MARINE FISHERIES, POST-DELISTING MONITORING PLAN GUIDANCE 1-1, 6-1, https://www.fws.gov/endangered/esa-library/pdf/final_PDM_guidance-FWS_and_NMFS-updated-7-2-18.pdf (last updated July 2018) [https://perma.cc/FH9F-P2AQ].

⁷⁵ *Id*

^{76.} I do not mean to suggest that post-listing monitoring has been ineffective for the few species that have been delisted, but the existing scheme leaves considerable discretion in the hands of local FWS officials in regional offices. Regional offices of federal agencies can implement federal law in highly divergent fashions, even when they are not formally delegated discretion to do so. See Dave Owen, Regional Federal Administration, 63 UCLA L. Rev. 58, 62–63 (2016) (describing regional administration by Army Corps of Engineers of section 404 Clean Water Act permits). When even the conservation of listed species is often dramatically underfunded, I worry that a regime that leaves post-listing monitoring almost entirely up to regional staff could lead to poor results. See WOW 101: The State of Wildlife: Hearing Before the Subcomm. on Water, Ocean and Wildlife of the H. Comm. on Nat. Res., 116th Cong. 6 (2019) (testimony of Jamie Rappaport Clark, President and CEO, Defenders of Wildlife), https:// naturalresources.house.gov/imo/media/doc/Testimony%20of%20Jamie%20Rappap ort%20Clark%20-%20WOW%20Ov%20Hrg%2003.12.19.pdf [https://perma.cc/ 5MTJ-T2K2] (describing funding shortfall for conservation).

^{77.} The monitoring provision of section 4(g) directs the agencies to make "prompt use" of authority to issue regulations to address "any emergency posing a significant risk to the well-being of any species of fish or wildlife or plants." 16 U.S.C § 1533(g)(2); see id. § 1533 (b)(7). This cross-reference does not appear substantive in nature as the agencies possess such emergency authority for all species, not just delisted ones.

^{78.} GOV'T ACCOUNTABILITY OFFICE, *supra* note 51, at 5. Most listed species are found within the United States, although the list includes hundreds of foreign species subject to importation restrictions. *Id.* Petitions have been filed to list more than a thousand new species, resulting in considerable litigation as the FWS inevitably misses statutory deadlines to complete processes to review petitions. *Id.* at 13 (identifying 141 deadline lawsuits filed between 2005 and 2015 involving a total of 1,441 species); *see also* McVean & Pidot, *supra* note 51, at 224–26.

been delisted.⁷⁹

Delisting may occur for three reasons: (1) recovery, (2) extinction, or (3) the discovery of errors in a listing decision.80 Twenty species have been delisted due to errors in the original listing decision, although this has occurred only twice since 2010.81 Eleven species have been delisted because they have been determined to have gone extinct, although this has also only occurred twice since 2010.82 The low number of delistings due to extinctions reflects the success of the ESA at preventing the complete eradication of species. 83 It may also partially reflect, however, the FWS deprioritizing delisting of extinct species because the regulatory provisions of the Act have little application once a species has disappeared.⁸⁴ Recent delisting decisions evidence this low priority. In delisting the eastern puma in 2018, for example, the FWS explained that the species "likely has been extinct for many decades, long before its listing under the Act."85

Fifty-four species have been delisted due to recovery, including well-known species like the bald eagle and more obscure species like the Lake Erie watersnake. 86 This number has experi-

- 80. 50 C.F.R. § 424.11(d) (2018).
- 81. See FWS DELISTING REPORT, supra note 5.
- 82. See id.
- 83. See Cheever, supra note 1, at 4.
- 84. A federal action cannot jeopardize a species that has disappeared, and the members of a species cannot be taken if they do not exist, meaning that section 7 and section 9 have little application to extinct species. See 16 U.S.C. §§ 1533(b), 1538(a) (2018). Even the prohibition on the destruction and adverse modification of critical habitat will become ineffective after extinction. Even if critical habitat remains designated, the FWS defines destruction and adverse modification in relationship to the habitat's value "for the conservation of a listed species." 50 C.F.R. § 402.02 (2018). Since it is no longer possible to conserve an extinct species, so too is it impossible to destroy or adversely modify the critical habitat of one. If federal actions occur in areas designated as critical habitat, however, a consultation process could still be required.
- 85. Endangered and Threatened Wildlife and Plants; Removing the Eastern Puma (=Cougar) From the Federal List of Endangered and Threatened Wildlife, 83 Fed. Reg. 3,086, 3,087 (Jan. 23, 2018); see also Endangered and Threatened Species; Final Rule to Remove the Caribbean Monk Seal From the Federal List of Endangered and Threatened Wildlife, 73 Fed. Reg. 63,901, 63,904 (Oct. 28, 2008) (explaining that the species had likely been extinct since 1952 but had not previously been delisted "because the question of the possible existence of a remnant population in the wild").
 - 86. Removal of the Lake Erie Watersnake (Nerodia sipedon insularum) from

^{79.} See FWS DELISTING REPORT, supra note 5. Nine species have been uplisted, meaning that they have been reclassified as endangered rather than threatened. See FWS Reclassification Report, supra note 67.

enced something of an uptick in recent years, with thirty-five species delisted due to recovery since 2010.87 Substantially more delistings may be on the horizon. For some time, observers have raised concerns that the FWS could give in to political pressure to "show results" by delisting more species, even in the face of substantial uncertainty about their condition.88 Moreover, even wildlife advocates anticipate that recovery efforts will lead to increasing numbers of delistings. A 2012 report by the Center for Biological Diversity predicts that delisting because of recovery will be appropriate for "many species" within ten to fifteen years. 89 As the number of species subject to delisting increases, so too does the potential benefit should the FWS develop new regulatory approaches—like contingent delisting—that allow delisting decisions to be calibrated to a species' circumstances. As the next Part discusses, such innovation is consistent with the evolutionary manner by which the FWS has implemented the ESA.

III. REGULATORY INNOVATION UNDER THE ESA

The ESA's statutory text has remained unchanged for many decades. 90 Congress enacted significant amendments to the law in 1978 and 1982 91 as well as a modest amendment in 1988 to improve recovery planning and require monitoring of delisted species. 92 Implementation of the Act has, nonetheless, evolved dramatically. The FWS has responded to seismic shifts in biol-

the Federal List of Endangered and Threatened Wildlife, 76 Fed. Reg. 50,680 (Aug. 16, 2011); Removing the Bald Eagle in the Lower 48 States from the List of Endangered and Threatened Wildlife, 72 Fed. Reg. 37,346 (July 9, 2007).

- 87. See FWS DELISTING REPORT, supra note 5.
- 88. See Cheever, supra note 14, at 11,302 ("[T]here is political pressure to 'show results' by declaring species recovered and removing them from the lists of protected species.").
 - 89. SUCKLING ET AL., supra note 6, at 9.
- 90. See Börk, supra note 25, at 101 (describing the ESA as experiencing "statutory stagnancy"). That the ESA has remained unchanged, despite many efforts in Congress to further amend it, may be the result of "legislative gridlock and risk aversion on all political sides." Holly Doremus, The Endangered Species Act: Static Law Meets Dynamic World, 32 WASH. U. J.L. & POLY 175, 182 (2010); see Matthew Brown, GOP Seeks Changes to Endangered Species Act After Court Protects Wolves, Grizzlies, CHI. TRIB. (Sept. 26, 2018), https://www.chicagotribune.com/nation-world/ct-endangered-species-act-congress-20180926-story.html [https://perma.cc/K4QR-TR4A].
- 91. Endangered Species Act Amendments of 1982, Pub. L. No. 97-304 (Oct. 13, 1982); Endangered Species Act Amendments of 1978, Pub. L. No. 95-632 (1978).
 - 92. Endangered Species Act Amendments of 1988, Pub. L. No. 100-478 (1988).

ogy, ecology, and related sciences as well as to persistent concerns over the regulatory burdens and uncertainty facing property owners and economic actors. 93 This Part discusses three exemplars of the innovative spirit that the FWS has exhibited to develop new approaches to conservation that are consistent with the purposes of the ESA but never specifically contemplated by its text. This history is important because it demonstrates that some of the FWS's great successes have occurred when the agency has avoided a blinkered reading of the statutory text. Contingent delisting will also require expansive thinking and offer similar benefits for species and regulated parties.

The FWS developed Candidate Conservation Agreements with Assurances (CCAAs) to address declining species before they are listed and, therefore, before they are brought within the formal jurisdiction of the ESA.94 CCAAs enable property owners to commit to specific efforts to conserve unlisted species. In exchange, the FWS provides assurances to property owners that they will not be subject to additional obligations should those species be listed in the future. 95 CCAAs represent significant innovation because as a species declines the FWS could view itself as powerless to facilitate conservation until and unless it completes a listing decision. It could also view itself as unable to assure property owners that conservation efforts undertaken now will suffice after listing. Despite the lack of an explicit statutory authorization for CCAAs, they have proven a durable instrument to accommodate the needs of species and property owners.96

At the same time the FWS adopted its CCAAs policy, it established a safe harbor program that similarly tests the boundaries of the agency's statutory authority.⁹⁷ The ESA prohibits landowners from taking listed species, but it does not require affirmative conservation or restoration of habitat.⁹⁸ Rather, standing alone, section 9's take prohibition creates a substantial incentive for owners to maintain their property in an

^{93.} See Börk, supra note 25, at 101-02.

^{94.} See Announcement of Final Policy for Candidate Conservation Agreements with Assurances, 64 Fed. Reg. 32,726 (June 17, 1999).

^{95.} Id. at 32,727.

^{96.} See Byrne, supra note 33, at 372 (noting that despite early legal controversies around CCAAs, they continue to be used by the FWS).

^{97.} Announcement of Final Safe Harbor Policy, 64 Fed. Reg. 32,717 (June 17, 1999).

^{98.} See Pidot, supra note 10, at 178.

inhospitable condition to avoid the regulatory restrictions that would come into force should listed species arrive.⁹⁹ The safe harbor program fundamentally reorients the incentives facing landowners, allowing them to enter into agreements with the FWS under which landowners improve habitat in exchange for the guarantee that they will face no additional requirements as a result.¹⁰⁰ This assurance takes the form of authorization to engage in the incidental take of listed species, including by returning the property to the condition it was in prior to the safe harbor agreement.¹⁰¹ Like CCAAs, the legal basis of safe harbor agreements has been questioned.¹⁰² Yet despite similarly lacking clear statutory authorization, the program has nonetheless proven durable and effective.¹⁰³

More recently, the FWS entered into innovative public-private conservation agreements to encourage conservation of a non-listed species and allow conservation efforts to influence potential future section 7 consultation processes. These agreements were negotiated in the wake of the FWS's high-profile decision that the greater sage-grouse did not warrant listing because of conservation plans adopted by the BLM and the Forest Service. 104 Those conservation plans were described, at the time, as the "largest landscape-level conservation effort in U.S. history" 105 and were embedded into federal law through ninety-eight amendments to federal land use plans. 106 The plans require, among other things, parties seeking permission to use federal land to offset any harms their activities pose to sage-

^{99.} See Byrne, supra note 33, at 357-58.

^{100.} See Patrick Parenteau, Rearranging the Deck Chairs: Endangered Species Act Reforms in an Era of Mass Extinction, 22 Wm. & MARY ENVTL. L. & POLY REV. 227, 286–87 (1998).

^{101.} See 64 Fed. Reg. at 32,717 (explaining that under Safe Harbor agreements, the FWS "will authorize incidental taking of the covered species at a level that enables the property owner ultimately to return the enrolled property back to agreed upon baseline conditions"): see also Börk, supra note 25, at 116.

^{102.} See, e.g., Parenteau, supra note 100, at 287.

^{103.} See Börk, supra note 25, at 121-22.

^{104. 12-}Month Finding on a Petition To List Greater Sage-Grouse (Centrocercus urophasianus) as an Endangered or Threatened Species, 80 Fed. Reg. 59,858, 59,870–71 (Oct. 2, 2015) (to be codified at 50 C.F.R. pt. 17).

^{105.} Christy Goldfuss et al., Unprecedented Collaboration to Save Sage-Grouse is the Largest Wildlife Conservation Effort in U.S., (Sept. 22, 2015, 2:27 PM), https://obamawhitehouse.archives.gov/blog/2015/09/22/unprecedentedcollaboration-save-sage-grouse-largest-wildlife-conservation-effort-us [https://perma.cc/S6KHLNBM].

^{106.} See Pidot, supra note 10, at 186.

grouse habitat. 107 While revolutionary in scope, the FWS's consideration of these plans would seem to flow from section 4's directive that it consider existing regulatory measures in listing decisions. The FWS and BLM also entered into two public-private conservation agreements with mining companies to facilitate compensatory mitigation. 108 Under these agreements, the mining companies agreed to engage in conservation activities, the success of which would be quantified as conservation "credits." 109 In exchange, the FWS agreed that the companies could rely on credits generated by those activities if the greater sage-grouse is ultimately listed. 110 Specifically, the companies could rely on credits from completed conservation actions as a basis for securing future land use authorization during section 7 consultation processes. 111

Superficially, these public-private conservation agreements resemble CCAAs: they provide regulatory certainty to the companies in exchange for conserving an unlisted species. CCAAs, however, function to exempt landowners from section 9 take liability for activities on their private property. In contrast, the conservation agreements address section 7 consultation processes

^{107.} See id.; see also Justin Pidot, The Bureau of Land Management's Infirm Compensatory Mitigation Policy, 30 FORDHAM ENVTL. L. REV., Winter 2019 at 1, 5–8 (criticizing BLM policy disclaiming authority to require compensatory mitigation). Compensatory mitigation requires conservation measures at one location to offset harms caused by authorized activities at another. See Pidot, supra note 10, at 195.

^{108.} BY AND AMONG THE U.S. DEP'T OF INTERIOR, STATE OF NEVADA, NEWMONT MINING CORP., CONSERVATION FRAMEWORK AGREEMENT, (2016), http://sagebrusheco.nv.gov/uploadedFiles/sagebrusheconvgov/content/Meetings/2016/160 913-ConsrevationAgreement-Item6.pdf; [https://perma.cc/Y7E9-LCLC] [hereinafter NEWMONT AGREEMENT]; BY AND AMONG THE U.S. DEP'T OF THE INTERIOR AND BARRICK GOLD OF NORTH AMERICA, BARRICK NEVADA SAGE-GROUSE BANK ENABLING AGREEMENT (2015), (on file with author) [hereinafter BARRICK AGREEMENT]. For a detailed discussion of these agreements, see Pidot, supra note 10.

^{109.} NEWMONT AGREEMENT, supra note 108, at 5, 8; BARRICK AGREEMENT, supra note 108, at 11–17.

^{110.} NEWMONT AGREEMENT, *supra* note 108, at 6–7; BARRICK AGREEMENT, *supra* note 108, at 22.

^{111.} The FWS agreed to allow mitigation credits to satisfy obligations to minimize harm to the greater sage-grouse that would arise as a condition of incidental take statements issued in conjunction with a biological opinion reviewing the approval of mining activities. NEWMONT AGREEMENT, supra note 108, at 6–7; BARRICK AGREEMENT, supra note 108, at 22. The agreements also allow the mining companies to rely on mitigation credits should they seek section 10 permits to authorize incidental take. See NEWMONT AGREEMENT, supra note 108, at 7; BARRICK AGREEMENT, supra note 108, at 22.

for mining activities on federal land. Whether these conservation agreements represent a new frontier in the FWS's administration of the ESA or aberrations remains to be seen. If followed elsewhere, the model they embody would enable the FWS to extend the conservation gains and economic certainty provided by CCAAs to resource users engaging in activities on federal land.

These examples demonstrate that the ESA provides "fertile ground for administrative evolution of the law." 112 Although the statutory text has remained static, it includes sufficient flexibility to enable broad policy experimentation, particularly where innovation advances conservation goals and increases predictability for economic interests. In keeping with this tradition, the next Part proposes contingent delisting as a promising technique to improve delisting decisions.

IV. CONTINGENT DELISTING

Contingent delisting could be a new frontier in innovation. Delisting remains rare, and the process has not yet been a focus for regulatory experimentation. Yet, delisting implicates many of the same considerations that led the FWS to develop CCAAs, safe harbor agreements, and private-public conservation agreements. Like these policy innovations of the past, contingent delisting would serve the purposes of the ESA while accommodating concerns about the burdens imposed by federal regulation

The concept behind contingent delisting is a simple one: a delisting decision would include a contingency provision to restore the listing of a species in certain identified circumstances. ¹¹³ The delisting decision would, in other words, render the listing dormant but not entirely extinguish it. To achieve this result, the FWS would conclude—based on the best available science—that delisting the species is warranted. It would also conclude that restoring the listing would be warranted if identified circumstances come to pass.

Consider the following admittedly highly simplified sce-

^{112.} Börk, *supra* note 25, at 101.

^{113.} I use the term "contingency provision" to mean a provision designed to address "an event . . . that may but is not certain to occur." *Contingency*, MERRIAM-WEBSTER ONLINE, https://www.merriam-webster.com/dictionary/contingency (last visited Nov. 22, 2019) [https://perma.cc/B8NP-CE6D].

nario: ecologists have identified a new species of prairie dog—let's call it the Longmountain prairie dog—which occupies one thousand acres of largely undisturbed habitat on private property within the city of Longmountain. 114 The FWS lists the Longmountain prairie dog as endangered, explaining that while the current population is sustainable, the prairie dog will become unviable and swiftly disappear if merely two hundred acres of its habitat becomes degraded. Because neither the state government nor Longmountain have rules in place to conserve habitat for the species, the FWS concludes that existing regulatory mechanisms are inadequate to prevent extinction.

Following the listing, the Longmountain zoning board designates all one thousand acres of habitat as open space, a classification that entirely prohibits development under the zoning code. The city then files a delisting petition. The petition makes a strong case because the threat that served as the basis for listing has abated—the zoning code amendments would appear to prevent further degradation of habitat. Some environmentalists protest, however, contending that the city adopted the zoning ordinance solely for the purpose of justifying delisting and will repeal the ordinance once delisting occurs. They contend that during the time lag between the city repealing its zoning ordinance and the FWS relisting the species, property owners will entirely extirpate the Longmountain prairie dog to avoid regulatory obligations under the ESA. The FWS fears that the environmentalists have a good point because members of the Longmountain zoning board have publicly stated that they view the Longmountain prairie dog as a nuisance species better eradicated than accommodated.

What should the FWS do? Existing regulatory mechanisms—the new zoning ordinance—appear to adequately conserve the species, satisfying one of section 4's listing factors and, therefore, justifying delisting. 115 Yet those regulatory mechanisms may prove ephemeral. Contingent delisting would provide a solution, allowing the FWS to issue a rule to delist the Longmountain prairie dog that renders the listing dormant but in-

^{114.} I draw the name for this fictitious species and town from recent initiatives in Longmont, Colorado, to provide for the "extermination, removal and relocation of prairie dogs," although those animals are not part of a listed species. *Prairie Dog Regulations*, CITY OF LONGMONT, https://www.longmontcolorado.gov/departments/departments-n-z/planning-and-development-services/prairie-dog-regulations (last updated Aug. 21, 2019) [https://perma.cc/PLU6-FAFZ].

^{115.} See 16 U.S.C. § 1533(a)(1)(D) (2018).

cludes a contingency provision to restore the listing should the zoning board amend the zoning code to allow development to occur in prairie dog habitat. While stylized, this illustration reflects the reality that the propriety of delisting may often depend on the efficacy and durability of nonfederal mechanisms securing conservation benefits for a species.¹¹⁶

Contingent delisting could also address biological factors unrelated to changes in the regulatory environment, so long as the factors are sufficiently foreseeable and subject to measurement. Assume, instead, that the FWS listed the Longmountain prairie dog as endangered because a virus decimated the population and created significant concerns of extinction. Subsequently, the population develops immunity to the virus and rebounds. Longmountain petitions for delisting, and the FWS determines that the species does not warrant listing so long as there are at least five colonies with at least one hundred members. The FWS's delisting decision would include a contingency provision tied to this biological determination: if someday fewer than five colonies with one hundred members exist, the listing would be restored.

These scenarios resemble aspects of the delisting processes for populations of the Northern Rocky Mountain population of gray wolves and Yellowstone population of grizzly bears. Each of those processes has been prolonged and complex—although the gray wolf delisting seems to have finally come to a conclusion—but some aspects suggest the manner by which contingent delisting could have been pursued.

The delisting process for the Northern Rocky Mountains gray wolf population unfolded over the course of more than a decade through multiple delisting decisions, extensive litigation, and congressional intervention. 117 As part of the process, the FWS determined that at least three hundred wolves and thirty breeding pairs are necessary for the population to remain viable. 118 The FWS then allocated approximately one-third of the

^{116.} See Doremus, supra note 14, at 10,439.

^{117.} See e.g., Defs. of Wildlife v. Zinke, 849 F.3d 1077, 1080–81 (D.C. Cir. 2017); All. for Wild Rockies v. Salazar, 672 F.3d 1170 (9th Cir. 2012); Notice of 12-Month Petition Finding, 71 Fed. Reg. 43,410, 43,410 (Aug. 1, 2006) (to be codified at 50 C.F.R. pt. 17); Bray, supra note 8, at 427–28. The delisting process appears to have concluded in 2017, when the D.C. Circuit affirmed the latest decision. Defs. of Wildlife, 849 F.3d at 1079.

^{118.} Defs. of Wildlife, 849 F.3d at 1080; Removal of the Gray Wolf in Wyoming From the Federal List of Endangered and Threatened Wildlife, 76 Fed. Reg. 61,782,

necessary population to Montana, Idaho, and Wyoming—meaning that each state had to commit to maintaining populations of more than one hundred wolves and ten breeding pairs. 119

As the FWS considered delisting, the number of wolves in each state exceeded the minimum number by a sizeable margin. 120 Some observers expressed significant concern, however, that removing the ESA's protections would lead residents opposed to the presence of wolves to decimate the population, potentially encouraged by the states themselves. 121 Initially, Wyoming proposed to allow virtually unrestricted killing of wolves, a regime that the FWS found insufficiently protective to warrant delisting. 122 Then, Wyoming changed course and committed to conserving the necessary population through an open-ended adaptive management process. 123 This satisfied the FWS, which delisted the wolf in Wyoming. 124

In the wake of delisting, hunting of gray wolves has exploded throughout the Rocky Mountains. Hunters and trappers killed nearly 40 percent of Montana's wolves in a single year, and one hunting organization in Idaho offers trappers cash bounties to target wolves. 125 So far, it does not appear that the states have allowed their wolf populations to fall below the minimum needed for viability. This could change, however, and the FWS's delisting decision did not preserve authority to ensure

^{61,789 (}Oct. 5, 2011) (proposed rule) (to be codified at 50 C.F.R. pt. 17).

^{119.} Defs. of Wildlife, 849 F.3d at 1080; Proposed Rule: Removal of the Gray Wolf, 76 Fed. Reg. at 61,790.

^{120.} See Final Rule Designating the Northern Rocky Mountain Population of Gray Wolf as a Distinct Population Segment 73 Fed. Reg. $10,514,\,10,523$ (Feb. 27, 2008) (to be codified at 50 C.F.R. pt. 17).

^{121.} See Hope M. Babcock, The Sad Story of the Northern Rocky Mountain Gray Wolf Reintroduction Program, 24 FORDHAM ENVTL. L. REV. 25, 35–36 (2013); Defenders of Wildlife, Removal of Federal Protection Is Hampering Recovery of Iconic Endangered Species (Nov. 13, 2012), https://defenders.org/newsroom/suit-filed-against-wyomings-kill-will-wolf-policy [https://perma.cc/BT5L-WPNB]. Reflecting on the program to reintroduce wolves in the Rocky Mountains, Professor Hope Babcock comments that "[a]lthough wolves have thrived from a biological perspective as a result of the program, public resistance in the areas where wolves were released has not abated." Babcock, supra, at 26.

^{122.} See Wyoming v. U.S. Dep't of Interior, 360 F. Supp. 2d 1214, 1223 (D. Wyo. 2005) (describing Wyoming's wolf management plan that would allow for unregulated killing of wolves): Babcock, *supra* note 121, at 46.

^{123.} See Defs. of Wildlife, 849 F3.d at 1081.

^{124.} Removal of the Gray Wolf in Wyoming From the Federal List of Endangered and Threatened Wildlife and Removal of the Wyoming Wolf Population's Status as an Experimental Population, 77 Fed. Reg. 55,530, 55,530 (Sept. 10, 2012) (to be codified at 50 C.F.R. pt. 17).

^{125.} See Bittel, supra note 18.

that Wyoming or the other states live up to their commitments. If too many wolves are killed, the FWS would need to initiate a new, time-consuming, and contentious listing process, which would doubtlessly engender further litigation. Contingent delisting would have provided a mechanism to create accountability by including a provision to restore the listing if states allowed unrestricted hunting or, alternatively, if state populations fell below viable levels.

Delisting the Yellowstone grizzly bear has been similarly complex and contentious. 126 In 2017, the FWS issued its most recent decision to delist the population, but a Montana federal district court vacated the decision, and the government's appeal is pending. 127 The district court identified several errors, among them the manner in which the FWS accounted for the risk facing the bears due to their genetic isolation. 128 An earlier conservation strategy required that two grizzly bears from other populations be relocated to Yellowstone each decade to maintain genetic diversity. 129 The delisting rule, however, made no provision for this practice to continue, instead relying on an illdefined commitment by the state of Montana to "retain the opportunity for natural movements of bears between ecosystems," although such movements had not previously occurred. 130 Even if Montana had represented that it would continue to relocate bears to Yellowstone in accordance with the conservation strategy, it could have changed course. Contingent delisting would have provided a means to ensure active relocation efforts. Assuming that the district court correctly understood that the best available science indicates the need for two relocations each decade, the delisting rule would have included a contingency that would restore the listing if those relocations did not occur.

Common aspects of the Northern Rocky Mountain gray wolf, Yellowstone grizzly bear, and imagined Longmountain prairie

^{126.} See Greater Yellowstone Coalition, Inc. v. Servheen, 665 F.3d 1015 (9th Cir. 2011); Removing the Greater Yellowstone Ecosystem Population of Grizzly Bears From the Federal List of Endangered and Threatened Wildlife, 82 Fed. Reg. 30,502 (June 30, 2017) (codified at 50 C.F.R. pt. 17); 90-Day Finding on a Petition To List as Endangered the Yellowstone Distinct Population Segment of Grizzly Bears, 72 Fed. Reg. 14,866 (Mar. 29, 2007) (codified at 50 C.F.R. pt. 17).

^{127.} Crow Indian Tribe v. United States, 343 F. Supp. 3d 999 (D. Mont. 2018), appeal filed, No. 18-36078 (9th Cir. Dec. 26, 2018).

^{128.} Id. at 1019.

¹²⁹ *Id*

^{130.} Id. at 1021 (quoting 82 Fed. Reg. 30502, 30533 (June 30, 2017)).

dog examples suggest the terrain in which exploring contingent delisting would prove fruitful: circumstances in which the FWS can identify measurable threats to a species that would warrant restoring a listing should they materialize. Contingency provisions could be developed to address such threats and avoid the risk, delay, and uncertainty that would accompany an entirely new listing process.

Developing appropriate contingency provisions may be challenging because the biological and social conditions affecting the health of a species will evolve over time and may interact in a manner unforeseen at the time of delisting. 131 Yet the challenge should not be overstated. In adopting recovery plans, the FWS already identifies "objective, measurable criteria which, when met, would result in a determination . . . that the species be removed from the list."132 The FWS has recognized that these recovery criteria bear on the status of a delisted species, and national guidance indicates that "post-delisting monitoring should be consistent with and comparable to monitoring prior to delisting."133 Moreover, the FWS already reviews state regulatory efforts as a component of post-delisting monitoring to ensure that state or local governments are engaging in conservation efforts that served as the basis for delisting. 134 Those are good places to start in developing a contingent delisting regime.

Contingent delisting offers significant benefits compared to the status quo, which requires the FWS to initiate a new listing process if a risk—even a foreseeable one—jeopardizes the continued existence of a delisted species. The most obvious advantage is time. The recovery of a species requires considerable investment by scientists, regulators, conservation organizations, and private parties over the course of decades. 135 The lag between the decline of a delisted species and the completion of a new listing process may squander that

^{131.} Cf. Pidot, supra note 20, at 179 (describing unforeseen potential impacts to wildlife).

^{132. 16} U.S.C. § 1533(f)(1)(b)(ii) (2018).

^{133.} See U.S. FISH & WILDLIFE SERVICE & NATIONAL MARINE FISHERIES SERVICE, POST-DELISTING MONITORING PLAN GUIDANCE UNDER THE ENDANGERED SPECIES ACT 2-1 to 2-2 (revised 2018).

^{134.} Id. at 2-2.

^{135.} The Government Accountability Office evidences the extent of investment needed for recovery, noting that some of the 107 recovery plans they reviewed "indicated that species were not likely to be recovered for up to 50 years." U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-06-463R, ENDANGERED SPECIES: TIME AND COSTS REQUIRED TO RECOVER SPECIES ARE LARGELY UNKNOWN 5 (2006).

investment. Contingent delisting enables swift restoration of a listing if foreseeable deleterious events occur. Relatedly, contingent delisting could save administrative resources by obviating the need for a new rulemaking process to address an issue that could have been resolved as part of delisting.

Contingent delisting can also create beneficial incentives. States, local governments, property owners, economic interests, and others whose activities would be constrained by the restoration of a listing will be motivated to avoid the triggering of contingency provisions. 136 For example, Wyoming would have a compelling reason not to allow unregulated hunting, Montana would have a compelling reason to relocate grizzly bears to the Yellowstone population to avoid genetic isolation, and property owners in Longmountain would have a compelling reason to develop and participate in activities to conserve habitat. The potential for relisting also creates incentives for conservation, 137 albeit far weaker ones. It may be easy for wolf antagonists to discount the possibility of relisting, particularly because that day may be far away and much mischief can occur in the interim. It would prove more difficult to ignore contingencies hardwired into a delisting decision.

Those benefits of contingent delisting inure to species and those who advocate on their behalf. Contingent delisting could also benefit economic interests by facilitating the delisting process. If the FWS can account for foreseeable problems with embedded contingency provisions, the agency may more readily determine that delisting is warranted. Moreover, contingent delisting could fare better in the courts by giving the FWS a tool to ensure that the conservation commitments that justify a delisting decision actually occur. Certainly, the district court judge reviewing the decision to delist the Yellowstone grizzly bear would appear to have welcomed such an approach, as it would have addressed his concern over the uncertainty of grizzly bear migration. 138

Contingent delisting cannot, of course, address all or even many eventualities. It represents a modest innovation to im-

^{136.} See Pidot, supra note 20, at 168-69.

^{137.} See Justin Pidot, Guest Blogger Justin Pidot: The Gray Wolf Delisting Revisited (Aug. 16, 2011), http://legal-planet.org/2011/08/16/guest-blogger-justin-pidot-the-gray-wolf-delisting-revisited/ [perma.cc/N7UZ-YXJV].

^{138.} Crow Indian Tribe v. United States, 343 F. Supp. 3d 999, 1021 (D. Mont. 2018), appeal filed, No. 18-36078 (9th Cir. Dec. 26, 2018).

prove decision-making in limited circumstances where the best available science supports delisting but would again warrant listing if foreseeable circumstances arise. So, for example, assume again that the best available science indicates that the Yellowstone grizzly bear will remain viable so long as relocation continues to address genetic diversity concerns. Contingent delisting would serve to ensure that relocation occurs, but it couldn't address new, unknown threats—such as wildfire decimating the bears' food. This deficiency does not impair the utility of contingent delisting because the tool will not make matters worse if unforeseen events occur. If wildfire imperils the grizzly bear, the FWS could initiate a new listing decision regardless of whether it had previously utilized contingent delisting. Changed circumstances might also lead to the conclusion that a contingency embedded in a delisting decision is no longer needed. Perhaps grizzly bears from other populations begin migrating to Yellowstone. If so, the FWS could issue a new decision to remove the contingency.

Moreover, contingent delisting will only be appropriate in some circumstances. The grizzly bear, gray wolf, and Longmountain prairie dog examples involve delisting decisions for which the FWS could identify circumstances that would warrant restoring the listing. That is because the examples have been framed to foreground a single threat to the species that can be monitored with relative ease. Reality is often far more complex. 139 The biological and social systems affecting a species' viability after delisting are manifold, 140 and the best available science may not support identifying specific circumstances that warrant relisting.

Contingent delisting is only a useful tool if it is also a lawful one. It would appear no more radical an innovation than those that the FWS has pursued in the past: it advances the ESA's goals, and, while not expressly authorized, it is also not expressly prohibited by the statutory text. Contingent delisting's greatest vulnerability may turn on verb tense. Section 4 directs the FWS to "determine whether any species is an endangered or

^{139.} See, e.g., Pidot, supra note 10, at 174–75 (discussing gaps in knowledge about species).

^{140.} See Daniel F. Doak et al., Recommendations for Improving Recovery Criteria Under the US Endangered Species Act, 65 BIOSCIENCE 189, 193 (2015) ("[Recovery] criteria must account for existing and anticipated or potential future threats, including climate change effects, and the shifting regulatory and threat landscapes faced by delisted species.").

a threatened species because of the listing factors. 141 Does that use of the present tense "determine" preclude the FWS from deciding that, based on the best available science, relisting would be warranted if an identifiable condition comes to pass? Verb tense is relevant to statutory interpretation, 142 particularly when statutory language uses sharply contrasting tenses. 143 The language of section 4 is not, however, so limited that it obviously precludes contingent delisting. Moreover, successes of the past suggest that the ESA is, as Secretary Babbitt pronounced, "a wonderful, expansive Act" that can accommodate new approaches to better harness society's efforts to avoid extinction. 144

CONCLUSION

As the ESA approaches its fiftieth anniversary, delisting will increase and probably markedly so. As the late Professor Federico Cheever put it in 2001, "[t]he recovery and delisting of species protected under the [ESA] is the coming fashion and no mistake." ¹⁴⁵ The onslaught he foresaw may not have arrived yet, but it continues to loom, for good and ill. Delisting will increase because recovery efforts will bear fruit, and we should all celebrate their success. Delisting may also increase because political pressure will continue to mount in opposition to the steady accretion in the number of listed species subject to federal jurisdiction. The time is, therefore, ripe to think creatively about the delisting process.

Contingent delisting offers an avenue for the ESA's further evolution. It enables the federal government to return jurisdiction over species whose condition has improved to the states, while enabling rapid intervention if conditions deteriorate. Pursuing it will require the FWS to embrace the spirit of innovation that has served it well in the past. In one iteration of the gray wolf delisting, commenters recommended that the FWS develop a "clear, unequivocal set of criteria for automatic relisting." 146

^{141. 16} U.S.C. § 1533(a)(1) (2018).

^{142.} See Gwaltney v. Chesapeake Bay Foundation, 484 U.S. 376, 382 (1987) (explaining that "the undeviating use of the present tense strongly suggests" that the Clean Water Act's citizen suit provision addresses violations in "the present or the future, not in the past").

^{143.} See, e.g., Otte v. United States, 419 U.S. 43, 49-50 (1974).

^{144.} Babbitt, supra note 11, at 366.

^{145.} Cheever, *supra* note 14, at 11,302.

^{146.} Final Rule to Identify the Northern Rocky Mountain Population of Gray

The FWS rejected the suggestion out of hand because "the Act contains no provision for 'automatic' relisting." 147

Couldn't the same be said for CCAAs, safe harbor agreements, public-private conservation agreements, and other efforts to improve administration of the ESA? Those required bravery and creativity. There have been missteps along the way, never-ending congressional oversight, and complaints lobbed from all sectors. Yet the result has been an ESA that, on the whole, works better for the species it is designed to protect and for those whose property or activities are regulated by its provisions. Done well, contingent delisting would also benefit wildlife and the economy, becoming the FWS's next successful improvement to implementation of one of America's most powerful environmental laws.

Wolf as a Distinct Population Segment and to Revise the List of Endangered and Threatened Wildlife, 74 Fed. Reg. $15,123,\,15,155$ (Apr. 2, 2009) (to be codified at 50 C.F.R. pt. 17).

^{147.} *Id*.