The Value of an Endangered Species: The ESA, Injunctions, and Human Welfare

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In the United States, the Endangered Species Act (ESA) represents the federal government's paramount effort to protect endangered species. In no uncertain terms, the ESA prohibits harming endangered species by both private and governmental actors. Moreover, the Supreme Court determined that the ESA prevents courts from exercising their usual discretion when such actors take actions that will foreseeably result in harm to endangered species. Put simply, the ESA prevents courts from allowing harm to come to endangered species even if that harm is necessary for an immense benefit to human beings. This broad protection has been effective in preventing ecological loss in the U.S. But because of the breadth of the statute, courts must sometimes resolve disputes where harm to an endangered species is necessary to protect human health and safety. In these cases, courts have severely narrowed the ESA's protections. Furthermore, changes in human and animal migration caused by climate change will pit human health against the welfare of endangered species far more often. Without better guidance from Congress, courts will likely continue to erode the strength of the ESA. This Note proposes expanding the ESA's exemption process in order to forestall foundational attacks on the statute. By addressing this issue now, Congress can preserve the ESA's core protections against increasingly problematic precedent.

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I. INTRODUCTION

A. Hurricanes, Droughts, Turtles, and Fish

In September of 1995, a Category three hurricane struck the island of St. Thomas in the U.S. Virgin Islands.¹ It displaced thousands of residents and caused devastating property damage.² At least three people were killed.³ Sixteen years later, California was in the midst of one of the most severe droughts on record.⁴ Communities were hollowed out by the economic and social devastation that accompanied the arid weather.⁵ What do these tragedies have in common? In both cases, the supposed keys to salvation involved human encroachment on the territory of endangered species. During Hurricane Marilyn, a temporary housing facility was established for displaced residents on the habitat of endangered Hawksbill sea turtles.⁶ In California, authorities argued that additional water

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^{1.} See Rajiv Chandrasekaran, Hurricane Kills 3 in U.S. Virgin Islands, WASH. POST, Sept. 17, 1995, at A8.

^{2.} See id.

^{3.} See id.

^{4.} See NOAA, NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM, CALIFORNIA DROUGHT: 2011-2017, https://www.drought.gov/california-no-stranger-dry-conditions-drought-2011-2017-was-exceptional [https://perma.cc/3PDE-MQVM] (last visited Jan. 14, 2021).

^{5.} See Eugene H. Buck et al., Cong. Rsch. Serv., R41608, The Endangered Species Act (ESA) in the 112th Congress: Conflicting Values and Difficult Choices 13–14 (2012).

^{6.} See generally, Hawksbill Sea Turtle v. Fed. Emergency Mgmt. Agency, 939 F. Supp. 1195, 1199 (D.V.I. 1996), rev'd sub nom., 126 F.3d 461 (3d Cir. 1997).

needed to be pumped into surrounding communities, threatening the existence of the indigenous Delta Smelt.⁷ In both St. Thomas and California, litigation commenced on the question of whether these human needs could override federal protection of endangered species under the Endangered Species Act of 1973 (ESA).⁸ That statute, the bulwark of species' conservation efforts, was overrun by human welfare concerns in both instances. The following is a discussion about the framework of the ESA, how human welfare concerns can erode that framework, and what might be done going into an uncertain future.

B. The Endangered Species Act and Injunctions

The ESA is designed to "provide a program for the conservation of ... endangered species and threatened species." To accomplish this goal, the Act prohibits "taking" of endangered species by both natural persons and federal agencies. To take is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage any such conduct." Additionally, these terms are to be interpreted in the "broadest possible manner to include every conceivable way in which a person can 'take' or attempt to 'take' any fish or wildlife." Section 10, however, allows the Secretary of the Interior or Commerce to permit takings for "scientific purposes or to enhance the propagation or survival of the affected species," or when "such taking is incidental to, and not the purpose of, the carrying out

^{7.} See Proclamation by the Governor of the State of California, State of Emergency – Water Shortage 1–2 (Feb. 27, 2009), https://www.library.ca.gov/wpcontent/uploads/GovernmentPublications/transcripts/38-Proc-2009-18.txt [https://perma.cc/M53M-X5BL].

^{8.} See infra Part II.

^{9. 16} U.S.C. § 1531.

^{10.} *Id.* § 1538(a)(1)(b); *see also* Strahan v. Linnon, 187 F.3d 623 (1st Cir. 1998) ("Section 9 of the ESA prohibits the taking of endangered species."); Heartwood, Inc. v. U.S. Forest Serv., 380 F.3d 428, 434 (8th Cir. 2004) ("ESA... prohibits any unauthorized 'take' of an endangered species."); City of Sausalito v. O'Neill, 386 F.3d 1186, 1215 (9th Cir. 2004) ("The Endangered Species Act ("ESA") prohibits 'taking' an endangered or threatened species.").

^{11. 16} U.S.C. § 1536; see also United States v. Town of Plymouth, 6 F. Supp. 2d 81, 90 (D. Mass. 1998) ("The ESA prohibits any person from 'taking' any endangered species within the United States."); Sw. Ctr. for Biological Diversity v. U.S. Forest Serv., 82 F. Supp. 2d 1070, 1074 (D. Ariz. 2000) ("[U]nder Section 9 of the Act, all persons, not just federal agencies, can be subject to liability for 'taking' protected species in certain proscribed manners.").

^{12. 16} U.S.C. § 1532.

^{13.} S. REP. No. 93–307, at 7 (1973); *see also* Babbitt v. Sweet Home Chapter of Cmtys. for a Great Or., 515 U.S. 687, 703–04 (1995) (citing congressional reports for the proposition that "take" is to be defined broadly); Strahan v. Coxe, 127 F.3d 155, 162 (1st Cir.1997) (same).

of an otherwise lawful activity."¹⁴ If a taking is unpermitted, the ESA uses three primary enforcement mechanisms: civil fines and other penalties, criminal conviction, and injunction.¹⁵ Moreover, because citizen suits make up a large proportion of ESA cases, injunctive relief is an increasingly common enforcement mechanism.¹⁶

Injunctions are a source of controversy in the ESA context because the Supreme Court has determined that courts are not competent to exercise their usual discretion.¹⁷ Typically, when considering an injunction a court determines whether the plaintiff establishes: "(1) a likelihood of success on the merits, (2) that [the plaintiff] is likely to suffer irreparable injury in the absence of an injunction, (3) that the balance of hardships tips in the plaintiff's favor, and (4) that the public interest would not be disserved by the issuance of [the] injunction."¹⁸ In the landmark case of *Tennessee Valley Authority v. Hill*, 437 U.S. 153 (1978), however, the Supreme Court held that the judiciary is not competent to balance the harms to an endangered species against economic losses.¹⁹ Essentially, the Court determined that through the

^{14. 16} U.S.C. § 1539.

^{15.} See e.g., 16 U.S.C. § 1540(a) ("Civil Penalties"); § 1540(b) ("Criminal Violations"); § 1540(e)(6) ("The Attorney General of the United States may seek to enjoin any person who is alleged to be in violation of any provision of this chapter or regulation issued under authority thereof."). Additionally, any person may commence a suit to enjoin any actor in violation of the ESA. See § 1540(g) ("Citizen Suits").

^{16.} See Eileen Sobeck, Enforcement of the Endangered Species Act, NAT. RES. & ENV'T, Summer 1993, at 30, 72 (describing the common methods of enforcement and noting that due to the small number of ESA enforcement agents employed by the Fish and Wildlife Service (FWS), "the importance of citizen suits as an additional enforcement method cannot be overestimated.").

^{17.} See generally, Tenn. Valley Auth. v. Hill, 437 U.S. 153 (1978).

^{18.} Capstone Logistics Holdings, Inc. v. Navarrete, 736 F. App'x 25, 26 (2d Cir. 2018); see also Winter v. Nat. Res. Def. Council, Inc., 555 U.S. 7, 20 (2008) ("A plaintiff seeking a preliminary injunction must establish that he is likely to succeed on the merits, that he is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor, and that an injunction is in the public interest."). Every circuit applies these precise factors or uses slight variations of them. See e.g., Courthouse News Serv. v. Brown, 908 F.3d 1063, 1068 (7th Cir. 2018) ("To obtain a preliminary injunction, a plaintiff must first show that: (1) without such relief, it will suffer irreparable harm before final resolution of its claims; (2) traditional legal remedies would be inadequate, and (3) it has some likelihood of success on the merits"); Janvey v. Alguire, 647 F.3d 585, 595 (5th Cir. 2011) ("The four elements a plaintiff must establish to secure a preliminary injunction are: (1) a substantial likelihood of success on the merits, (2) a substantial threat of irreparable injury if the injunction is not issued, (3) that the threatened injury if the injunction is denied outweighs any harm that will result if the injunction is granted, and (4) that the grant of an injunction will not disserve the public interest.").

^{19.} In *Tennessee Valley Auth. v. Hill*, 437 U.S. 153 (1978), the Supreme Court was tasked with deciding whether to issue an injunction against the building of Tellico Dam. The dam project, already underway, had cost "millions of unrecoverable dollars." *Hill*, 437 U.S. at 187. The Court ruled, however, that because Congress (by way of the ESA) "clearly... viewed the value of endangered species as 'incalculable," the Court was not willing to balance the equities. *See Id.*

Endangered Species Act, Congress ascribed an "incalculable" value to the preservation of endangered species.²⁰ Because of that valuation, the Court reasoned that it would contravene separation of powers principles for the judiciary to strike its own balance.²¹ Thus, *Hill* strips the courts of their authority to balance the equities when considering injunctions under the Endangered Species Act.

C. Lightly Charted Territory: Human Health and Safety after Hill

The ruling in *Hill* both enshrined the protection of endangered species and sparked immense debate. As noted by the Court itself, "[i]t may seem curious to some that the survival of a relatively small number of three-inch fish among all the countless millions of species extant would require the permanent halting of a virtually completed dam for which Congress has expended more than \$100 million."²² Unsurprisingly, scholarship in the wake of this case often argues for a more flexible approach to balancing costs and protecting endangered species.²³ There is little discussion, however, of what ought to occur when the interests that threaten the endangered species are not economic. Is there a way for courts to balance concerns like human health and safety against the value of endangered species?

That increasingly pressing question is the focus of this note. The Court's expansive holding in *Hill* does not seem to permit balancing in cases like these. If the value of the endangered species is incommensurable with other human values, how can a court weigh one against the other? The problem is further compounded by climate

at 187-88 ("Quite obviously, it would be difficult for a court to balance the loss of a sum certain—even \$100 million—against a congressionally declared "incalculable" value, even assuming we had the power to engage in such a weighing process, which we emphatically do not.").

^{20.} Id. at 187.

^{21.} See id. at 194 ("Here we are urged to view the Endangered Species Act 'reasonably,' and hence shape a remedy 'that accords with some modicum of common sense and the public weal.' But is that our function? We have no expert knowledge on the subject of endangered species, much less do we have a mandate from the people to strike a balance of equities on the side of the Tellico Dam. Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities, thereby adopting a policy which it described as 'institutionalized caution.'") (emphasis added) (citations omitted).

^{22.} Id. at 172.

^{23.} See, e.g., Brandon M. Middleton, Restoring Tradition: The Inapplicability of TVA v. Hill's Endangered Species Act Injunctive Relief Standard to Preliminary Injunctive Relief of Non-Federal Actors, 17 Mo. Env't L. & Pol'y Rev. 318 (2010); Sheila Banes, Cost Consideration and the Endangered Species Act, 90 N.Y.U. L. Rev. 961 (2015); Jonathan Coy, Defending Against the Fourth Horse: The Endangered Species Act and the Threat of Communicable Disease, 12 PENN ST. Env't L. Rev. 285 (2004).

change and consequent habitat loss, leading to increased human contact with endangered species.²⁴ That trend will be further exacerbated by climate change's effects on human migration.²⁵ Climate change increases the frequency of extreme weather events,²⁶ coastal erosion,²⁷ and changes in temperature.²⁸ These effects lead to human displacement, and increase the tension between providing safe human habitats and protecting endangered species.²⁹ In the near-future courts will increasingly face situations that pit human health and safety against the protection of endangered species.

Hill's blanket proscription against balancing the harms in such cases does not seem to be a feasible rule in the face of these challenges. Although Congress may have ascribed a high value to endangered species, courts cannot be expected to mechanistically apply Hill when deciding cases where human health and safety is at risk. It is both unethical and unrealistic for courts to ignore concerns of human health and safety when considering injunctions protecting endangered species. In fact, in two cases where such circumstances

^{24.} See Tim Caro & Paul W. Sherman, Endangered Species and A Threatened Discipline: Behavioural Ecology, 26 Trends in Ecology and Evolution 111, 114–17 (2011) ("Loss of habitat creates novel combinations of environments in close proximity (e.g. a plowed field where the centre of a shrub-steppe community once stood).... By 2100 it will be difficult (probably impossible) to locate populations of any species that have not experienced human contact, and whose behaviour has not somehow been affected by it.").

^{25.} See Richard A. Black et al., The Effect of Environmental Change on Human Migration, 21 GLOBAL ENV'T CHANGE (SUPPLEMENT) S3, S8 (2011).

^{26.} See Gordon McBean, Climate Change and Extreme Weather: A Basis for Action, 31 NAT. HAZARDS 177 (2004) (describing the impact of climate change on increasing extreme weather, and arguing for action on the part of governmental agencies).

^{27.} Michalis I. Vousdoukas et al., Sandy Coastlines Under Threat of Erosion, 10 NAT. CLIMATE CHANGE 260, 260 (2020) ("The global mean sea level has been increasing at an accelerated rate during the past 25 years and will continue to do so with climate change.").

^{28.} See Peter Stott, How Climate Change Affects Extreme Weather Events, 352 SCIENCE 1517, 1517 (2016) ("Human-induced climate change has led to an increase in the frequency and intensity of daily temperature extremes and has contributed to a widespread intensification of daily precipitation extremes.").

^{29.} See, e.g., Florian T. Wetzel et al., Future Climate Change Driven Sea-Level Rise: Secondary Consequences from Human Displacement for Island Biodiversity, 18 GLOB. CHANGE BIOLOGY, 2207, 2714 (2012) (analyzing the impact of the "secondary effects" of sea level rise (SLR), such as human migration, on animal populations like the endangered Smoky Flying Squirrel. The article finds "the secondary SLR effects on biodiversity from human refugees can be even more devastating than from primary effects and increase estimates of overall habitat loss depending upon the region."); Hannah R. Trayford & Kay H. Farmer, Putting the Spotlight on Internally Displaced Animals (IDAs): A Survey of Primate Sanctuaries in Africa, Asia, and the Americas, 75 Am. J. OF PRIMATOLOGY 116, 116 (2013) ("As anthropogenic activity makes deeper incursions into forests, fragmenting habitat, wildlife is forced into closer proximity to humans leading to increased incidences of human-wildlife conflict and wildlife displacement.").

arose, neither court followed *Hill*, instead weighing the equities on the side of human welfare.³⁰ Such cases, however, will not always be clear cut. How is a court supposed to weigh a small risk to human health against a large risk to an endangered species, or vice versa? What if there is a large health risk to a small group of people, and an equally large risk to the endangered species? As of now, there is no guidance for courts to follow when settling these issues, and the prevailing rule suggests that they should duck these questions instead. This situation is untenable.

This Note explores two potential pathways for a more realistic approach to cases in this difficult position. First, courts may choose to distinguish *Hill* and balance the equities on their own, like the courts in both *Hawksbill Sea Turtle v. Federal Emergency Management Agency* and *Consolidated Delta Smelt Cases.*³¹ If that is the solution, it is necessary to determine if courts can make those determinations without eroding the goals of the ESA. Alternatively, it may be necessary for Congress to retool the ESA to ensure that human health and safety are valued in a way that comports with protecting endangered species. Congress could create a more precise framework around human safety concerns that would help courts navigate this thorny area.

Part I discusses the history of the ESA, including how Congress initially thought about valuing the protection of endangered species, and provides a more in-depth discussion on *Hill* and its aftermath. Part II looks at two cases where human health and safety were pitted against the lives of endangered species, and how those courts handled the issue. Part III explores whether courts can solve the problem of balancing on their own and the potential problems with such an approach. Finally, Part IV argues that Congress needs to do more to address concerns over future conflicts between human health and endangered species. The Endangered Species Act was an enormous milestone in the fight for conservation in the United States. By addressing this issue now, Congress has the opportunity to prevent the erosion of the ESA due to conflicts over human safety and welfare.

^{30.} See Consol. Delta Smelt Cases, 717 F. Supp. 2d 1021, 1069 (E.D. Cal. 2010) (Judge Wanger distinguishes Hill, asserting that "Congress has not nor does TVA v. Hill elevate species protection over the health and safety of humans."); see also Hawksbill Sea Turtle v. Fed. Emergency Mgmt. Agency, 11 F. Supp. 2d 529 (D.V.I. 1998) (balancing the potential harm to a sea-turtle habitat of allowing a tent-camp set up by FEMA in the wake of Hurricane Mariyln with the potential harm to displaced inhabitants of taking the camp down).

^{31.} See Consol. Delta Smelt Cases, 717 F. Supp. 2d at 1069; Hawksbill Sea Turtle, 11 F. Supp. 2d 529.

II. A SHORT HISTORY OF ANIMAL CONSERVATION: THE ESA AND BEYOND

A. Historical Antecedents of the Endangered Species Act

In order to understand the current state of play in the courts, it is important to flesh out the history of the ESA, along with its intended goals, mechanisms, and values. From its inception, the United States generally relegated control over wild animals, or *ferae naturae*, to the states.³² The Supreme Court expanded this general rule in *McCready* v. Virginia (1876), when it upheld a Virginia statute fining citizens for planting and harvesting oysters in the Potomac river-basin against a challenge that the law violated the Privileges and Immunities Clause.33 The Court determined that "States own the tide-waters themselves, and the fish in them, so far as they are capable of ownership while running."34 Following that logic, the treatment of intrastate animals is reserved to the States, and that power is not limited by the potential right of any citizen over those animals. After this ruling, there was "a steady growth in the regulation of wildlife at the state and territorial levels."35 The result was a hodgepodge of overlapping state regulation of animals, oftentimes blurring the line between intrastate conservation and the regulation of animals beyond state borders.

Moreover, during this time the federal government largely avoided regulating the trade, sale, or conservation of animals, outside of some narrow statutes aimed at protecting industrial fisheries.³⁶ These acts were aimed at the efficient use of certain animals, rather than some comprehensive goal of conservation. That aim comported with early federal understandings of the commerce power, which were more

^{32.} See MICHAEL J. BEAN & MELANIE J. ROWLAND, THE EVOLUTION OF NATIONAL WILDLIFE LAW 11–12, (3rd ed. 1983) (discussing Martin v. Waddell, 41 U.S. 367 (1842): "Taney seemed to place the states in the role of successors to the Parliament and the Crown, thus laying the groundwork for the later development of state ownership of wildlife.... Until the turn of the century, there were few occasions to consider the scope of rights surrendered by the states, because prior to 1900 the only federal wildlife legislation was limited in scope and relatively insignificant in impact.").

^{33.} See generally McCready v. Virginia, 94 U.S. 391, 392 (1876).

^{34.} Id. at 394.

^{35.} See BEAN, supra note 32, at 12.

^{36.} See id. at 12 n.17 ("See, e.g., Act of July 27, 1868, ch. 273 § 6, 15 Stat. 241 (repealed 1944) prohibiting the killing of certain fur-bearing in the territory and waters of Alaska; Act of February 9, 1871, 16 Stat. 593 (repealed 1964), creating the Office of the United States Commissioner of Fish and Fisheries 'for the protection and preservation of the food fisheries of the coast of the United States.").

deferential to a state's right to regulate intrastate commerce.³⁷ In fact, the major animal conservation effort of this period, the Lacey Act of 1900,³⁸ merely extended the states' regulatory authority over wildlife.³⁹ In effect, the more limited understanding of the scope of congressional power made the establishment of broad conservation law daunting. As a result, comprehensive federal action on wildlife would not be taken until the 1960s.

In that decade, however, the window for wildlife conservation swung open. The first major congressional wildlife preservation statute, the Endangered Species Preservation Act (ESPA), was passed in 1966 and amended three years later.⁴⁰ The ESPA was passed in a climate of legislative activism around conservation, buoyed by Rachel Carson's seminal 1962 work, *Silent Spring*, and increasing state-level game protection.⁴¹ The ESPA represented a break with prior federal statutes, which were narrowly aimed at preventing commercial trade of some species.⁴² Those statutes, however, met resistance from states,⁴³ did not apply to private lands, and did not prohibit habitat

 $^{37.\} See$ id. at 15–16 (discussing the evolution of state-control over the trade and regulation of wildlife to the federal government's more expansive role in the 20^{th} century). Essentially, the federal government before the 1940s was limited in its regulation of animal markets for purposes other than economic maximization. After New Deal Era policies, however, courts and Congress took a central role in public welfare regulation that was not solely targeted at ensuring free and efficient markets.

^{38.} Lacey Act of 1900, ch. 553, 13 Stat. 187 (1900) (codified as amended at 16 U.S.C. $\S\S$ 42, 3371–3378).

^{39.} See BEAN, supra note 32, at 15-16 ("The Lacey Act... included a provision taken almost verbatim from legislation designed to permit "dry" states to block the importation of alcohol, stating that whenever dead wildlife was imported into a state, it was subject to the state's laws if killed there.").

^{40.} See Endangered Species Act: A History of the Endangered Species Act of 1973, U.S. FISH AND WILDLIFE SERV., (Jan. 30, 2020), https://www.fws.gov/endangered/laws-policies/esahistory.html [https://perma.cc/L38R-4Y2Q]; see Endangered Species Protection Act of 1966, Pub. L. No. 89-669, 80 Stat. 926 (repealed 1973).

^{41.} See Steven P. Quarles & Thomas R. Lundquist, The Pronounced Presence and Insistent Issues

of the ESA, 16 NAT. RES. & ENV'T. 59 (2001) ("The States, however, had left an opening for federal regulation. For reasons of tradition and revenue, they concentrated not on the species at risk of extinction, but on the management of game animals — the regulation of recreational and subsistence consumption of wildlife. It was that void — given widespread public recognition by Rachel Carson in her seminal 1962 book *Silent Spring* — that the Congress moved to fill as environmental awareness and activism ripened in the late 1960s.").

^{42.} See Albert Gidari, The Endangered Species Act: Impact on Section 9 on Private Landowners, 24 ENV'T L. 419, 444 n.117 (1994) (describing wildlife protection statutes predating ESPA).

^{43.} See id. at 443 n.116 ("For example, the Migratory Bird Act of 1913 (Act of March 4, 1913, ch. 145, 37 Stat. 828) (repealed 1918), which prohibited the hunting of all migratory game without a federal permit, was challenged as unconstitutional. On authority of Geer v. Connecticut, 161 U.S. 519 (1896), which stood for the proposition that the states owned the

modification that led to harm.⁴⁴ The goal of the ESPA, rather, was to create a broader (though still limited) federal framework for protecting endangered species that would replace the patchwork of existing federal and state regulations.⁴⁵ The final version of the ESPA was thus cast as a cooperative effort between states and the federal government to consult and compromise over actions that could harm protected species.⁴⁶

Although the ESPA was a marked extension over preceding legislation, by 1972, it was becoming clear to the Nixon Administration that the ESPA did "not provide the kind of management tools needed to act early enough to save a vanishing species." The Nixon Administration was convinced of the ESPA's ineffectiveness even with the 1969 Amendments to the law, which enlarged the Secretary of the Interior's power to both list endangered species and prohibit the importation of those species. Essentially, the ESPA was impotent for two reasons. First, it did not make the taking of endangered species a federal offense punishable by significant jail time. Second, and more importantly, the ESPA ensured federal protection of endangered species only "insofar as [was] practicable and consistent with the primary purposes" of its

wildlife within their borders, the legislation was struck down, but the Supreme Court never had an opportunity to review the decision. United States v. Shauver, 214 F. 154 (D. Ark. 1914), *error dism'd*, 248 U.S. 594 (1919).").

^{44.} *See* Seattle Audubon Soc'y v. Evans, 952 F.2d 297, 303 (9th Cir. 1991) (rejecting claim that "take" in MBTA included acts of environmental degradation and finding that taking narrowly proscribed only direct acts of depredation).

^{45.} See Gidari, supra note 42, at 444–45 ("Passage of the Endangered Species Preservation Act of 1966 (ESPA) marked the first-time protection of habitats became part of a larger conservation strategy. The purpose of the ESPA was to provide for 'the conservation, protection, restoration, and propagation of selected species of native fish and wildlife, including migratory birds, that are threatened with extinction.' Despite this broad pronouncement of purpose, Congress limited the scope of ESPA to "protect species of native fish and wildlife, including migratory birds, that are threatened with extinction, and, insofar as is practicable and consistent with the primary purposes of such bureaus, agencies, and services . . . preserve the habitats of such threatened species on lands under their jurisdiction.").

^{46.} *See id.* at 445–48 (describing the ESPA's consultation requirements, federal and state negotiations over habitat management, and permitting a process for potential taking.).

^{47.} The President's 1972 Environmental Program, 8 WEEKLY COMP. PRES. DOC. 218, 223-24 (Feb. 14, 1972).

^{48.} See Act of Dec. 5, 1969, Pub. L. No. 91-135, §§ 2, 3(a), 83 Stat. 275.

^{49.} See The President's 1972 Environmental Program, 8 WEEKLY COMP. PRES. DOC. 218, 231 (Feb. 14, 1972) ("My new proposal would make the taking of endangered species a federal offense for the first time, and would permit protective measures to be undertaken before a species is so depleted that regeneration is difficult or impossible.").

agencies.⁵⁰ In other words, the ESPA was constrained by practical concerns, which rendered protection efforts uncertain. The remedy to these problems, then, was a statute that went much further.

B. The Endangered Species Act: A Comprehensive and Effective Statute

The ESA was passed quickly after Nixon's push for a greater federal conservation act. The Act differed from its predecessor in two important ways. First, it sought to extend federal protections of habitats to encompass whole "ecosystems" that endangered species depend on.⁵¹ This language was intended to broaden the scope of federal regulation, and to allow for easier acquisition of private lands where protected species are at risk.⁵² Second, section 7 of the ESA eschewed the ESPA's practicability concerns. In relevant part it reads:

The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other federal departments and agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act and by taking such action necessary to insure that actions authorized, funded or carried out by them do not jeopardize the continued existence of such endangered species and threatened species or result in the destruction or modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected states, to be critical.⁵³

In other words, the Secretary of the Interior must act to preserve endangered species in all circumstances, not only when it is

^{50.} Endangered Species Protection Act of 1966, Pub. L. No. 89-669, § 1(b), 80 Stat. 926 (repealed 1973).

^{51.} See 16 U.S.C. § 1531(b) ("The purposes of this chapter are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section.").

^{52.} See Gidari, supra note 42, at 450–51 ("Just as with ESPA and ESCA, Congress continued to believe that the acquisition of private land was an integral part of 'a program to conserve fish, wildlife, and plants, including those which are listed as endangered or threatened species.' In so doing, Congress recognized that: 'Often, protection of habitat is the only means of protecting endangered animals which occur on non-public lands. With programs for protection underway, and worthy of continuation into the foreseeable future, an accelerated land acquisition program is essential.' Thus, as under the ESA's predecessors, the federal government's acquisition of private lands under the ESA was the express method of protecting wildlife whose ecosystems were in danger from private land use.").

 $^{53. \} Endangered\ Species\ Act\ Amendments\ of\ 1978, Pub.\ L.\ No.\ 95-632, 92\ Stat.\ 3751\ (1978).$

practicable. Thus, the ESA both broadened the scope of the ESPA and released the act from its earlier restrictions.

The upshot of the ESA's modification of the ESPA was its more comprehensive approach to the protection of threatened and endangered species.⁵⁴ While Section 7 of the ESA mandated that federal agencies protect endangered species, Section 9 prohibited takings by private persons as well.⁵⁵ That provision is in line with prior legislation like the ESPA, but created a more defined duty on the part of private persons "not to take an endangered species."⁵⁶ Unlike its predecessor, the ESA created distinct duties for federal agencies and private persons. Moreover, the federal government had to take more affirmative steps to protect threatened and endangered species.⁵⁷ Those positive duties combined with the regulation of non-state actors to make the ESA one of the most sweeping conservation acts in American history.⁵⁸

The ESA's extensive reforms of existing law have been an astounding success in American conservation efforts.⁵⁹ According to the Center for Biological Diversity, "over 90 percent of species are

^{54.} The Supreme Court noted that the ESA "as it was finally passed ... represented the most comprehensive legislation for the preservation of endangered species ever enacted by any nation." Tenn. Valley Auth. v. Hill, 437 U.S. 153, 180 (1978).

^{55. 16} U.S.C. § 1538 ("Except as provided in sections 1535(g)(2) and 1539 of this title, with respect to any endangered species of fish or wildlife listed pursuant to section 1533 of this title it is unlawful for any person subject to the jurisdiction of the United States to—

⁽A) import any such species into, or export any such species from the United States;

⁽B) take any such species within the United States or the territorial sea of the United States;

⁽C) take any such species upon the high seas;

⁽D) possess, sell, deliver, carry, transport, or ship, by any means whatsoever, any such species taken in violation of subparagraphs (B) and (C);

⁽E) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species;

⁽F) sell or offer for sale in interstate or foreign commerce any such species; or

⁽G) violate any regulation pertaining to such species or to any threatened species of fish or wildlife listed pursuant to section 1533 of this title and promulgated by the Secretary pursuant to authority provided by this chapter.").

^{56.} See Gidari, supra note 42, at 454.

^{57.} *Id.* ("In context, the ESA was patterned after earlier endangered species legislation, but it elevated the federal government's obligation to take affirmative steps to protect endangered species on federal lands.")

^{58.} See, e.g., The Endangered Species Act: A Wild Success, CTR. FOR BIOL. DIVERSITY, https://www.biologicaldiversity.org/campaigns/esa_wild_success/ [https://perma.cc/U4NZ-XPV9] (last visited Dec. 14, 2020) ("The Endangered Species Act is the strongest law for protecting biodiversity passed by any nation.").

^{59.} *See id.* ("Over the past four-plus decades, the Endangered Species Act has repeatedly demonstrated that — when used to the full extent of the law — it *works*.").

recovering at the rate specified by their federal recovery plan."⁶⁰ Moreover, "[w]ere it not for the Act, scientists have estimated, at least 227 species would have likely gone extinct since the law's passage in 1973."⁶¹ In other words, the ESA has been a potent protector of threatened and endangered species in the almost four decades since its passage. Additionally, the ESA covers a broader range of endangered species than any prior act.⁶²

The success of the ESA should not come as a major surprise. The ESA was Congress' third try at enacting substantial protections for endangered species, and thus drew on many of the lessons learned by prior failures. Moreover, its removal of the practicality requirement allows "no latitude in its enforcement." The ESA represents Congress' best effort at valuing the protection of endangered species above all other considerations. Thus, it is not a shock that it has been so successful at preventing species' decline since its inception.

^{60.} KIERAN SUCKLING ET AL., CTR. FOR BIOL. DIVERSITY, ON TIME, ON TARGET: HOW THE ENDANGERED **SPECIES** Act Is SAVING AMERICA'S WILDLIFE 1 https://esasuccess.org/pdfs/110_REPORT.pdf [https://perma.cc/8XH5-MFLN]. This report also helps to clear up debate over how successful the ESA has been. Some, for instance, dispute this 90% figure, arguing that the success rate is only around 2%. See, e.g., ENDANGERED SPECIES ACT CONGRESSIONAL WORKING GROUP, REPORT, FINDINGS AND RECOMMENDATIONS (2014), http://www.pinedaleonline.com/wolf/pdf/finalreportandrecommendations-113.pdf [https://perma.cc/V4SS-9YNB] ("Working Group Conclusion: With less than 2% of species removed from the ESA list in 40 years, the ESA's primary goal to recover and protect species has been unsuccessful. Progress needs to be measured not by the number of species listed, especially as a result of litigation, but by recovering and de-listing those that are currently listed and working cooperatively on-the-ground to prevent new ones from being listed."); but see, KIERAN SUCKLING ET AL., CTR. FOR BIOL. DIVERSITY, ON TIME, ON TARGET: HOW THE ENDANGERED SPECIES ACT IS SAVING AMERICA'S WILDLIFE 1 (2012) ("Critics of the Endangered Species Act contend it is a failure because only 1 percent of the species under its protection have recovered and been delisted. The critique, however, is undermined by its failure to explain how many species should have recovered by now. It is a ship without an anchor. To objectively test whether the Endangered Species Act is recovering species at a sufficient rate, we compared the actual recovery rate of 110 species with the projected recovery rate in their federal recovery plans.").

^{61.} CTR. FOR BIOL. DIVERSITY, supra note 58.

^{62.} See John Lowe Weston, The Endangered Species Committee and the Northern Spotted Owl: Did the "God Squad" Play God?, 7 ADMIN. L.J. AM. U. 779, 784-83 (1994) ("Unlike the earlier Acts of 1966 and 1969, the 1973 Act encompassed protection for nearly all species."); see also 16 U.S.C. § 1532(8) (protecting "any member of the animal kingdom, including without limitation any mammal, fish, bird, amphibian, reptile, mollusk, crustacean, arthropod or other invertebrate, and includes any part, product, egg, or offspring thereof, or the dead body or parts thereof.").

^{63.} *Id.* at 785 n.37 ("noting that purpose of ESA is species preservation, which has priority over any other considerations.") (citing Jared des Rosiers, Note, *The Exemption Process Under the Endangered*

 $[\]textit{Species Act: How the "God Squad" Works and Why, 66 Notre Dame L. Rev. 825, 839-40 (1991)).}$

C. Tennessee Valley Authority v. Hill Revisited

With the background of the ESA fleshed out, it is now possible to understand the full consequences of *Hill*. There, the Court ruled that construction on the massive Tellico Dam, which Congress had appropriated over \$100 million to support, had to be halted to protect the endangered snail darter.⁶⁴ While at first blush the holding might seem overly broad in its protection of endangered species, it is reasonable when read against the history of the statute. The ESA was not written on a blank slate. Rather, it was Congress' third major attempt at passing comprehensive protections for threatened and endangered species.⁶⁵ Prior statutes had been criticized as too weak to serve Congress's interests in conservation.⁶⁶ In fact, in *Hill* the Supreme Court remarked "[t]he plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost."67 The Court pointed to the legislative history of the Act and Congress's explicit removal of the limiting language contained within the ESPA as evidence that the intent of the ESA was to afford endangered species with the utmost protection.⁶⁸

Congress's intent, however, was in tension with the prospect of stopping a massive public works project to protect a small species of fish.⁶⁹ The monetary cost to the public of halting Tellico Dam was potentially far greater than the loss of the endangered Snail Darter.⁷⁰ To wit, the plaintiff asked the Court to weigh those human costs

^{64.} See generally Tenn. Valley Auth. v. Hill, 437 U.S. 153 (1978).

^{65.} See supra Part I.B.

^{66.} See Quarles & Lundquist, supra note 41.

^{67.} Hill, 437 U.S. at 185.

^{68.} *Id.* ("[T]he legislative history undergirding § 7 reveals an explicit congressional decision to require agencies to afford first priority to the declared national policy of saving endangered species. The pointed omission of the type of qualifying language previously included in endangered species legislation reveals a conscious decision by Congress to give endangered species priority over the 'primary missions' of federal agencies.").

^{69.} *Id.* at 172–73 ("It may seem curious to some that the survival of a relatively small number of three-inch fish among all the countless millions of species extant would require the permanent halting of a virtually completed dam for which Congress has expended more than \$100 million. The paradox is not minimized by the fact that Congress continued to appropriate large sums of public money for the project, even after congressional Appropriations Committees were apprised of its apparent impact upon the survival of the snail darter. We conclude, however, that the explicit provisions of the Endangered Species Act require precisely that result.").

^{70.} *Id.* at 187 ("One might dispute the applicability of these examples to the Tellico Dam by saying that in this case the burden on the public through the loss of millions of unrecoverable dollars would greatly outweigh the loss of the snail darter.").

against the preservation of fish.⁷¹ Complicating matters further, Congress had approved the funding for the Dam in its yearly budgetary process.⁷² Congressional intent, then, was ambiguous at best.

Petitioners argued that because of this inconsistency, the Court ought to decide Congress's true intent. They wanted a narrow ruling, asserting that while the ESA may prohibit balancing the equities, conflicting Congressional action in this case gave the Court authority to rule for the TVA.⁷³ In fact, the majority opinion held that not only was Congress's intent clear, but also that the ESA stripped the judiciary of the authority to balance such concerns in the first instance.⁷⁴ The history of the ESA, and the plain meaning of the text, pointed to a congressional determination that preserving endangered species was valuable in and of itself. Moreover, that value could not be balanced against economic loss or public concerns; it was incommensurable.⁷⁵ In other words, Congress had assigned an "incalculable" value to preserving endangered species, and removed the ability to strike a balance to the contrary from the ambit of courts.⁷⁶ Thus, Court held that the ESA limited the authority of courts

^{71.} Brief for Petitioner at 16–33, Tenn. Valley Auth. v. Hill, 437 U.S. 153 (1978) (No. 76-1701), 1978 WL 206589 ("A thorough balancing of the benefits of the projects against their environmental consequences has been performed. These projects will provide needed flood control; jobs and industrial development; water supply and recreational opportunities; improved navigation in the case of Tellico; and other benefits. In addition, the Tellico project will provide an average of about 200 million kilowatt hours of electricity annually. These projects are sound regional development projects which are vitally important to the people of the regions affected.... Senator Tunney appears to have understood his bill as requiring agencies to consider the impact of their prospective actions on endangered species, and as requiring them to engage in the kind of balancing process mandated by the National Environmental Policy Act, but not as prohibiting them from constructing a project if, after such balancing, they concluded that the public interest warranted it.").

^{72.} See Hill, 437 U.S. at 164 ("Congress then approved the TVA general budget, which contained funds for continued construction of the Tellico Project.").

^{73.} *See* Brief for Petitioner, *supra* note 71, at 22 ("As a general principle, courts should not ordinarily infer from appropriations acts an intent by Congress to repeal or modify substantive law. But where Congress has clearly indicated such an intent, decisions of this Court and the courts of appeals establish that the courts must give effect to it. In the particular and unusual circumstances presented here, Congress has indicated such an intent with respect to the Tellico project.").

^{74.} See Hill, 437 U.S. at 194.

^{75.} See Hill, 437 U.S. at 187–88 ("Quite obviously, it would be difficult for a court to balance the loss of a sum certain—even 100 million—against a congressionally declared "incalculable" value, even assuming we had the power to engage in such a weighing process, which we emphatically do not.").

^{76.} Id.

in such cases, making it unnecessary to even consider balancing between the good of the people and the good of the species.

D. Congressional Response to Hill: The Exemption Process

The *Hill* ruling proved controversial. In its wake, some members of Congress moved quickly to amend the ESA to create a more workable statute. Senator Stennis, for instance, asserted that the "insofar as practicable" language from the ESPA should be reinserted in the ESA.⁷⁷ That proposal, however, had "the problem of totally defeating the purpose of the Act."78 Senators Baker and Culver, on the other hand, believed that an exemption process presented a practicable compromise without shredding the statute. 79 Their proposed amendments would have added provisions to sections 3, 4, 5, and 7, creating a new Endangered Species Committee to exempt federal agencies from the provisions upon application.80 The Committee would consider numerous factors in deciding whether to grant such applications, including whether the applicant: "had consulted in good faith, made a reasonable effort to identify and consider alternatives, and refrained from making an irreversible commitment of resources."81 If these factors were present, a hearing would be triggered at a review board to determine whether an exemption

^{77. 124} CONG. REC. 21,285 (1978).

^{78.} Nancy M. Ganong, Endangered Species Act Amendments of 1978: A Congressional Response to Tennessee Valley Authority v. Hill, 5 COLUM. J. ENV'T L. 283, 301 (1979).

^{79.} See Adrian Guerrero et al., Case Study: Tennessee Valley Authority v. Hiram Hill, et al.: The Endangered Species Act and Dam Construction 11 (2008) (unpublished manuscript) (on file with Colum. J. Env't L.) ("Soon after the Court's decision, Minority leader Howard Baker (R-Tenn.) and John Culver (D-Iowa), chair of the Senate subcommittee on Resource Protection, crafted a bill creating a new administrative exemption process.").

^{80.} See Endangered Species Act Amendments of 1978, Pub. L. No. 95-632, 92 Stat. 3751 (codified as amended at 16 U.S.C. §§ 1531-1544). This committee has informally become known as "The God Squad." See Benjamin Rubin, Calling on the "God Squad", Nossaman LLP (Apr. 23, 2014), https://www.endangeredspecieslawandpolicy.com/calling-on-the-god-squad [https://perma.cc/T23R-5V5G]; see also Guerrero et al. supra note 79, at 11 ("The exemption process outlined by the 1978 ESA amendments empowered an Endangered Species Committee ('Committee') to consider exemption applications, but only when an applicant had proved to a review board that they had consulted in good faith, made a reasonable effort to identify and consider alternatives, and refrained from making an irreversible commitment of resources.").

^{81.} Endangered Species Act Amendments of 1978, Pub. L. No. 95-632, 92 Stat. 3751 (codified as amended at 16 U.S.C. §§ 1531-1544).

would be granted. Be amendments passed on a vote of 94–3. Due to its power, this committee has informally become known as "The God Squad." Thus, in the immediate aftermath of Hill, Congress eased the stiff protections of the ESA by creating an exemption process.

The exemption process created by these amendments was designed to apply when there is an "irresolvable conflict." Only a few enumerated parties who have met the procedural consultation requirements of the ESA can request a God Squad exemption. These parties include 'Federal agenc[ies], the Governor of the State in which an agency action will occur... or a permit or license applicant." In practice, these amendments have amounted to "a limited exemption process to be used only after the normal consultation process failed." In fact, after Hill, the God Squad reevaluated the Tellico Dam project under the new exemption process and again denied a permit. At the same hearing, however, the Committee issued its first exemption to a different dam project. The Grayrocks Dam project,

^{82.} H.R. REP. No. 95-632, at 15 (1978) (Conf. Rep.), as reprinted in 1978 U.S.C.C.A.N. 9484, 9488 (to grant an exemption, at least five members of the committee must find: "(1) there was no reasonable and prudent alternative to the project; (2) the benefits of the project clearly outweighed the benefits of any alternative consistent with conservation of the species and the project was in the public interest; (3) the project was of regional or national significance; and (4) neither the agency involved nor the exemption applicant has made an irreversible or irretrievable commitment of resources.").

^{83.} See All Information (Except Text) for S.2899 - Endangered Species Act Amendments, CONGRESS.GOV, https://www.congress.gov/bill/95th-congress/senate-bill/2899/all-info (last visited Dec. 4, 2021).

^{84.} See Benjamin Rubin, Calling on the "God Squad", Nossaman LLP (Apr. 23, 2014), https://www.endangeredspecieslawandpolicy.com/calling-on-the-god-squad [https://perma.cc/T23R-5V5G].

^{85.} Endangered Species Amendments of 1978 § 2(4) (The Amendments stating: "The term "irresolvable conflict" means, with respect to any action authorized, funded, or carried out by a Federal agency, a set of circumstances under which, after consultation as required in section 7(a) of this Act, completion of such action would (A) jeopardize the continued existence of an endangered or threatened species, or (B) result in the adverse modification or destruction of a critical habitat.").

^{86.} Eric Yunkis, Would a "God Squad" Exemption Under the Endangered Species Act Solve the California Water Crisis?, 38 B.C. ENV'T AFF. L. REV. 567, 576 (2011); 16 U.S.C § 1536(g).

^{87.} Jared des Rosiers, Exemption Process under the Endangered Species Act: How the God Squad Works and Why, $66\ Notre\ Dame\ L.\ Rev.\ 825, 845\ (1991).$

^{88.} See ENDANGERED SPECIES COMM'N, APPLICATION FOR EXEMPTION FOR TELLICO DAM AND RESERVOIR PROJECT, (1979) (finding "that denial of exemption, which would probably prompt TVA to pursue some form of river development, is the only option likely to favor the continuance of the snail darter. This conclusion concurs with the findings of the Snail Darter Recovery Team." Essentially, the Committee refused to allow the dam, despite its clear value to the community, because of the high likelihood of destruction of the snail darter.).

located on Laramie River within the Missouri River Basin, was set to provide power to "customers in Colorado, Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota and Wyoming."⁸⁹ The Army Corps of Engineers, in fulfilment of its consultation requirement under Section 7(a), requested an environmental impact report from the Fish and Wildlife Service (FWS).⁹⁰ For its part, the FWS found that dredging the dam would adversely impact endangered whooping cranes downstream.⁹¹ Despite those risks, the Committee "found that there were no reasonable alternatives to the project, that its benefits clearly outweighed any alternate courses of action, and that the project was in the public interest."⁹² The Committee issued the exemption, while establishing an irrevocable trust, capitalized at 7.5 million dollars, to maintain the crane's critical habitat.⁹³

Despite the 1978 Amendments providing a more restrained approach to animal conservation, this exemption process has been used sparingly. 94 In fact, since its inception the exemption process has been invoked six times. 95 Only three of those projects were eventually ruled on by the Committee; two exemptions were granted. 96 The Congressional Research Service identifies four basic reasons the exemption process is so rare:

[1] The applicant must fund any required mitigation measures; the funding obligation lasts for the life of the action—potentially forever, depending on the nature of the action; [2] Because the exemption

^{89.} Endangered Species Comm., Transcript of First Meeting of the Endangered Species Committee US Department of the Interior, at 7, \P 5-8 (Jan. 23, 1979), https://lawdigitalcommons.bc.edu/cgi/viewcontent.cgi?article=1001&context=darter_materials [https://perma.cc/8VSK-8UDV].

^{90.} See Id. ¶¶ 16-21.

^{91.} *Id.* at 8 ("In combination with four other projects, the Fish and Wildlife Service estimated the total depletion of nearly 172,000 acre/feet by the year 2000. Reducing the streamflow by that amount, 172,000 acre/feet or nearly 20 percent of the stream flow would result in the opinion of the Fish and Wildlife Service in an adverse modification or ultimate destruction of the crane's critical habitat on the Platte.").

^{92.} Rosiers, supra note at 846.

^{93.} *Id.* at 847; See also Transcript of First Meeting of the Endangered Species Committee, supra note 89, at 10, $\P\P$ 13-17.

^{94.} See M. LYNNE CORN ET AL., CONG. RSCH. SERV., R40787, ENDANGERED SPECIES ACT (ESA): THE EXEMPTION PROCESS 2 (2017) ("The Endangered Species Act (ESA) is designed to protect species from extinction, but it includes an exemption process for those unusual cases where the public benefit from an action is determined to outweigh the harm to the species. This process was created by a 1978 amendment to the ESA, but it is rarely used.").

^{95.} *Id.* ("The exemption process has been invoked with a dam on the Tellico River (TN), a water project in the Platt River (WY and NE), and timber sales (OR). In three other instances, the process was begun but was aborted before a decision was reached.")

^{96.} See id. at 14-19 apps. A, B, C.

applies to the action and not to the species, FWS or NMFS must continue to attempt to recover the species. Consequently, the burden of conservation and recovery may fall more heavily elsewhere. A governor, trying to balance the interests of an entire state, might find this a particularly difficult obstacle; [3] If conservation of a listed species is only one of various statutory obligations under federal or state laws, then an exemption from ESA for the action may not advance the action, because those other statutory obligations may still be required. [4] Many parties to a dispute may be reluctant to appear publicly to side with the extinction of a species, no matter how uncharismatic. Moreover, if the increased risk of extinction provides only modest advancement for the action, the rewards of a successful exemption application may not seem worth the effort.⁹⁷

These reasons create a regime where the petitioner bears both the opportunity costs of applying and the risk that the permit will be denied or costs will be too prohibitive. In cases where planned works projects run up against endangered species, it is usually easier to find alternative siting. Thus, although the 1978 Amendments were intended to ease the ESA's strong protections for species, in practice the process is unavailing.

E. Judicial Response to Hill: Cabining its Precedent

While Congress attempted to ease *Hill*'s strong interpretation of the ESA through a slew of amendments, courts have been busy confining its reach through precedent. The judiciary has generally restricted *Hill* in two ways: (1) district courts have held the ESA does not force a court to issue an injunction if an endangered species is threatened by *private action* under Section 9; and (2) the Supreme Court has refused to apply a blanket proscription on balancing the equities to other statutes.

Currently, the First and Ninth Circuits are the only circuits to explicitly endorse *Hill* in cases arising under Section 9 involving private actors (as opposed to federal agencies). Rulings on the

^{97.} Id. at 11-12.

^{98.} *Id.* at 12 ("As a practical matter, the consultation process itself offers federal agencies many opportunities to modify their actions to avoid jeopardizing species or adversely modifying their designated critical habitats, yet still proceed with their actions.").

^{99.} See Frederico M. Cheever, An Introduction to the Prohibition Against Takings in Section 9 of the Endangered Species Act of 1973: Learning to Live with a Powerful Species Preservation Law, 62 U. Colo. L. Rev. 109, 163 (1991) ("The general cumbersomeness of the Endangered Species Act Committee exemption process renders section 7(o)(1) insignificant.").

^{100.} See Middleton, supra note 23, at 340 ("Aside from the First and Ninth Circuits, no other circuits have specifically addressed the standard for preliminary injunctions against non-federal actors under the ESA."). The Ninth Circuit adopted Hill's proscription on balancing the equities

district level, though, have been inconsistent with those circuits. For instance, in *Hamilton v. City of Austin*, 8 F. Supp. 2d 886 (W.D. Tex. 1998), a court weighed the public's interest in maintaining a safe community swimming pool against foreseeable harm to an endangered species of salamander.¹⁰¹ The process of cleaning the pool involved lowering the water level while small scrub-brushes cleaned algae and detritus from shallow areas.¹⁰² That process, however, led endangered Barton Spring Salamanders to become trapped without breathable air between rocks and crevices.¹⁰³ As a result, the trapped salamanders desiccated and perished.¹⁰⁴ Instead of closing the pool or mandating a different cleaning process, though, the court ruled that, on balance, having a clean pool was more important than preserving these salamanders.¹⁰⁵ Other courts have ruled similarly.¹⁰⁶ Thus, on the district-level, *Hill*'s precedential strength is more restrained in cases arising under Section 9.

While district courts have narrowed *Hill's* reach in Section 9 cases, the Supreme Court has backed away from forbidding balancing tests

in National Wildlife Federation v. Burlington Northern Railroad, 23 F.3d 1508, 1510 (9th Cir. 1994) ("[The] traditional test for preliminary injunctions, however, is not the test for injunctions under the Endangered Species Act. In cases involving the ESA, Congress removed from the courts their traditional equitable discretion in injunction proceedings of balancing the parties' competing interests.") (internal citations omitted). The First Circuit did the same three years later in Strahan v. Coxe, 127 F.3d 155, 160 (1st Cir. 1997) ("Under the ESA, however, the balancing and public interest prongs have been answered by Congress' determination that the 'balance of hardships and the public interest tips heavily in favor of protected species."") (internal citations omitted).

- 101. See generally Hamilton v. City of Austin, 8 F. Supp. 2d 886, (W.D. Tex. 1998).
- 102. *Id.* at 891.
- 103. Id.
- 104. Id.

105. *Id.* at 897 ("It is worth noting that the harm to the defendants and the public interest also weigh heavily against granting the injunction. Significantly, the Court finds the experimental pool cleanings advance the public interest of benefitting the Salamander.").

106. See, e.g., All. for the Wild Rockies v. Kruger, 35 F. Supp. 3d 1259, 1266–67 (D. Mont. 2014). The Kruger court interpreted Hill not to stand for a blanket proscription on balancing the equities. Instead, it determined that under Hill "the balance of the hardships requirement for an injunction always tips sharply in favor of the endangered or threatened species." It went on to weigh the equities of allowing timber harvesting against protected endangered species of grizzly bears and elk, finding that declining to enjoin the harvest would actually benefit these animals more than issuing an injunction; Strahan v. Sec'y, Mass. Exec. Office of Energy & Env't Affairs, 458 F. Supp. 3d 76, 93 (D. Mass. 2020) ("Before issuing a preliminary injunction, this court "must balance the competing claims of injury and must consider the effect on each party of the granting or withholding of the requested relief.'... In order to effectively do so, the court must first identify the equitable relief under consideration. Even though the court has found that Plaintiff is likely to be able to prove at trial that Defendants are acting in violation of the Endangered Species Act's Section 9 prohibitions, it is not obligated to immediately enjoin the Defendants from the continued licensing of VBRs.") (citations omitted).

in the context of other statutes.¹⁰⁷ The most recent and impactful instance of this judicial avoidance was in *Winter v. National Resources Defense Council.*¹⁰⁸ There, the Court was asked to enjoin Navy mapping exercises that might adversely impact several species of marine life.¹⁰⁹ Plaintiffs sought a preliminary injunction against those practices, charging violations of the Marine Mammal Protection Act (MMPA), the National Environmental Policy Act (NEPA) and the ESA.¹¹⁰ The majority opinion, however, dealt only with the alleged violations under NEPA and the MMPA, as the district court did not certify the NRDC's ESA claim.¹¹¹ The Court determined that balancing the equities was appropriate in deciding whether to issue the injunction:

A preliminary injunction is an extraordinary remedy never awarded as of right. In each case, courts must balance the competing claims of injury and must consider the effect on each party of the granting or withholding of the requested relief. In exercising their sound discretion, courts of equity should pay particular regard for the public consequences in employing the extraordinary remedy of injunction.¹¹²

^{107.} See Sarah J. Morath, A Mild Winter: The Status of Environmental Preliminary Injunctions, 37 SEATTLE U. L. REV. 155, 166–67 (2013) (describing Weinberger v. Romero-Barcelo, 456 U.S. 305 (1982): "Based on the Court's interpretation of the statutory scheme and purpose of [Federal Water Pollution Control Act (FWPCA) now the Clean Water Act (CWA)], the Court rejected the plaintiffs' argument that procedural violations of environmental statutes gave rise to automatic injunctions. Instead, it interpreted FWPCA as not "foreclosing completely the exercise of the court's discretion." The district court could order the relief it considered necessary to secure prompt compliance with the FWPCA, including but not limited to an order of immediate cessation. The Court's holding was clear: unlike the ESA, FWPCA did not limit a court's equitable discretion in ordering remedies.").

^{108.} Winter v. Nat. Res. Def. Council, 555 U.S. 7 (2008).

^{109.} Id. at 13-16.

^{110.} See Nat. Res. Def. Council v. Winter, 645 F. Supp. 2d 841, 846 (C.D. Cal. 2007).

^{111.} See Winter, 555 U.S. 7, 17 ("Shortly after the Navy released its EA, the plaintiffs sued the Navy, seeking declaratory and injunctive relief on the grounds that the Navy's SOCAL training exercises violated NEPA, the Endangered Species Act of 1973(ESA), and the Coastal Zone Management Act of 1972 (CZMA). The District Court granted plaintiffs' motion for a preliminary injunction and prohibited the Navy from using MFA sonar during its remaining training exercises. The court held that plaintiffs had 'demonstrated a probability of success' on their claims under NEPA and the CZMA.") (cleaned up) (citations omitted).

^{112.} Id. at 24-26.

After examining the consequences, the Court determined that the value of ensuring safety to the fleet was more important than protecting these species. The injunction was denied. The injunction was denied.

Although *Hill* was never explicitly mentioned, the broad language of the opinion could suggest that courts *must always* balance the equities. In fact, in the wake of *Winter*, some courts have balanced the equities even when the ESA is implicated. Additionally, the *Winter* decision has faced academic criticism, as some consider it to be judicial usurpation of Congress' decision to place endangered species over all other concerns. Even if courts do usually uphold *Hill*, the *Winter* decision represented a break from the Court's prior reasoning by refusing to ascribe an incalculable value to endangered species protections. Thus, the Supreme Court in the aftermath of *Hill* has narrowed the powerful protections afforded to ecological concerns to the ESA alone.

^{113.} *Id.* at 33 ("We do not discount the importance of plaintiffs' ecological, scientific, and recreational interests in marine mammals. Those interests, however, are plainly outweighed by the Navy's need to conduct realistic training exercises to ensure that it is able to neutralize the threat posed by enemy submarines.").

^{114.} *Id.*

^{115.} See, e.g., Sierra Club v. U.S. Army Corps of Eng'rs, 645 F.3d 978, 997 (8th Cir. 2011) ("The district court's analysis of the balance of harms was not an abuse of discretion particularly because any injury to SWEPCO was largely self inflicted. SWEPCO spent about \$800 million on plant construction before the § 404 permit was issued and ignored the Corps' April 2008 warning letter that construction would proceed 'at [its] own risk.""); Conservation Cong. v. U.S. Forest Serv., No. 213CV01922TLNCMK, 2016 WL 6524860, at *6 (E.D. Cal. Nov. 3, 2016) ("Although cases presenting a likelihood of environmental injury often involve a hardship balance that tips in favor of an injunction, the Court may not abandon the balance of harms analysis just because a potential exists for environmental injury."); Desert Protective Council v. U.S. Dep't of the Interior, No. 12CV1281 WQH(MDD), 2012 WL 13175866, at *2 (S.D. Cal. Sept. 28, 2012) (balancing the equities when determining whether to issue a preliminary injunction against potential harm to endangered marine species. The court held the Ninth Circuit had interpreted Winter to require balancing of the equities in ESA cases, even if they usually tip sharply in favor of environmental interests.).

^{116.} See Jared A. Goldstein, Equitable Balancing in the Age of Statutes, 96 VA. L. REV. 486, 489 (2010) ("Although the Court may believe that equitable balancing is simply what courts deciding injunctions have always done, the application of equitable balancing in statutory cases like Winter is remarkably new, and it serves to aggrandize judicial power by authorizing judges to resolve cases by comparing the relative importance of policies established by the political branches.").

^{117.} See Morath, supra note 107 at 165 ("Sensing that this decision may lead environmental plaintiffs to argue that the traditional rules of equitable balancing do not apply when statutory violations are alleged, the Court clearly distinguished TVA v. Hill the next time[s] it addressed [] environmental preliminary injunction[s].").

III. HILL'S LEGACY: CONFLICT WITH HUMAN HEALTH AND SAFETY

Despite the reaction of Congress and the courts to *Hill*'s broad holding, *Hill* still stands as the rule in ESA cases involving injunctions. The Supreme Court removed the authority of the judiciary to balance the equities when the lives or habitats of endangered species are reasonably threatened by private or public action. In cases where injunctions are filed to protect endangered animals where human health or safety is implicated, courts are placed in the position of either overruling human welfare concerns or going against precedent. What follows is a discussion of two circumstances where courts were faced with that decision. In both cases, the court chose to contravene *Hill*.

A. Hawksbill Sea Turtle v. Federal Emergency Management Agency

In September 1995, Hurricane Marilyn struck the island of St. Thomas. Hurricane was a Category 3 storm with sustained winds of 100 knots. Hurricane was a Category 3 storm with sustained winds of 100 knots. In the force of the storm led to the displacement of hundreds of people from their homes, and caus[ed] substantial property damage. In response to this natural disaster, President Clinton declared the Virgin Islands a disaster area, allowing FEMA to set up emergency housing for displaced residents. That temporary housing was established in an area designated as sensitive habitat for three endangered or threatened species: the Hawksbill sea turtle, the St. Thomas tree boa, and the green sea turtle. Property owners in the area filed suit for a temporary restraining order and preliminary injunction against the development, asserting that the construction harmed these habitats

^{118.} See Hawksbill Sea Turtle v. Fed. Emergency Mgmt. Agency, 939 F. Supp. 1195, 1198 (D.V.I. 1996), rev'd sub nom., Hawksbill Sea Turtle v. Fed. Emergency Mgmt. Agency, 126 F.3d 461 (3d Cir. 1997).

^{119.} U.S. DEP'T OF COMMERCE, NAT'L OCEANIC AND ATMOSPHERIC ADMIN., NATURAL DISASTER SURVEY REPORT: HURRICANE MARILYN 20 (1996).

^{120.} Hawksbill Sea Turtle, 939 F. Supp. at 1199.

^{121.} Id

^{122.} *Id.* ("In preparing for the temporary housing project, FEMA issued a Final Environmental Assessment ('EA') report. In conjunction with this report, FEMA analyzed any effects that the project might have on the environment. As part of its analysis, FEMA consulted with officials from various agencies, including USFWS. Correspondence with USFWS revealed that the project could potentially affect the habitat of the Virgin Islands Tree Boa.").

and animals.¹²³ The court was thus tasked with the question of whether to allow construction of this emergency housing even if it might harm endangered species.

Under the normal four-prong preliminary injunction test, the court was likely to refuse an injunction against the housing project. For that reason, plaintiffs contended that *Hill* represented a "flat ban" on balancing the equities within that test. Without the "balancing" prong of the analysis, the court would be forced to issue the injunction if plaintiffs demonstrated both a reasonable certainty of harm to the species (likelihood of success on the merits), and irreparable harm (which is likely to follow if prong one is satisfied). Hill's flat ban on balancing the equities would potentially mean evicting the members of this displaced community and putting them back on the street in

The court did also consider a challenge to plaintiffs' case on grounds of collateral estoppel and res judicata that may have allowed it to escape this situation. Plaintiffs originally brought this case only on behalf of the Tree Boa, without mentioning the other species. *See* V.I. Tree Boa v. Witt, 918 F. Supp. 879, 890 (D.V.I. 1996), *aff'd sub nom.*, V.I. Tree Boa, (Epicrates Monensis Granti) v. Witt, 82 F.3d 408 (3d Cir. 1996). In the instant case, however, the court held that neither the claims nor the issues were precluded, because the dismissal of the original claims was on jurisdictional grounds. *See* Hawksbill Sea Turtle v. Fed. Emergency Mgmt. Agency, 939 F. Supp. 1195,1207 (D.V.I. 1996), *rev'd sub nom.*, Hawksbill Sea Turtle v. Fed. Emergency Mgmt. Agency, 126 F.3d 461 (3d Cir. 1997).

^{123.} *Id.* ("First, plaintiffs claim that in the course of defendants' construction of the temporary housing project at Estate Nazareth, defendants violated section 7(a)(1) by failing to conserve the St. Thomas Tree Boa, the Hawksbill Sea Turtle, and the Green Sea Turtle.").

^{124.} Id. at 1208-09.

^{125.} Id. at 1208.

^{126.} See Forest Conservation Council v. Rosboro Lumber Co., 50 F.3d 781, 787 (9th Cir. 1995) (in order to grant an injunction against an actor, there must be a "reasonably certain" threat of harm to the endangered species); see also Nat'l Wildlife Fed'n v. Burlington N.R.R., 23 F.3d 1508, 1511 (9th Cir. 1994) ("[T]he plaintiff must make a showing that a violation of the ESA is at least likely in the future.").

^{127.} Irreparable injury is generally understood as an injury for which money damages are an inadequate remedy. In the ESA context, it is presumed that harm to endangered species is irreparable damage. See, e.g., Cottonwood Env't. L. Ctr. v. U.S. Forest Serv., 789 F.3d 1075, 1091 (9th Cir. 2015) (describing the trial court's holding: "it proceeded to review the record and found that without certain protective measures sought by the plaintiffs, including the spills, the protected fish would suffer irreparable harm. The court then granted injunctive relief to address the specific harm."); Forest Guardians v. Babbitt, 174 F.3d 1178, 1185–86 (10th Cir. 1999) ("Congress expressed its opinion regarding the importance of critical habitat designations by requiring, with limited exception, a contemporaneous designation of critical habitat at the time of listing a species as either endangered or threatened. Delaying a decision on the Secretary's duties regarding designation of critical habitat—a designation already 3 ½ years overdue—for over a year more could result in continued and potentially irreparable loss of the silvery minnow."); Strahan v. Coxe, 127 F.3d 155, 171 (1st Cir. 1997) (finding that the ESA understands harm to an endangered species as irreparable, foreclosing the court's ability to even consider that prong upon satisfaction of the first prong).

the wake of Hurricane Marilyn's destruction. ¹²⁸ Instead, the court held that the rule did not apply to *this* case.

To that end, the court cited the Supreme Court's holding in Weinberger v. Romero Barcelo, as well as two decisions from the Second and Third Circuits, which refused to extend *Hill's* holding to NEPA and the Clean Water Act (CWA). 129 In each of those cases, courts distinguished Hill, avoiding its inflexible rule. 130 The Hawksbill court distinguished *Hill* on three grounds: (1) the court asserted that in this case the plaintiffs were seeking a preliminary injunction, whereas Hill dealt with a permanent injunction; (2) where the Hill Court was balancing the "complete destruction of the snail darter's habitat," the facts here did not suggest that the entire Hawksbill Sea Turtle/Tree Boa habitat would be destroyed by the housing project; and "[m]ost importantly," (3) the Court in *Hill* refused to balance economic harms with the loss of an endangered species. Here, however, the court was balancing the loss of an endangered species against "the equally incalculable value of the sanctity and quality of human life."131 Here, however, the court was balancing the loss of an endangered species against "the equally incalculable value of the sanctity and quality of human life."132 Given these three differences, the court held that the *Hill* rule did not apply and that it could balance the equities.

The court then went on to apply the preliminary injunction analysis, and found that the plaintiffs could not succeed on the four prongs of the injunction test. The court determined "that both FEMA and the people of the Virgin Islands who live in substandard living conditions will suffer considerable harm if FEMA cannot fulfill its congressional mandate pursuant to the Stafford Act to provide federal emergency assistance when necessary." In other words, the court found that potential harm to the displaced residents outweighed the irreparable harm to the Hawksbill Sea Turtle or Tree Boa habitats. Thus, despite Hill's broad proscription against balancing the equities, the Hawksbill

^{128.} See generally V.I. Tree Boa, 918 F. Supp. 879; Hawsbill Sea Turtle, 939 F. Supp. at 1195.

^{129.} See CORN, supra note 94; see also Town of Huntington v. Marsh, 884 F.2d 648, 649 (2d Cir. 1989); Nat. Res. Def. Council v. Texaco Refin. & Mktg., Inc., 906 F.2d 934, 941 (3d Cir. 1990).

^{130.} Hawksbill Sea Turtle, 939 F. Supp. at 1208 ("In each case, the courts distinguished Hill and found that Hill did not relieve them of their duty to balance the competing claims of injury, the consequences to each party, and the public interest.") (emphasis in original).

^{131.} Id. at 1209.

^{132.} Id.

^{133.} *Id.* at 1210–11.

^{134.} *Id.* at 1209. For clarity, the Stafford Act of 1988 gives the federal government the authority to assist states and territories with emergencies and disaster relief. The statute itself governs FEMA and establishes the procedures and goals of the Agency.

Court carved out a functional exception when human health or safety is concerned.

B. Consolidated Delta Smelt Cases

The Delta smelt is a three to four-inch fish that makes its home in the San Francisco Bay and Sacramento-San Joaquin Delta. This "Bay Delta... is the largest estuary on the West Coast and a critical water supply for several million acres of farmland and two-thirds of California's population." Water usage from this Delta, however, caused significant harm to wildlife in the area, with the endemic Delta smelt as a main casualty. In fact, in 1993, the smelt was listed as threatened under both California's Endangered Species Act (CESA) and the federal ESA. The smelt's status has since been upgraded (or downgraded) to endangered under CESA.

The rapidly declining status of the smelt can be attributed to the two massive water projects taking place in the Bay Delta: The State Water Project (SWP) and federal Central Valley Water Project (CVP). Due to California's arid climate, these water projects use Bay Delta water flows for irrigation, agriculture, and human consumption for millions of Californians. The Delta smelt is at risk because the SWP and CVP both operate massive pumping facilities to circulate water throughout the region. Essentially,

[w]hen the projects' pumps operate, they create a draw so powerful that two rivers within the Delta interior reverse their flow. While fishscreening facilities are used, the collective operation of the projects'

^{135.} Jane Kay, *Delta Smelt, Icon of California Water Wars, Is Almost Extinct*, NAT'L GEO. (Apr. 3, 2015), https://www.nationalgeographic.com/science/article/150403-smelt-california-bay-delta-extinction-endangered-species-drought-fish [https://perma.cc/FV2G-7EJQ].

^{136.} Richard Hamann, Can the Endangered Species Act Save the Apalachicola?, 29 GA. St. U. L. Rev. 1025, 1045 (2013).

^{137.} *Id.* at 1046 ("One of the most notable species is the Delta smelt, a small endemic fish that has been pushed to the brink of extinction.").

^{138.} CAL. NAT. RES. AGENCY, STATE AND FEDERALLY LISTED ENDANGERED AND THREATENED ANIMALS OF CALIFORNIA 5 (2021), https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405.

^{139. 58} FED. REG. 12854 (Mar. 5, 1993).

^{140.} CAL. NAT. RES. AGENCY, STATE AND FEDERALLY LISTED ENDANGERED AND THREATENED ANIMALS OF CALIFORNIA 5 (2021), https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405.

^{141.} See Hamann, supra note 136, at 1046 ("Central and southern California are arid and therefore rely primarily on water imports via two large-scale water storage and conveyance projects, the State Water Project and the Central Valley Water Project. The State Water Project (SWP), operated by the California Department of Water Resources (DWR), is the United States' largest state-built water and power project. It stretches across 600 miles and delivers irrigation supply to 750,000 acres of farmland and drinking water to twenty-five million people.").

pumps kills Delta smelt and other ESA-listed species (e.g., various salmonids, the Central Valley steelhead, and green sturgeon. 142

The pumps draw water in at such a rate that individual Delta smelt get trapped and cannot escape, leading to decline of the smelt population over the last 50 years.¹⁴³

In 2004, the California Department of Water Resources (DWR) which runs SWP, and the U.S. Bureau of Reclamation (Reclamation) which runs CVP, sought to make operational changes to their respective water projects. ¹⁴⁴ Under the ESA's Section 7 consultation requirement, such changes required the advice of both FWS and the National Marine Fisheries Service (NMFS). ¹⁴⁵ The agencies both evaluated the proposed changes and issued Biological Opinions (BiOps) on the potential impact to threatened Delta Smelt. ¹⁴⁶ The BiOps found that there was "no-jeopardy" on behalf of SWP and CVP regarding further harm to the Delta smelt. ¹⁴⁷ That initial assessment, however, was challenged by environmental groups and in ensuing litigation was found to be in violation of ESA requirements. ¹⁴⁸

A revised BiOp required temporary water restrictions for several months, leading to only 35% of expected water allocations for

^{142.} Mia S. Brown, *Little Fish, Big Problem: Endangered Fish Impacts Large-Scale Water Deliveries*, A.B.A. AGRIC. MGMT. COMM. NEWSL., May 2011, at 11, https://www.americanbar.org/content/dam/aba/publications/nr_newsletters/am/201105_a m.pdf.

^{143.} *See id*. ("Once abundant, the smelts' number began to decline in the 1970s, due to large-scale pumping from the projects.").

^{144.} See Hamann, supra note 136, at 1047.

^{145.} Endangered Species Act Amendments of 1978, Pub. L. No. 95-632, 92 Stat. 3751 (1978).

^{146.} EUGENE H. BUCK ET. AL., CONG. RSCH. SERV., 7-5700, THE ENDANGERED SPECIES ACT (ESA) IN THE 112TH CONGRESS: CONFLICTING VALUES AND DIFFICULT CHOICES 13–14 (2012).

^{147.} See id. at 14 ("FWS initially issued a no-jeopardy BiOp with regard to impacts on delta smelt by the operations of the CVP and SWP in 2004, and re-issued the BiOp in 2005 to address potential critical habitat issues of the delta smelt.").

^{148.} See id. ("In May 2007, the FWS BiOp was found not to comply with ESA with regard to delta smelt."); see also Nat. Res. Def. Council v. Kempthorne, 506 F. Supp. 2d 322, 387 (E.D. Cal. 2007) ("The disputed BiOp depends in material measure for its no jeopardy finding on the DSRAM, which is legally insufficient. The agency's recognition the Delta smelt is increasingly in jeopardy; that its operative BiOp is inadequate, as evidenced by its second initiation of reconsultation for the 2004 OCAP, now pending, and its insistence that it will nonetheless operate the Projects under the challenged BiOp is unreasonable. The agency could have, but did not, offer a viable protective alternative. Adaptive management is within the agency's discretion to choose and employ, however, the absence of any definite, certain, or enforceable criteria or standards make its use arbitrary and capricious under the totality of the circumstances."). In other words, Judge Wanger held that the BiOp did not reasonably consider the significant risks posed by increased pumping activity. He sent the BiOp to be revised to better account for these concerns, and to implement further measures to protect Delta Smelt.

2008.¹⁴⁹ Additionally, the revised BiOp imposed a "reasonable and prudent alternative' (RPA), which included numerous changes to the projects' operations that, if implemented, would reduce water deliveries to projects contractors by thousands of acre-feet per year."150 "The BiOps and resultant pumping restrictions garnered national media attention and sparked widespread controversy in California, where nearly 300,000 farmland acres went dry, agricultural unemployment soared, and residents posted signs throughout the Central Valley declaring that 'Congress created [the] Dust Bowl."151 Consequently, "numerous public water agencies, districts, and other projects water contractors, as well as the state of California (through the Department of Water Resources), sued FWS and the U.S. Bureau of Reclamation alleging violations of the ESA, the Administrative Procedure Act (APA), and the National Environmental Policy Act (NEPA)." These groups sought a preliminary injunction against the BiOp's pumping restrictions. 152

The plaintiffs "advanced a human welfare exception and contend[ed] that unlike any of the prior cases, this case juxtapose[d] species' survival with human welfare, requiring a balancing of the BiOp's threat of harm to humans, health, safety, and protection of affected communities."¹⁵³ Essentially, plaintiffs argued that the devastation wrought on drought-stricken communities over the three years of reduced water flow ought to be balanced against the welfare of the Delta Smelt.

Much like the *Hawksbill* Court, the court first turned its attention to *Winter*. The court found that, although the *Winter* decision "altered the Ninth Circuit's general preliminary injunctive relief standard by making that standard *more rigorous, Winter* did not address, nor change, the approach to the balancing of *economic* hardships where endangered species and their critical habitat are jeopardized"¹⁵⁴ (emphasis original). The court also found that *Winter* "does not modify or discuss the *TVA v. Hill* standard."¹⁵⁵ Despite this analysis,

^{149.} *See* Brown, *supra* note 142, at 11–12 ("Judge Wanger directed FWS to revise the BiOp, and in the interim, required reductions in Delta water exports during January through June when the pumping most adversely affected the smelt. As a result, water contractors were told to expect only 35 percent of their 2008 water allocations.").

^{150.} Id.

^{151.} Hamann, supra note 136, at 1048.

^{152.} See generally Consol. Delta Smelt Cases, 717 F. Supp. 2d 1021 (E.D. Cal. 2010).

^{153.} Id. at 1068.

^{154.} Id.

^{155.} Id.

the court did not conclude that the equities could not be balanced in this case. Rather, drawing from *Winter*, the court found this situation presented a novel legal question. Here, the question presented to the court was not whether the economic costs of enjoining the water projects outweighed harm to the Delta smelt. Instead, the issue was whether the harm to the delta smelt could be balanced against "harm . . . to humans and their environment." Thus, much like the *Hawksbill* court, the court framed its choice as between protecting human welfare or protecting a threatened species.

Unlike the *Hawksbill* case, however, the court here did not distinguish *Hill* on multiple legal grounds. Instead, the court focused the analysis on one issue: whether human welfare was at stake.¹⁵⁸ On this issue, the court found that "Congress has not nor does *TVA v. Hill* elevate species protection over the health and safety of humans." Both the ESA and NEPA assert that the protection of endangered species' have immense value *for* the United States and its people. In other words, both statutes may fixate on the welfare of animals, but those species are valuable insofar as they are valuable to humans. To put animal welfare above human welfare would reverse the proper relationship. On this theory, balancing the equities is necessary to ensure that endangered species' rights do not harm those protecting them.

Given the dire situation for Californians after the water flow restrictions, ¹⁶¹ there were strong reasons for finding that issuing the

^{156.} *Id.* ("No case, including *TVA v. Hill*, which concerned the competing economic interest in the operation of a hydro-electric project and prohibited federal courts from balancing the loss of funds spent on that project against the loss of an endangered species, expressly addresses whether the ESA precludes balancing of harms to humans and the human environment under the circumstances presented here.").

^{157.} Id. at 1068-69.

^{158.} Id.

^{159.} Id.

^{160.} See, e.g., 16 U.S.C. § 1531(a)(3) ("[Endangered species] are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people."); 42 U.S.C. § 4321 (declaring a policy to "encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; [and] to enrich the understanding of the ecological systems and natural resources important to the Nation.").

^{161.} There was, however, considerable debate as to how much impact these restrictions had as opposed to other climatic factors. *Compare* Ian Fein, *Reassessing the Role of the National Research Council: Peer Review, Political Tool, or Science Court?*, 99 CAL. L. REV. 465, 510 (2011) ("an ongoing drought played a larger role in the agricultural water cutbacks than did the BiOps: the state's top water regulator said ESA restrictions accounted for only 25 percent of the reduced Delta exports, while an independent report put the number as low as 15 percent.") *with* Diane Feinstein, *Why Feinstein Seeks Review of Delta Findings*, S.F. Chron. (Sept. 25, 2009),

injunction would cause less hardship than refusing it. Indeed, there was "evidence of harm to the human environment in the form of social dislocation, unemployment, and other threats to human welfare." ¹⁶² On these facts, the court found that the balance of hardships tipped decidedly in plaintiff's favor. Much like *Hawksbill*, once the court found that it *could* balance the equities as an exception to *Hill*, there was little discussion over whether it *should* favor the endangered species. Here, the injunction was granted, and the BiOp was sent back again for further revision. ¹⁶³ Thus, both cases demonstrate that when human welfare is pitted against the welfare of an endangered species, courts will rationalize carving out an exception to the blanket proscription of *Hill*.

IV. TAKING HILL SERIOUSLY: PROBLEMS WITH A HUMAN WELFARE EXCEPTION

The results in *Hawksbill* and *Consolidated Delta Smelt* are the two most significant instances of courts finding a human welfare exception to *Hill*. The courts in both cases determined that even *Hill*'s water-tight rule¹⁶⁴ could not apply to cases where human welfare was at stake. The reluctance of the courts to mechanistically apply *Hill*, and to refuse to balance the equities, is understandable. In the *Hawksbill* case, refusing to balance the equities may well have led to

https://www.sfgate.com/green/article/Why-Feinstein-seeks-review-of-delta-findings-3285683.php [https://perma.cc/3FDL-MD2T] (seeking an independent review of the BiOp's findings, and detailing a harrowing situation in the Bay Delta area where "[p]eople who once tended "America's breadbasket" now stand in bread lines. The unemployment rate is 40 percent in some Valley towns. I understand why these communities want more water and oppose restrictions they consider unfair.")

162. Consol. Delta Smelt Cases, 717 F. Supp. 2d 1021, 1070 (E.D. Cal. 2010).

163. Since the Consolidated Delta Smelt decision, the Bay Delta has been bound up in interminable litigation. Most recently, in December of 2019, the Trump Administration through the FWS weakened water restrictions, in an attempt to divert resources to California agricultural projects. See Coral Davenport, Trump Administration Moves to Lift Protections for Fish and Divert Water Farms. N.Y. TIMES (Oct. 22. 2019). https://www.nytimes.com/2019/10/22/climate/trump-delta-smelt.html [https://perma.cc/NC33-8H8]. Meanwhile, studies in the Bay Delta show that the Delta Smelt population is declining rapidly. See Dan Bacher, Estuary in Collapse, ZERO Delta Smelt and Sacramento Splittail Reported in November CDFW Survey, RED GREEN AND BLUE (Dec. 17, 2020), http://redgreenandblue.org/2020/12/17/estuary-collapse-zero-delta-smelt-sacramentosplittail-reported-november-cdfw-survey/ [https://perma.cc/T7Y5-6FBQ].

164. See Tenn. Valley Auth. v. Hill, 437 U.S. 153, 187–88 (1978) ("Quite obviously, it would be difficult for a court to balance the loss of a sum certain—even \$100 million—against a congressionally declared "incalculable" value, even assuming we had the power to engage in such a weighing process, which we *emphatically do not.*") (emphasis added).

the displacement of hundreds of citizens suffering in the wake of a destructive storm. In the *Consolidated Delta Smelt* case, the court was responding to severe agricultural collapse due to drought conditions around the Bay Delta. One reaction to these results is to assert that the role of courts is to make precisely these decisions, where the black letter of the law does not meet the needs of the moment. In the *Hill* Court, however, still held that the ESA left no place for courts to engage in this balancing process. It decided that Congress intended the ESA to assign an "incalculable value" to the conservation of endangered species. These district courts, in refusing to follow this rule, have created a nebulous exception outside of their competency and have threatened the framework of the statute.

A. Human Welfare Is Too Broad

The notion of a human welfare exception is far too expansive to provide a workable rule for district courts to apply. The evidence for this proposition is demonstrated by the differences between the *Hawksbill* and *Consolidated Smelt* cases. In *Hawksbill*, the situation for the court was clear. The temporary housing facility at Estate Nazareth may have been in direct conflict with critical habitat of the Tree Boa and Hawksbill Sea Turtle,¹⁶⁹ but if harms could not be balanced, the residents would be forced into a dangerous situation and deprived of a basic human need. Thus, the court was faced with a situation where an injunction had a direct and foreseeable consequence for human safety.

^{165.} See supra text accompanying notes 118–123.

^{166.} See Winter v. Nat. Res. Def. Council, Inc., 555 U.S. 7, 24 (2008) ("A preliminary injunction is an extraordinary remedy never awarded as of right. In each case, courts 'must balance the competing claims of injury and must consider the effect on each party of the granting or withholding of the requested relief. In exercising their sound discretion, courts of equity should pay particular regard for the public consequences in employing the extraordinary remedy of injunction.") (cleaned up) (citations omitted); but see Jared A. Goldstein, Equitable Balancing in the Age of Statutes, 96 VA. L. REV. 486, 489 (2010) ("The courts that first developed equitable balancing presented it as an ancient practice, thereby justifying an expansion of judicial discretion to protect judicially favored policy interests, which in that era included a preference for industrial interests over the interests of small property owners. History is repeating itself because, in expanding the application of equitable balancing from the common law context in which it developed to the contexts of federal statutes, the Supreme Court has once again justified an expansion of judicial discretion by making the false claim that equitable balancing is an ancient judicial practice.").

^{167.} See supra note 153.

^{168.} Id.

^{169.} See supra text accompanying notes 119-121.

However, where the court's ruling in *Hawksbill* had a clear impact on human safety, the Consolidated Delta Smelt cases lacked anything like that. The plaintiffs there argued not that they would be deprived of basic necessities, but rather that their communities would be devastated by drought conditions.¹⁷⁰ Governor Schwarzenegger did, however, find that "conditions of extreme peril to the safety of persons and property exist in California caused by the current and continuing severe drought conditions and water delivery restrictions."171 Even within that statement, there was no imminent threat to human health or safety in the same league as the threat in *Hawksbill.* The Governor, and later the court, was discussing harms like rampant unemployment, hunger from economic disruption, and social despair.¹⁷² While it would be irrational to argue these concerns are not vital, or that human welfare is not implicated to some degree, these harms are far more attenuated than those discussed in Hawksbill. Thus, in Consolidated Delta Smelt, the court was quick to apply a human welfare exception where it was unclear whether lives were in any direct danger.

The flexibility in what exactly constitutes "human welfare," and just how far that concept can be stretched is both the upside of judicial discretion and a major threat to the ESA. On the one hand, broad yet attenuated human concerns can fulfill the human welfare exception to *Hill* in situations where it is clear that significant harm to humans may result indirectly from actions taken under the ESA. On the other hand, if that discretion continues unabated, judges may decide that economic disasters are enough to implicate human welfare in some nebulous way. In *Consolidated Delta Smelt*, for instance, hunger may seem like a harm to human health and safety, but in reality, it is the result of unemployment in the area caused by decreased water

^{170.} See First Amended Complaint for Declaratory and Injunctive Relief at \P 2, Consol. Delta Smelt Cases, 717 F. Supp. 2d, 1021 (E.D. Cal. 2010) (No. 109CV00407), 2009 WL 4086486.

^{171.} Press Release, Governor Arnold Schwarzenegger, Schwarzenegger Issues Drought Proclamation (Feb. 27, 2009), https://newportbeachca.gov/Home/ShowDocument?id=1175 [https://perma.cc/A6TF-U43J].

^{172.} See Consol. Delta Smelt Cases, 717 F. Supp. 2d 1021, 1055–56 (E.D. Cal. 2010) ("Unemployment has led to hunger on the west side of the San Joaquin Valley ... The Community Food Bank, serving Fresno, Madera and Kings Counties, estimates 435,000 people in its service area do not have a reliable source of food. The Chief Executive Officer of the Community Food Bank, Dana Wilkie, believes that hunger in the communities served by the Food Bank in the western San Joaquin Valley will continue to increase in 2010 because of ongoing water shortages.") (citations omitted).

reserves.¹⁷³ The reduced water flows did not directly cause hunger. Californians never complained that the lack of water made supermarkets run empty. No one died from thirst because the tap ran dry. Rather, economic harms made available resources difficult to afford. If this reasoning looks suspiciously like an analysis of economic harms from reduced water flows, then the *Consolidated Delta Smelt* court's human welfare exception has swallowed the *Hill* rule whole.

Moreover, the above chain of logic was the exact reasoning the *Hill* Court rejected and wanted to guard against. In *Hill*, the Court enjoined the completion of a dam that Congress had already spent \$100 million on over the course of years.¹⁷⁴ The plaintiffs in *Hill* argued that the Tellico Dam would "impro[ve] the quality of life in an area now characterized by unemployment, low incomes, and the outmigration of young people."¹⁷⁵ Those harms seem similar, if not identical to those described in the *Consolidated Delta Smelt* cases. If the Court had followed the *Consolidated Delta Smelt* cases, it may have concluded that those human harms were too great to not balance against the harm to the snail darter. It was however, the dissent that took this track. Judge Powell argued,

[u]nder the Court's reasoning, the Act covers every existing federal installation, including great hydroelectric projects and reservoirs, every river and harbor project, and every national defense installation—however essential to the Nation's economic health and safety... The only precondition, according to respondents, to thus destroying the usefulness of even the most important federal project in our country would be a finding by the Secretary of the Interior that a continuation of the project would threaten the survival or critical habitat of a newly discovered species of water spider or amoeba. 176

The majority, though, found that Congress, in its third attempt at endangered species' conservation, had sought to remove equitable discretion from courts.¹⁷⁷ Allowing courts to decide on their own that *Hill* does not apply in cases where human welfare is at stake is not a narrow ruling for extraordinary situations. Every case pits an

^{173.} See Id. Food insecurity is a concern that is explored both in the Governor's proclamation, and in Judge Wanger's opinion. That worry, however, is only connected to harms that flow from community devastation owing to the economic consequences of reduced water flows.

^{174.} See Tenn. Valley Auth. v. Hill, 437 U.S. 153, 187-88 (1978).

^{175.} See Reply Brief for Petitioner, Tenn. Valley Auth. v. Hill, 437 U.S. 153 (1978) (No. 76-1701), 1978 WL 206591, at 6 (quoting TVA's comments on a Government Accountability Office report on the Tellico Dam).

^{176.} Hill, 437 U.S. at 203-04 (Powell, J., dissenting).

^{177.} See Hill, 437 U.S. at 187-88.

endangered species against human welfare in some way. Thus, when courts carve out an exception they erode the foundation of the rule.

B. Courts Are Not Competent to Determine When Human Welfare Must Trump Animal Rights

Even though the above argument claims that human welfare is too broad to give courts a workable standard, there is an obvious point where *Hill* can no longer stand. For instance, if wildfire victims fleeing a blaze wound up in the territory of an endangered bird,¹⁷⁸ a court could not reasonably banish such victims to wander the flames. To take the hypothetical further, imagine a situation where a court is asked to allow a *certainty* of human death to protect endangered animals. Clearly, *Hill* is not fit to deal with such circumstances. The problem, however, is that courts are not competent to decide when the evidence merits finding that the risk to human lives is too large and an exception must be made. Thus, instead of choosing the proper situations for preserving human life against endangered species, courts are effectively asked to exercise discretion far beyond their expertise.¹⁷⁹

In an ordinary ESA controversy, an enormous amount of scientific and biological literacy is involved.¹⁸⁰ Scientific reports, terminology,

178. A similar situation actually played out in California during one of many recent wildfires. Although this author could not find any litigation attempting to enjoin wildfire victims from relocation due to ESA issues, concerns have been raised about human encroachment on critical habitat due to the devastating impact of the fires. See Sam Harnett, California's Wildlife Can Handle Fires – Human Encroachment Is the Problem, KQED (Aug. 28, 2020), https://www.kqed.org/news/11835504/californias-wildlife-can-handle-fires-human-encroachment-is-the-problem [https://perma.cc/2MG6-XUUU].

179. Although judges are not often asked to balance human welfare against some other intangible value, there are narrow areas of the law where something like this balancing does happen. For instance, although far afield of environmental law, the United States Criminal Code allows for sentence modification under certain conditions, including a finding that the person incarcerated will not pose "danger to the safety of any other person or the community." 18 U.S.C. § 3582(c). In essence, the statute gives judges the authority to balance the safety of the community against the prospective value of a sentence reduction for one who merits it. Strangely enough then, the judge is put into a similar situation as considered here, where she must weigh the welfare of the community on one hand, against the incommensurate value of individual mercy on the other. Whether courts are competent to make such a finding is beyond the scope of the argument here, but this author asserts that comparing values between two sets of human beings (the incarcerated versus the community) is a far more commensurable task than balancing between the value of the project of animal preservation and human welfare.

180. See CONG. RSCH. SERV., 7-5700, THE ENDANGERED SPECIES ACT AND "SOUND SCIENCE" 12 (2013) ("The complexity, uncertainty, and risk associated with many ESA issues, and the predictive nature of science with its emphasis on the probability of various outcomes rather

and models are thrown at trial judges, who are asked to distill conflicting evidence into a cogent holding based on science. This herculean task, moreover, falls to judges who are rarely if ever schooled at the level of a graduate scientist. Allowing courts to not only determine whether a species is at risk, but also assess whether harms may come to human beings stretches their abilities. In fact, the *Hill* Court made this exact argument:

Here we are urged to view the Endangered Species Act "reasonably," and hence shape a remedy "that accords with some modicum of common sense and the public weal." But is that our function? We have no expert knowledge on the subject of endangered species, much less do we have a mandate from the people to strike a balance of equities on the side of the Tellico Dam. Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities, thereby adopting a policy which it described as "institutionalized caution." ¹⁸¹

Put another way, the Court recognized that balancing wide-ranging harms to humans against possible harms to endangered species required knowledge courts do not have. Thus, letting courts create a human welfare exception risks turning courts into a policy-making body operating far beyond the limits of their competency.

The above argument is not to suggest that courts are never able to competently decide cases in the ESA context. Rather, the problem is specific to a possible human welfare exception, when a court seeks to balance the risk to humans against the risk to animals. In the typical ESA case, a court must determine whether some other discrete standard of the ESA is met.¹⁸² Even those ordinary ESA cases can be stupefying. The difference here though, is that the district courts in those cases have at least some statutory bases with which to anchor their reasoning. A court may have to parse mountainous scientific data, but it still only has to determine whether the proximate cause of

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than on absolute certainty, can make the interaction of scientists and decision-makers frustrating for both.").

^{181.} Tenn. Valley Auth. v. Hill, 437 U.S. 153, 194 (1978) (citations omitted).

^{182.} See, e.g., Hoopa Valley Tribe v. Nat'l Marine Fisheries Serv., 230 F. Supp. 3d 1106 (N.D. Cal. 2017) (discussing whether the NMFS failed to satisfy Section 7's consultation requirement); Am. Rivers v. U.S. Army Corps of Eng'rs, 271 F. Supp. 2d 230, 236 (D.D.C. 2003) (court tasked with preservation of pallid sturgeon against Army Corps of Engineers ("USACE") projects on the Missouri River. The Court had to decide whether the USACE complied with the determinations of a BiOp); Humane Soc'y of U.S. v. Kienzle, No. 16-CV-0724, 2017 WL 5151305 (D.N.M. Nov. 2, 2017) (determining whether a state licensing program allowing cougar trapping could constitute a take of an endangered wolf population, if the program was the proximate cause of harm to the wolves).

harm to a species was actor A or B. 183 That situation, however, is much different from determining the possible effects of an injunction on human health in the future. In such a situation, a court not only determines whether human welfare is in grave danger, but also how that risk can be balanced against harm to the endangered species. If a court concludes that there is a 1% chance one person may be harmed by issuing an injunction, does that meet the requirements for the exception to *Hill?* And if so, how should the court address animals that would come to certain harm? In *Hawksbill* and *Consolidated Delta Smelt*, the courts did not spend much time on the latter question. Once they found that they could strike a balance, it was struck on the side of humans. Thus, even if courts could make a scientific determination on whether human welfare is at stake, they still have no framework to balance that risk against possible or certain harm to endangered species.

V. A PROPOSAL FOR REFORM

Given the difficulty courts face when pleas for human welfare compete with the health of an endangered species, it is necessary to create statutory tools to compensate. The concern is increasingly pressing, as climate change has and will continue to lead to further human and animal migration, placing the courts in more of these situations. On top of that, climate change is simply increasing the number of species that become endangered, potentially compounding the problem. If courts are left on their own, the increased conflicts

^{183.} *See, e.g.*, Aransas Project v. Shaw, 775 F.3d 641, 656-57 (5th Cir. 2014) (applying a reasonable foreseeability analysis to determine if a logging company was the proximate cause of the death of whooping cranes); Cascadia Wildlands v. Kitzhaber, 911 F. Supp. 2d 1075, 1082 (D. Or. 2012) (using a similar test to determine proximate causation of a potential take of marbled murrelets).

^{184.} See supra, notes 24-29 (discussing how the effects of climate change lead to significant human and animal conflict over increasingly scarce land resources).

^{185.} See, e.g., Aimee Delach, Endangered Species Are Overwhelmingly Threatened by Climate Change, DEFS. OF WILDLIFE (Nov. 25, 2019), https://defenders.org/blog/2019/11/endangered-species-are-overwhelmingly-threatened-climate-change [https://perma.cc/NA4D-7CRU] (listing several species adversely impacted by the effect of climate change on critical habitat); Species and Climate Change, INT'L UNION FOR CONSERVATION OF NATURE, https://www.iucn.org/resources/issues-briefs/species-and-climate-change [https://perma.cc/K8MU-WJBP] (last visited Nov. 24, 2021) ("Species are already being impacted by anthropogenic climate change, and its rapid onset is limiting the ability of many species to adapt to their environments. Climate change currently affects at least 10,967 species

will corrode the ESA. That is not the result Congress intended when passing the most comprehensive wildlife conservation effort in U.S. history. In order to preserve the ESA and mitigate real threats to human welfare, then, the statute must provide a means to balance these competing concerns. The following discussion points to the exemption process of the ESA as a key framework for solving this tough puzzle.

A. Targeted Expansion of The Statutory Exemptions

A potential solution for this balancing problem is to expand the extant exemption process under ESA Section 7.187 Currently, the exemption process is rarely used, often due to the prohibitive costs of application and the usual ease of re-siting projects. 188 Those concerns, however, are not typical features of those contexts where grave human welfare concerns are pitted against protection of endangered species. In both Hawksbill and Consolidated Delta Smelt, for instance, the costs of the project far outstripped those of the application process and the project could not be feasibly re-sited without potential human harm.¹⁸⁹ These circumstances, moreover, were not merely common to these two cases. These conflicts between human welfare and the endangered species were due to the lack of other siting. Additionally, such conflicts are far more likely to be implicated in public works projects than in private development.¹⁹⁰ Private entities do not often conduct projects for the sole purpose of ensuring human health or safety. Thus, the exemption process will cover most

addition to increased rates of disease and degraded habitats, climate change is also causing changes in species themselves, which threaten their survival.").

A Federal agency, the Governor of the State in which an agency action will occur, if any, or a permit or license applicant may apply to the Secretary for an exemption for an agency action of such agency if, after consultation under subsection (a)(2), the Secretary's opinion under subsection (b) indicates that the agency action would violate subsection (a)(2). An application for an exemption shall be considered initially by the Secretary in the manner provided for in this subsection, and shall be considered by the Committee for a final determination under subsection (h) after a report is made pursuant to paragraph (5). The applicant for an exemption shall be referred to as the "exemption applicant" in this section.

^{186.} See supra, Pt. II.B.

^{187. 16} U.S.C. § 1536(g)(1) provides:

^{188.} See supra, Pt. I.D.

^{189.} See supra, Pt. III.A, B.

^{190.} It is important that most of these situations occur in the government context, as the exemption process "is limited to three eligible entities: the federal agency proposing the action, the governor of the state in which the action is proposed, or the permit or license applicant (if any) related to that agency action." Corn, *supra* note 94, at 5.

human welfare situations, and with some tweaks, will not pose the same challenges in this context as in the typical exemption situation.

Given these circumstances, then, why was the exemption process not even considered in the *Hawksbill* or *Consolidated Delta Smelt* cases? The answer lies in the timeline for exemption. According to § 1536(g), the Secretary first has up to ten days to determine whether an application has all the required information.¹⁹¹ The Secretary then has twenty days to make a threshold determination as to whether the applicant has fulfilled all prior requirements.¹⁹² After that, the Secretary has 140 days to prepare a report to be sent to the Endangered Species Committee.¹⁹³ That committee then has thirty days to give its determination.¹⁹⁴ In a situation where parties are asking the court to make a quick judgment on injunctive relief, a timeline of up to 200 days is unacceptable. Thus, the length of the exemption process makes it an unappealing track for relief.¹⁹⁵

The current length of the process, however, does not mean that it is beyond repair. The exemption process could and should be modified to ease the threshold barriers when the case is presumed to contain a human welfare conflict. For instance, the thirty-day threshold review under 1536 (g)(b) could be modified to include a human welfare review. If the Secretary decides that there is a concern, they could then bring the issue straight to committee. That streamlined structure should allow such cases to be heard before the "God Squad" within a shorter timeline. Now, lines will need to be drawn here, but the anchoring principle should be that the process may only be used upon a threshold determination that human welfare is directly at risk. Put another way, the dangers should more approximate the facts in Hawksbill rather than Consolidated Delta Smelt. In the former case, denying the action would, with no intervening economic cause, lead to severe harm to people, whereas in the latter case the harm results only after intervening economic consequences.¹⁹⁶ Thus, instead of

^{191. 50} C.F.R. § 451.02(f)(2) (2020).

^{192. 16} U.S.C. § 1536(g)(3)(B).

^{193. 16} U.S.C. § 1536(g)(5).

^{194. 50} C.F.R. § 453.03(a) (2020).

^{195.} Modernizing the Endangered Species Act, Senate Republican Pol'y Comm. (Jul. 17, 2018), https://www.rpc.senate.gov/policy-papers/modernizing-the-endangered-species-act [https://perma.cc/8XDJ-L4HW] ("Exemptions are rarely sought or granted because the process can take more than six months and the applicant must pay for any activities to mitigate the effect of the exemption.").

^{196.} The line proposed here is meant to approximate the logic of the *Hill* decision. As stated, the Supreme Court there refused to balance economic harms under any circumstances. Thus, the proposition here is meant to obviate the exemption process where it is determined that

going through the intensive injunction process, experts would provide a detailed opinion on the matter. If the parties still chose to seek judicial recourse, a court would not feel the same pressure to balance the equities; they would already have been balanced.

The upshot of such an approach is that it would give the experts the ability to balance risks to human welfare with those that effect the endangered species. Rather than depending on courts to make snap decisions based on complex evidence outside of their bailiwick, the process allows for reasoned decision making by those on the forefront of conservation policy.¹⁹⁷ Moreover, allowing expert and agency decision-making on this point will lead to greater achievement ESA's goals in these situations. The top decision makers on the God Squad are the heads of several environmental agencies, including the EPA, and have a better feel and perhaps a greater respect for national conservation policy. It may not always be obvious where the line between a valid human welfare concern and pure economic fallout is. That line, however, must be drawn somewhere, and the head executive agents at the preeminent environmental agencies are the most competent to do so.. Thus, some tweaks to the exemption process could provide for a faster and better parallel process when human welfare is implicated.198

A modified exemption process, moreover, need not look much different than the current section 1539(a)(2). Under the extant process,

[i]f the Secretary finds, after opportunity for public comment, with respect to a permit application and the related conservation plan that—(i) the taking will be incidental; (ii) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking; (iii) the applicant will ensure that adequate funding for the plan will be

harm to human beings would only come after a series of commercial consequences, which would flout the spirit of $\it Hill.$

197. See Rosiers, supra note 87, at 852–54 ("The Committee consists of seven members; namely the Secretary of Agriculture, the Secretary of the Army, the Chairman of the Council of Economic Advisors, the Administrator of the Environmental Protection Agency, the Secretary of the Interior, the Administrator of the National Oceanic and Atmospheric Administration, and one other member from the affected state, to be appointed by the President. The Secretary of the Interior serves as the Chair").

198. In fact, the ESA's implementing regulations have a similar expediency process built into the consultation requirement under Section 7. See 50 C.F.R. § 402.5(a) (2020) ("Where emergency circumstances mandate the need to consult in an expedited manner, consultation may be conducted informally through alternative procedures that the Director determines to be consistent with the requirements of sections 7(a)-(d) of the Act. This provision applies to situations involving acts of God, disasters, casualties, national defense or security emergencies, etc.").

provided; (iv) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and (v) the measures, if any, required under subparagraph (A)(iv) will be met; and he has received such other assurances as he may require that the plan will be implemented, the Secretary shall issue the permit.¹⁹⁹

In other words, permits are granted when harm to the species can be mitigated through further action, and the agency commits to such action. Tweaking this section involves little more than allowing for the Secretary and Committee to make a threshold decision prior to public comment. That would further cut down on potential wait-time.²⁰⁰ In situations where the Committee finds that human welfare is at severe risk, extensive countermeasures could be required in order to receive a permit. For instance, if FEMA needed to develop critical sea-turtle habitat for temporary housing,²⁰¹ the Secretary could permit an exemption if FEMA agreed to extensive recuperation efforts, such as those provided in FWS Recovery Programs or in Section 4(d) of the ESA.²⁰² Thus, a streamlined exemption process with minor changes could help navigate this thorny area.

199. 16 U.S.C. § 1539(a)(2)(B). For clarity, subparagraph (A)(iv) reads: "No permit may be issued by the Secretary authorizing any taking referred to in paragraph (1)(B) unless the applicant therefor submits to the Secretary a conservation plan that specifies ... such other measures that the Secretary may require as being necessary or appropriate for purposes of the plan." 16 U.S.C. § 1539(A)(iv). In other words, the permit must comply with any additional requirements that the Secretary finds necessary to bolster conservation efforts.

200. See supra, text accompanying notes 187–190.

201. See discussion of Hawksbill Sea Turtle supra text accompanying notes 118-122.

202. See U.S. FISH AND WILDLIFE SERV., ENDANGERED SPECIES RECOVERY PROGRAM 2 (2011) https://www.fws.gov/endangered/esa-library/pdf/recovery.pdf [https://perma.cc/RHE5-3MX5] ("FWS programs are leading recovery efforts for species. For example, many of our national fish hatcheries are raising endangered or threatened species such as Higgins' eye pearly mussels at the Genoa National Fish Hatchery in Wisconsin. Many national wildlife refuges such as Florida's Hobe Sound were established to protect listed species such as green sea turtles and loggerhead turtles but also benefit a range of bird and plant species. . . . Since 1969, 99 percent of listed species have been prevented from going extinct through the efforts of the FWS Recovery program and our many partners."). See also 16 U.S.C. § 1534(a), which provides:

The Secretary, and the Secretary of Agriculture with respect to the National Forest System, shall establish and implement a program to conserve fish, wildlife, and plants, including those which are listed as endangered species or threatened species pursuant to section 1533 of this title. To carry out such a program, the appropriate Secretary-

(1) shall utilize the land acquisition and other authority under the Fish and Wildlife Act of 1956, as amended, the Fish and Wildlife Coordination Act, as amended, and the Migratory Bird Conservation Act, as appropriate; and

(2) is authorized to acquire by purchase, donation, or otherwise, lands, waters, or interest therein, and such authority shall be in addition to any other land acquisition authority vested in him.

The extensive conservation efforts alluded to above may be costly, both for federal agencies and landowners in the area.²⁰³ The counterpoint, however, is that human lives are at stake in these circumstances. A strict exemption process hence turns the logic of the human welfare exemption on itself. If the project is so important that harm to an endangered species must be allowed, then spending some massive amount to mitigate harm should not be an obstacle. After all, how can economic harm be measured against human health and safety? In the extreme case, the Secretary could require animals to be held safely captive, then reintroduced into the environment when possible.²⁰⁴ Now, there may be some circumstances where the mitigation of harm to the species is prohibitively expensive compared to a relatively low risk of human harm. There, the difficult conflict rears its head once again. At least in those cases, though, experts would decide whether these risks to human welfare outweigh the endangered species, and how such risks might be mitigated. Thus, altering the exemption process would offer a more science-oriented approach, and would be more faithful to the goals of the ESA than allowing judges to carve out nebulous exemptions.

To give an example of how this process might work, consider the wildfire example discussed above.²⁰⁵ Because of devastating fires, people are displaced and must find new accommodations. In response, FEMA decides to create temporary housing facilities for displaced residents on critical habitat. Before it can do so, however, it must fulfill the consultation requirements under Section 7.²⁰⁶ In fulfillment of those requirements, FEMA is required to consult with

^{203.} See Frank Casey et al., The Cost of a Comprehensive National Wildlife Habitat Conservation System 8-9 (2008) ("For the three particular protection strategies, our estimates indicate that the least-cost alterative for protecting 12% of the continental US over the next 30 years is through land rental. For the Adjusted Scenario, land rental over a 30-year period would cost about \$218.5 billion (at today's prices) compared to the \$332.2 billion for 9 permanent easements (including up-front transactions costs). Fee-simple purchases, including annual management costs, would cost about \$927.1 billion over thirty years. However, if private landowners were paid to manage for wildlife habitat values, the 30-year cost would be about \$135 billion"). This proposal is just one analysis of comprehensive conservation reform, but provides estimates for three main strategies of land use.

^{204.} See generally Alison L. Greggor et al., Animal Welfare in Conservation Breeding: Applications and Challenges, Frontiers in Veterinary Sci., Dec. 2018, at 1 (discussing generally the process of captive breeding and animal reintroduction. Essentially, in situations where endangered species' populations are so diminished, conservation facilities can breed survivors in order to bolster the population until the habitat is healthy enough for reintroduction. The paper cited explains this process, its benefits, and some critiques).

^{205.} See Harnett, supra note 178.

^{206.} See 16 U.S.C. § 1531(b).

the USFWS leading to the issuance of a BiOP on the proposed Assuming that critical habitat is harmed from the facilities.²⁰⁷ development, the BiOP might recommend RPAs based on context, but here those alternatives would be either nonexistent due to urgency or unavailable due to the location of the problem. FEMA could move forward with their plan despite harm to the critical habitat, but it would invite an injunction. With an expedited human welfare process, however, FEMA could petition the Secretary for a threshold review of the situation. If the Secretary and Committee then found human welfare directly at stake, they could then decide to grant a spot exemption. In exchange, FEMA would agree to abide by whatever further conservation efforts the God Squad might deem necessary. Thus, the expedited exemption process would allow for the acting party to preserve human welfare, avoid litigation, and still conserve endangered species.

Finally, the example above also demonstrates why it is unlikely that an expedited exception procedure could threaten to overwhelm the Committee or erode the ESA. The concern would be that the human welfare exception might be stretched too broad by actors attempting to abuse it. That concern, however, would be allayed by the fact that the exemption process already requires applicants to make expansive efforts to protect endangered species.²⁰⁸ In order for an application to even be considered, all of the consultation requirements under Section 7 must be fulfilled.²⁰⁹ The exemption process is simply not a cost effective way to avoid ESA requirements.²¹⁰ Therefore, it is unlikely that a more expansive procedure, which gives special consideration to human welfare concerns, would be a source of abuse from parties seeking to skirt ESA obligations.

 $^{207.\ \}textit{See}\ 50\ \text{C.F.R.}\ \$\ 402.1\ (2020)$ (describing the scope and general procedures of the consultation requirement).

^{208.} Rosiers, *supra* note 87, at 858 ("Before an exemption will be granted, the applicant must first follow all of the requirements of the ESA, including consultation and biological assessment. By forcing any federal agency, or other applicant, to go through these procedures and to not spend much money on the project, the overall purpose of the ESA is met. When forced to look for ways to avoid any conflict between the proposed project and the endangered or threatened species and its habitat, federal agencies nearly always have found an alternative plan. Because it is so burdensome, the exemption process works; it maintains the ESA's purpose of species preservation").

^{209.} Id.

^{210.} The best evidence for this proposition is that the current exemption process has only been invoked six times. *See* Yunkis, *supra* note 86, at 578.

VI. CONCLUSION

Climate change is rapidly morphing the world, and will increasingly pit human beings against endangered species in the future. Even though the ESA represents the United States' greatest effort at safeguarding the existence of species, it is not well-equipped to deal with these life-or-death situations. The precedent in Hill does not bring clarity either. Its broad proscription against balancing the equities puts courts into untenable situations, where they may be forced to reject the value of human life in favor of endangered species. As we have seen, courts will refuse to comply. Instead, they are liable to carve out broad exemptions, yet are not competent to make these sorts of decisions. If the situation continues unabated, both Hill and the ESA will be eroded until there is little left. Congress' goal of protecting endangered species will be swallowed by citizens' passing needs. Therefore, Congress must provide a framework to decide these cases, or else risk the substantial progress in species preservation made since 1973.