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Critical Habitat Designations After New Mexico Cattle Growers: An Analysis of Agency Discretion to Exclude Critical Habitat

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NOTES

CRITICAL HABITAT DESIGNATIONS AFTER NEW MEXICO CATTLE GROWERS: AN ANALYSIS OF AGENCY DISCRETION TO EXCLUDE CRITICAL HABITAT

Jared B. Fish*

I. Introduction

Congress passed the Endangered Species Act (ESA) in 1973 noting that "the preservation of a species' habitat is essential to the preservation of the species itself." Congress recognized that habitat loss is "the major cause for the extinction of species worldwide," and required the U.S. Fish and Wildlife Service ("FWS" or "the agency") to make a critical habitat designation (CHD) for threatened or endangered species that is "essential to the conservation of the species." In no event may the agency delay designating critical habitat for more than twelve months after listing a species as threatened or endangered. FWS has, however, consistently dragged its feet in fulfilling this obligation. As of July 2010, out of 1,375 listed U.S. species, only 594 (43%) had CHDs in some portion of their range.

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^{1.} Ctr. for Biological Diversity v. Norton, 240 F. Supp. 2d 1090, 1098 (D. Ariz. 2003).

^{2.} H.R. REP. No. 95-1625, at 5 (1975), reprinted in 1978 U.S.C.C.A.N. 9453, 9455.

^{3. 16} U.S.C. § 1532(5)(A)(ii) (2006).

^{4.} Id. § 1533(b)(6)(C)(ii); 50 C.F.R. § 424.17(b)(2) (2009).

^{5.} Eugene H. Buck, et al., Cong. Research Serv., R40185, The Endangered Species Act (ESA) in the 111th Congress: Conflicting Values and Difficult Choices 2 (2010).

Before 2001, FWS's legal explanations for failing to designate critical habitat had a poor success rate in court, ultimately compelling meaningful, if delayed, CHDs.⁶ The agency put forth three main rationales for not designating critical habitat: 1) they were not prudent because designating habitat would not be beneficial to the species;⁷ 2) they were not determinable because scientific data was not conclusive as to what habitat was essential for conservation;⁸ and 3) designating critical habitat was redundant because it would not add meaningful species protections.⁹ On this last point, the agency argued that (a) the listed species already received comparable protections resulting automatically from a species' listing and/or (b) other regulatory safeguards existed.¹⁰

Courts routinely rejected these arguments, referencing Congress' clear command that FWS shall designate critical habitat except in extreme circumstances. 11 A 2001 Tenth Circuit decision, however, gave the agency a new rationale for limiting CHDs: a more robust economic analysis that has resulted in exaggerated underestimated benefits, and ultimately smaller habitat designations. 12 In New Mexico Cattle Growers Ass'n v. U.S. Fish & Wildlife Service, 13 the court rejected FWS's refusal to consider the economic impacts of designating critical habitat, as required by the ESA. The agency argued that (a) designating critical habitat added no

^{6.} See infra Part II(b) – (d).

^{7.} See infra Part II(b); see also 50 C.F.R. § 424.12(a)(1) (2009) ("A designation of critical habitat is not prudent when...[either] (i) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of such threat to the species, or (ii) Such designation of critical habitat would not be beneficial to the species.").

^{8.} See infra Part II(c); 50 C.F.R. § 424.12(a)(2) (2009) ("Critical habitat is not determinable when one or both of the following situations exist: (i) Information sufficient to perform required analyses of the impacts of the designation is lacking, or (ii) The biological needs of the species are not sufficiently well known to permit identification of an area as critical habitat.").

^{9.} See infra Part II(d).

^{10.} See, e.g., N.M. Cattle Growers Ass'n v. U.S. Fish & Wildlife Serv., 248 F.3d 1277, 1280 (10th Cir. 2001).

^{11.} See, e.g., Natural Res. Def. Council v. U.S. Dep't of the Interior ("The Gnatcatcher Case"), 113 F.3d 1121, 1127 (9th Cir. 1997); Ctr. for Biological Diversity v. Norton, 240 F.Supp.2d 1090, 1099 (D. Ariz. 2003); N. Spotted Owl v. Lujan, 758 F. Supp. 621, 626 (W.D. Wash. 1991).

^{12.} See N.M. Cattle Growers Ass'n, 248 F.3d 1277 at 1280.

^{13.} Id. at 1278.

further protections beyond species listing, and therefore (b) the economic impacts attributable solely to habitat designation were negligible. Noting Congress' intent that the agency consider "relevant impact[s]" of CHDs – including economic impacts – the court for the first time required the agency to consider economic impacts co-extensive with listing. 15

Beyond being inconsistent with the ESA's requirement that the agency consider economic impacts attributable to a CHD *only*, the *New Mexico Cattle Growers* ruling inadvertently handed the agency an innovative means of not designating critical habitat. The timing was serendipitous for a new administration that sought to tip the balance in favor of private property rights and development interests. After the decision, FWS beefed up its economic analyses to include all impacts associated with listing and habitat designation. Partly because economic costs like stymied real estate development are easier to measure than direct and ancillary benefits, such as watershed protection, aesthetic values, and educational opportunities, the new cost projections were politically alarming and invited political pressure and prospects for increased litigation by pro-development groups. ¹⁸

This paper argues that as a result of *New Mexico Cattle Growers*, FWS's co-extensive economic impact analysis has become a vehicle for excluding critical habitat and promoting unproven alternative cooperative conservation initiatives, such as habitat conservation plans (HCPs). These alternatives, however, do not afford species the

^{14.} Id. at 1283-84.

^{15.} Id at 1282; 16 U.S.C. § 1533(b)(2) (2006).

^{16.} See, e.g., Michael Senatore, et al., Critical Habitat at the Crossroads: Responding to the G.W. Bush Administration's Attacks on Critical Habitat Designation Under the ESA, 33 GOLDEN GATE U. L. REV. 447, 462 (2003); Douglas Jehl, Rare Arizona Owl (All 7 Inches of It) Is in Habitat Furor. N.Y. TIMES, March 17, 2003, at A1; Jane Kay, California Frog Loses 4 Million Protected Acres, S.F. CHRON., July 4, 2002, at A.1 ("From the outset, the Bush administration has made no secret of its misgivings about the critical habitat process, saying that the designations -- particularly when required under court order -- divert the Fish and Wildlife Service from the more important task of determining which species deserve federal protection.").

^{17.} See, e.g., Janet Wilson, Habitats May Shrink by Leaps, Bounds, L.A. TIMES, Nov. 4, 2005 at A1.

^{18.} See Amanda R. Garcia, Student Article, The Sage Grouse Debate: Cost-Benefit Analysis and the Discourse of the Endangered Species Act, 14 N.Y.U. ENVIL. L.J. 572 (2006).

same protections, are unproven, have poor implementation records, and are inconsistent with the ESA's mandate that FWS designate critical habitat.¹⁹

Courts have granted the agency broad deference to exclude habitat under § 1533(b)(2), at odds with previous rulings where courts took a "hard look" at the agency's refusal to designate critical habitat in the first place under ESA § 1533(a)(3). In other words, FWS is doing on the back end at Step 2 (excluding critical habitat from proposed designations) what courts prohibited on the front end at Step 1 (delaying or simply not designating critical habitat at all because it was not prudent, not determinable, or redundant). Instead of refusing to designate critical habitat in the first place, the agency cites high economic costs and alternative protections as reasons to exclude critical habitat after the initial designation. 22

Part II of this paper explains the role of critical habitat designations in promoting the recovery of listed species. Part III analyzes FWS's

^{19.} Martin F.J. Taylor, et al., *The Effectiveness of the Endangered Species Act:* A Quantitative Analysis, BIOSCIENCE, Apr. 2005 at 364-65.

^{20. 16} U.S.C. § 1533(a)(3)-(b)(2) (2006). The "hard look" test refers to a probing level of judicial review for agency rulemaking under the Administrative Procedure Act (APA). Under this doctrine, first adopted in *Motor Vehicle Mfrs' Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 52-53 (1983), the Court closely scrutinizes the logical and factual bases for the decisions made. The Court therefore grants limited deference to the agency's decision, looking closely at whether the agency has thoroughly analyzed the relevant evidence and policy alternatives, on which it has come to a reasoned decision. *See* Harold Leventhal, *Environmental Decision-making and the Role of the Courts*, 122 U. PA. L. REV. 509, 511 (1974). Although the Court may not substitute its judgment for that of the agency, the Court's review must nevertheless be "searching and careful." Marsh v. Or. Natural Res. Council, 490 U.S. 360, 378 (1989).

^{21.} See, e.g., N.M. Cattle Growers Ass'n v. Ú.S. Fish & Wildlife Serv., 248 F.3d 1277, 1280, 1285 (10th Cir. 2001).

^{22.} See, e.g., Revised Designation of Critical Habitat for the California Red-Legged Frog (Rana aurora draytonii), 74 Fed. Reg. 51,825, 51,827 (proposed Oct. 8, 2009) (to be codified at 50 C.F.R. pt. 17); Revised Critical Habitat for the California Red-Legged Frog (Rana aurora draytonii), 73 Fed. Reg. 53,492 (proposed Sept. 16, 2008) (to be codified at 50 C.F.R. pt. 17); Designation of Critical Habitat for the San Diego Fairy Shrimp (Branchinecta sandiegonensis), 72 Fed. Reg. 70,648, 70,663, 70688 (Dec. 12, 2007) (to be codified at 50 C.F.R. pt. 17); Designation of Critical Habitat for the California Red-Legged Frog, and Special Rule Exemption Associated With Final Listing for Existing Routine Ranching Activities, 71 Fed. Reg. 19,244 (April 13, 2006) (to be codified at 50 C.F.R. pt. 17); Designation of Critical Habitat for the Bull Trout, 70 Fed. Reg. 56,212, 56,232, 56,240 (Sept. 26, 2005) (to be codified at 50 C.F.R. pt. 17).

main justifications for refusing to designate critical habitat, and how those justifications routinely fail in court. Part IV looks at the impact of the Tenth Circuit's decision in *New Mexico Cattle Growers* on FWS's use of expanded, co-extensive economic impact analyses to determine the costs and benefits of CHDs. Part V explains how the agency quickly began using the new economic analyses to exclude large tracts of critical habitat for several species. Part VI looks at how the agency's routine exaggeration of costs and underestimation of benefits have led the agency to essentially read Congress' goal of species recovery out of the ESA. Finally, Part VII discusses a way forward in both the courts and through congressional and agency action to ensure that CHDs are designated in line with Congress' overriding goal of achieving species conservation.

II. CRITICAL HABITAT DESIGNATIONS ARE NECESSARY FOR SPECIES RECOVERY AND ECOSYSTEM FUNCTIONALITY

Critical habitat designations are central to recovering ESA listed species. They provide important protections beyond those attributable to a species' listing and attendant recovery plans, neither of which is directly tethered to habitat protection.²³ Listing species only protects individuals of species from harm, while recovery plans focus only on site-specific impacts to individuals or small populations of a species.²⁴

Critical habitat is defined in § 3 of the ESA as the specific areas within a geographic region, either occupied or unoccupied by a species, on which are found those physical or biological features essential to the conservation of the species and that may require special management consideration or protection.²⁵ "Conservation" means the use of all methods and procedures that are necessary to bring a listed species to the point at which listing under the ESA is no longer necessary.²⁶ FWS must designate critical habitat based only on the best scientific data available.²⁷ It must also, however, conduct an impact analysis of the designation under § 4(b)(2), which takes into account the "the economic impact, the impact on national security,

^{23.} See 16 U.S.C. § 1533(a), (f) (2006).

^{24.} *Id*.

^{25.} Id. § 1532(5)(A)(i), (ii).

^{26.} Id. § 1532(3).

^{27.} Id. § 1533(b)(1)(A).

and any other relevant impact."²⁸ The agency may then exclude portions of the CHD based on the impact analysis, if the benefits of excluding those areas outweigh the benefits of including them, so long as such exclusions will not result in the species' extinction.²⁹

Critical habitat protections are triggered by § 7 of the ESA, which requires consultations between FWS and the federal agency involved in any activity on public lands – as well as for actions on private lands with a federal nexus - that are likely to result in the destruction or adverse modification of critical habitat.³⁰ Such consultations offer a greater degree of protection than jeopardy consultations, or those triggered by a species' listing.³¹ A jeopardy analysis is limited to determining whether the activity is likely to impact a species' survival.³² In addition, the scientific data developed in designating CHDs helps to establish long-term recovery plans.³³ CHDs are therefore key to implementing the ESA's recovery or conservation objective, while also promoting ancillary ecological benefits associated with preserving open space. As John Kostyack, senior counsel for the National Wildlife Federation, stated in congressional testimony in 2003, "critical habitat provisions are designed to protect more than just the habitat occupied by the species in its depleted state: they ensure that all habitats needed for recovery are taken into account.",34

A 2005 *BioScience* study found a strong correlation between CHDs and species recovery.³⁵ The authors tracked data from the government's biannual reports listing species as declining, stable, or recovering over the period 1990 to 2002.³⁶ Species with critical habitat for two or more years were more likely to enjoy increasing numbers and were less likely to experience decline than those without

^{28.} Id. § 1533(b)(2).

^{29.} *Id*.

^{30.} *Id.* § 1536(a)(2).

^{31.} *Id*.

^{32.} Id.

^{33.} See Determination of Critical Habitat for the Mexican Spotted Owl, 60 Fed. Reg. 29,914, 29,917 (June 6, 1995) (to be codified at 50 C.F.R. pt. 17).

^{34.} Critical Habitat Designations Under the Endangered Species Act: Hearings Before the U.S. S. Subcomm. on Fisheries, Wildlife, and Water, 108th Cong. 62 (2003) (statement of John Kostyack, Senior Counsel, National Wildlife Federation).

^{35.} See Taylor, supra note 19, at 366.

^{36.} Id. at 360.

CHDs.³⁷ In addition, species with critical habitat for two or more years were less than half as likely to be declining in the early period of the study, and were more than twice as likely to be improving in the late stage, compared to species without CHDs.³⁸ While it is true that only a little more than a dozen of roughly 1300 listed species have achieved recovery since 1973, it is also true that only one-third of listed species have received CHDs.³⁹ Considering that it may take several years or decades to recover a listed species, the *BioScience* data showing *improvement*, if not full recovery, associated with CHDs favors the inference that critical habitat is important to eventual recovery. As FWS itself noted in designating critical habitat for the Mexican spotted owl:

[C]ritical habitat serves to preserve options for a species' eventual recovery. . .[It] helps focus conservation activities by identifying areas that contain essential habitat features (primary constituent elements) regardless of whether or not they are currently occupied by the listed species, thus alerting the public to the importance of an area in the conservation of a listed species.⁴⁰

The *BioScience* study also found dedicated recovery plans important to species conservation, but not exclusive of CHDs. The ESA requires FWS to develop site-specific recovery actions under § 4(f)(1), in addition to designating critical habitat. FWS data shows that, by 2004, only two percent of FWS-administered species had achieved more than seventy-five percent of their recovery objectives through recovery plans; thus indicating the continued importance of CHDs. Compliance with the ESA also *requires* both CHDs and recovery plans. Indeed, by including both sections in the ESA, and in no way indicating their mutual exclusivity, Congress gave every

^{37.} *Id.* at 362.

^{38.} Id.

^{39.} *Id.* at 360.

^{40.} Determination of Critical Habitat for the Mexican Spotted Owl, 60 Fed. Reg. 29,914, 29,917 (June 6, 1995) (to be codified at 50 C.F.R. pt. 17).

^{41. 16} U.S.C. § 1533(a)(3), (f)(1) (2006).

^{42.} Taylor, supra note 19, at 364.

^{43. 16} U.S.C. § 1533(a)(3), (f)(1) (2006).

indication that it did not intend for FWS to use alternative conservation strategies, such as HCPs, as substitutes for CHDs. 44

That said, Congress did include HCPs in the 1982 ESA amendments, but only as part of a compromise that loosened the ESA's § 9 strict prohibition on the "taking" – killing or otherwise harming – of species and not as a substitute for CHDs. 45 Under § 10, a landowner may apply for an incidental take permit (ITP), which provides an exception to the take prohibition where landowners engage in otherwise lawful activities. 46 Approval of the permit is contingent on the landowner developing an HCP that will mitigate the impacts of the take and not "appreciably reduce the likelihood of the survival and recovery of the species in the wild." As is discussed in more detail in Part V(b), 48 however, HCPs and other "cooperative conservation" strategies have, at best, a mixed track record of promoting species recovery.

III. FWS's RATIONALES FOR NOT DESIGNATING CRITICAL HABITAT ROUTINELY FAIL IN COURT

A. Standard Of Review

Under the Administrative Procedure Act (APA),⁴⁹ a reviewing court must set aside agency actions found to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law."⁵⁰ This is a "deferential standard . . . designed to ensure that the agency considered all of the relevant factors and that its decision contained no clear error of judgment."⁵¹ The court must ask whether the agency "articulated a rational connection between the facts found

^{44.} See The Gnatcatcher Case, 113 F.3d 1121, 1127 (9th Cir. 1997) ("[T]he Natural Community Conservation Plan alternative cannot be viewed as a functional substitute for critical habitat designation.... The NCCP alternative ... is a purely voluntary program that applies only to non-federal land-use activities.").

^{45. 16} U.S.C. § 1532(19) (2006) (explaining "take" means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" a listed species).

^{46.} Id. § 1539(a)(1)(B).

^{47.} Id. § 1539(a)(2)(B)(iv).

^{48.} See infra Part V(b).

^{49.} Administrative Procedure Act, 5 U.S.C. § 551 (2006).

^{50.} Pac. Coast Fed'n of Fishermen's Ass'ns. v. Nat'l Marine Fisheries Serv., 265 F.3d 1028, 1034 (9th Cir. 2001) (internal quotations omitted).

^{51.} Id.

and the choice made."⁵² Where a statute's language and purpose are clear, agency discretion is most directly constrained under the familiar *Chevron* framework, whereby "the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress."⁵³ In the case of the ESA, courts must closely scrutinize agency decision-making — to a greater degree than for other environmental statutes — because Congress' clear and overriding intent was to conserve the ecosystems essential for the recovery of threatened and endangered species. ⁵⁴ "When Congress has a clear intent, the court must give effect to that intent as law."⁵⁵ The following sections detail how courts have consistently honored this clear intent when hearing challenges to FWS's refusal to designate critical habitat under § 4(a)(3).

B. Not Prudent Rationale

Courts have consistently rejected FWS's "not prudent" justification for failing to designate critical habitat by employing an intrusive level of judicial review.⁵⁶ A CHD is "not prudent" when the following exists: (a) identifying critical habitat will increase the threat of taking

^{52.} The Gnatcatcher Case, 113 F.3d 1121, 1124 (9th Cir. 1997).

^{53.} Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 842-43 (1984).

^{54. 16} U.S.C. § 1531(b) (1988). In creating the ESA, "Congress started from the finding that '[t]he two major causes of extinction are hunting and destruction of natural habitat." TVA v. Hill, 437 U.S. 153, 179 (1978) (quoting S. Rep. No. 93-307, p. 2 (1973), reprinted in 1973 U.S. Code Cong. & Admin. News 2289, 2290). In addition, Congress passed the ESA with the stated purpose "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved,' and 'to provide a program for the conservation of such . . . species" Id. (quoting 16 U.S.C. § 1531(b)).

^{55.} Ariz. Cattle Growers' Ass'n v. U.S. Fish & Wildlife Serv., 273 F.3d 1229, 1236 (9th Cir. 2001) (citations omitted) ("[W]hile reviewing courts should uphold reasonable and defensible constructions of an agency's enabling act, they must not 'rubber-stamp ... administrative decisions that they deem inconsistent with a statutory mandate or that frustrate the congressional policy underlying a statute."); Sw. Ctr. for Biological Diversity v. Bartel, 470 F. Supp. 2d 1118, 1125 n.5 (S.D. Cal. 2006) (citing Wilderness Soc'y v. U.S. Fish & Wildlife Serv., 353 F.3d 1051, 1059-60 (9th Cir. 2003) (en banc)).

^{56.} See, e.g., The Gnatcatcher Case, 113 F.3d at 1125; Bldg. Indus. Ass'n of Superior Cal. v. Babbitt, 979 F. Supp. 893, 905-06 (D.D.C. 1997).

of the species, or (b) such a designation would not be beneficial to the species.⁵⁷

When the agency makes a "not prudent" finding, courts examine the agency's record to determine whether it (a) fully considered the benefits of designating critical habitat and (b) whether its balancing of a designation's benefits and adverse consequences are rationally connected to the evidence in the record.⁵⁸ Courts give the agency little deference in balancing factors, considering Congress' clear command that the agency "shall" designate critical habitat to the "maximum extent prudent" as the linchpin of achieving species conservation and recovery.⁵⁹ This level of intrusive analysis is consistent with the Supreme Court's reasoning in State Farm, where the Court found that the agency failed to draw a rational connection between the evidence available and its rulemaking concerning the public safety benefits of passive restraint seatbelts. 60 In all cases that reached trial – spanning nearly two decades from 1991 through 2009 - where the question centered on whether the "not prudent" justification was valid, the agency lost, thereby compelling FWS to designate critical habitat.⁶¹ Where disputes did not reach trial, the agency often settled with environmental plaintiffs and designated critical habitat.62

Several cases illustrate courts' routine willingness to limit agency discretion by rejecting FWS's failure to fully consider benefits of

^{57. 50} C.F.R. § 424.12(a)(1)(i)-(ii) (1996).

^{58.} See, e.g., The Gnatcatcher Case, 113 F.3d at 1125-26; Bldg. Indus. Ass'n, 979 F. Supp. at 905-06.

^{59.} Bldg. Indus. Ass'n, 979 F. Supp. at 905.

^{60.} Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Insur. Co., 463 U.S. 29 (1983).

^{61.} See, e.g., The Gnatcatcher Case, 113 F.3d 1121; Conner v. Burford, 848 F.2d 1441 (9th Cir. 1988); Ctr. for Biological Diversity v. Bureau of Land Mgmt., 422 F. Supp. 2d 1115 (N.D. Cal. 2006); Jumping Frog Research Inst. v. Babbitt, No. C 99-01461 WHA, 1999 WL 1244149 (N.D. Cal. Dec. 15, 1999); Bldg. Indus. Ass'n, 979 F. Supp. 893.

^{62.} For example, in a settlement negotiation with the Center for Biological Diversity, FWS agreed to withdraw its "not prudent" determination for the Alameda Whipsnake and designate critical habitat. It promulgated a final rule for a CHD on October 3, 2000. Final Determination of Critical Habitat for the Alameda Whipsnake (Masticophis lateralis euryxanthus), 65 Fed. Reg. 58,933 (Oct. 3, 2000) (to be codified at 50 C.F.R. pt. 17). Home Builders Ass'n of N. Cal. v. U.S. Fish & Wildlife Serv., 268 F. Supp. 2d 1197, 1204 (E.D. Cal. 2003).

CHDs. 63 The California red-legged frog is a high-profile example. Since it was first listed as threatened in 1996, the frog has lost more than seventy percent of its historic habitat to development.⁶⁴ The frog's listing triggered a mandatory CHD by FWS,65 but the agency refused to designate habitat for two reasons. First, it argued that it was "not prudent" because a CHD would reveal precise locations of the frog and therefore render it vulnerable to vandalism and taking.⁶⁶ Second, it argued that because most of the designated habitat occurred on private land, such a designation would not benefit the frog because private land was not likely to be subject to § 7 consultation requirements.⁶⁷ As discussed in Part I, the core force behind a CHD is the § 7 consultation process, which prevents projects with a federal nexus that adversely impact a species' critical habitat.⁶⁸ The agency balanced these two considerations against the fact that preserving open space and riparian areas was a "fundamental requirement in the survival and recovery of the California red-legged frog."69 Finding that the former outweighed the latter, it concluded that a designation would provide "no benefit" to the frog. 70

Similarly, the agency refused to designate critical habitat for four vernal pool species and the California gnatcatcher because it concluded that the risk of vandalism outweighed the benefits to the species.⁷¹ The agency cited to one instance of intentional vandalism to the vernal pool species' habitat,⁷² and eleven instances of

^{63.} See, e.g., The Gnatcatcher Case, 113 F.3d 1121; Burford, 848 F.2d 1441; Ctr. for Biological Diversity, 422 F. Supp. 2d 1115; The Jumping Frog Case, 1999 WL 1244149; Bldg. Indus. Ass'n, 979 F. Supp. 893.

^{64.} Wilson, supra note 17.

^{65. 16} U.S.C. § 1533(a)(3)(A)(i) (2006).

^{66.} Determination of Threatened Status for the California Red-Legged Frog, 61 Fed. Reg. 25,813, 25,822 (May 23, 1996) (to be codified at 50 C.F.R. pt. 17).

^{67.} *Id*.

^{68.} See supra Part I.

^{69.} Determination of Threatened Status for the California Red-Legged Frog, 61 Fed. Reg. at 25,830.

^{70.} *Id*.

^{71.} The Gnatcatcher Case, 113 F.2d 1121, 1125 (9th Cir. 1997); Bldg. Indus. Ass'n of Superior Cal. v. Babbitt, 979 F. Supp. 893, 896-97, 905 (D.D.C 1997).

^{72.} Bldg. Indus. Ass'n, 979 F. Supp. at 906 (citing Memorandum from FWS Sacramento Field Office (July 3, 1991), A.R. at 1012).

vandalism in the case of the gnatcatcher.⁷³ In yet another instance, FWS refused to designate critical habitat for the jaguar in 2006, citing studies suggesting that CHDs in Arizona and New Mexico were not necessary for the species' survival.⁷⁴

In all four cases, the courts struck down the agency's not prudent findings for failing to fully consider benefits of CHDs and for failing to overcome "the strong presumption that critical habitat will be designated" in balancing benefits against adverse consequences of designation. In Jumping Frog Institute v. Babbitt ("The Jumping Frog Case"), a California district court found that, as a matter of law, the agency needed to consider the benefits of § 7 federal consultation requirements on public land. The agency did not do so. Moreover, the court rejected the agency's conclusion that the designation would provide "no benefit" because most of the critical habitat occurred on private land. Projects on private land with a federal nexus, such as those requiring federal permitting, would be subject to § 7 consultations, so the agency could not rationally conclude that the designation would provide no benefit.

Similarly, in Natural Resources Defense Council v. U.S. Department of the Interior ("The Gnatcatcher Case"), the Ninth Circuit faulted the agency for failing to fully consider the benefits of a CHD to determine whether "the possible adverse consequences would outweigh the benefits of designation." And most recently, on March 30, 2009, an Arizona district court in Center for Biological Diversity v. Kempthorne ("The Jaguar Case") went beyond considering whether FWS sufficiently considered benefits of

^{73.} The Gnatcatcher Case, 113 F.3d at 1125 (citing Determination of Threatened Status for the Coastal California Gnatcatcher, 58 Fed. Reg. 16,753, 16,756 (March 30, 1993) (to be codified at 50 C.F.R. pt. 17)).

^{74.} Determination That Designation of Critical Habitat Is Not Prudent for the Jaguar, 71 Fed. Reg. 39,335, 39,337 (July 12, 2006).

^{75.} Bldg. Indus. Ass'n, 979 F. Supp. at 906 (citing N. Spotted Owl v. Lujan, 758 F. Supp. 621, 626 (W.D. Wash. 1991)).

^{76.} Jumping Frog Research Inst. v. Babbitt, No. C 99-01461 WHA, 1999 WL 1244149, at *1 (N.D. Cal. Dec. 15, 1999).

^{77.} Id.

^{78.} Id.

^{79.} Id.

^{80. 113} F.3d at 1121, 1125 (9th Cir. 1997) (quoting Amended Procedures to Comply With the 1982 Amendments to the Endangered Species Act, 49 Fed. Reg. 38,900, 38,903 (Oct. 1, 1984) (to be codified at 50 C.F.R. pt. 424) (emphasis added)).

designation by examining the scientific record itself. While acknowledging that FWS relied on a study that "cautioned against designating critical habitat at that time," the court found the report unpersuasive because it was based on the conclusion that a CHD would not benefit the *survival* of the species. As discussed in Part 3(c)(2), "[t]he designation of critical habitat is intended to promote not only the survival but also the *recovery* of species." The court cited *sua sponte* numerous other scientific studies supporting the necessity of designating critical habitat for the jaguar to support its recovery. 4

The Jaguar Case and The Gnatcatcher Case illustrate that, despite courts' general deference to an agency's scientific expertise, in the ESA context, courts are more willing to invoke the precautionary principle due to Congress' clear conservation mandate. The agency cannot "ignore available biological information," even if it found that, in its judgment, the information only "may indicate potential conflicts between development and the preservation of protected species." As a California district court opined in 2006, "[t]o the extent that there is any uncertainty as to what constitutes the best available scientific information, Congress intended to 'give the benefit of the doubt to the species." To hold otherwise would eviscerate Congress' intent to 'give the benefit of the doubt to the species."

The second reason courts have struck down "not prudent" determinations is because the agency used flawed reasoning in balancing the benefits and adverse consequences of designating

^{81.} Ctr. For Biological Diversity v. Kempthorne, 607 F. Supp. 2d 1078, 1089-90 (D. Ariz. 2009).

^{82.} Id. at 1089.

^{83.} Id. (citing Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059, 1069 (9th Cir. 2004) (noting that it "is logical and inevitable that a species requires more critical habitat for recovery than is necessary for species survival")).

^{84.} Id. at 1090-91.

^{85.} Conner v. Burford, 848 F.2d 1441, 1454 (9th Cir. 1988) (emphasis added).

^{86.} Ctr. for Biological Diversity v. Bureau of Land, 422 F. Supp. 2d at 1127 (quoting *Burford*, 848 F.2d at 1454).

^{87.} Burford, 848 F.2d at 1454 (quoting H.R. Rep. No. 96-697, at 12 (1979), reprinted in 1979 U.S.C.C.A.N. 2572, 2576).

critical habitat.88 In Building Industry Ass'n of Superior Cal. v. Babbitt ("The Fairy Shrimp Case"), the United States District Court for the District of Columbia found that the agency's reliance on one instance of intentional vandalism could not rationally outweigh the potential benefits of a designation to the vernal pool species' recovery.⁸⁹ Acknowledging that, where a determination "requires a high level of technical expertise [a court] must defer to the informed discretion of the responsible federal agencies,""90 the court nevertheless found that agency's conclusion to be fatally flawed.⁹¹ Moreover, while the court did not quarrel with the agency's determination that landowners would increase development ahead of an announced designation,92 it did fault the agency for failing to support its assertion with sufficient evidence.⁹³

Even where the agency cited eleven instances of vandalism for the California gnatcatcher, The Gnatcatcher Case court found this evidence insufficient to rationally conclude that the 400,000-acre CHD would either cause more landowners to destroy gnatcatcher land or provide no benefit to the species. 94 As in The Fairy Shrimp Case, the court leaned heavily on Congress' intent that "[i]t is only in rare circumstances where the specification of critical habitat concurrently with the listing would not be beneficial to the species."95

^{88.} See The Gnatcatcher Case, 113 F.3d 1121, 1125 (9th Cir. 1997) (holding that FWS must weigh the benefits of designation against the risks of designation before determining that, on balance, a CHD would increase the threat to the species); see also Jumping Frog Research Inst. v. Babbitt, No. C 99-01461 WHA, 1999 WL 1244149, at *1 (N.D. Cal. Dec. 15, 1999).

^{89. 979} F. Supp. 893, 905-06 (D.D.C. 1997); cf. Fund for Animals v. Babbitt, 903 F. Supp. 96, 116-17 (D.D.C. 1995) (upholding FWS's determination that a CHD for grizzly bears was not prudent because it was redundant and less beneficial than comparable habitat protection agreements). The district court's reasoning in Fund for Animals is the exception to the rule, however, and was explicitly rejected by the Ninth Circuit two years later in the Gnatcatcher Case. That court found that, as a matter of statutory interpretation, FWS may not refuse to designate critical habitat because it would add protections less beneficial than those already in place. The Gnatcatcher Case, 113 F.3d at 1127.

^{90.} The Fairy Shrimp Case, 979 F. Supp. at 898 (quoting Marsh v. Oregon Natural Res. Def. Council, 490 U.S. 360, 377 (1989)).

^{91.} Id. at 906.

^{92.} Id.

^{93.} Id.

^{94.} The Gnatcatcher Case, 113 F.3d at 1125.

^{95.} Id. at 1126 (quoting H.R. Rep. No. 95-1625, at 17 (1978), reprinted in 1978 U.S.C.C.A.N. 9453, 9467).

FWS failed to articulate a "'rational connection between the facts found and the choice made'"⁹⁶ under the APA.⁹⁷

Court orders rejecting "not prudent" determinations and mandating CHDs have generally resulted in real – if protracted – agency action. Following *The Jumping Frog* decision, the agency designated 4.1 million acres of critical habitat for the red-legged frog in March 2001. In September 2002, five years after *The Fairy Shrimp* decision, FWS issued a proposed rule designating 1.7 million acres of critical habitat for fifteen vernal pool species. And in 2000, the agency designated more than 500,000 acres as critical habitat for the gnatcatcher. Finally, in January 2010, less than a year after its "not prudent" finding for the jaguar was struck down, FWS issued a notice of determination that a CHD for the jaguar is prudent. A proposed designation is expected by January 2011.

While acknowledging agency discretion to find CHDs "not prudent" under certain circumstances, courts have consistently cited Congress' overriding charge that FWS designate critical habitat to achieve species recovery, taking a "hard look" at agency decision-making.

C. Not Determinable Rationale

FWS has also refused to designate critical habitat because it had insufficient scientific data to make an appropriate designation. The designation was therefore "not determinable" under the ESA. As with "not prudent" arguments, courts routinely rejected this rationale

^{96.} Id. (quoting Res. Ltd., Inc. v. Robertson, 35 F.3d 1300, 1304 (9th Cir. 1993)).

^{97. 5} U.S.C. § 706(2)(A) (2006).

^{98.} Final Determination of Critical Habitat for the California Red-legged Frog, 66 Fed. Reg. 14,626 (March 13, 2001) (to be codified at 50 C.F.R. pt. 17).

^{99.} Critical Habitat Designation for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants in California and Southern Oregon, 67 Fed. Reg. 59,884 (Sept. 24, 2002) (to be codified at 50 C.F.R. pt. 17).

^{100.} Final Determination of Critical Habitat for the Coastal California Gnatcatcher, 65 Fed. Reg. 63,680 (Oct. 24, 2000) (to be codified at 50 C.F.R. pt. 17).

^{101.} Determination That Designation of Critical Habitat Is Prudent for the Jaguar, 75 Fed. Reg. 1741 (Jan. 13, 2010) (to be codified at 50 C.F.R. pt. 17).

^{102.} E.g., Determination of Threatened Status for the Northern Spotted Owl, 55 Fed. Reg. 26,114, 26,118 (June 26, 1990) (to be codified at 50 C.F.R. pt. 17).

^{103.} Id. at 26,124.

as inadequate. Congress unequivocally directed the agency to designate critical habitat whenever possible, some degree of scientific uncertainty notwithstanding. 104 As the Tenth Circuit opined in 1999, "shall' means shall," and the ESA plainly requires that the Secretary "shall," after no more than two years, "designat[e], to the maximum extent prudent, [critical] habitat." In this way, the "not determinable" escape valve constrains agency discretion even more than the "not prudent" exception, because a "not determinable" finding may only delay - rather than permanently halt - agency action.

Perhaps the most contentious symbol of the ESA over the last two decades has been the northern spotted owl, which has served both as a rallying cry for those seeking to weaken CHDs and a vindication of the ESA's core component for its supporters. The owl's population declined precipitously in the 1980s due to aggressive deforestation in the Pacific Northwest, 107 and it was designated as threatened under the ESA in 1990. 108 The agency refused to designate critical habitat, however, arguing that a CHD was "not determinable." The United States District Court for the Western District of Washington sided with conservation groups challenging the rule, noting Congress' overriding conservation focus and the corresponding high threshold for finding a CHD to be indeterminable. 110 The court found the agency had abused its discretion under § 706 of the APA, 111 noting that the agency failed to state what additional economic and biological information was needed to make a CHD, or to describe in detail what steps it had taken toward designating critical habitat. 112 The court held that the agency's argument that it was working on alternative conservation strategies to protect the spotted owl was

^{104.} See, e.g., N. Spotted Owl v. Lujan, 758 F. Supp. 621, 629 (W.D. Wash. 1991).

^{105.} Forest Guardians v. Babbitt, 174 F.3d 1178, 1187 (10th Cir. 1999).

^{106.} *Id.* at 1186, n.13 (quoting 16 U.S.C. § 1533(b)(6)(C) (2006)).

^{107.} Brad Knickerbocker, Northern Spotted Owl's Decline Revives Old Concerns. THE CHRISTIAN SCI. MONITOR, June 27, 2007, at 2.

^{108.} Id.

^{109.} Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Northern Spotted Owl, 55 Fed. Reg. 26,114, 26,124 (June 26, 1990) (to be codified at 50 C.F.R. pt. 17).

^{110.} N. Spotted Owl v. Lujan, 758 F. Supp. 621, 629 (W.D. Wash. 1991).

^{111. 5} U.S.C. § 706(2)(A) (2006).

^{112.} N. Spotted Owl, 758 F. Supp. at 627-28.

inadequate, asserting that those efforts "did not relieve the [Fish and Wildlife] Service of its obligation under the ESA to designate critical habitat to the maximum extent determinable." Consequently, FWS designated 6.9 million acres as critical habitat for the Northern spotted owl in January 1992. 114

Courts similarly rejected FWS's "not determinable" rationales for refusing to designate critical habitat for the spikedace (listed in 1986), loach minnows (listed in 1986), Mexican spotted owl (listed in 1993), and willow flycatcher (listed in 1995), among others. ¹¹⁵ As with the "not prudent" case law, in each case where the court struck down a "not determinable" finding, FWS eventually designated critical habitat after litigation and a court order. ¹¹⁶

D. Redundant Protections Rationale

Finally, the agency justified not designating critical habitat on the grounds that doing so added no additional protections for the species. The agency put forth two main arguments to this effect. First, oftentimes other regulatory schemes already existed that provided sufficient protections for the species. Second, designating critical habitat was redundant because any action on public land, or any action on private land with a federal nexus, would be subject to § 7 consultations to determine whether the species' survival would be jeopardized.

1. Other Protections Already Exist

District courts within the Ninth Circuit have routinely rejected the notion that adequate alternative protections absolve the agency of its duty to designate critical habitat. In *The Gnatcatcher Case*, ¹¹⁸ the Ninth Circuit held that the agency does not have discretion under the

^{113.} Id. at 629.

^{114.} Determination of Critical Habitat for the Northern Spotted Owl, 57 Fed. Reg. 1796, 1809 (Jan. 15, 1992) (to be codified at 50 C.F.R. pt. 17).

^{115.} Thomas F. Darin, Designating Critical Habitat Under the Endangered Species Act: Habitat Protection Versus Agency Discretion, 24 HARV. ENVTL. L. REV. 209, 229-30 (2000).

^{116.} *Id*.

^{117.} See, e.g., The Gnatcatcher Case, 113 F.3d 1121 (9th Cir. 1997); Ctr. for Biological Diversity v. Norton, 240 F. Supp. 2d 1090, 1098 (D. Ariz. 2003).

^{118.} The Gnatcatcher Case, 113 F.3d at 1121.

ESA to determine whether or not to designate an area as critical habitat once it deems the habitat to be essential to recovery. The court reasoned that to do so would be contrary to the ESA's purpose and plain language. 120

In that case, the Ninth Circuit considered a challenge to FWS's refusal to designate a tract of land deemed essential to the recovery of the California gnatcatcher. The agency argued that superior protections already existed, but the court found that "[n]either the [Endangered Species] Act nor the implementing regulations sanctions nondesignation of habitat when designation would be merely *less* beneficial to the species than another type of protection." The court rejected the contention that (a) a CHD would "not appreciably benefit the [gnatcatcher]" and (b) that a voluntary habitat conservation program (HCP) could substitute for a CHD.

A California district court came to the same determination in 2002, when the agency sought a voluntary remand with vacatur of its CHD for the California gnatcatcher and San Diego fairy shrimp. The agency asserted a vacatur was appropriate because an already existing HCP afforded the gnatcatcher adequate protections in the interim. Citing NRDC v. U.S. Dep't of Interior, the court held that while the HCP was a comprehensive and coordinated environmental protection program, it was irrelevant to the fact that "as a matter of law the critical habitat offers distinct protections required by the ESA" 127

Similarly, in 2003, an Arizona district court struck down the agency's rationale for reducing the Mexican spotted owl's CHD by

^{119.} Id. at 1127.

^{120.} See id.; see also Ctr. for Biological Diversity, 240 F. Supp. 2d at 1098 (stating that "[T]he legislative history of the ESA evidences Congress' understanding that the preservation of a species' habitat is essential to the preservation of the species itself.").

^{121.} The Gnatcatcher Case, 113 F.3d at 1121.

^{122.} Id. at 1126.

^{123.} Id. at 1127.

^{124.} Id. at 1126-27.

^{125.} Natural Res. Def. Council v. U.S. Dep't of Interior, 275 F. Supp. 2d 1136 (C.D. Cal. 2002).

^{126.} Id. at 1155.

^{127.} Id. at 1154 n.37.

8.9 million acres, from 13.5 to 4.6 million acres. ¹²⁸ FWS issued a rule eliminating all protected habitat in lands managed by the National Forest Service, arguing that the Forest Service's own land management plans provided adequate protections. ¹²⁹ A CHD, therefore, would merely add *additional* protections. ¹³⁰ As a matter of law, the court held that the agency had impermissibly read the words "additional" and "adequate" into the statute. ¹³¹ Moreover, the ESA's overriding emphasis on conservation and recovery obliged the agency to follow the precautionary principle and err on the side of more protections, not fewer. ¹³²

In all cases where the legitimacy of the agency's additional or redundant protections argument in refusing to designate areas of land as critical habitat was at issue, the courts leaned on two factors: the plain text of the ESA and Congress' overriding emphasis on recovering species by protecting their habitat. If there was any question as to the agency's discretion under § 4(a)(3), courts held that the agencies should be guided by Congress' central purpose in mandating CHDs: conservation and recovery.

2. Jeopardy Analysis Is Redundant

Under § 7 of the ESA, any federal activity requires consultation between an action agency¹³⁵ and FWS to determine whether the proposed activity will (a) jeopardize a listed species' survival and/or (b) destroy or otherwise adversely modify a listed species' critical habitat.¹³⁶ A consultation is based on FWS's biological opinion, which uses the best scientific and commercial data available to determine the proposed action's likely impact.¹³⁷ Because the

^{128.} Ctr. for Biological Diversity v. Norton, 240 F.Supp.2d 1090, 1091, 1102 (D. Ariz. 2003).

^{129.} *Id.* at 1093.

^{130.} See id.

^{131.} Id. at 1099.

^{132.} Id. at 1098.

^{133.} See id.; see also Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059, 1075-76 (9th Cir. 2004).

^{134.} Id.

^{135.} This is the agency that finances, permits, or otherwise contributes to the action that may impact a listed species. *See, e.g.*, Bennett v. Spear, 520 U.S. 154, 168 (1997) (explaining the role of action agencies in the consultation process).

^{136. 16} U.S.C. § 1536(a)(2) (2006); 50 C.F.R. § 402.14(a) (2009).

^{137. 50} C.F.R. § 402.11-12 (2009).

consultation requirement applies to any activity with a federal nexus, a private landowner would be subject to a consultation if he required, say, a Clean Water Act § 404 dredge and fill permit. 138

As noted, § 7 consultations for CHDs provide significantly greater protections than jeopardy consultations triggered by a species' listing for three reasons. First, they focus on species *recovery* rather than *survival*. Second, CHD consultations net important derivative benefits, such as water quality and watershed protection, climate and air quality control, persistence of other species higher and lower on the food chain, plant diversity, cultural values, and overall ecosystem integrity. Finally, CHD consultations apply to areas that may not be currently occupied by a listed species, while jeopardy consultations do not. Ho This means that if an unoccupied area were designated as critical habitat, then any activity on that land with a federal nexus would be subject to an adverse modification analysis under § 7. Ho

Despite the greater protections Congress attached to adverse modification consultations, the agency conflated jeopardy and adverse modification analyses in its implementing regulation, 50 C.F.R. § 402.02. This made it appear that the two conferred the same degree of species protection, and, therefore, that CHDs are redundant. The regulation defines "destruction or adverse modification" as changes to the critical habitat that appreciably diminish "the value of critical habitat for both the survival and recovery of a listed species." Because a species needs more habitat for recovery than survival, the regulation focuses exclusively on "survival." The agency's rule thus rationalizes its argument that

^{138.} Id.

^{139.} Complaint for Declaratory and Injunctive Relief at 11-13, Ctr. For Biological Diversity v. Kempthorne, No. CV 08 5546 (N.D. Cal. Dec. 11, 2008).

^{140. &}quot;Critical habitat may also include 'specific areas outside the geographical area occupied by the species ... upon a determination by the Secretary that such areas are essential for the conservation of the species." Cape Hatteras Access Pres. Alliance v. U.S. Dep't. of Interior, 344 F. Supp. 2d 108, 119 (D.D.C. 2004) (quoting 16 U.S.C. § 1532(5)(A)(ii) (2006)).

^{141.} See 16 U.S.C. § 1536(a)(2)(2006).

^{142. 50} C.F.R. § 402.02 (2009).

^{143.} Id. (emphasis added).

^{144.} Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059, 1069 (9th Cir. 2004).

^{145.} See id.

CHDs are redundant because § 7 adverse modification consultations afford listed species no more protections than a jeopardy analysis. Predictably, FWS dramatically reduced the number of new CHDs immediately after finalizing the rule in 1986. 146

The northern spotted owl illustrates the agency's redundancy argument. After a Washington court rejected FWS's "not determinable" justification for failing to designate critical habitat for the owl, 147 FWS finally issued a CHD. 148 Conservation groups challenged the CHD, however, arguing that the agency's decision to exclude millions of acres of critical habitat was based on an illegal regulation, 50 CFR § 402.02, governing consultations. 149 The plaintiffs asserted that the regulation was facially invalid because it set the threshold for vetoing the proposed action at species "survival and recovery" rather than "recovery." 150

Aside from rationalizing a refusal to designate areas as critical habitat, the agency's regulation also justified its finding that CHDs alone have negligible economic impacts. By equating protections afforded to species by listing and CHDs, any action associated with an adverse modification analysis (triggered by a CHD) would necessarily be subsumed by a jeopardy analysis (triggered by a species' listing). In other words, any economic impacts incurred due to a CHD would necessarily be incurred by a species' listing. The agency termed this the "functional equivalence theory." Because FWS could not consider economic impacts in its listing decisions, and because, under 50 C.F.R. § 402.02, CHDs had no appreciable economic impacts beyond those attributable to listing, the agency

^{146.} Taylor, *supra* note 19, at 362.

^{147.} See supra Part II(c).

^{148.} Gifford Pinchot, 378 F.3d at 1063.

^{149.} Id. at 1069.

^{150.} Id.; 50 C.F.R. § 402.02 (2009).

^{151.} Fisher v. Salazar, 656 F. Supp. 2d 1357, 1369 (N.D. Fla. 2009); Cape Hatteras Access Pres. Alliance v. U.S. Dep't of the Interior, 344 F. Supp. 2d 108, 127 (D.C. Cir. 2004) (stating that "[f]unctional equivalence is the theory that the designation of critical habitat serves a minimal additional function separate from the listing.").

^{152.} Listing decisions must be made "solely on the basis of the best scientific and commercial data available..." 16 U.S.C. § 1533(b)(1)(A) (2006).

^{153.} See Fisher, 656 F. Supp. 2d at 1368.

did not conduct impact analyses to determine the costs or benefits of designating critical habitat. 154

In 2001, the Fifth Circuit invalidated 50 CFR § 402.02 in Sierra Club v. U.S. Fish & Wildlife Service, thereby rejecting the agency's rationale for not designating unoccupied habitat for the gulf sturgeon. 155 The agency argued that the habitat was unnecessary for the sturgeon's survival, per 50 C.F.R. § 402.02. 156 In 2004, the Ninth Circuit came to the same conclusion in Gifford Pinchot v. U.S. Fish & Wildlife Service, finding that reliance on the regulation led to FWS's failure to analyze the impact of proposed logging leases on the Northern spotted owl's recovery within its CHD. 157 The court held the regulation to be an impermissible interpretation of a statute critical habitat including specific defines as areas. . .essential to the *conservation* [i.e., recovery] of the species."158

As Part VI discusses, the agency's failure to account for recovery benefits of CHDs must also result in a judicial finding that exclusions of critical habitat under § 4(b)(2) are procedurally invalid. Yet too many courts have jettisoned a hard look analysis at FWS's decision to exclude critical habitat under § 4(b)(2), inconsistent with its intrusive level of review of the initial designations under § 4(b)(3). Rectifying this deficit both in agency decision-making and accountability in the courts has become a practical imperative after the Tenth Circuit's misguided 2001 decision in *New Mexico Cattle Growers*.

^{154.} See, e.g., N.M. Cattle Growers' Ass'n v. U.S. Fish & Wildlife Serv., 248 F.3d 1277, 1283-84 (10th Cir. 2001) ("The FWS stated in its economic analysis that, because all actions 'that result in adverse modification of critical habitat will also result in a jeopardy decision, designation of critical habitat for the flycatcher is not expected to result in any incremental restrictions on agency activities."").

^{155.} Sierra Club v. U.S. Fish & Wildlife Serv., 245 F.3d 434, 444-45 (5th Cir. 2001).

^{156.} Id.

^{157.} Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059, 1069 (9th Cir. 2004).

^{158.} Id. at 1070 (citing 16 U.S.C. § 1532(5)(A) (2006)).

^{159.} See Ctr. for Biological Diversity v. Bureau of Land Mgmt., 422 F. Supp. 2d 1115, 1122 (N.D. Cal. 2006) (holding that FWS "improperly ignored the recovery goal of critical habitat" by finding "that there were no additional regulatory benefits to be gained by designating critical habitat in areas that were ultimately excluded.") (emphasis added).

IV. New Mexico Cattle Growers Thrust Economic Impact Analyses Onto Center Stage, and Provided a New Rationale for Excluding Critical Habitat

Many commentators have identified the beginning of the Bush Administration in 2001 as the defining moment when FWS began slashing critical habitat protections. While politics no doubt influenced agency decision-making, it was the Tenth Circuit's ruling in *New Mexico Cattle Growers* that gave the agency legal cover for excluding vast swaths of critical habitat, largely on economic grounds.

In 2001, the Tenth Circuit abolished the agency's baseline approach for conducting § 4(b)(2) impact analyses, thereby inadvertently handing FWS a new rationale for excluding critical habitat. By requiring FWS to expand its analysis to include impacts attributable to listing, the court invited an administration openly hostile to the ESA to publish the economic costs associated with both listing species *and* CHDs. This decision, therefore, undermined the plain language of the ESA that restricts economic analyses to the effects of CHDs. ¹⁶²

In New Mexico Cattle Growers, the plaintiff New Mexico Cattle Growers Association sought to invalidate FWS's CHD for the southwestern willow flycatcher, arguing that the agency failed to conduct an economic impact analysis for the CHD. 163 Congress amended the ESA in 1982 to include § 4(b)(2), which requires the agency to take into account "the economic impact, the impact on national security, and any other relevant impact" of designating

^{160.} See, e.g., George Cameron Coggins & Robert L. Glicksman, Federal Land and Resource Preservation Management, 3 PUB. NAT. RES. L. (2d Ed. 2010); Dan Vergano, Survey: Science, Politics at Odds, USA TODAY, Feb. 9, 2005, at 9D, available at http://www.usatoday.com/tech/science/2005-02-09-fish-game_x.htm; Natural Resources Defense Council, The Bush Record: Endangered Species & Habitat Protection, available at http://www.nrdc.org/bushrecord/wildlife_species asp (accessed on May 4, 2010).

^{161.} See N.M. Cattle Growers Ass'n v. U.S. Fish & Wildlife Serv., 248 F.3d 1277, 1285 (10th Cir. 2001).

^{162.} Cape Hatteras Access Pres. Alliance v. U.S. Dep't of Interior, 344 F. Supp. 2d 108, 130 (D.D.C. 2004).

^{163.} N.M. Cattle Growers Ass'n, 248 F.3d at 1280.

critical habitat.¹⁶⁴ The purpose was to provide some counterpoint to the listing process, which is based solely on the best scientific data available, to account for effects on land use and other development interests.¹⁶⁵ After 1982, the agency used a baseline approach for its § 4(b)(2) analysis, whereby it placed all economic impacts not solely attributable to the CHD below the baseline, leaving only impacts resulting exclusively from the CHD above the baseline.¹⁶⁶ Once again, the agency argued that no economic impacts resulted only due to its designation of critical habitat because, as discussed in Part II(c)(ii), a CHD would add no additional protections beyond a listing pursuant to 50 C.F.R. § 402.02.¹⁶⁷ Therefore, there were no above-the-baseline economic impacts.¹⁶⁸

The court rejected the agency's rationale, finding that Congress unambiguously intended for the agency to consider economic impacts in CHDs. 169 Because the plaintiffs did not challenge the agency's regulation governing consultation for jeopardy and adverse modification, however, the court did not invalidate the regulation itself, as the courts did in *Sierra Club* and *Gifford Pinchot*. 170 Instead, it reached a muddled compromise. The agency would need to conduct a co-extensive economic analysis, which would consider economic impacts of both listing a species and designating critical habitat. 171

The agency responded by considering "all conservation related costs"- including those implicated by listing- in its economic impact analyses. ¹⁷² This was despite opinions by the Fifth and Ninth Circuits

^{164. 16} U.S.C. § 1533(b)(2) (2006). Congress was responding to the outcry following the Supreme Court's ruling in TVA. v. Hill, 437 U.S. 153 (1978), which halted construction on the expensive and nearly complete Tellico Dam because the area fell under a CHD for the endangered snail darter. The Court found that regardless of the economic impact, Congress left no agency flexibility to weigh species conservation against other values. Id. at 194.

^{165.} H.R. REP. No. 97-567, PT.1, at 12 (1982).

^{166.} N.M. Cattle Growers Ass'n, 248 F.3d at 1280.

^{167.} Id.

^{168.} Id. at 1283-84.

^{169.} Id. at 1285.

^{170.} Id.

^{171.} *Id.* at 1284-85.

^{172.} See, e.g., Clarification of the Economic and Non-Economic Exclusions for the Final Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants in California and Southern Oregon, 72 Fed. Reg. 30,279, 30,292 (May 31, 2007) (to be codified at 50 C.F.R. pt. 17) ("In light of the

shortly thereafter rejecting the Tenth Circuit's holding as inconsistent with the ESA. ¹⁷³ As a practical matter, revised CHDs based on coextensive impact analyses have led to stark reductions in CHDs for many listed species. ¹⁷⁴

V. FWS DRASTICALLY REDUCED CHDs FOR LISTED SPECIES FOLLOWING NEW MEXICO CATTLE GROWERS

Pro-development groups responded to the Tenth Circuit's decision by challenging CHDs nationwide, arguing that their economic impact analyses to date had failed to consider co-extensive impacts. ¹⁷⁵ If FWS considered the full economic costs of both species listing and CHDs, it might be less inclined to exclude more habitat under § 4(b)(2). ¹⁷⁶ After designating critical habitat essential for a species' conservation and conducting an economic analysis, the Secretary may determine that the benefits of excluding certain areas outweigh the benefits of including them, so long as exclusion will not result in the species' extinction. ¹⁷⁷ I refer to this as Step 2 in the critical habitat designation process. Unfortunately, *New Mexico Cattle Growers* set up a collision course between § 4(b)(2)'s floor of preventing extinction, and ESA's primary emphasis on achieving species recovery.

After *New Mexico Cattle Growers*, the Bush Administration and developers began using § 4(b)(2) as a means of drastically reducing CHDs. Half the designations in 2001-2003 included exclusions under the provision, compared with just five out of fifty-six from 1993-2001. The compared with just five out of 1993-2001.

uncertainty concerning the regulatory definition of adverse modification, our current methodological approach to conducting economic analyses of our critical habitat designations is to consider all conservation-related costs.").

^{173.} See Ariz. Cattle Growers' Ass'n v. Kempthorne, 534 F. Supp. 2d 1013, 1032 (D. Ariz. 2008).

^{174.} See infra Part IV.

^{175.} See, e.g., Peter Uimonen & Jack Kostyack, Unsound Economics: The Bush Administration's New Strategy for Undermining the Endangered Species Act, NAT'L WILDLIFE FED'N, (June 2004), at 11-12 available at http://www.nwf.org/nwfwebadmin/binaryVault/Unsound%20Economics.pdf.

^{176.} See id. at 13-14.

^{177. 16} U.S.C. § 1533(b)(2) (2006).

^{178.} See Uimonen & Kostyack, supra note 175, at 7.

^{179.} Id.

FWS responded to *New Mexico Cattle Growers* by either seeking a voluntary remand and vacatur of challenged CHDs, or by settling with pro-development challengers. In any event, the agency's reevaluation of its CHDs based on a more robust economic analysis usually resulted in reduced habitat designations for many listed species, including the Mexican spotted owl, northern spotted owl, arroyo toad, San Diego fairy shrimp, bull trout, and red-legged frog. This article analyzes these particular cases because they involve species with CHDs prior to *New Mexico Cattle Growers*, but whose CHDs were revised after the Tenth Circuit's ruling.

FWS clarified the connection between the Tenth Circuit's decision and its reevaluations. Before reducing the red-legged frog's CHD by 90%, an Interior Department official stated that it settled with the Home Builders Association in response to the ruling, noting that, "Fish and Wildlife agrees that a more robust economic analysis is required." Indeed, the share of acres reduced due to economic

^{180.} For example, in 2003, the U.S. Fish & Wildlife Service reached a settlement with the American Forest Resource Council to conduct a new economic impact analysis in line with the *New Mexico Cattle Growers* decision. Proposed Revised Designation of Critical Habitat for the Northern Spotted Owl (Strix occidentalls caurina), 73 Fed. Reg. 29,471, 29,473 (proposed May 21, 2008) (to be codified at 50 C.F.R. pt. 17).

^{181.} Ctr. for Biological Diversity v. Norton, 240 F. Supp. 2d 1090, 1098 (D. Ariz. 2003).

^{182.} In 2008, FWS cut the northern spotted owl's critical habitat by 1.6 million acres, or 24 percent, to 5.3 million acres. Revised Designation of Critical Habitat for the Northern Spotted Owl, 73 Fed. Reg. 47,325, 47,326 (Aug. 13, 2008) (to be codified at 50 C.F.R. pt. 17).

^{183.} Mike Ferullo, Endangered Species: Fish and Wildlife Service Slashes Habitat for California Toad Species, Citing Costs, 38 ENV'T REP. (BNA) 828 (Apr. 22, 2005).

^{184.} The shrimp's habitat was reduced from roughly 15,000 acres in 1997 to 6,000 acres in 2003. Determination of Endangered Status for the San Diego Fairy Shrimp, 62 Fed. Reg. 4925 (Feb. 3, 1997) (to be codified at 50 C.F.R. pt. 17); Designation of Critical Habitat for the San Diego Fairy Shrimp (Branchinecta sandiegonensis), 68 Fed. Reg. 19,887, 19,888 (proposed Apr. 22, 2003) (to be codified at 50 C.F.R. pt. 17).

^{185.} Designation of Critical Habitat for the Bull Trout, 70 Fed. Reg. 56,212, 56,212 (Sept. 26, 2005) (to be codified at 50 C.F.R. pt. 17).

^{186.} Revised Critical Habitat for the California Red-Legged Frog (Rana aurora draytonii), 73 Fed. Reg. 53,492, 52,492 (proposed Sept. 16, 2008) (to be codified at 50 C.F.R. pt. 17).

^{187.} See, e.g., Kay, supra note 16.

impacts grew dramatically between 2001 and 2003, rising from 0.3% in 2001, to 8.9% in 2002, to 69% in 2003. There are, as usual, exceptions to the rule. Interestingly, the species at issue in *New Mexico Cattle Growers*, the southwestern willow flycatcher, gained 138 river miles of habitat protection in the agency's revised 2005 CHD. 189

As discussed in Part II, the red-legged frog gained protections after a court rejected FWS's argument in 1996 that designating critical habitat was "not prudent." That holding resulted in a CHD of 4.1 million acres. A decade later, the frog was not so lucky. The Home Builders Association challenged the designation immediately after *New Mexico Cattle Growers*, asserting the agency conducted an inadequate economic impact analysis. In its final 2001 rulemaking, FWS concluded, not unusually, that "no significant economic impacts are expected from critical habitat designation above and beyond that already imposed by listing the California red-legged frog." We believe that any project that would adversely modify or destroy critical habitat would also jeopardize the continued *existence* of the species." 194

In 2006, after conducting a new, co-extensive economic analysis consistent with *New Mexico Cattle Growers*, FWS cut the red-legged frog's CHD from 4.1 million acres to 450,000 acres, excluding,

^{188.} Uimonen and Kostyack, supra note 175, at 8.

^{189.} The agency designated 599 river miles in 1997 and 737 miles in 2005. Final Determination of Critical Habitat for the Southwestern Willow Flycatcher, 62 Fed. Reg. 39,129, 39,129 (July 22, 1997) (to be codified at 50 C.F.R. pt. 17); Designation of Critical Habitat for the Southwestern Willow Flycatcher (Empidonax traillii extimus), 70 Fed. Reg. 60,886, 60,886 (Oct. 19, 2005) (to be codified at 50 C.F.R. pt. 17). That said, the agency expanded the breadth of the designation, adding habitat in the states of Colorado, Nevada, and Utah in 2005, to the states also impacted in 1997: Arizona, California, and New Mexico. *Id.* In addition, the agency admitted that the 1997 designation resulted from a rushed process compelled by a court order, and therefore "the Service was not able to provide the level of analysis and completeness that it has in the past on such rules." Final Determination of Critical Habitat for the Southwestern Willow Flycatcher, 62 Fed. Reg. 39,129, 39,130 (July 22, 1997) (to be codified at 50 C.F.R. pt. 17).

^{190.} See supra Part II.

^{191.} See Kay, supra note 16.

^{192.} See id.

^{193.} Final Determination of Critical Habitat for the California Red-legged Frog, 66 Fed. Reg. 14,625, 14,656 (Mar. 13, 2001) (to be codified at 50 C.F.R. pt. 17).

^{194.} Id. (emphasis added).

among other things, all unoccupied land because it was not essential to the frog's *survival*.¹⁹⁵ FWS excluded more than 250,000 acres based on the revised economic analysis alone, ¹⁹⁶ citing co-extensive economic costs totaling nearly \$396 million for nineteen designated tracts as the reason for the exclusion. ¹⁹⁷ The agency further indicated that economics, and not scientific evidence, motivated the exclusions, conceding that the "decrease in residential housing development [on those nineteen tracts] would directly translate into a potential benefit to the subspecies that would result from this designation." ¹⁹⁸ In other words, the exclusion was not due to new scientific data questioning the conservation benefits of the designated tracts, but to newly considered economic factors.

Similarly, in revising the CHDs downward for the bull trout and arroyo toad, the agency noted high economic costs. After conducting a co-extensive economic analysis for the agency's proposed bull trout CHD in June 2004, 800 FWS cut the designation by 75% in 2005, based almost entirely on new cost projections. In the agency published costs between \$200 million and \$300 million for ranchers and utility companies, noting that excluding critical habitat on this basis would not imperil the bull trout's *survival*. FWS also excluded 98% of the critical habitat for the arroyo toad. After the United States District Court for the District of Columbia granted FWS's request for a voluntary remand and vacatur of its original

^{195.} Bob Egelko, Feds Sued Over Millions of Acres for 13 Species, S.F. CHRON., Dec. 20, 2007, at B1; Center for Biological Diversity, Saving the California Red-Legged Frog, available at http://www.biologicaldiversity.org/species/amphibians/California_red-legged_frog/.

^{196.} Designation of Critical Habitat for the California Red-Legged Frog, and Special Rule Exemption Associated With Final Listing for Existing Routine Ranching Activities, 71 Fed. Reg. 19,244, 19,282-83 (Apr. 13, 2006) (to be codified at 50 C.F.R. pt. 17).

^{197.} Id.

^{198.} Id. at 19,283.

^{199.} Designation of Critical Habitat for the Bull Trout, 70 Fed. Reg. 56,212 (Sept. 26, 2005) (to be codified at 50 C.F.R. pt. 17).

^{200.} Proposed Designation of Critical Habitat for the Jarbidge River, Coastal-Puget Sound, and Saint Mary-Belly River Populations of Bull Trout, 69 Fed. Reg. 35,768 (proposed June 25, 2004) (to be codified at 50 C.F.R. pt. 17).

^{201.} Designation of Critical Habitat for the Bull Trout, 70 Fed. Reg. at 56,212.

^{202.} Wilson, supra note 17.

^{203.} Ferullo, supra note 183.

CHD for the toad in 2002 to comply with *New Mexico Cattle Growers*, ²⁰⁴ the agency conducted a new analysis in 2005 revealing co-extensive costs of \$1.5 billion over twenty years – an alarming figure that invited a pro-development backlash. ²⁰⁵ The agency attributed 90% of those costs to curbed real estate development. ²⁰⁶ In response, the agency cut the toad's CHD in 2005 by 125,000 acres to 11,695 acres, basing the reduction of 68,000 acres "solely on economic considerations." ²⁰⁷

Finally, in 2008, the agency reduced the northern spotted owl's critical habitat by 1.6 million acres, or 24%, to 5.3 million acres. The reduction resulted from a 2003 settlement with the American Forest Resource Council, among other groups, requiring FWS to revise its economic impact analysis. Once again, *New Mexico Cattle Growers* took center stage, and it was reported that "the administration's decision to seek a settlement was based on [the Tenth Circuit's] decision finding that federal agencies had not properly considered the economic impacts of designating critical habitat."

The agency's justifications for the exclusions reflect an abuse of discretion in their continuous reliance on 50 C.F.R. § 402.02's conflation of the survival and recovery standards. In the case of the red-legged frog, after citing the high costs of designating habitat, FWS then noted that the benefit of CHDs was limited because all nineteen excluded tracts were occupied by the frog, meaning they would receive comparable protections through jeopardy consultations. Aside from the fact that this conclusion wrongly assumes that both jeopardy and adverse modification consultations

^{204.} Bldg. Indus. Legal Def. Found. v. Norton, 231 F. Supp. 2d 100, 101-02 (D.D.C. 2002).

^{205.} Ferullo, supra note 183.

^{206.} Id.

^{207.} Id.

^{208.} Revised Designation of Critical Habitat for the Northern Spotted Owl, 73 Fed. Reg. 47,325, 47,326 (Aug. 13, 2008) (to be codified at 50 C.F.R. pt. 17).

^{209.} Proposed Revised Designation of Critical Habitat for the Northern Spotted Owl (Strix occidentalls caurina), 73 Fed. Reg. 29,471, 29,473 (proposed May 21, 2008) (to be codified at 50 C.F.R. pt. 17).

^{210.} Les Blumenthal, Bush Toppling Forest Safeguards, Critics Say: The Settling of Suits Will Kill Protections in the Northwest Plan, They Charge, THE SACRAMENTO BEE, Dec. 30, 2002 at A1.

^{211.} See Ferullo, supra note 183.

determine impacts only to a species' *survival*,²¹² it raises another question. If excluding those lands would drastically reduce economic costs by allowing for greater development in frog habitat, how could the agency simultaneously claim that remaining jeopardy consultations would provide nearly identical protections?

One possible answer is that the agency did not need to square this circle. Under § 4(b)(2), the FWS may exclude lands based on the impact analysis so long as the species does not face extinction²¹³ – in other words, so long as the exclusion does not impact the species' survival. As FWS acknowledged, newly revealed economic costs tipped the balance from favoring species conservation to preventing extinctions.²¹⁴ The agency therefore found a back-door means under Step 2 of defining CHD consultations in terms of survival instead of recovery even while acknowledging that the Gifford Pinchot and Sierra Club courts invalidated such an interpretation of the ESA.

In short, FWS's adoption of co-extensive economic analyses has resulted in the opposite of Congress' intent "that under the ESA the balance of hardships always tips sharply in favor of endangered or threatened species." ²¹⁵

^{212.} See Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059, 1069 (9th Cir. 2004); Sierra Club v. U.S. Fish & Wildlife Serv., 245 F.3d 434, 444-45 (5th Cir. 2001).

^{213. 16} U.S.C. § 1533(b)(2) (2006).

^{214.} Designation of Critical Habitat for the California Red-Legged Frog, and Special Rule Exemption Associated with Final Listing for Existing Routine Ranching Activities, 71 Fed. Reg. 19,244 (Apr. 13, 2006) (to be codified at 50 C.F.R. pt. 17); *Cf.* Final Designation of Critical Habitat for the Arroyo Toad (Bufo californicus), 70 Fed. Reg. 19,562, 19,596 (Apr. 13, 2005) (to be codified at 50 C.F.R. pt. 17) (conceding that the costs and other impacts cited in the economic analysis "may not be avoided by excluding the area, due to the fact that the areas in question are currently occupied by the arroyo toad and there will be requirements for consultation under Section 7 of the Act...")

^{215.} Marbled Murrelet v. Babbitt, 83 F.3d 1068, 1073 (9th Cir. 1996).

VI. FWS USES CO-EXTENSIVE ECONOMIC IMPACT ANALYSES TO EXAGGERATE COSTS, UNDERESTIMATE BENEFITS, AND JUSTIFY ALTERNATIVE PROTECTION SCHEMES AS SUPERIOR ALTERNATIVES FOR PROMOTING SPECIES RECOVERY

A. The Agency Exceeds Its Discretion by Focusing On Costs Of Critical Habitat And Minimizing Economic And Non-Economic Benefits

Since the courts in Sierra Club and Gifford Pinchot compelled FWS to consider CHDs in terms of species recovery rather than survival, the agency has acknowledged benefits of CHDs in its final rulemakings. 216 But critical habitat exclusions have continued to rise under § 4(b)(2) for two reasons. First, FWS routinely fails to fully consider economic and non-economic benefits relative to costs, instead citing three boilerplate benefits of designating critical habitat: educational benefits, benefits derived from adverse modification consultations that would not also trigger jeopardy consultations, and circumstances where additional protections under other regulatory mechanisms are triggered by a designation.²¹⁷ Second, the coextensive economic impact analysis mandated by New Mexico Cattle Growers has resulted in exaggerated costs. As John Kostyack of the National Wildlife Federation correctly predicted in 2003, the rewrite of CHDs to be consistent with New Mexico Cattle Growers "will ultimately lead to smaller areas covered by the critical habitat designations, as the Services begin to use the ESA [§] 4(b)(2) exclusion authority in unprecedented ways."218

Critical habitat designations for the red-legged frog, bull trout, and arroyo toad that were developed after *New Mexico Cattle Growers* illustrate how the agency undervalues benefits and exaggerates costs. After conservation organizations sued FWS for failing to consider economic benefits and broader social values in eliminating 90% of the red-legged frog's critical habitat, the agency relented and

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^{216.} See, e.g., Designation of Critical Habitat for the Bull Trout, 70 Fed. Reg. 56,212, 56,240 (Sept. 26, 2005) (to be codified at 50 C.F.R. pt. 17).

^{217.} *Id*

^{218.} Critical Habitat Designations Under the Endangered Species Act: Hearings Before the Subcomm. on Fisheries, Wildlife, and Water of the S. Comm. on Env't and Pub. Works, 108th Cong. 64 (2003) (statement by John Kostyack, Senior Counsel, National Wildlife Federation).

reevaluated the CHD.²¹⁹ Yet the agency's proposed 2008 designation restored the frog's CHD to only 1.8 million acres – far short of the original 4.1 million acres proposed pre-New Mexico Cattle Growers.²²⁰ On March 17, 2010, the agency settled on a final designation of slightly more than 1.6 million acres, or a 61% reduction compared to the original designation.²²¹ This was in large part due to a revised economic impact analysis, which again focused almost exclusively on costs. In soliciting public comment on its 2008 \S 4(b)(2) analysis, sixteen of the agency's twenty questions concerned whether the agency had underestimated costs. Only four included any mention of potential benefits - economic or noneconomic - that the agency might consider. 222 Moreover, the analysis itself cited only economic costs, including impacts to: (1) residential and commercial development; (2) water management; (3) agriculture; (4) ranching and grazing; (5) timber harvest; (6) transportation; (7) fire management; (8) utility and oil and gas pipeline construction and maintenance; and (9) habitat and vegetation management.²²³

In addition to a cost-biased focus, the agency considered costs associated both with listing and designating habitat in its co-extensive analysis. This had a distortionary effect. Not only was the cost estimate exaggerated – in this case \$510 million to \$1.34 billion over

^{219.} A 2007 inspectors general report found that FWS-head Julie MacDonald had routinely excised scientific data supporting broader CHDs. She resigned her position in 2007. See Memorandum from Earl. E. Devaney, Inspector General, Dep't of the Interior, to Dirk Kempthorne, U.S. Secretary of the Interior, available at

http://www.doioig.gov/images/stories/reports/pdf/Endangered%20Species%20FINAL%20REDACTED5%20w_TOC_encryption.pdf.

^{220.} Revised Critical Habitat for the California Red-Legged Frog (Rana aurora draytonii), 73 Fed. Reg. 53,492 (proposed Sept. 16, 2008) (to be codified at 50 C.F.R. pt. 17).

^{221.} Revised Designation of Critical Habitat for the California Red-Legged Frog, 75 Fed. Reg. 12,816 (Mar. 10, 2010) (to be codified at 50 C.F.R. pt. 17).

^{222.} Revised Designation of Critical Habitat for the California Red-Legged Frog (Rana aurora draytonii), 74 Fed. Reg. 51,825, 51,825-26 (proposed Oct. 8, 2009) (to be codified at 50 C.F.R. pt. 17).

^{223.} Id. at 51,827.

^{224.} See Uimonen & Kostyack, supra note 175, at 17.

twenty years²²⁵ – but it included those costs solely attributable to listing protections, which may not be considered in deciding whether to exclude critical habitat.²²⁶

FWS's impact analysis was similarly flawed for the bull trout, arroyo toad, and combined habitat designation for fifteen vernal pool species. In the case of the bull trout, the agency cited up to \$300 million in development costs but failed to include estimates by its own economist of \$200 million to \$215 million in potential economic benefits derived from preserving the trout's habitat.²²⁷ Similarly, while citing enormous costs for protecting the arroyo toad, the agency did not consider water quality protections and subsequent improvements in public health that would likely result from the CHD,²²⁸ nor did it account for the premium homeowners would pay to locate near protected open space.²²⁹ Finally, with its 2003 revised CHD for fifteen vernal pool species, FWS reduced the designated critical habitat by 60%, citing co-extensive costs of approximately \$1.4 billion over twenty years.²³⁰ Besides considering costs associated with listing protections that are irrelevant to a CHD, the agency used questionable methods to estimate broader real estate market impacts, sometimes double-counting previous costs estimated by the Army Corps of Engineers § 404 permitting under the Clean Water Act. 231 The resulting cost estimate therefore not only differed from the 2002 draft estimate of \$130 million over twenty years - it was more than ten times greater.²³²

A cost-biased impact analysis constitutes an abuse of agency discretion under the APA. Contrary to the White House Office of Management and Budget (OMB) guidelines and ESA's clear command that FWS consider *all* impacts of a CHD, the agency routinely excludes from its analyses non-economic social benefits, such as recreation, cultural and historic values, and preserving

^{225.} *Id.* Confusingly, the agency now refers to the co-extensive analysis *as* the baseline analysis, and the formerly termed baseline analysis as an incremental cost analysis.

^{226.} Id.

^{227.} Wilson, supra note 17.

^{228.} Ferulio, supra note 183.

^{229.} Wilson, supra note 17, at A1.

^{230.} Uimonen & Kostyack, supra note 175, at 17.

^{231.} Id. at 18.

^{232.} Id. at 17-18.

genetic and scientific resources, as well as other economically significant benefits, like watershed protection, erosion control, climate and air quality control.²³³

B. FWS Underestimates The Benefits Of Critical Habitat To Justify Reliance On Alternative Protection Schemes Like HCPs And Pre-Existing Regulations

FWS does consistently consider three benefits of CHDs: educational opportunities, benefits to the species derived from adverse modification consultations that do not also trigger jeopardy consultations, and circumstances where additional protections under other regulatory regimes are triggered by a designation. But these are offered up as straw men, acknowledged for the purpose of satisfying *Sierra Club* and *Gifford Pinchot*'s requirement that FWS consider recovery goals, but easily dismissed for providing few additional benefits beyond listing. Having disabused anyone of the notion that such CHD benefits are, in fact, substantial, the agency then shifts gears and cites alternative conservation mechanisms – generally HCPs and pre-existing regulations – to justify excluding large tracts of critical habitat, particularly on private lands. 235

The agency's reasons for favoring HCPs over CHDs are not without merit. HCPs and other voluntary, adaptive management programs may provide species protections while also bringing collaborative flexibility to a contentious and divisive law.²³⁶ Indeed,

^{233.} The Office of Management & Budget (OMB) developed guidelines for conducting economic analyses in response to an executive order in 1996 and congressional legislation in 2003. The OMB requires direct the agency to consider both quantifiable and non-quantifiable costs and benefits. "When there are important non-quantified monetary values at stake, you should also identify them in your analysis so policymakers can compare them with monetary benefits and costs." Office of MGMT. & BUDGET, EXECUTIVE OFFICE OF THE PRESIDENT, OMB CIRCULAR A-4, REGULATORY ANALYSIS 3 (2006), available at http://www.whitehouse.gov/sites/default/files/omb/assets/omb/circulars/a004/a-4.pdf.

^{234.} See, e.g., Designation of Critical Habitat for the Bull Trout 70 Fed. Reg. 56,212, 56,240 (Sept. 26, 2005) (to be codified at 50 C.F.R. pt. 17).

^{235.} In 2003, then-Assistant Interior Secretary Manson acknowledged an expansion of the use of the exclusion provision, stating, "[w]e in this Administration have been looking at [this exclusion provision] quite a bit more robustly than has been done in the past." See Jehl, supra note 16, at A18.

^{236.} See, e.g., Craig R. Allen, Panarchy, Adaptive Management and Governance: Policy Options for Building Resilience, 87 NEB. L. REV. 1036, 1040

many analysts have noted the theoretical advantages of collaborative HCPs in fostering agreements between FWS, private property owners, and other regulated entities to manage development on land occupied by listed species. But as Martin Nie recently observed, collaborative plans cannot supplant robust regulatory enforcement, and are actually dependent on them. HCPs may be acceptable conservation alternatives but only against the "backdrop of regulatory coercion making HCPs look relatively attractive to private landowners." The threat of the "hammer" of regulatory enforcement – in this case, maximal CHDs – is important to developing stronger HCPs.

For both legal and policy reasons, I would go one step further in asserting that CHDs should remain the default course of action, rather than a backstop against weak voluntary mechanisms.

1. Congress Requires That FWS Designate Critical Habitat

The ESA requires that the agency both designate critical habitat and implement recovery plans, which may include HCPs. HCPs. While the agency has discretion to exclude critical habitat under § 4(b)(2) based on its impact analysis, this does not equate to unbounded authority to effectively vitiate this statutory obligation. Indeed, Congress erected a "conservation firewall" between CHDs and recovery plans. That is, Congress viewed the two as distinct rather than alternative means toward reaching the same end. For example, while CHDs trigger the more rigorous CHD adverse habitat modification consultation analysis, HCPs activate only less protective jeopardy consultations. As the Ninth Circuit held in Gifford

^{(2009);} J.B. Ruhl, Regulation By Adaptive Management – Is it Possible?, 7 MINN. J.L. Sci. & Tech. 21, 42-46 (2005); Lynn Scarlett, The Endangered Species Act and Landowner Incentives, A.L.I. 139, 143-45 (2009).

^{237.} Ruhl, supra note 236, at 45-46, n.70.

^{238.} Martin Nie, The Underappreciated Role of Regulatory Enforcement in Natural Res. Conservation, 41 POLICY SCIENCES 139, 148 (2008).

^{239.} Id. at 150.

^{240.} Id. at 151.

^{241. 16} U.S.C. § 1533(a)(3), (f)(1) (2006).

^{242.} See, e.g., David A. Paulson, No Endangered Species Left Behind: Correcting the Inequity in Critical Habitat designation for Pre-1978-Amendment Listed Species, 25 U. HAW. L. REV. 525, 537 (2003).

^{243.} See 16 U.S.C. § 1536(a)(2).

^{244.} Id.

Pinchot, "[the agency] cannot rely on a conservation program that has the same goal as critical habitat to change the boundaries of the spotted owl's critical habitat." This would amount to doing at Step 2 (determining what lands to exclude from a CHD) what the Ninth Circuit rejected doing at Step 1 (failing to designate critical habitat). ²⁴⁶

Moreover, legislative history supports a statutory interpretation that limits FWS's discretion to replace CHDs with HCPs. In 2003, in a move to weaken CHDs and promote voluntary "cooperative the U.S. House of Representatives conservation" programs, considered the Critical Habitat Reform Act which would have banned CHDs in areas where HCPs existed.²⁴⁷ Former FWS head Jamie Rappaport Clark testified that replacing CHDs with HCPs was a recipe for more species extinction. "[It] not only fails to improve the conservation of habitat under the Endangered Species Act, it would actually make the situation worse by effectively eliminating any protection for much if not most of the habitat endangered and threatened species need to recover."248 If FWS already had statutory authority to exclude CHDs based on the existence of HCPs, the need to codify that into law would seem redundant and the campaign by conservationists to defeat the bill moot.²⁴⁹

Third, excluding land based on alternative protections is a suspect interpretation of the agency's own regulation, which permits exclusions based on the "probable economic and other impacts of the designation upon proposed or ongoing activities." The exclusion analysis should thus follow directly from the § 4(b)(2) impact analysis. Indeed, the agency acknowledges as much in its CHD rulemakings, stating in its bull trout designation, for example, that "information [from the economic impact analysis] is intended to

^{245. 378} F.3d at 1076.

^{246.} Natural Res. Def. Council v. U.S. Dept. of the Interior, 113 F.3d 1121, 1127 (9th Cir. 1997).

^{247.} Ronny Millen, Christopher L. Burdett, *Critical Habitat in the Balance: Science, Economics, and Other Relevant Factors*, 7 MINN. J. L. Sci. & Tech. 227, 228 (2005).

^{248.} *Id.* at 229 (citing *Hearing on H.R. 2933 Before the H. Comm. on Resources*, 108th Cong. 9 (April 28, 2004), at 73-74 (statement of Jamie Rappaport Clark, Executive Vice President, Defenders of Wildlife)).

^{249.} One could, however, argue that the bill's import derived from the fact that it made a discretionary decision to supplant CHDs with HCPs a mandatory one.

^{250. 50} C.F.R. § 424.19 (2009).

assist the Secretary in making decisions about whether the benefits of excluding particular areas... outweigh the benefits of including those areas in the designation." Yet FWS has instead used § 4(b)(2) to supplant CHDs with alternative conservation mechanisms.

Admittedly this is a weaker argument, since the agency's rule does not *prohibit* consideration of other factors in weighing the benefits of exclusion versus inclusion.²⁵² FWS could thus make a strong argument that its policy of excluding land based on the existence or development of HCPs is a reasonable interpretation of its own regulation.²⁵³

2. Replacing CHDs With HCPs Is A Suspect Policy

Excluding habitat on the basis of alternative protections is also suspect policy for three reasons: (1) voluntary conservation programs, like HCPs, are subject to less rigorous consultation standards; (2) HCPs are oftentimes based on bad science; and (3) HCPs' legitimacy as superior conservation mechanisms is undermined by the agency's failure to fully consider benefits of CHDs.

First, an HCP may not jeopardize the continued existence of a species, but it also need not contribute to its recovery, thus raising questions of whether HCPs really provide comparable protections. Second, HCPs are too often based on bad science, and have a mixed track record of success. Many HCP recovery plans purporting to protect multiple species contain significant information gaps that compromise suitable conservation or mitigation efforts. In

^{251.} Designation of Critical Habitat for the Bull Trout 70 Fed. Reg. 56,212, 56,260 (Sept. 26, 2005) (to be codified at 50 C.F.R. pt. 17).

^{252.} See 16 U.S.C. § 1536(b)(2) (2006).

^{253.} Martin v. Occupational Safety and Health Review Comm'n, 499 U.S. 144, 150-51 (1991) (stating that "[b]ecause applying an agency's regulation to complex or changing circumstances calls upon the agency's unique expertise and policymaking prerogatives, we presume that the power authoritatively to interpret its own regulations is a component of the agency's delegated lawmaking powers.").

^{254.} Matthew E. Rahn, Holly Doremus & James Diffendorfer, Species Coverage in Multispecies Habitat Conservation Plans: Where's the Science?, 56 BIOSCIENCE 613, 614 (July 2006).

^{255.} Id. at 616

^{256.} Id.; Alejandro E. Camacho, Can Regulation Evolve? Lessons From a Study in Maladaptive Management. 55 UCLA L. REV. 293, 298 (2007) (noting that "[m]onitoring of HCP compliance is usually deficient, if not entirely absent, and

addition, the process for including species in an HCP is weak, with many species added without an adequate scientific basis. On average, 41% of all covered species in the plans were never actually confirmed in the planning area.²⁵⁷

Inadequate procedures were showcased in the case of two of the vernal pool species considered in *Bartel*, the San Diego and Riverside fairy shrimp. In 2006, a district court found the agency's HCP for the species wholly inadequate.²⁵⁸ FWS authorized § 10 ITPs on land essential to the species' conservation, combined with "ersatz mitigation measures," exclusion of adaptive management provisions to adjust for changes in the species' conservation needs, and failure to evaluate the potential impact of its conservation plan.²⁵⁹

Third, replacing CHDs with HCPs is bad policy because of serious procedural flaws in how the agency conducts its § 4(b)(2) analyses. As was discussed in Part V(a), FWS consistently underestimates the benefits of CHDs while relying on spotty scientific data in developing recovery plans, ²⁶⁰ thus begging the question whether HCPs are *actually* superior. If the agency is so confident that HCPs are better at promoting recovery, why undermine its own legitimacy by failing to fully consider the benefits of including critical habitat?

The agency's CHDs for the red-legged frog and bull trout beg this question. FWS wrote extensively on the benefits of cooperative conservation programs over CHDs for the red-legged frog, touting its "private-sector efforts through the Department of the Interior's Cooperative Conservation philosophy," and noting that "[c]onservation agreements with non-Federal landowners (HCPs, safe harbor agreements, other conservation agreements, easements, and state and local regulations) enhance species conservation by extending species protections beyond those available through [§]

subsequent adaptation of HCPs to integrate new information or changed circumstances acquired during implementation is even rarer.").

^{257.} Id. at 617. This is troubling because HCPs, by definition, permit development on some pieces of land in exchange for preserving others. Id. Unless the species is evenly distributed throughout the recovery area, then poor data on a species' location could threaten its survival – let alone recovery – if it largely or exclusively inhabits a specific tract slated for development.

^{258.} Sw. Ctr. for Biological Diversity v. Bartel, 470 F. Supp 2d 1118, 1123 (S.D. Cal. 2006).

^{259.} Id. at 1123, 1139, 1144.

^{260.} See supra Part V(a).

7(a)(2) consultations."²⁶¹ The agency continued by noting the benefits of partnerships with landowners and voluntary conservation commitments. Similarly, in explaining habitat exclusions for the bull trout, the agency noted that "[t]here are tools (e.g., HCPs) that can encourage or require habitat restoration or improvement and other positive steps to help move species closer to being recovered [beyond CHDs]."²⁶³

There is legitimacy to this line of reasoning. Extensive implementation of cooperative conservation initiatives in the 1990s demonstrated that such programs have the potential to accomplish many important conservation-related goals while reducing political aversion to the ESA. Perhaps most importantly, landowners are more willing to share information about species on their land and to commit to preserving certain areas if they are assured a "safe harbor" from ESA bans on "taking" species under § 9. The argument goes that the threat of CHDs and § 9 take prohibitions drive landowners to preemptively develop, clear, or otherwise make their land inhospitable to endangered species — a perverse incentive not-so-affectionately termed "shoot, shovel, and shut up." Perhaps in the species incentive not-so-affectionately termed "shoot, shovel, and shut up."

In reality, however, it is overwhelmingly § 9 alone that (may) create this incentive, not CHDs. The agency's assertion that HCPs are a favored *alternative* to CHDs therefore requires some inventive logic. CHDs are only triggered on private lands when there is some federal nexus.²⁶⁷ Otherwise, private landowners have no obligation to preserve habitat or protect species. Landowners are only subject to land-use regulations through § 9's strict take prohibition, which itself may be relaxed if the landowner implements a viable HCP under § 10.²⁶⁸ Therefore, it is unclear what problem FWS is trying to solve

^{261.} Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the California Red-Legged Frog (Rana aurora draytonii) 73 Fed. Reg. 53,492, 53,516 (Sept. 16, 2008) (to be codified at 50 C.F.R. pt. 17).

^{262.} Id.

^{263.} Designation of Critical Habitat for the Bull Trout 70 Fed. Reg. 56,212, 56,240 (Sept. 26, 2005) (to be codified at 50 C.F.R. pt. 17).

^{264.} Id.

^{265.} Lynn Scarlett, Species Protection: Critical Legal Issues, *The Endangered Species Act and Landowner Incentives*, ALI-ABA 139, 143-45 (Nov. 5-6, 2009).

^{266.} Mark Sagoff, Muddle or Muddle Through? Takings Jurisprudence Meets the Endangered Species Act. 38 Wm. & MARY L. REV. 825, 826-27 (1997).

^{267.} See 16 U.S.C. § 1536(a)(2) (2006).

^{268.} *Id.* § 1539(a)(1) –(2).

by replacing CHDs with HCPs. Why challenge the ESA's clear statutory command that FWS both designate critical habitat and implement conservation plans?

One explanation may be the inclusion of "no surprises" provisions in HCPs and other cooperative conservation programs. ²⁶⁹ Under such agreements, the agency assures landowners that if they agree to preserve parts of their land, then should a species inhabiting that land later be listed as threatened or endangered, the landowner will not be subject to additional regulations – such as CHDs. ²⁷⁰ The agency may also want to minimize the psychological and political impact of drawing a big red circle around private land designating critical habitat. ²⁷¹ But if these reasons explain why HCPs are preferred alternatives to CHDs, then they are inconsistent with the agency's proffered explanation for choosing HCPs over CHDs: that they provide superior conservation benefits for listed species. ²⁷² If HCPs provide better species protections, why should landowners fear CHDs at all?

The most plausible rationalization of these apparent inconsistencies is that HCPs do *not* actually achieve the ESA's conservation objectives – at least, not as they are implemented. Realizing cooperative conservation benefits depends on the availability of thorough scientific data and rigorous oversight and enforcement.²⁷³ So far, this has not been the case.²⁷⁴ The fact that cooperative conservation initiatives have a spotty record of success²⁷⁵ demands that the agency implement rigorous procedures to ensure that any uncertainty is resolved in favor of species conservation. The agency

^{269.} Ruhl, supra note 237, at 47-49.

^{270.} Id.

^{271.} See, e.g., Clarification of the Economic and Non-Economic Exclusions for the Final Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants in California and Southern Oregon, 72 Fed. Reg. 30,279, 30,284 (May 31, 2007) (to be codified at 50 C.F.R. pt. 17) (stating that "[B]y excluding critical habitat for the listed species, we are enhancing our relationship with these conservation partners and facilitating future conservation partnerships.").

^{272.} See, e.g., The Gnatcatcher Case, 113 F.3d 1121, 1127 (9th Cir. 1997); Clarification of the Economic and Non-Economic Exclusions for the Final Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants in California and Southern Oregon, 72 Fed. Reg. 30,279-01, 30,283 (May 31, 2007) (to be codified at 50 C.F.R. pt. 17).

^{273.} See Rahn, et al., supra note 254, at 618.

^{274.} Id. at 616-18.

^{275.} See e.g., Taylor, supra note 19, at 364.

must first study the full range of benefits afforded by a CHD before explaining why HCPs provide superior benefits. In addition, the agency must explain how HCPs can both provide superior (or even comparable) conservation benefits while also saving millions of dollars in economic costs otherwise incurred by CHDs. The agency should bear the burden of demonstrating that HCPs are simply more cost-effective, specialized means of achieving better species conservation.

VII. CHARTING A PATH FORWARD: ENSURING THAT CRITICAL HABITAT DESIGNATIONS PROMOTE SPECIES RECOVERY

A. Judicial Review Of Critical Habitat Designations

Courts should be just as willing to take a hard look at FWS's procedural deficiencies in excluding habitat under § 4(b)(2) as they are in analyzing "not prudent" or "not determinable" findings. Congress' overwhelming conservation mandate that justified courts' intrusive level of review under § 4(a)(3) is equally applicable under § 4(b)(2). PWS has excluded critical habitat based on flawed impact analyses that courts should deem an abuse of discretion under the APA. First, the agency failed to adequately consider the economic and non-economic benefits of CHDs under § 4(b)(2). Second, by excluding critical habitat on the basis that species already enjoy alternative protections at Step 2 under § 4(b)(2), the agency attempts to do exactly what the Ninth Circuit rejected at Step 1 under § 4(a)(3).

Courts have heard challenges to critical habitat exclusions based on allegations of inadequate § 4(b)(2) analyses on only a few occasions. The three relevant cases are *Home Builders Ass'n of Northern California v. U.S. Fish & Wildlife Service*²⁸⁰ and *Center for*

^{276.} See Sw. Ctr. for Biological Diversity v. Bartel, 470 F. Supp. 2d 1118, 1125 n.5 (S.D. Cal. 2006) (citing Wilderness Soc'y v. U.S. Fish & Wildlife Serv., 353 F.3d 1051, 1059–60 (9th Cir. 2003)).

^{277. 5} U.S.C. § 706(2)(A) (2006).

^{278.} See supra Part V(a).

^{279.} The Gnatcatcher Case, 113 F.3d 1121, 1127 (9th Cir. 1997); 16 U.S.C. §§ 1532(5)(A); 1533(b)(2) (2006).

^{280.} No. CIV. S-05-0629 WBS-GGH, 2006 WL 3190518 at *1 (E.D. Cal. 2006) (holding that U.S. Fish & Wildlife Services impermissibly conflated survival and

Biological Diversity v. Bureau of Land Management²⁸¹ in 2006, and Arizona Cattle Growers Ass'n v. Kempthorne²⁸² in 2008. Other challenges have settled out of court.²⁸³

These cases, all arising in the Ninth Circuit, reflect some level of discord in courts' willingness to take a "hard look" at FWS's § 4(b)(2) impact analyses. None of the decisions review FWS's analyses closely enough to ensure consistency with CHDs' primary goal of species recovery.

First, in both *Home Builders Ass'n* and *Bureau of Land Management*, the courts appropriately took a close look at the agency's record to determine whether it actually considered recovery benefits of CHDs beyond good faith assurances that it had done so. The *Arizona Cattle Growers* court did not consider this question. The *Home Builders Ass'n* court struck down the agency's final CHD excluding critical habitat for fifteen vernal pool species as arbitrary and capricious because it impermissibly determined that jeopardy and adverse modification consultations provided equal benefits – a finding that was rejected by the Ninth Circuit in *Gifford Pinchot*. 285

recovery standards, and failed to adequately consider economic benefits in its § 4(b)(2) analysis.).

^{281. 422} F. Supp. 2d 1115, 1143-44 (N.D. Cal. 2006) (holding that mere references to "conservation" in the CHD rule are insufficient evidence that the agency implemented the ESA's recovery goal when the substance of the rule essentially equates "jeopardy" and "adverse modification" determinations).

^{282. 534} F. Supp. 2d 1013, 1035 (D. Ariz. 2008), *aff'd* Ariz. Cattle Growers v. Salazar, 606 F.3d 1160 (9th Cir. 2010) (finding reliance on co-extensive economic impact analyses to be unlawful).

^{283.} The agency designated 74,000 acres of critical habitat for the California tiger salamander after the Center for Biological Diversity sued in 2008 to enjoin the agency's reduction of critical habitat for the salamander by half in 2005. See Designation of Critical Habitat for the Sonoma County Distinct Population Segment of California Tiger Salamander, 74 Fed. Reg. 41,662 (Aug. 18, 2009) (to be codified at 50 C.F.R. pt. 17); see also "Saving the California Tiger Salamander," http://www.biologicaldiversity.org/species/amphibians/California_tiger_salamande r/index.html (last accessed Sept. 26, 2010). As part of a settlement agreement with the American Forest Resources Council (AFRC), the agency proposed several CHD exclusions under § 4(b)(2). Revised Critical Habitat Proposed for Marbled Murrelet, U.S. FISH & WILDLIFE SERVICE NEWS RELEASE (U.S. Fish & Wildlife Service), July 30, 2008, at 1 available at http://www.fws.gov/news/NewsReleases/showNews.cfm?newsId=74AD1A28-D7B1-74AB-E524C17C7AFC988C.

^{284.} See 534 F. Supp. 2d 1013 (D. Ariz. 2008).

^{285.} Home Builders Ass'n of N. Cal. v. U.S. Fish and Wildlife Serv., No. CIV. S-05-0629 WBS-GGH, 2006 WL 3190518, at *27 (E.D. Cal. Nov. 2, 2006).

Empty assurances by the agency that recovery had been applied to its reasoning consistent with *Gifford Pinchot* were inadequate. Similarly, the *Bureau of Land Management* court looked beyond the agency's assertion that it had considered the "conservation needs" of the endangered milk-vetch in excluding critical habitat. The agency defended its exclusion of two tracts of critical habitat on the basis that the milk-vetch was already protected under § 7 federal jeopardy consultations because they occupied these areas. The court deemed the CHD arbitrary and capricious for the same reason: "references to 'conservation'... cannot be squared with the reasoning... which essentially equates the 'jeopardy' and 'adverse modification' determinations to conclude that the regulatory benefits of critical habitat designation in the excluded areas was negligible." 289

Second, in both *Home Builders Ass'n* and *Bureau of Land Management*, the courts appropriately rejected FWS's impact analyses by looking closely at whether the agency fully considered economic benefits of critical habitat in determining that the benefits of exclusion outweighed the benefits of inclusion. Again, the *Arizona Cattle Growers* court did not consider this question. The issue was not, however, clear-cut. Indeed, the district court in *Home Builders Ass'n* at first affirmed the agency's incomplete consideration of economic benefits in justifying habitat exclusions. Upon reconsideration, it reversed this finding. The court acknowledged that it could not consistently hold that FWS failed to follow *Gifford Pinchot* by not considering recovery benefits while simultaneously concluding that its failure to consider economic benefits of recovery in its § 4(b)(2) analysis was permissible. On remand, the court

^{286.} Id.

^{287.} Ctr. for Biological Diversity v. Bureau of Land Mgmt., 422 F. Supp. 2d 1115, 1146 (N.D. Cal. 2006).

^{288.} Id. at 1145.

^{289.} Id. at 1146.

^{290.} Home Builders Ass'n of N. Cal. v. U.S. Fish & Wildlife Serv., No. CIV. S-05-0629 WBS-GGH, 2007 WL 201248, *3 (E.D. Cal. Jan. 24, 2007).

^{291.} See Ariz. Cattle Growers' Ass'n v. Ctr. for Biological Diversity, 534 F. Supp. 2d 1013 (D. Ariz. 2008).

^{292.} Home Builders Ass'n of N. Cal., 2006 WL 3190518, at *27.

^{293.} Home Builders Ass'n, 2007 WL 201248, at *3.

^{294.} Id.

ordered FWS to "adequately consider the recovery benefits of critical habitat designation in designating its exclusions." ²⁹⁵

Similarly, the Bureau of Land Management court found the agency impermissibly failed to consider the public cost savings from closing off areas to off-highway vehicle (OHV) use. 296 FWS considered only the costs in lost surplus value from projected lower visitation rates by OHV users.²⁹⁷ The court injected itself into the agency's decisionmaking process, finding the agency abused its discretion by considering only boilerplate benefits of inclusion - regulatory and educational benefits from designating 52,780 acres of critical habitat. 298 "By only analyzing the loss of revenue and jobs associated with closures, and failing to analyze the concomitant public cost associated with not having to provide additional infrastructure as well as law enforcement and emergency services, the agency "provided an unbalanced assessment of the 'economic impact and any other relevant impact of specifying any particular areas as critical habitat.""299 The court also quickly disposed of the agency's argument that it could not accurately include those cost savings because specific data indicating the extent of the savings was unavailable.300 Just as courts have held that "best scientific data available" under § 4(a)(3) does not mean *perfect* scientific data for purposes of designating critical habitat, ³⁰¹ the *Bureau of Land* Management court appropriately did not absolve the agency of its duty to consider economic benefits in the face of imperfect, if robust, economic information. 302

The court went further in its analysis. Beyond finding the agency's failure to fully consider economic benefits arbitrary and capricious, it closely analyzed the agency's methodology used to calculate costs.³⁰³

^{295.} Id.

^{296.} Ctr. for Biological Diversity v. Bureau of Land Mgmt., 422 F. Supp. 2d 1115, 1153-54 (N.D. Cal. 2006).

^{297.} Id. at 1147.

^{298.} *Id.* at 1153; see supra Part V(b).

^{299.} Id. at 1153 (quoting 16 U.S.C. § 1533(b)(2) (2006)).

^{300.} Bureau of Land Mgmt., 422 F. Supp. 2d at 1154.

^{301.} See, e.g., N. Spotted Owl v. Lujan, 758 F. Supp. 621, 628-29 (W.D. Wash 1991) (noting "[t]hat the Thomas Committee was working to develop conservation strategies for the spotted owl did not relieve the Service of its obligation under the ESA to designate critical habitat to the maximum extent determinable.")

^{302.} Bureau of Land Mgmt., 422 F. Supp. 2d at 1154.

^{303.} Id. at 1148.

The court determined that the analysis concluding a 15% decline in OHV visitation was flawed.³⁰⁴ BLM based its projection on land closures in 2001 that correlated with a 24% decline in visits.³⁰⁵ The 15% estimated decline for a similar closure was based on the 2001 data, which when adjusted for confounding factors in 2001, may have exacerbated the decline in that year.³⁰⁶

While acknowledging that the agency's reasoning appeared sound on its face, the court rejected the finding for three reasons: (1) the BLM itself concluded that the 2001 closures likely had a minimal OHV visitation;³⁰⁷ (2) the economic acknowledged that BLM lacked accurate pre-2002 visitation data; 308 and (3) the analysis unreasonably concluded that the closures led to a 15% decline in visitation in each year from 2001 to 2004, even though the 2003 data showed an increase from 2001.309 In short, the court took it upon itself to question the methodology and assumptions made in the agency's economic analysis. Far from deferring broadly to agency expertise, the court determined for itself whether it believed the agency's reasoning and conclusion made sense – not just that the agency's conclusion could, by some estimation, be rational. This is a similar exercise of judicial review as seen in courts' consistent determination that FWS had supplied insufficient evidence for the court to ratify a "not prudent" finding. 310

In both cases, on these two points, the courts took a "hard look" to determine if the agency's assertion that it considered species recovery was supported by the evidence in the record.³¹¹ Moreover, it is important to remember that the agency's exclusions were based on an illegal regulation that conflated jeopardy and adverse modification

^{304.} Id.

^{305.} Id.

^{306.} Id.

^{307.} Id. at 1148-49.

^{308.} Id.

^{309.} Id.

^{310.} See, e.g., The Gnatcatcher Case, 113 F.3d 1121, 1125 (9th Cir. 1997); Ctr. for Biological Diversity v. Kempthorne, 607 F. Supp. 2d 1078, 1090-91 (D. Ariz. 2009); The Jumping Frog Case, No. C 99-01461, 1999 WL 1244149, at *1 (N.D. Cal. 1999).

^{311.} See Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 27 (1983).

analyses.³¹² Courts should be weary of granting agencies deference for any actions based on an illegal rule – even when the agency professes to do otherwise. Indeed, the burden is squarely on the agency to put forth evidence to counter the "presumption of regularity" that the agency has followed its own rule.³¹³

Unfortunately, the courts limited the effect of their own check on agency discretion by (a) allowing FWS's continued use of coextensive economic analyses, 314 (b) affirming FWS's procedurally and substantively incomplete non-economic impact analyses, 315 and (c) permitting FWS to exclude critical habitat on the basis of alternative protections. 316

1. Arizona Cattle Growers, Bureau of Land Mgmt, And Home Builders Ass'n Got It Half Right In Their Review Of The Agency's Use Of Co-Extensive Economic Analyses

In considering whether FWS could exclude critical habitat under § 4(b)(2) based on a co-extensive, rather than a baseline, economic analysis, the courts got the law partly correct. Importantly, just as the courts looked to Congress' overriding charge that critical habitat promote conservation where "not prudent," "not determinable," or "alternative protections" was the defense, the three courts here appropriately couched their rulings in the ESA's overriding purpose of promoting species conservation. 317

^{312.} See Gifford Pinchot Task Force v. U.S. Fish & Wildlife, 378 F.3d 1059, 1073-74 (9th Cir. 2004).

^{313.} *Id.* at 1074 (affirming the "presumption of regularity" that an agency follows its own regulation unless it provides evidence to the contrary).

^{314.} Ariz. Cattle Growers' Ass'n v. Ctr. for Biological Diversity, 534 F. Supp. 2d 1013, 1035-36 (D. Ariz. 2008); Home Builders Ass'n of N. Cal. v. U.S. Fish & Wildlife Serv., No. CIV. S-05-0629, 2007 WL 201248, at *5 (E.D. Cal. Jan. 24, 2007); Ctr. for Biological Diversity, 422 F. Supp. 2d at 1152 (acknowledging that a co-extensive economic analysis undercuts critical habitat protections, but not going so far as rejecting it).

^{315.} See Home Builders Ass'n of N. Cal. v. U.S. Fish & Wildlife Serv., No. CIV. S-05-0629, 2006 WL 3190518, at *29 (Nov. 2, 2006 E.D. Cal.) (citing Admin. R. Vol. 2 at 17021468); Ctr. for Biological Diversity v. Bureau of Land Mgmt., 422 F. Supp. 2d 1115, 1154 (N.D. Cal. 2006).

^{316.} Home Builders Ass'n, 2006 WL 3190518, at *29.

^{317. 16} U.S.C. § 1531(b) (2002). In creating the ESA, "Congress started from the finding that '[t]he two major causes of extinction are hunting and destruction of natural habitat." TVA v. Hill, 437 U.S. 153, 179 (1978) (quoting S. Rep. No. 93-307, p. 2 (1973), reprinted in 1973 U.S. Code Cong. & Admin. News 2289, 2290).

In Arizona Cattle Growers', the court found that a co-extensive economic analysis was unlawful, in part because "an expansive interpretation of 'economic impacts' is contradictory to the overall purpose of the ESA, which speaks only to conservation, without regard to costs or other economic considerations." The court rejected outright FWS's reliance on a co-extensive analysis in making exclusions for the Mexican spotted owl. 319 FWS's methodology goes "beyond the command of the ESA by examining impacts that exist independent of the critical habitat designation."320 It was therefore inconsistent with Gifford Pinchot, which rejected the agency's rule that gave rise to the co-extensive economic analysis.³²¹ Affirming the ruling, the Ninth Circuit in 2010 reiterated that the "practical relevance of the economic analysis. . . is to determine the benefits of excluding or including an area in the [CHD]."322 Incorporating costs not associated with the designation undercuts that analysis "by incorporating in the analysis costs that will exist regardless of the decision made."323 The court went further, noting that regardless of § 4(b)(2)'s deferential language, the agency remains bound by ESA's primary insistence on designating critical habitat to promote species recovery – a task which is more accurately

In addition, Congress passed the ESA with the stated purpose "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved,' and 'to provide a program for the conservation of such . . . species" *Id.* (quoting 16 U.S.C. § 1531(b)).

^{318.} Ariz. Cattle Growers' Ass'n, 534 F. Supp. 2d at 1035 (emphasis added) (citing 16 U.S.C. § 1531(b)). The district courts have not come to a satisfactory conclusion regarding the permissibility of using a co-extensive economic impact analysis. In Fisher v. Salazar, 656 F. Supp. 2d 1357, 1371, 1372-73 (N.D. Fla. 2009), a pro-development group challenged FWS's use of a baseline economic analysis, out-of-step with New Mexico Cattle Growers. The court confusingly stated that "[t]o the extent the Tenth Circuit's co-extensive approach permits consideration of costs not attributable to the designation, it is inconsistent with the mandate of the ESA." It also held that FWS's use of the baseline economic impact analysis was not arbitrary and capricious because it did "identify costs that would not be attributable to the designation," in line with New Mexico Cattle Growers.

^{319.} Ariz. Cattle Growers', 534 F. Supp. 2d at 1035.

^{320.} Id.

^{321.} See Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059, 1070 (9th Cir. 2004).

^{322.} Ariz. Cattle Growers' Ass'n v. Salazar, 606 F.3d 1160, 1173 (9th Cir. 2010).

^{323.} Id.

reflected by a baseline approach.³²⁴ "[I]f there is no net benefit...to excluding the area, the agency *must* designate it."³²⁵ Similarly, the *Bureau of Land Management* court noted that the co-extensive analysis "undercut[s] the importance of critical habitat."³²⁶

Of the three decisions, the Home Builders Ass'n court got the analysis least correct. It upheld the co-extensive analysis, even after acknowledging that it was legally flawed.³²⁷ The court punted, finding that while other courts had invalidated the co-extensive analysis as impermissibly considering economic impacts associated with species listing, ³²⁸ Gifford Pinchot neutralized that concern: "[After Gifford Pinchot], an agency is no longer prevented from engaging in a meaningful analysis of the economic impact of a [CHD], above and beyond the impact of listing a species. "329 and it therefore did "not require the conclusion that a co-extensive analysis is legally improper."³³⁰ The court missed the point. The objective of the economic analysis is not simply to consider costs and benefits associated with CHDs, but to consider only those costs solely attributable to CHDs, which was the Ninth Circuit's concern in Gifford Pinchot. 331 As the Arizona Cattle Growers' court found, in sharp contrast, "the inclusion of co-extensive costs implicitly violates the ESA's disallowance of consideration of economic factors at the time of listing."³³²

^{324.} Id.

^{325.} Id.

^{326.} Ctr. for Biological Diversity v. Bureau of Land Mgmt., 422 F. Supp. 2d 1115, 1152 (N.D. Cal. 2006).

^{327.} Home Builders Ass'n of N. Cal. v. U.S. Fish & Wildlife Serv., No. CIV. S-05-0629, 2007 WL 201248, at *5 (E.D. Cal. Jan. 24, 2007).

^{328.} See, e.g., Ariz. Cattle Growers' Ass'n v. Ctr. for Biological Diversity, 534 F. Supp. 2d 1013, 1035 (D. Ariz. 2008); Cape Hatteras Access Pres. Alliance v. U.S. Dep't of the Interior, 344 F. Supp. 2d 108, 130 (D.D.C. 2004).

^{329.} Home Builders Ass'n, 2007 WL 201248, at *5 (emphasis added).

^{330.} *Id*.

^{331.} See United States v. Weed, 389 F.3d 1060, 1070 (10th Cir. 2004).

^{332.} Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059, 1070 (9th Cir. 2004). The Ninth Circuit has yet to resolve the district court splits. Considering that several courts have found that Gifford Pinchot, by revitalizing the recovery standard, fundamentally undermined the rationale for the Tenth Circuits' ruling in New Mexico Cattle Growers, it is appropriate for the Ninth Circuit to consider a case involving a co-extensive economic analysis dispute, and find it to be arbitrary and capricious. This would, at least, restore order to the district courts. See Ariz. Cattle Growers', 534 F. Supp. 2d at 1034; Home Builders Ass'n, 2007

Unfortunately, all three courts refused to strike down the co-extensive methodology itself, even though *Gifford Pinchot* and *Sierra Club* rejected the *New Mexico Cattle Growers*' decision that spurred the methodology in the first place. The regulation's persistence is more bizarre considering that the *Gifford Pinchot* and *Sierra Club* rulings, by requiring FWS to consider the unique recovery aspects of CHDs, destroyed the rationale for the Tenth Circuit's decision. If the agency must consider a CHD's impact above and beyond ensuring a species' survival, then a baseline economic analysis that looks only at the impacts of the CHD is necessarily infused with relevance – the Tenth Circuit's original concern.

That three courts failed to reject outright a co-extensive analysis even while referencing the Cape Hatteras D.C. district court, which did³³⁵ – is troubling both legally and practically. The Arizona Cattle Growers' court implicitly addressed the issue, though arrived at a dubious conclusion. The court found somewhat inconsistently that conducting a co-extensive analysis is fine, so long as the agency uses the analysis to determine where the baseline is, rather than relying on it to determine whether to exclude critical habitat.³³⁶ But the reason the agency gave for conducting a co-extensive analysis at all was to be in compliance with New Mexico Cattle Growers, not as an alternative means of implementing the baseline approach. A court cannot supply a reasoned basis for an agency's decision the agency has not itself offered, simply to comport the agency's action with the law.³³⁷ Moreover, the court's unelaborated reasoning makes little sense anyway. How can lumping costs attributable to species listing and CHDs help the agency determine what costs result solely from CHDs?

Finally, the practical effect of upholding the co-extensive economic analysis, which necessarily reveals higher costs than a baseline

WL 201248, at * 5; Ctr. for Biological Diversity, 422 F. Supp. at 1152-53 (N.D. Cal. 2006.); Cape Hatteras, 344 F. Supp. 2d at 130.

^{333.} *Id.*; Sierra Club v. U.S. Fish & Wildlife Serv., 245 F.3d 434, 444-45 (5th Cir. 2001).

^{334.} See id.

^{335.} Cape Hatteras, 344 F. Supp. 2d at 129-30.

^{336.} Ariz. Cattle Growers', 534 F. Supp. 2d at 1035-36.

^{337.} See Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983).

analysis,³³⁸ invites lawsuits by developers who point to astronomical costs as proof that CHDs aren't justified.³³⁹ As seen with the agency's rejection of CHDs for the red-legged frog, bull trout, and arroyo toad, publishing the costs at all, regardless of whether the agency relies on them, often compels the agency to strike a balance that favors excluding habitat and preventing extinction, rather than including habitat and promoting conservation.³⁴⁰ While *Arizona Cattle Growers*' and *Bureau of Land Management* correctly found that FWS may not rely on co-extensive analyses in determining whether to exclude land, permitting such analyses has resulted in the opposite of Congress' determination "that under the ESA the balance of hardships always tips sharply in favor of endangered or threatened species."³⁴¹

2. Home Builders Ass'n And Bureau of Land Management Should Have Required That The Agency Consider Non-Economic Benefits

The Home Builders Ass'n and Bureau of Land Management courts rightly refused to grant deference to FWS's failure to fully consider economic benefits. Yet the former court wrongly affirmed the agency's incomplete consideration of non-economic benefits. In Home Builders Ass'n, the agency argued that considering such benefits "would duplicate the codification of the societal value of protecting species by Congress in enacting the ESA." Said another way:

^{338.} See supra Part III.

^{339. &}quot;While largely ignored for nearly twenty years following their enactment, . . [the agency's economic analyses] have recently been the focus of numerous successful lawsuits brought by industry groups challenging the economic analyses accompanying critical habitat designations." See Senatore, supra note 16, at 453.

^{340.} Designation of Critical Habitat for the California Red-Legged Frog, and Special Rule Exemption Associated With Final Listing for Existing Routine Ranching Activities, 71 Fed. Reg. 19,244, 19,282-83 (Apr. 13, 2006) (to be codified at 50 C.F.R. pt. 17); Designation of Critical Habitat for the Bull Trout, 70 Fed. Reg. 56,212 (Sept. 26, 2005) (to be codified at 50 C.F.R. pt. 17); Ferullo, *supra* note 183.

^{341.} Marbled Murrelet v. Babbitt, 83 F.3d 1068, 1073 (9th Cir. 1996).

^{342.} Home Builders Ass'n of N. Cal. v. U.S. Fish & Wildlife Serv., No. CIV. S-05-0629, 2007 WL 201248, at *3 (E.D. Cal. Jan. 24, 2007); Ctr. for Biological Diversity v. Bureau of Land Mgmt., 422 F. Supp. 2d 1115, 1153-54 (N.D. Cal. 2006).

^{343.} See Home Builders Ass'n, 2007 WL 201248, at *29-30.

^{344.} *Id.* at *29 (citing Admin. R. vol. 2 at 17021468).

[w]hile [§] 4(b)(2) of the Act gives the Secretary discretion to exclude certain areas from the final designation, she is authorized to do so only if an exclusion does not result in the *extinction* of the species. Thus, we believe that explicit consideration of broader social values for the species and its habitat, beyond economic impacts, is evidenced by the designation itself...³⁴⁵

In other words, FWS argued that excluding habitat previously designated presupposes that the benefits of including such habitat were already considered in the designation concurrent with the species listing under $\S 4(a)(3)$.

However, this does not comport with the ESA. Indeed, the argument impermissibly reads out of § 4(b)(2) the explicit requirement that the agency weigh both the benefits of exclusion and the benefits of inclusion together. It also fails to account for § 4(b)(2)'s clear mandate that the agency shall "take into consideration...any other relevant impact of specifying any particular areas as critical habitat." If considering economic impacts translates into a non-discretionary duty to consider both economic costs and benefits, how can the agency consistently have discretion to ignore non-economic benefits in an analysis of other relevant impacts?

The *Bureau of Land Management* court, on the other hand, did not reach the legal question of whether FWS may refuse to consider non-economic benefits. The agency was within its discretion, the court held, to determine that land uses that qualify as non-economic benefits – hiking, backpacking, camping, wildlife viewing, birdwatching, and photography – were so minimal that they were not significant.³⁴⁷ The court left open the question of whether the agency is obligated to consider non-economic benefits that are significant.³⁴⁸

^{345.} Designation of Critical Habitat for the Bull Trout, 70 Fed. Reg. 56,212, 56,221 (Sept. 26, 2005) (to be codified at 50 C.F.R. pt. 17) (emphasis added).

^{346. 16} U.S.C. § 1533(b)(2) (2006).

^{347.} Ctr. For Biological Diversity v. Bureau of Land Mgmt., 422 F. Supp. 2d 1115, 1154 (N.D. Cal. 2006).

^{348.} See id.

3. The *Home Builders Ass'n* Court Should Not Have Upheld The Agency's Exclusion Of Habitat Based On Alternative Protections

The Home Builders Ass'n court erroneously concluded that the agency could permissibly exclude lands at Step 2 under § 4(b)(2) on the basis that other conservation plans – generally HCPs – provide alternative protections. But the Ninth Circuit rejected this maneuver at Step 1 under § 4(a)(3) on three separate occasions. The Home Builders Ass'n court, however, found it permissible to do the same thing at Step 2 under § 4(b)(2), pursuant to the impact analysis. The court reasoned that the provision's deferential language "permits the FWS to conduct a discretionary analysis of exclusions. . [t]hus, the Environmental Groups have not cited any authority that would preclude the FWS from considering the existence of other management schemes in deciding whether to exclude land from its critical habitat designation." 352

Yet the court's laissez-faire approach to exclusions is undermined by other opinions. In *Natural Resources Defense Council v. U.S. Department of the Interior*, for example, the United States District Court for the Central District of California rejected the agency's attempt to use its motion to vacate a CHD as a vehicle for its alternative protections argument. The agency claimed that a vacatur of CHDs for the fairy shrimp and gnatcatcher would do no harm to the species because alternative protections already existed. The court rejected this reasoning, opining that "[t]his debate is a transparent rehash of the government's previously rejected arguments against originally designating these critical habitats." 353

Finally, Congress included HCPs in the ESA not as an alternative to CHDs, but to protect species on private lands, which are less likely

^{349. 2006} WL 3190518 at * 30. The court was satisfied that "FWS explained its exclusion of lands subject to HCPs based on its determination that the benefits of exclusion outweighed the benefits of inclusion, and the species would not become extinct as a result." *Id.* Home Builders Ass'n of N. Cal. v. U.S. Fish & Wildlife Serv., No. CIV. S-05-0629, 2006 WL 3190518 at *30 (E.D. Cal. 2006).

^{350.} The Gnatcatcher Case, 113 F.3d 1121 (9th Cir. 1997); Ctr. for Biological Diversity v. Norton, 240 F. Supp. 2d 1090, 1098 (D. Ariz. 2003); Natural Res. Def. Council v. U.S. Dep't of Interior, 275 F. Supp. 2d 1136, 1153 (C.D. Cal. 2002).

^{351.} Home Builders Ass'n, 2006 WL 3190518 at *29.

^{352.} Id.

^{353.} Natural Res. Def. Council, 275 F. Supp. 2d at 1153.

to be protected under a CHD.³⁵⁴ The HCP framework reflects a delicate balance. As noted previously, under § 10, a landowner may apply for an ITP, allowing for the sacrifice of a certain number of members of a specific species,³⁵⁵ contingent on preparing a detailed HCP specifying how the applicant will "minimize and mitigate" harm to protected species.³⁵⁶ In other words, HCPs fulfill the ESA's conservation objectives where CHDs cannot. The emphasis was still, however, on making species recovery *the* overriding objective – consistent with the primary purpose of the ESA.³⁵⁷ Despite the voluntary nature of such cooperative conservation agreements, Congress still "expected FWS to comply with the broad conservation goals of the ESA."

4. Results Matter: CHDs For The Mexican Spotted Owl, Peirson's Milk-Vetch, & Fifteen Vernal Pool Species Following Court Orders

The courts' partial rejections of FWS's impact analyses for failing to include recovery goals has resulted in either reduced or unchanged CHDs. In the cases of the vernal pool species³⁵⁹ and the Peirson's milk-vetch,³⁶⁰ the agency based its decisions to exclude critical habitat on economic costs and alternative protections. In its February 14, 2008, final designation, FWS reduced the milk-vetch's critical habitat by approximately 9,800 acres from the previous 22,000 acres designated, noting "disproportionate economic and social impacts." The agency similarly maintained its exclusion of one

^{354.} As discussed in Part I, *supra*, § 7 consultation requirements are triggered pursuant to a CHD on public land, and are only triggered on private land where the proposed activity involves a federal permit or some other federal nexus. *See* 16 U.S.C. § 1536(a) (2006).

^{355.} Id. § 1539(a)(1)(B).

^{356.} Id. § 1539(a)(2)(A).

^{357.} See TVA v. Hill, 437 U.S. 153, 194 (1978).

^{358.} Sw. Ctr. for Biological Diversity v. Bartel, 470 F. Supp. 2d 1118, 1145 (S.D. Cal. 2006).

^{359.} Clarification of the Economic and Non-Economic Exclusions for the Final Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants in California and Southern Oregon, 72 Fed. Reg. 30,279, 30,283 (May 31, 2007) (to be codified at 50 C.F.R. pt. 17).

^{360.} Revised Designation of Critical Habitat for Astragalus magdalenae var. peirsonii (Peirson's Milk-Vetch), 73 Fed. Reg. 8748 (Feb. 14, 2008) (to be codified at 50 C.F.R. pt. 17).

^{361.} Id.

million acres of critical habitat for the vernal pool species, based again on the rationale that HCPs provide adequate, if not superior, protections.³⁶² There is no pending proposal to revise the Mexican spotted owl's CHD since the *Arizona Cattle Growers* court's ruling in 2006.

The agency's downward revisions to its final CHDs reflects FWS's ongoing reluctance to fully flesh out benefits associated with critical habitat, and highlights the importance of rigorous judicial review over agency procedures. FWS disregarded the Bureau of Land Management court's requirement that FWS consider the economic benefits of CHD designations. Instead, FWS recited its boilerplate generic benefits:³⁶³ educational benefits and benefits derived from adverse modification consultations that would not also trigger jeopardy consultations.³⁶⁴ Indeed, FWS minimized the importance of even these limited "benefits" in a discussion of their shortcomings vis-à-vis voluntary HCPs. 365 Moreover, while FWS discussed the costs associated with reduced OHV use to justify its exclusion of 9,000 acres for the milk-vetch, it failed, once again, to quantify economic benefits in direct contravention of the court's order in Bureau of Land Management. 366 Finally, in an unexplained reversal of its remanded CHD, the agency discussed non-economic costs due to lost recreational opportunities, besides OHV use.³⁶⁷ In court, however, the agency defended not considering the recreational benefits of including the excluded areas because recreational activities beyond OHV use were so minimal.368 The agency offered no explanation for the inconsistency. The imbalanced weighing of non-economic costs and benefits is, unfortunately, consistent with the court's opinion in *Home Builders Ass'n* – the only one of the three

^{362.} Clarification of the Economic and Non-Economic Exclusions for the Final Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants in California and Southern Oregon, 72 Fed. Reg. at 30,283.

^{363.} See supra Part V(a).

^{364.} Clarification of the Economic and Non-Economic Exclusions for the Final Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants in California and Southern Oregon, 72 Fed. Reg. 30,279.

^{365.} Revised Designation of Critical Habitat for Astragalus magdalenae var. peirsonii (Peirson's Milk-Vetch), 73 Fed. Reg. 8748, 8771-72.

^{366.} Id. at 8773.

^{367.} Id.

^{368.} Ctr. For Biological Diversity v. Bureau of Land Mgmt., 422 F. Supp. 2d 1115, 1154 (N.D. Cal. 2006).

courts to rule directly on whether the agency must consider non-economic benefits.³⁶⁹ In its revised May 31, 2007 final CHD following the court's remand, the agency considered neither economic nor non-economic benefits beyond its oft-repeated "boilerplate" benefits for the fifteen vernal pool species.³⁷⁰ Indeed, the agency's only substantive revision was to explicitly state that its unaltered decision to exclude one million acres was now based on consideration of CHDs' unique recovery benefits in line with *Gifford Pinchot*.³⁷¹ And the recovery benefits, the agency determined, were better achieved through HCPs than CHDs. On July 31, 2007, the court dismissed the case, finding FWS's revisions satisfactory, and thus overlooking FWS's semantic sleight of hand.³⁷² The court seemed to forget that, in the controversy's previous iteration, it rejected such empty assurances by the agency that it had considered recovery objectives.³⁷³

In all three cases, judicial review ultimately took a back seat to agency discretion. Where the agency did not violate the court's order, it took full advantage of the court's deference. The results were therefore not entirely surprising: no additional critical habitat. While § 4(b)(2), as noted, grants the agency more discretion than § 4(a)(3), it does not absolve the agency of its responsibility to rigorously examine CHDs' economic and non-economic costs and benefits. Nor does it hamstring the courts from striking down an exclusion justified by alternative protections, such as HCPs, that fail to fully consider the benefits of a CHD. Just as courts in *The Fairy Shrimp Case* and *The Gnatcatcher Case*, among others, reviewed "not prudent" findings under an intrusive "hard look" review standard, courts should do the same in examining whether the agency has made a rational connection between a thoroughly conducted impact analysis (not done here) and a decision to exclude critical

^{369.} Home Builders Ass'n of N. Cal. v. U.S. Fish & Wildlife Serv., No. CIV. S-05-0629 WBS-GGH, 2006 WL 3190518 at *29-30 (E.D. Cal. 2006).

^{370.} Clarification of the Economic and Non-Economic Exclusions for the Final Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants in California and Southern Oregon, 72 Fed. Reg. 30,279, 30,281 (May 31, 2007) (to be codified at 50 C.F.R. pt. 17).

^{371.} Id. at 30,282.

^{372.} Home Builders Ass'n of N. Cal. v. U.S. Fish & Wildlife Serv., No. CIV. S-05-0629 WBS-GGH, 2007 WL 201248, *2 (E.D. Cal. Jan. 24, 2007).

^{373.} Id. at *28.

habitat. Just as those courts cabined the intrusiveness of their review in *TVA v. Hill*'s holding that "the balance has been struck in favor of affording endangered species the highest of priorities," that same charge should guide a review of § 4(b)(2) exclusions. ³⁷⁵

Opponents of limiting agency discretion argue that, under § 4(b)(2), Congress delegated greater discretion to the agency than under § 4(a)(3), which includes the non-discretionary command that the agency "shall...designate [critical habitat]." Nevertheless, even the agency concedes in its CHDs that the impact analysis forms the basis for weighing benefits of exclusion over inclusion. And even under a highly deferential standard, the agency must still demonstrate a rational connection between an informed analysis and any exclusion. Requiring FWS to implement procedures that rigorously analyze all economic and non-economic benefits of CHDs is not inconsistent with the agency's discretion under § 4(b)(2). Indeed, § 4(b)(2) demands it.

Considering that the revised CHDs for the red-legged frog, bull trout, arroyo toad, various vernal pool species, among others, all justify excluding habitat on the basis of existing HCPs, ensuring that recovery objectives are met demands a searching judicial review standard of CHD exclusions.

B. Agency & Congressional Reforms To Promote Species Recovery

FWS's aggressive use of § 4(b)(2)'s exclusion provision raises serious questions of legitimacy. HCPs may serve useful recovery purposes, but their apparent value is belied by the agency's procedural inadequacies in analyzing the costs and benefits of CHDs. Such institutional shortcomings also result in costly lawsuits and sometimes court orders requiring new CHDs, 379

^{374.} TVA v. Hill, 437 U.S. 153, 194 (1978).

^{375.} Wilderness Soc'y v. U.S. Fish & Wildlife Serv., 353 F.3d 1051, 1059-60 (9th Cir. 2003) (finding that where Congress passed legislation with a clear intent, a court must give that intent its full effect as a matter of law).

^{376. 16} U.S.C. § 1533(a)(3)(A)(i) (2006).

^{377.} See, e.g., The Gnatcatcher Case, 113 F.3d 1121, 1124 (9th Cir. 1997) (stating that the agency must "articulate a rational connection between the facts found and the choice made.").

^{378.} See, e.g., Wilson, supra note 17, at A1; Kay, supra note 16, at A1.

^{379.} Senatore, *supra* note 16, at 465 (commenting that "[f]ollowing the willow flycatcher and pygmy-owl decisions [both in 2001], additional lawsuits were filed

triggering even more administrative costs associated with notice and comment rulemaking. 380

As, noted, scientific studies tracking species recovery indicate that CHDs are important to species conservation. Species with critical habitat for two or more years are more likely to improve and less likely to decline than species without critical habitat. Recovery plans, by contrast, have yielded poorer results; only two percent of FWS-administered species achieved greater than 75% of recovery objectives under such plans.

Both Congress and FWS should ensure that (a) the agency is fulfilling Congress' charge of ensuring species' recovery through CHDs, (b) its CHDs are, as much as possible, lawsuit-proof, and (c) that it minimizes political acrimony regarding the ESA. These goals can be achieved through three mechanisms. First, the agency should complete new rulemaking to address the Fifth and Ninth Circuit's orders which invalidated its § 7 consultation rule. Second, the agency should consider economic and non-economic benefits in its § 4(b)(2) analyses. Third, the agency should end it back-door method of excluding critical habitat under § 4(b)(2) on the basis of alternative protections.

A new rule governing § 7 consultations for adverse modification would save administrative costs, promote regularity and predictability with stakeholders, and give CHDs the full force that Congress intended. Currently, the agency operates in a muddled middle, attempting to reconcile the *New Mexico Cattle Growers* decision on the one hand, and *Gifford Pinchot* and *Sierra Club* on the other. As a result, FWS wastes time and money conducting two economic analyses: a co-extensive analysis to comply with *New Mexico Cattle Growers* and a baseline analysis to comply with *Gifford Pinchot* and

challenging critical habitat designations on similar grounds for many other species.").

^{380.} See 5 U.S.C. § 553 (2006).

^{381.} Taylor, *supra* note 19, at 360-62.

^{382.} Id. at 362.

^{383.} See id.

^{384.} Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059, 1070 (9th Cir. 2004).

Sierra Club v. U.S. Fish & Wildlife Serv., 245 F.3d 434, 444-45 (5th Cir. 2001).

^{385.} See, e.g., The Gnatcatcher Case, 113 F.3d 1121 (9th Cir. 1997); Ctr. for Biological Diversity v. Norton, 240 F.Supp.2d 1090 (D. Ariz. 2003); N. Spotted Owl v. Lujan, 758 F. Supp. 621, 626-27 (W.D. Wash. 1991).

Sierra Club. A new rule codifying the agency's adverse modification consultations in terms of recovery only would clarify the benefits of CHDs beyond species survival, trigger a meaningful economic analysis above the "baseline," and eliminate the New Mexico Cattle Growers rationale for conducting costly and time-consuming coextensive economic analyses.

Abolishing the co-extensive analysis would also soften the alarming cost estimates that the agency published after 2001, which intensified demands by pro-development groups to reduce CHDs across the board. Finally, a new consultations rule would likely reduce expensive litigation over CHD designations, thereby directing more agency resources toward species conservation.

1. Crafting A New Consultation Rule

A new rule could take various forms. It might simply remove the two words "survival and" from the current version, so that it defines changes to critical habitat as those that appreciably diminish "the value of critical habitat for the recovery of a listed species." This would bring the regulation into accord with the governing statute, which prevents federal actions that adversely impact conservation of a listed species. 386

In addition, any new rulemaking should "fill the space" in the statute's discretionary language under § 4(b)(2). For one, it should make explicit that any impact analysis must consider both economic and non-economic costs and benefits – and only those above the baseline. The rule should prescribe a non-exhaustive list of factors that the agency shall consider, such as the impact of a CHD on watershed integrity, erosion control, climate and air quality, and property values. This is critical to ensuring that the agency's discretion to exclude critical habitat is less subject to the vicissitudes of politics. Without this provision, the agency could continue arguing that, while CHDs offer educational benefits and more searching § 7 consultations, that these are either irrelevant or redundant. Educational benefits, for example, are imputed to listing itself, and it is likely that any federal action triggering an adverse

^{386.} See, e.g., Gifford Pinchot, 378 F.3d at 1070.

modification consultation would thus also trigger a jeopardy consultation on this basis.³⁸⁷

2. Legislative Reform: Unlikely But Needed

Congress could also amend § 4(b)(2) in a way that would strike a better balance between conservation and development interests, without undermining the ESA's core recovery objective. A statutory command has the advantage of providing more permanence and predictability than an agency regulation, which can be changed relatively easily with each administration. Admittedly, it would be much more difficult to pass such controversial legislation compared with rewriting the agency's rule since sixty votes are now required to pass most legislation of consequence in the U.S. Senate.

Assuming that Congress could summon the political will and rise to the challenge, conservation interests would benefit from two amendments. First, Congress could include a clause specifying that all impacts of CHDs must be considered – both costs and benefits of economic and non-economic consequences. Second, the clause should clearly state that any exclusions shall be based on the impact analysis only. This would avoid the agency's current practice of justifying exclusions based on its development of voluntary cooperative conservation strategies.³⁸⁸

Landowners would also benefit from a separate statutory provision permitting the agency to implement cooperative conservation programs in lieu of CHDs, but with significant caveats. Any compromise must keep Congress' core intent intact: that species have every opportunity for recovery and ultimate delisting. Currently, HCPs are site-specific, and tailored to assist a specific population of a species. CHDs, by contrast, focus on long-term conservation by

^{387.} See, e.g., Designation of Critical Habitat for the Bull Trout, 70 Fed. Reg. 56,212, 56,239-40 (Sept. 26, 2005) (to be codified at 50 C.F.R. pt. 17).

^{388.} See supra Part V(b).

^{389.} Alternatively, the agency could author the same text as a regulation interpreting § 4(b)(2), and would likely get deference due to the section's grant of broad discretionary authority to the agency. Congressional action is, however, preferable because it is not subject to the changing politics of different administrations.

^{390.} Gifford Pinchot, 378 F.3d at 1070.

^{391.} See supra Part I.

"preserv[ing] options for a species' eventual recovery." CHDs, while not sufficient, therefore have the added benefit of encouraging long-term species viability by promoting genetic diversity and preserving more of the species' natural range. 393

The amendment must therefore require that any CHD substitutes satisfy the goal of ensuring long-term species recovery, beyond sitespecific projects. It should specify, for purposes of judicial review, that the agency has the clear burden of proving that it has exhaustively considered the benefits of CHDs, and yet has still determined that the benefits of exclusion outweigh the benefits of inclusion. In addition, the agency must provide robust scientific evidence that the HCP will achieve conservation objectives for both ecosystem functionality and the species itself. It must also commit resources to monitoring. Finally, the rule should include a "fail safe" mechanism that would be tripped in two situations. For argument's sake, if in ten years the listed species shows few or no signs of recovery, or if Congress fails to appropriate sufficient funding for monitoring and enforcement, then an expanded CHD will immediately go into effect, covering the impacted area. 394 Such a trigger could have an important preemptive action-forcing effect. Landowners would have an incentive to agree to strong conservation programs at the outset. The current system, whereby landowners are assured of "no regulatory surprises" if they agree to voluntarily conserve portions of their land, provides the opposite incentive.³⁹⁵ Ultimately, this strategy would better balance the interests of conservationists and landowners alike, reduce costly litigation from all sides, and ensure that the ESA's core habitat conservation objective is validated.

^{392.} Determination of Critical Habitat for the Northern Spotted Owl, 57 Fed. Reg. 1796 (Jan. 15, 1992) (to be codified at 50 C.F.R. pt. 17).

^{393.} See Taylor, supra note 19.

^{394.} An expanded CHD may not solve the problem, since § 7 consultation requirements are only triggered for projects with a federal nexus, but the threat of a "big red circle" surrounding one's land could incentivize landowners to agree to more conservation-oriented recovery programs at the outset.

^{395.} See Ruhl, supra note 236, at 47-49.

VIII. CONCLUSION

The Tenth Circuit's decision in New Mexico Cattle Growers has resulted in reduced CHDs for many listed species. The court's order not only thwarted Congress' intent for the agency to consider economic impacts attributable only to CHDs, but it also gave FWS a new rationale for excluding critical habitat. Co-extensive economic analyses that consider the impacts of both species listing and CHDs reveal much higher costs than those attributable only to CHDs, thereby inviting a backlash from pro-development groups. While cost-benefit analyses themselves are not necessarily fatal to meaningful CHDs, the agency's underestimation of benefits and overestimation of costs has negatively impacted the ESA's core conservation focus. By minimizing the benefits of CHDs vis-à-vis the protections afforded species through the listing process, the agency has justified HCPs as superior conservation mechanisms. current form, this is both bad law and bad policy. Studies show that both CHDs and recovery plans, like HCPs, are necessary to achieve species conservation. Moreover, Congress requires both recovery plans and CHDs for listed species.

Courts should take a "hard look" at the agency's impact analyses and its justifications for excluding critical habitat. Just as the courts routinely struck down the agency's "not prudent," "not determinable," and "redundant" rationales for not designating critical habitat in the 1990s, they should remand critical habitat exclusions that fail to fully consider benefits of CHDs. Because the designation of critical habitat is "the principal means for conserving endangered species," both the agency and the courts must ensure that fulfilling CHDs' conservation objective is *the* top priority.