COMMENTS

"Habitat": What's in a Name (or Term)?

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I. INTRODUCTION

It pays to be cute, especially in conservation efforts. There are animals that benefit from it (like the panda), and those that get the shorter end of that straw (like the Nimbia otter shrew). The dusky gopher frog falls towards the latter end. Neither fluffy and cuddly nor exceptionally notable to the public, the gopher frogs have been having a hard time making a case for themselves in conservation efforts. Despite their exceptionally small population and the fact that their loss of habitat was primarily due to human action, it took nineteen years for the Mississippi dusky gopher frog to become designated as an endangered species. Further still, designation of areas of land required for their habitat has caused a significant controversy between environmental activists and property owners. This Comment provides background into the Endangered Species Act (ESA), details the cases concerning the dusky gopher frogs (namely, *Weyerhaeuser v. United States Fish & Wildlife Service*), and analyzes the Supreme Court's decision to remand the case back to the Fifth Circuit with

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guidance. It will also advocate for a "totality of the circumstances" approach for interpreting the meaning of the term "habitat."

II. BACKGROUND

A. The Endangered Species Act

The Endangered Species Act (ESA) is the product of efforts by early conservationists and a decades-long history of wildlife law. Starting with the passage of the Lacey Act in 1900, Congress initiated conservation legislation in response to the catastrophic decline of certain species.[1] Among those species were the passenger pigeon, the Carolina parakeet, and the whooping crane. The last carrier pigeon died in 1914, as did the Carolina parakeet, and by 1941 the whooping crane's population had been reduced to twenty-one.[2] The Lacey Act prohibited the interstate transportation of "any wild animals or birds" and authorized the secretary of agriculture to implement measures for the "preservation, distributions, introduction, and restoration of game birds and wild birds."[3] In 1964, the Fisheries and Wildlife Service's Rare and Endangered Species Committee's "redbook" on *Rare and Endangered Fish and Wildlife of United States* was the first of its kind, serving an informational role in educating the general public on the status of various animals.[4] While wildlife law developed substantially throughout the next decade, the ratification of the Convention on International Trade in Endangered Species of Wild Fauna (CITES) and the passage of the Endangered Species Act in 1973 greatly increased the federal government's power and scope in conservation efforts.[5] CITES was the result of a parallel effort among the United States and other governmental and nongovernmental organizations.

The ESA was developed to provide a means for the federal government to conserve "the ecosystem upon which endangered species and threatened species depend," as well as a program for "the conservation of such endangered species and threatened species."[6] With its passage, Congress declared that "various species" of wildlife and flora in the United

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1. Stanley H. Anderson, *The Evolution of the Endangered Species Act*, *in* PRIVATE PROPERTY AND THE ENDANGERED SPECIES ACT 11 (Jason F. Shogren ed., 1998); DONALD C. BAUR, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES (2010).
2. BAUR, *supra* note 1, at 11.
3. Anderson, *supra* note 1, at 11.
4. *Id.* at 12.
5. *See id.* at 12-13.
6. 16 U.S.C. § 1531(b) (2018).

States had been "rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation."[7] The Act received nearly unanimous approval from Congress, with President Nixon stating upon signing the bill, "Nothing is more priceless and more worthy of preservation than the rich array of animal life . . . lives will be richer, and America will be more beautiful in the years ahead, thanks to the measure that I have the pleasure to sign into law today."[8] By 2013, a decade after its implementation, the ESA had led to the delisting of twenty-seven endangered species, a signal of their recovery.[9] However, critics note that the small percentage of recovery could be indicative of the regulation's ineffectiveness in conservation efforts.[10] Despite this, the Act, to this day considered "the most comprehensive legislation for the preservation ever enacted by any nation," serves the purpose of providing a means for the conservation of endangered and threatened species and their ecosystems.[11]

The process for granting a species ESA protection starts with the species being listed. Nonfederal parties, via petition, or the Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) can initiate the process for listing. Decisions are based on five criteria: (1) the present or threatened destruction, modification, or curtailment of the species' habitat or range; (2) overutilization of the species for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; or (5) other natural or manmade factors affecting the species' continued existence.[12] The ESA also requires that the decisions be made "solely on the basis of the best scientific and commercial data available."[13]

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7. *Id.* § 1531(a)(1).

8. Statement of President Nixon, San Clemente (Dec. 28, 1973), *reprinted in* S. COMM. ON ENVIRONMENT AND PUBLIC WORKS, A LEGISLATIVE HISTORY OF THE ENDANGERED SPECIES ACT, AS AMENDED IN 1976, 1977, 1979, AND 1980, 487 (1982).

9. *Defining Success Under the Endangered Species Act*, U.S. FISH & WILDLIFE SERV. (Feb. 2, 2019), https://www.fws.gov/endangered/news/episodes/bu-04-2013/coverstory/index.html.

10. Martin F.J. Taylor, Kieran F. Suckling & Jeffrey J. Rachlinski, *The Effectiveness of the Endangered Species Act: Quantitative Analysis*, 55 AM. INST. BIOLOGICAL SCI. 4, 360-67 (2005).

11. Ctr. for Biological Diversity v. Zinke, 900 F.3d 1053, 1059 (9th Cir. 2018).

12. 16 U.S.C. § 1533(a)(1) (2018).

13. *Id.* § 1533(b)(1)(A). The ESA doesn't contain a definition of what constitutes the "best scientific and commercial data available." Therefore, the meaning of the phrase has been left up to interpretation by the courts, and the "best scientific evidence available" does not necessarily mean the "best scientific evidence possible." Building Indus. Ass'n of Superior Cal. v. Norton, 247 F.3d 1241, 1246 (D.C. Cir. 2001). Furthermore, scientific evidence that is inconclusive may be utilized in determining whether a listing is warranted. Sw. Ctr. for Biological Diversity v. Norton, No. 98-

Furthermore, the Secretary of the Interior must designate a critical habitat within one year of the species' listing. Listing decisions—as well as other decisions by any of the agencies that administer the ESA—may be challenged and are subject to the Administrative Procedures Act (APA) and are, therefore, reviewed under the "arbitrary and capricious" standard.[14] The APA allows courts to review and decide all relevant questions of law, including interpretations of constitutional and statutory provisions, such as agency decisions, and "determine the meaning or applicability of the terms of an agency decision.[15] Courts shall

> compel agency action unlawfully withheld or unreasonably delayed; and hold unlawful and set aside agency action, findings, and conclusions found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law; contrary to constitutional right, power, privilege, or immunity; in excess of statutory jurisdiction, authority, imitations, or short or statutory right; without observance of procedure required by law; or . . . unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court.[16]

Generally, agencies' decisions enjoy the highest amount of deference when the agency is creating rules pertaining to its area of expertise concerning matters of factual, scientific, and policy matters.[17] One of those decisions, for example, regards the "critical habitat" determinations.

The Supreme Court once stated that Congress, through the ESA, recognized the crucial importance of preserving natural habitats from destructions and emphasized that the purpose to the ESA was to facilitate

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934, 2002 WL 1733618, at *1, *8-9 (D.D.C. 2002). Interpretation by the courts has led to the practice guidelines for agencies to follow:

(1) Agencies may not manipulate their decisions unreasonably by "relying on certain sources to the exclusion of others"
(2) Agencies may not disregard "scientifically superior evidence."
(3) Relatively minor flaws in scientific data do not render the information unreliable.
(4) The agencies are required to use the best data available, not the best scientific data possible.
(5) The agencies must rely on even inconclusive or uncertain information if that is the best available at the time of the decision.
(6) The agencies may not insist on conclusive data in order to make a decision.
(7) The Agencies are not required to conduct independent research to improve the pool of available data.
(8) The agencies must manage and consider the data in a transparent administrative process.

See Sw. Ctr. for Biological Diversity, No. 98-934, 2002 WL at *8-9.

14. N. Spotted Owl v. Hodel, 716 F. Supp. 479, 481 (W.D. 1988).
15. 5 U.S.C. § 706 (2018).
16. *Id.*
17. Ctr. for Biological Diversity v. Zinke, 900 F.3d 1053,1067 (9th Cir. 2018).

and provide mechanism for conservation of species and their habitats.[18] The ESA provides broad mechanisms for conservation, defining the term as "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided. . . . are no longer necessary."[19] The "critical habitat" requirement has stirred controversy among legislators, courts, and activists. As a result, there has been increasing litigation surrounding the "critical habitat" provision. Sites that could be designated as a "critical habitat" varied widely due to the broad definition of the phrase as

> any air, land or water area (exclusive of those existing man-made structures or settlements which are not necessary to the survival and recovery of a listed species) and constituent elements thereof, the loss of which would be an appreciable decrease the likelihood of the survival and recovery of a listed species or a distance segment of its population.[20]

The regulation also noted that "critical habitat. . . may represent any portion of the present habitat. . . and may include additional areas for population expansion."[21]

The procedure for determining critical habitat for a listed species involves the exchange of information between the States and federal agencies that have jurisdiction over the area in question, after which the Director of the Agency will publish in the Federal Registrar a map of each critical habitat area, with textual information to "[clarify] or [refine] the location and boundaries of each area."[22] Comments from interested parties, including the scientific community, are considered when promulgating the final rule.[23] In making this determination, the Director is required to consider the "physiological, behavioral, ecological, and evolutionary requirements for survival and recovery of listed species," with certain requirements being:

> (1) Space for individual population growth and for normal behavior; (2) Food, water, air, light, minerals, or other nutritional or physiological requirements; (3) Cover or shelter; (4) Site for breeding, reproduction, or rearing of offspring; and generally (5) Habitats that are protected from

18. Tenn. Valley Auth. v. Hill, 437 U.S. 153, 179 (1978).

19. 16 U.S.C. § 1532(2) (2018).

20. Interagency Cooperation, 43 Fed. Reg. 870, 874-75 (Jan. 4, 1978). Constituent elements also include (but are not limited to) physical structures and topography, biota, climate, human activity, and the quality and chemical content of land, water, and air.

21. *Id.*

22. 50 C.F.R. § 424.12 (c) (West through Apr. 9, 2020).

23. 43 Fed. Reg. 870, 876 (Jan. 4, 1978).

> disturbances or are representative of the geographical distribution of listed species.[24]

As it stands, the official definition of critical habitat is as follows:

> The term 'critical habitat' for a threatened or endangered species means
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> (i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 1533 of this title, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and
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> (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 1533 of this title, upon a determination by the Secretary that such areas are essential for the conservation of the species.[25]

Specifically crucial to the issue surrounding the gopher frogs is the provision regarding the designation of areas outside of the species' occupied geographical area as a critical habitat.

B. The Journey of the Mississippi Gopher Frogs—in Both Senses of the Term

The Dusky Gopher Frog, also called the Mississippi Gopher Frog, is a distinct population segment of the gopher frogs found in the lower coastal plain that ranges from Mississippi to Louisiana.[26] With a stubby appearance, mostly due to its "plump body, comparatively large head, and relatively short legs," they range from 63.2 to 70.2 millimeters for males and 78.0 to 82.7 millimeters for females.[27] The dusky gopher frog lives up to its common nomenclature with the coloration of its back, ranging from "almost uniform black to a pattern of reddish brown or dark brown spots on a ground color of gray or brown" and a belly "thickly covered with dark spots and dusky markings from chin to mid-body."[28] The frogs live in "upland sandy habitats historically forested with longleaf pine and isolated temporary wetland breeding sites embedded within the forested landscape."[29] While adult frogs tend to live underground for most of their lives, usually in abandoned burrows created by other animals (tortoise

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24. *Id.*
25. 16 U.S.C. § 1532(5)(A) (2018).
26. Final Rule to List the Mississippi Gopher Frog as Endangered, 66 Fed. Reg. 62,993, 62,993-95 (Dec. 4, 2001)
27. *Id.* at 62,994.
28. *Id.* at 62,993.
29. *Id.*

burrows are usually preferred) and in old stumps, eggs are laid (and tadpoles are born) in ephemeral ponds—isolated ponds that dry completely on a cyclic basis.[30] The ponds fill with water due to rainfall within small, localized watersheds near the pond's center. Because of this, winter rains are crucial in ensuring that the pond is sufficiently filled to allow larvae to hatch and tadpoles to develop.[31] This specific characteristic is crucial, as the cyclical dryness of the ponds prevents predatory fish from surviving in that environment, thus allowing the eggs of the dusky gopher frogs to hatch.[32] The pond's temporal nature makes timing and location crucial to the reproductive cycle of the gopher frogs. After breeding, the adult frogs migrate from the ponds to their main habitat. However, their amphibious nature restricts them to specific routes with environmental conditions that are capable of providing them with enough cover and moisture during the journey.[33] Without areas connecting their terrestrial and wetland habitats, the frogs would have immense difficulty migrating from their breeding ground to their forested environment, and vice versa.[34]

To recap, the Mississippi gopher frog requires the following conditions for its habitats in its entire life cycle: ephemeral ponds that provide seasonal water to allow for breeding and the development of larvae; upland sandy, forested areas near tortoise burrows that provide a habitat for adult frogs; and specific migratory corridors with open canopy that link the two habitats to allow for young adult frogs to migrate to their main habitat. It is these specific requirements that arguably limit the range of the Mississippi gopher frogs. Their historical range consisted of two or three parishes in Louisiana, six counties in Mississippi and one county in Alabama—however they are now found only in Mississippi.[35] The FWS Final Rule notes that the primary factor for the decrease in population is habitat degradation, noting that some habitats had been developed into residential areas, with others having been extensively altered for a variety of reasons.[36] As of the writing of this Article, there are approximately 100

30. *Id.*

31. *Id.*

32. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Dusky Gopher Frog, 50 C.F.R. pt. 17, at 35,118, 35,129-30 (June 12, 2012).

33. 66 Fed. Reg. at 62,993.

34. Markle Interests, LLC v. U.S. Fish & Wildlife Serv., 40 F. Supp. 3d 744, 751 (E.D. La. 2014).

35. *Id.*

36. 66 Fed. Reg. at 62,994-95. Some of the alterations to the historical breeding sites included a conversion of a site to a permanent pond in a residential backyard and two sites having been bedded, cleared, and nutrient-loaded to convert the site into a pine plantation. Furthermore,

Mississippi dusky gopher frogs left in the wild.[37] While the low number in and of itself is a concern, it also raises other risks, such as genetic isolation, inbreeding, and random demographic or human-related events.[38]

Despite this seemingly extreme decline of their population, the Mississippi dusky gopher frogs had to wait almost nineteen years before acquiring status as an endangered species warranting protection of the ESA.[39] In December of 1982, the FWS released a Notice of Review for the dusky gopher frog, designating it as a category two candidate, which meant that the agency had information indicating that listing the species may be appropriate but that the agency lacked sufficient data on "biological vulnerability and threats were not currently available to support a proposed rule."[40] The dusky gopher frog remained a category two candidate for about nine years, until November 21, 1991, when the FWS identified it as a category one candidate, meaning that the agency had sufficient information on the biological vulnerabilities and threats to support a proposed listing rule.[41] However, when the FWS removed its designation of multiple categories of candidates in February 1996, it also removed the dusky gopher frog from "candidate" status due to the need for additional information; the dusky gopher frog received its candidate status again in October 1999, with the proposed listing rule published on May 23, 2000, and the final rule published on December 4, 2001.[42] While now officially designated as an endangered species, the dusky gopher frog's journey to ESA protection is far from over.

C. Weyerhaeuser v. United States Fish & Wildlife Service

In 2010, the FWS published a proposed rule designating as "critical habitat" 1957 acres in Mississippi and later expanded it to 6477 acres, which included four counties in Mississippi and one parish in Louisiana.[43]

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the longleaf pine forests in Louisiana were found to be severely degraded due to urbanization and conversion of the forests into pine plantations. *Id.*

37. *Markle Interests*, 40 F. Supp. 3d at 751.

38. *Id.*

39. While this may seem like an unusually long period of time, it is actually only seven years longer than the average listing rates for the ESA. *See* Emily E. Puckett, Dylan C. Kesler & D. Noah Greenwald, *Taxa, Petitioning Agency, and Lawsuits Affect Time Spent Awaiting Listing Under the US Endangered Species Act*," 201 BIOLOGICAL CONSERVATION 220, 220-29 (Sept. 2016).

40. 66 Fed. Reg. at 62,995.

41. *Id.*

42. *Id.* at 62,995-96.

43. Markle Interests, LLC v. U.S. Fish & Wildlife Serv., 827 F.3d 452, 459 (5th Cir. 2016); 76 Fed. Reg. 56,774, 56,776 (Sept. 27, 2011) (codified as 50 C.F.R. § 17).

The cause of the conflict centered on the specific 1544 acres in St. Tammany Parish (designated as "Unit 1"), which belongs, in part, to Weyerhaeuser Company[44] and was slated for residential and commercial development, as well as timber operations.[45] The owners filed for injunctive relief against the FWS and related agencies to enjoin the designation of Unit 1 as "critical habitat," as well as declaratory judgment.[46] The plaintiffs based their complaints on the allegations that the FWS's Final Rule on Critical Habitat exceeded constitutional authority under the Commerce Clause, violated the Endangered Species Act, the Administrative Procedure Act (APA), and the National Environmental Policy Act (NEPA).[47] The district court granted summary judgment in favor of FWS on the merits, noting (1) that the provisions of the ESA and their application have "consistently been upheld as a constitutional exercise of congressional authority under the Commerce Clause," because they substantially affect interstate commerce.[48] On whether the FWS violated the APA, the court addressed the issue by asking five questions:

(1) "Did FWS reasonably determine that Unit 1 is 'essential for the conservation' of the dusky gopher frog?"
(2) "Must unoccupied areas contain PCEs [(physical and biological features that . . . were essential to the conservation of the species)] to be designated critical habitat?"
(3) "Did FWS act unreasonably in failing to identify the point at which ESA protections will no longer be required for the dusky gopher frog?"
(4) "Did FWS designate critical habitat for a species that is not listed as endangered?"
(5) "Does FWS's alleged "trespass" on Unit 1 invalidate the Rule?"[49]

In analyzing whether FWS reasonably determined that Unit 1 was essential to conservation, the district court emphasized that Congress delegated the term "essential" to be defined by the Secretary of the Interior.[50] It found that FWS's determination was reasonable. In making

44. Weyerhaeuser owns part of the land. The rest of the land was leased to them.
45. *Id.* Ownership of the land was also held, along with Weyerhaeuser, Markle Interests, L.L.C., P&F Lumber Company 2000, L.L.C., and PF Monroe Properties, L.L.C. *Id.*
46. *Id.*
47. Markle Interests, LLC v. U.S. Fish & Wildlife Serv., 40 F. Supp. 3d 744, 753 (E.D. La. 2014).
48. *Id.* at 758.
49. *Id.* at 760-64.
50. *Id.* at 760.

its decision, the district court considered specific criteria, and with the use of scientific information and assistance from a peer reviewer, concluded that the ponds in Unit 1 provided "breeding habitat that in its totality is not known to be present elsewhere within the historic range."[51] While the plaintiffs did not dispute the scientific and factual basis of the FWS determination, they argued that an area cannot be "essential" if the species does not inhabit it.[52] However, as the court noted, the ESA allows agencies to designate unoccupied areas as critical habitat.[53] The court spent little time addressing the question of whether an unoccupied area must contain PCEs as a requirement for it to be designated as critical habitat, stating that the ESA specifically requires only occupied habitats to contain all of the relevant PCEs.[54] As Unit 1 is an unoccupied habitat, FWS only needed to determine that it is essential for the conservation of the gopher frogs, which has already been established.[55]

On the question of whether FWS acted unreasonably in failing to identify when ESA protections would no longer be required for the dusky gopher frog, the court rejected the plaintiffs' argument that this is a task required of FWS, simply citing the applicable provisions of the ESA and precedent, which noted that FWS must designate a critical habitat even if it does not know precisely how or when recovery of a viable population will be achieved.[56] Essentially, the court was stating that the plaintiffs had conflated FWS's responsibilities under the "critical habitat" provision (16 U.S.C. § 1533(a)(3)) with its responsibilities for preparing a recovery plan (16 U.S.C. § 1533(f)). The plaintiffs' fourth argument was that the taxonomic change of the frogs (a change from "Mississippi gopher frog" to "dusky gopher frog") invalidated its listing. However, the court was unconvinced that a mere change in nomenclature signaled an arbitrary change of mind on the part of FWS.[57] The fifth argument alleged that FWS and a scientist trespassed on the land to take photos of the ponds, and therefore, the violation caused the photos to be invalid in determining the critical habitat; the court declined to address this on the merits.[58]

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51. *Id.* at 761.
52. *Id.*
53. *Id.* (citing 16 U.S.C. § 1532(5)(A)(ii) (2012)).
54. *Id.* (citing 16 U.S.C. § 1532(5)(A)).
55. *Id.*
56. *Id.* at 762 (citing Home Builders Ass'n v. U.S. Fish & Wildlife Serv., 616 R.3d 983, 989 (9th Cir. 2010)).
57. *Id.* at 764.
58. *Id.*

After addressing these peripheral issues, the district court proceeded to tackle the crux of the case: the proportionality of the economic impacts of designating Unit 1 as a critical habitat.[59] Plaintiffs had contended that FWS's designation of Unit 1 as critical habitat was irrational because the economic impact would be disproportionate to the conservation benefits.[60] The Secretary of the Interior is required by the ESA to base its critical habitat determinations on the "best scientific data available after taking into consideration the economic impact" that results from such a designation.[61] In designating Unit 1 as critical habitat, FWS considered several economic consequences of designation and used the baseline method to make its conclusion; however, the plaintiffs argued that FWS arbitrarily concluded that there were no disproportionate costs that would result from designation of Unit 1 and critical habitat.[62] They supported this conclusion by claiming that Unit 1 "provides no benefit to the dusky gopher frog" and that the potential damage to the landowners ranged from $20.4 million to $33.9 million, implying that the economic cost of the designation is not outweighed by the benefits.[63] However, the district court found that because FWS's methods were reasonable and consideration of the economic impacts was all that was required of FWS, the agency fulfilled its statutory responsibilities.[64] The court referred to FWS's economic analysis (EA) to further support the assertion that the agency did give due consideration to economic impact,[65] and because FWS had fulfilled its statutory requirements, the court was limited to a "somewhat

59. *Id.* at 764-65.
60. *Id.*
61. *Id.* at 765.
62. *Id.*
63. *Id.*
64. *Id.* at 766.
65. *Id.* FWS's economic analysis contemplated the economic impacts of Unit 1 designation under three hypothetical scenarios:

> (1) development occurring in Unit 1 would avoid impacts to jurisdictional wetlands and, thus, would not trigger ESA Section 7 consultation requirements; (2) development occurring in Unit 1 would require a permit from the Army Corps of Engineers due to potential impacts to jurisdictional wetlands, which would trigger ESA Section 7 consultation between the Corps and FWS; and FWS would work with landowners to keep 40% of the unit for development and 60% managed for the frog's conservation ("present value incremental impacts of critical habitat designation due to the lost option for developing 60 percent of Unit 1 lands are $20.4 million"); and (3) development occurring would require a federal permit, triggering ESA Section 7 consultation, and FWS determines that no development can occur in the unit ("present value impacts of the lost option for development in 100 percent of the unit are $33.9 million").

Id. at 766.

paralyzing standard of review," namely, deference to its expertise.[66] Deference, here, refers to the kind provided for by the Administrative Procedure Act (APA), which allows for courts to review all relevant questions of law but at the same time restricts such review to a strict standard, stating that courts "shall hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law."[67] Unless an agency decision is so contradictory to Congress' intention that it can be considered arbitrary and capricious, an agency deserves the highest deference when it is making rulings pertaining to its area of expertise.[68] In Markle Interests, specifically, the district court gave deference to FWS in regard to its conclusion about the potential economic impact of designating Unit 1 as critical habitat.[69]

The last issue the district court addressed was whether the Secretary's failure to prepare an environmental impact statement constituted a violation of the National Environmental Policy Act (NEPA), which requires agencies to prepare a comprehensive environmental impact statement (EIS) for "major Federal actions significantly affecting the quality of the human environment."[70] To this, FWS argued, and the court agreed,[71] that Congress does not expressly require an EIS for critical habitat designations, as FWS does not have authority to force private landowners to alter the habitat, and thus PCE simply provides a description of the ideal habitat for the dusky gopher frogs.[72]

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66. *Id.* at 766-67.

67. 5 U.S.C. § 706(2)(B) (West through P.L 116-112).

68. Greater Yellowstone Coal. v. Servheen, 665 F.3d 1015, 1023 (9th Cir. 2011).

69. *See Markle Interests, LLC*, 40 F.Supp.3d at 766-67.

70. *Id.* at 767; 42 U.S.C. § 4332(2)(c) (West though P.L. 116-112).

71. *See Markle Interests, L.L.C.*, 40 F.Supp.3d at 767-68. The court made a pointed remark about the plaintiffs' "tortured reasoning" to arrive at their assertion. The plaintiffs argued that NEPA requires an EIS for federal actions that significantly affect the quality of a human environment, and because of the modifications required to make Unit 2 habitable for the frogs, which constitute a change to the physical environment, an EIS was necessary. *Id.*

72. *Id*. at 767. To illustrate, the court distinguished this case from *Catron County Board of Commissioners v. United States Fish & Wildlife Service*, where a critical habitat designation would "harm the environment by limiting the county's ability to engage in flood control effort and the environmental impact would have been "immediate and disastrous." Catron County Bd. Of Com'rs, New Mexico v. U.S. Fish & Wildlife Serv., 75 F.3d 1429, 1436-39 (10th Cir.1996); *see Markle Interest, L.L.C.*, 40 F.Supp.3d at 768. In contrast, designation of Unit 1 would not have physically changed the environment. *See Markle Interest, L.L.C.*, 40 F.Supp.3d at 768 Further, citing *Douglas County v. Babbitt*, the court noted the reasoning behind exempting critical habitat designations from NEPA: "(1) the ESA displaced the procedural requirements of NEPA with respect to critical habitat designation; (2) NEPA does not apply to actions that do not alter the physical environment; and (3) critical habitat designation serves the purposes of NEPA by protecting the environment

After losing the summary judgment on the merits, the plaintiffs appealed the case and eventually made it to the Fifth Circuit Court of Appeals, which then reviewed the district court decision de novo and affirmed it.[73] In its opinion, the Fifth Circuit addressed the issue of standing, critical habitat designation, the Secretary's decision not to exclude Unit 1, FWS's powers under the Commerce Clause, and NEPA.[74]

While the question of standing was not directly raised by either party on appeal, the appeals court nevertheless decided to address the matter, stating that "although the district court correctly held that the APA provided the proper vehicle for the Landowners [plaintiffs] to challenge . . . it did not address the APA's zone-of-interests test; instead, it only held that the Landowners have standing under Article III."[75] The court went through a short analysis that essentially affirmed the district court decision on the matter, holding that the plaintiffs had standing under Article III because the designation of their property as a critical habitat lowered its market value and thus caused an injury that satisfies the "Cases and Controversy" federal jurisdiction requirement.[76] But despite specifically mentioning the APA's zone-of-interest test, the court declined to consider it *sua sponte* due to FWS's failure to raise the argument—thereby forfeiting the challenge.[77]

Much like the district court, on the matter of critical habitat designation, the appeals court held that deference was due to FWS in its application in the ESA, *Chevron* deference to be specific. As part of the *Chevron* framework courts have traditionally applied deference to the federal agency when a statute fails to provide an unambiguous definition for unclear provisions.[78] The *Chevron* test required that the court first determine whether Congress' intent was clear and unambiguously

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from harm due to human impacts." Douglas County v. Babbitt, 48 F.3d 1495, 1501-08 (9th Cir.1995); *see Markle Interests, L.L.C.*, 40 F.Supp.3d at 768.

73. Markle Interests, L.L.C., v. U.S. Fish & Wildlife Serv., 827 F.3d 452, 458-59 (5th Cir. 2016).

74. *See generally id.* at 452.

75. *Id.* at 462.

76. *Id.* at 463-64.

77. *Id.* at 464.

78. *See generally* Chevron, U.S.A., Inc v. Nat. Res. Def. Council, Inc, 467 U.S. 837 (1984); *see, e.g.*, Nw. Ecosystem All. v. U.S. Fish & Wildlife Serv., 475 F.3d 1136, 1140, 1143 (9th Cir. 2011) (holding that the Fish and Wildlife Service's determination that the Washington population of the grey squirrel was not a "distinct population segment" deserved the *Chevron* deference because the term was not unambiguously defined by Congress); Trout Unltd. v. Lohn, 559 F.3d 946, 954 (9th Cir. 2009) (holding that the National Marine Fisheries Service's Hatchery Listing Policy deserved *Chevron* deference because it went through a formal notice-and-comment process).

presented in the statute; if it is not, the court must then determine whether the agency's interpretation of the statute is permissible when considering its purpose and construction.[79] Section 1532 of the ESA distinguishes between occupied and unoccupied habitats.[80] Where the designation of an occupied critical habitat requires the agency to demonstrate that the area contains "physical or biological features essential to the conservation of the species and which may require special treatment or management," the designation of an unoccupied critical habitat only requires that the Secretary determine that it is "essential for the conservation of the species."[81] The key term, here, is "essential"—and coincidentally, it has not been defined by Congress.[82] Therefore, because, the court held, it seemed that Congress intended to delegate authority to the agency executing the ESA, then that agency's interpretation of the provision in question deserves *Chevron* deference; Because Congress has not defined "essential," FWS has the authority to do so.[83] The court's assessment regarding the Secretary's decision not to exclude Unit 1 was addressed in a similar fashion, with the court adhering to the principle of deference to agency decisions when making determinations that are in their areas of expertise—per the APA.[84] They noted that the only other circuit that has addressed this issue held that "there are no manageable standards for reviewing the Service's decision not to exercise its discretionary authority to exclude an area from a critical-habitat designation."[85]

Moving onto the alleged Commerce Clause violation, the court considered two factors: (1) whether the provision mandating the designation of critical habitat is part of an economic regulatory scheme, and (2) whether designation is essential to that scheme.[86] They answered in the affirmative to both, noting that the ESA prohibits the sale of endangered species across state lines (satisfying the economic regulatory scheme requirement), and the critical habitat provision is essential to that scheme.[87]

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79. *Chevron*, 467 U.S. at 843-44.
80. 16 U.S.C. § 1532 (5)(A) (2018).
81. *Id.* § 1532(5)(A)(i)-(ii) (2018).
82. *Markle Interests*, 827 F.3d at 464 (citing Markle Interests, LLC v. U.S. Fish & Wildlife Serv., 40 F. Supp. 3d 744, 760 (E.D. La 2014)).
83. *Id.* at 464-65, 467.
84. *See id* at 473.
85. *Id.* (citing Bear Valley Mut. Water Co. v. Jewel., 790 F.3d, 977, 989-90 (9th Cir. 2015)).
86. *Id.* at 476.
87. *Id.* at 476-78.

Lastly the Fifth Circuit agreed with the lower courts that the Secretary did not violate NEPA by failing to submit an EIS, as it is not triggered by the critical designation requirement.[88] The court also noted that the plaintiffs lack standing to bring a NEPA claim, as those claims require Article III standing *and* inclusion within the zone of interests the NEPA seeks to protect.[89] Because purely economic injuries are not sufficient to assert standing to challenge an agency action under NEPA, the plaintiffs also lacked standing for this reason.[90]

Upon reaching the United States Supreme Court, the main controversy centered around the definition of "critical habitat," an issue that had not garnered extensive attention in the lower courts, and FWS's failure to exclude Unit 1 from the frog's critical habitat.[91] As previously mentioned, section (5)(A) of the ESA defines "critical habitat" and allows for the designation of "specific areas outside the geographical area occupied by the species . . . upon determination by the Secretary that such areas are essential for the conservation to the species."[92] The plaintiffs contended that the designation of Unit 1 as a critical habitat was inappropriate because the dusky gopher frog could not survive there without significant modifications to the habitat.[93] In its analysis, the Court tried to define "critical habitat" by considering its etymology, noting that "critical," as the adjective, describes the "habitat," and that for an area to be "critical," it must first be a habitat. Therefore, "critical habitat" is a subset of "habitat"; furthermore, the key term the requires interpretation is "habitat."[94] Because only habitats are eligible for designation, section 4(a)(3)(A)(i) allows the Secretary to only designate habitats as critical; therefore, property that is not considered habitat cannot be declared a critical habitat.[95] The question here was whether areas that require modification before it can support the dusky gopher frog qualify as a habitat. The Supreme Court ruled that because an answer to this question requires an interpretation of the term "habitat," and the Court of Appeals, in ruling that "there is no habitability requirement in the text of the ESA or implementing regulations," deprived itself of an occasion to do so, the

88. *Id.* at 479-80.
89. *Id.* at 480.
90. *Id.*
91. Weyerhaeuser Co. v. U.S. Fish & Wildlife Serv., 139 S. Ct. 361, 367 (2018).
92. 16 U.S.C. § 1532(5)(A) (2018).
93. The modifications consisted of "replacing the close-canopy timber plantation encircling the ponds with an open-canopy longleaf pine forest*." Weyerhaeuser*, 139 S. Ct. at 367.
94. *Weyerhaeuser*, at 368-69.
95. *See id.* at 368.

case should be remanded with the order to consider these questions.[96] Turning to the Secretary's decision not to exclude Unit 1 from the designation of critical habitat, the Court did not decide the merits but merely deemed that the issue was subject to judicial review and remanded it back to the Fifth Circuit to consider.[97]

III. ANALYSIS

The Supreme Court's ruling in *Weyerhaeuser v. United States Fish & Wildlife Service* signaled an intent to delegate issues concerning environmental protection of the dusky gopher frogs to the lower courts. Instead of ruling on the substantive issues of the case, the Court's decision merely gave procedural guidance, declaring that the Fifth Circuit should consider issues it did not address previously or determined to be unreviewable (i.e., the definition of "critical habitat" and the reviewability of agency decisions).[98]

A. The Toad-tality of the Circumstances[99]

The definition of "critical habitat" has been a topic of debate throughout the existence of the ESA. In 1978, merely five years after its passage, its meaning was called into consideration. Chief Justice Burger observed in dictum that the ESA did not define "critical habitat," but that the Secretary of the Interior has administratively interpreted it to mean

> any air, land, or water area . . . and constituent elements thereof, the loss of which would appreciably decrease the likelihood of the survival and recovery of a listed species or a distinct segment of its population. . . . Critical habitat may represent any portion of the present habitat of a listed species and may include additional areas for reasonable population.[100]

As previously mentioned, the ESA was later amended in 1978 (actually, as a response to *Tennessee Valley Authority*) to include its current definition of critical habitat.[101] In *Weyerhaeuser*, the Court deemed this definition to be insufficient, as it established guidelines for determining what is "critical," not what is a "habitat." This ruling is a key to why the

96. *Id* at 369.
97. *Id.* at 371.
98. *See generally id.*
99. Yes, the author does know the difference between a frog and a toad.
100. Tenn. Valley Auth. v. Hill, 417 U.S. 153, 213 n.9 (1978).
101. *See* 16 U.S.C. § 1532(5)(A)(i)-(ii) (2018).

case is novel, in a sense, as the line of case law concerning "critical habitat" has previously centered on the "critical" aspect.[102]

The definition of "habitat," as provided for by the *Merriam-Webster Dictionary*, "is the place or environment where a plant or animal naturally or normally lives." In analyzing the definition of "habitat," the Fifth Circuit will have a wide range of examples from which to draw. The Convention on Biodiversity defines it as "the place or type of site where an organism or population naturally occurs."[103] However, it may also be defined as "any area in the range of a . . . species which contains suitable conditions for that species."[104] The former definition implies that a requirement of a habitat is that the organism resides there, and the latter simply requires that its conditions are suitable to support the species. However, in considering their options, it is important that the court keep in mind the circumstances surrounding environmental and endangered species protection. The natural habitats of the dusky gopher frogs were altered predominantly due to human action and development, and the same applies to many other endangered species. Therefore, as human development increases, it is presumable that the habitats, if defined as areas where the organisms naturally occur, would decrease.

In interpreting the term "habitat," the court should consider the totality of the circumstances, and that means looking at all the factors involved in this designation, such as population of the species, rarity of the type of habitat in question, and how much modification is required to allow it to support the species. The Supreme Court, in *King v. Burwell*, stated that "the words of a statute must be read in their context and with a view to their place in the overall regulatory scheme."[105] In *Burwell*, the court upheld the Internal Revenue Service (IRS) final rule implementing the premium tax credit provision of the Affordable Care Act.[106] The petitioners presented an interpretation of the statute that the Court then rejected because it would "destabilize the individual insurance market."[107]

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102. *See, e.g.,* Home Builders Ass'n of N. Cal. v. U.S. Fish & Wildlife Serv., 616 F.3d 983 (9th Cir. 2010) (holding that designation of an area as critical habitat did not require that all the elements needed for conservation of a species to be present); Alaska Oil & Gas Ass'n v. Salazar, 916 F. Supp. 2d 975 (D. Alaska 2013) (holding that for a habitat to be critical, the agency cannot speculate as to the existence of physical or biological features essential to the conservation).

103. *Habitat*, BIODIVERSITY A-Z, http://www.biodiversitya-z.org/content/habitat (last updated Dec. 17, 2019).

104. *Id.*

105. King v. Burwell, 135 .S. Ct. 2480, 2492 (2015) (quoting Util. Air Regulatory Grp. v. EPA, 134 S. Ct. 2427, 2441 (2014)).

106. *See generally id.*

107. *Id.* at 2484.

Essentially, the Court considered how the interpretation of the statute may affect its purpose and effectiveness. In this case, there are about 100 dusky gopher frogs in the entire world, all of them limited to the habitat in Mississippi. Should anything happen to that specific area, the frogs have nowhere else to go. Unit 1, with modifications, can provide a habitat to which the frogs may be moved should the habitat in Mississippi be damaged, such as by a hurricane or other natural disaster. Considering the location of the habitat and its propensity for natural disasters, that possibility is absolutely plausible. Furthermore, the ephemeral ponds, which are a crucial element to the dusky gopher frog's habitat, are rare.[108]

Granted, there would need to be modifications to Unit 1 in order to make it habitable for the frogs. Therefore, a key consideration is whether the value of those ephemeral ponds justifies the costs and efforts associated with performing those modifications. These ponds are the focal point for the dusky gopher frogs, as they are rare and, therefore, a limiting factor in their recovery.[109] While the Fifth Circuit may devise its own method of analysis for interpreting the term "habitat," it is arguable that the recent drastic changes in the environment, often caused by human development, call for a consideration of the totality of the circumstances as opposed to a bright-line rule. However, it is to the benefit of future jurisprudence for the court to establish a clear definition of "habitat," to prevent excessive litigation over future designation of "critical habitat." To create more barriers for the designation of a critical habitat would further weaken the ESA and prevent it from carrying out its purpose.

Perhaps a point the Fifth Circuit should consider is whether there is a moral obligation to mitigate the damage. The issue is also applicable when assessing the economic impact of a "critical habitat designation." If humans were the cause of the decline in their species, should we attempt to resolve that at the expense of property rights? As urbanization increases and climate change accelerates, these issues seem to become more relevant and prominent. The question then becomes: Is the Endangered Species Act strong enough to make a difference in the current environment? Possibly not. With the Supreme Court's ruling, decisions by the Secretary on whether to exclude certain areas from the designation are now reviewable.

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108. Markle Interests, L.L.C. v. U.S. Fish & Wildlife Serv., 827 F.3d 452, 466 (5th Cir. 2016).

109. *Id.*

B. A Moratorium, This Is Not

Another aspect the that should be considered when analyzing the situation is the gravity of the burden that would be placed on property owners. The landowners of Unit 1 argue that the Secretary "failed to adequately weigh the benefits of designating Unit 1 against the economic impact . . . [and] that the Service [FWS] has used an unreasonable methodology for estimating economic impact."[110] Essentially, they were arguing that the costs of the designation outweighed the conservation benefits. However, as the Fifth Circuit had originally noted in its ruling, such economic costs are speculative.[111] Designation of an area as a critical habitat does not force the landowners to modify their land, nor does it directly prohibit them from making alterations; if future development on Unit 1 does not impact federal wetlands, the landowners would not need a federal permit, and therefore, no ESA section 7 consultation would be required.[112] Designation of Unit 1 as a critical habitat is not a moratorium on all building and development—it simply requires that, when the landowners seek a permit from a federal agency, that federal agency must consult with the FWS first. It is not saying, "You can't build here." It is saying, "Please ask us before you do." However, with this having been said, it is acknowledged that private property owners are restricted in their land usage rights when their property is designated as a critical habitat. Still, the economic cost-benefits analysis lies with the Secretary and FWS; and while the Supreme Court ruled that the decision is reviewable, it is the Fifth Circuit's decision to determine whether it was arbitrary and capricious.[113]

However, a determination that an agency's decision is "arbitrary and capricious" is based solely on whether the agency was reasonable in its conclusion. Therefore, if FWS considers the burden on property owners as a factor during its decision, and it is reasonable, the court is bound to uphold the agency's determination.

IV. CONCLUSION

In requiring an interpretation for the definition of "habitat," the Court arguably made it more difficult for agencies to designate critical habitats, as they would not only have to satisfy the requirements of determining

110. Weyerhaeuser Co. v. U.S. Fish & Wildlife Serv., 139 S. Ct. 361, 367 (2018).
111. *Markle Interests,* 827 F.3d at 462.
112. *Id.*
113. *Weyerhaeuser*, 139 S. Ct. at 372.

what is "critical," but also the requirements of what is a "habitat." As deceptively small of an issue as a definition may seem, the Fifth Circuit's interpretation of the term "habitat" greatly impacts future determinations of critical habitat. Changes in the environment caused by human action often lead to changes in habitat for many species. The Court's ruling in Weyerhaeuser, while fair and consistent with the law, has erected another barrier in conservation efforts and weakened the Endangered Species Act. However, they ruled on mostly procedural matters and left it up to the Fifth Circuit to determine substantive law. But the Fifth Circuit would not get a second bite of the proverbial apple, for the parties reached a settlement while litigation was still pending. On July 3, 2019, the parties agreed to remove the private land in dispute from the critical habitat designation without affecting the designation of other areas that were deemed to be critical habitats.[114] The consent decree put an end to the litigation, but hanging in the air, like an ever-present ominous cloud, is the unresolved issue of what constitutes a "critical habitat." As there has been no official legal ruling in the matter, it can be expected that similar cases will arise until a ruling has been rendered or congressional legislation has been passed. For the gopher frog and other similarly situated species, the continued anticipation and ambiguity may be detrimental to their survival.

114. Consent Decree, Markle Interest, LLC v. U.S. Fish & Wildlife Serv., No. 13-cv-00234-MLCF-JVM (E.D. La.).