



CHICAGO-KENT JOURNAL OF
*ENVIRONMENTAL
AND ENERGY LAW*

VOLUME 13 • ISSUE 1 • SPRING 2024

CHICAGO-KENT JOURNAL OF ENVIRONMENTAL AND ENERGY LAW

IIT Chicago-Kent College of Law

565 West Adams Street

Chicago, IL 60661-3691

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Please cite the *Journal* as

13 CHI.-KENT J. ENV'T ENERGY L. ____ (2024)

Citations conform generally to *The Bluebook: A Uniform System of Citation* (Columbia L. Rev. Ass'n et al. eds., 21st ed. 2020).

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ISSN: 2769-6707

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Chicago-Kent Journal of Environmental and Energy Law

Volume 13

Spring 2024

Issue 1

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WHEN THE RUBBER MET THE ROAD . . . THEN THE WATER, FISH,
AND WHALES: USING THE ENDANGERED SPECIES ACT TO
OVERCOME THE DILUTION OF THE CLEAN WATER ACT

*Jennifer Bass**

Just as populations of whales and salmon are declining, so too are the ways to protect them. The United States Supreme Court has continuously narrowed the Environmental Protection Agency's authority to protect waterways under the Clean Water Act (CWA). If the CWA is not protecting the water, then perhaps other acts, such as the Endangered Species Act (ESA), can be used to protect the Southern Resident killer whales.

6PPD is a preservative used in tires that, when mixed with the gas ozone, turns into the toxic compound 6PPD-quinone. When tires hit the road, the 6PPD-quinone particles are released and washed into the groundwater and streams. As a result, 6PPD-quinone often kills salmon before they can spawn, which has a devastating effect on the Coho salmon population. A reduction in salmon has a severe effect on the population of Southern Resident killer whales, an endangered species that feeds on Coho salmon during the fall and winter.

The article proposes and analyzes using the citizen suit provision of the ESA to prevent tire manufacturers from using 6PPD in tires. The first proposal is to sue the tire manufacturers directly. The second proposal is to hold the Environmental Protection Agency accountable through vicarious liability. The third proposal is to hold the Department of Transportation liable for allowing the import of tires that contain 6PPD.

INTRODUCTION

The turquoise waves ripple out from the shore, only disrupted by the lush greenery of Douglas fir trees that populate the distant islands. The scene turns from idyllic to exuberant as an immense black tail clears the water's surface. High-pitched clicks and squeaks the Southern Resident killer whales use to chase salmon fill the air, a display that can be viewed in Washington State for as long as anyone can remember. People travel the world to see this scene.

* 3L Law Student at Vermont Law and Graduate School. For extremely helpful feedback, I thank Delcianna Winders, Greg Johnson, Yanmei Lin, Priscilla Rader, Erika Calderon, and Morgan Muenster. I also thank Blythe Pabon, Lydia Lieberman, Jacob Krivitzkin, and the rest of the editorial team at the Journal of Environmental and Energy Law for very helpful review of the work. Any errors are my own.

Little do these whale enthusiasts know that when their tires hit the road to travel, they release toxins that contribute to the decline of the species. These whales, once endemic in the waters of the Northwest, are now critically endangered. The whales are starving to death from the decimation of the salmon population due to a tire preservative called 6PPD.¹ The chemical is ubiquitously used in the tire industry and is in the tires of most vehicles driven today.

Just as the whale and salmon populations are declining, so too are the ways to protect them. The United States Supreme Court has continuously narrowed the Environmental Protection Agency's (EPA) authority to protect waterways under the Clean Water Act (CWA).² If the CWA is not protecting the water, then perhaps other acts, such as the Endangered Species Act (ESA), can be used to protect the Southern Resident killer whales.

The ESA might be used to prevent 6PPD from entering our waterways. 6PPD is a preservative used in tires that, when mixed with the gas ozone, turns into the toxic compound 6PPD-quinone.³ When tires hit the road, the 6PPD-quinone particles are released and washed into the groundwater and streams.⁴ As a result, 6PPD-quinone often kills salmon before they can spawn, which has a devastating effect on the Coho salmon population.⁵ A reduction in salmon has a severe effect on the population of Southern Resident killer whales, an endangered species that feeds on Coho salmon during the fall and winter.⁶ According to the Marine Mammal Commission, "[t]he ongoing decline of the Southern Resident killer whale population over the last 20 years is most likely due to three distinct threats: the decreased quantity and quality of prey, the presence of persistent organic

¹ See Sarah McQuate, *Tire-related Chemicals are Largely Responsible for Adult Coho Salmon Deaths in Urban Streams*, UNIV. OF WASH. NEWS (Dec. 3, 2020), <https://www.washington.edu/news/2020/12/03/tire-related-chemical-largely-responsible-for-adult-coho-salmon-deaths-in-urban-streams/> [<https://perma.cc/DWG3-VQAA>]; *Southern Resident Killer Whale Health Assessment*, NAT'L OCEANIC AND ATMOSPHERIC ADMIN., <https://www.fisheries.noaa.gov/science-data/southern-resident-killer-whale-health-assessments> (last visited on Mar. 7, 2022) [<https://perma.cc/7SMV-FJAP>].

² *Tenn. Valley Auth. v. Hill*, 437 U.S. 153 (1978); *U.S. v. Riverside Bayview Homes, Inc.*, 447 U.S. 121 (1985); *Rapanos v. U.S.*, 547 U.S. 715 (2006); *Sackett v. E.P.A.*, 566 U.S. 120, 127 (2012) [hereinafter *Sackett I*]; *Sackett v. E.P.A.*, 598 U.S. 651 (2023) [hereinafter *Sackett II*].

³ McQuate, *supra* note 1.

⁴ *Id.*

⁵ *See Id.*

⁶ *See Southern Resident Killer Whale*, MARINE MAMMAL COMM'N, <https://www.mmc.gov/priority-topics/species-of-concern/southern-resident-killer-whale/> (last visited Mar. 7, 2024) [<https://perma.cc/5EME-LNLW>].

pollutants, and disturbance from vessel presence and noise.”⁷ Washington State and Seattle’s local government are addressing the disturbance from vessel noises, leaving pollutants and the killer whales’ food source still to be addressed.⁸

Under the ESA, it is unlawful for any person “to take” a listed endangered or threatened species of fish or wildlife.⁹ The Act defines “to take” as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect” wildlife on the endangered or threatened species list.¹⁰ While the ESA did not originally define the terms harm and harass, they were later defined in the Code of Federal Regulations.¹¹ Harm is defined as “significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or shelter.”¹² Harass is defined as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering”¹³

Here, the chemical 6PPD-quinone modifies the environment, resulting in the disruption of the killer whales’ feeding habits by depleting their food source.¹⁴ As a practical matter, in environmental cases, the most common legal relief given is injunctive relief.¹⁵ However, securing injunctive relief for polluters is harder under the “harm” provision than the “take” provision because death or injury must be intentional or the result of negligence under the traditional take mechanism.¹⁶ Most successful injunctions under the ESA are accomplished through civil action.¹⁷ Injunctive relief to prevent the harm caused by 6PPD could be achieved in one of two ways. The first way is to file a civil suit against the United States government

⁷ *Id.*

⁸ S. Resident Orca Recovery, *Vessels*, WASH. STATE RECREATION AND CONSERVATION OFF., <https://orca.wa.gov/recommendation-category/vessels-disturb-orcas/> (last visited Jan. 16, 2023) [<https://perma.cc/DLB2-2AHJ>].

⁹ Endangered Species Act, 16 U.S.C. § 1538(a)(1)(B).

¹⁰ *Id.* § 1532.

¹¹ See 50 CFR § 17.3.

¹² *Id.* § 17.3.

¹³ *Id.* § 17.3.

¹⁴ See *Southern Resident Killer Whale*, *supra* note 6.

¹⁵ Eric J. Murdock and Andrew J. Turner, *How “Extraordinary” is Injunctive Relief in Environmental Litigation? A Practitioner’s Perspective*, 42 ENV’T LAW REP. 10464 (2012).

¹⁶ AM. BAR ASS’N, *ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES* 162 (Donald C. Baur & Ya-Wei Le, 3rd ed. 2021).

¹⁷ See *Tenn. Valley Auth. v. Hill*, 437 U.S. 153 (1978); Matthew Osnowitz, *The Value of an Endangered Species: The ESA, Injunctions, and Human Welfare*, 47 COLUMBIA UNIVERSITY 102, 105 (2022).

requiring the regulation of 6PPD's use in tires. The second option would be to file a civil suit against the tire manufacturers, requiring them to use a different chemical to preserve their tires.

This article is about using the ESA to overcome the shortfalls of the CWA to protect waterways and the animals in them. Section I provides background by describing the erosion of the CWA through case law, the history of the ESA, and the cases that helped define it. Section II looks specifically at the Coho salmon in Washington state, the Southern Resident killer whales, and the chemical 6PPD-quinone. Section III covers the legal analysis of both the CWA and the ESA. Section IV will focus on how to utilize the ESA to bring civil suits to hold agencies accountable for regulating the pollutant, 6PPD-quinone, and to hold companies accountable through dumping regulations. Finally, section V will tie everything together and show how the ESA can be used to protect the environment and waterways as the scope of the CWA has been reduced.

I. BACKGROUND

Before delving into a new litigation strategy, each element must first be observed. This first section will provide background by way of examining the relevant history of the CWA, the ESA, and the case law relating to that history.

A. *History of the Clean Water Act*

The CWA was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”¹⁸ After the CWA’s enactment, the EPA was given the power to regulate some of the nation’s waters under certain conditions.¹⁹ Specifically, the EPA was given authority to address “navigable waters,” a term which is defined in the statute as “the waters of the United States, including territorial seas.”²⁰ This subsection will discuss three major cases related to the interpretation of the CWA. First, in 1985, the U.S. Supreme Court decided, *United States v. Riverside Bayview Homes, Inc.*²¹ In *Riverside Bayview Homes, Inc.*, the Court determined that the CWA applied to wetlands adjacent to navigable waters.²² Second, in 2006, the Supreme Court decided *Rapanos v. United States*, which redefined “waters of the United States” and narrowed the EPA’s ability to regulate dumping.²³ The third case is *Sackett v. EPA*, which has been heard by the

¹⁸ Clean Water Act, 33 U.S.C. § 1251(a) (1972).

¹⁹ *Id.* § 1251(d).

²⁰ *Id.* § 1362(7).

²¹ *U.S. v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 124 (1985).

²² *Id.*

²³ *Rapanos v. U.S.*, 547 U.S. 715 (2006).

Supreme Court twice, first in 2012 and again in 2023, each hearing addressing different questions.²⁴ After laying out those three major cases, there will be a brief discussion of decisions made outside of the CWA that do not protect wildlife, and extrajudicial decisions such as EPA rulings, Presidential Executive Orders, and the current state of enforceability of the CWA.

Before the CWA was enacted, a patchwork of acts covered the nation's waterways, each act specific to a certain waterway.²⁵ The United States first began protecting water resources with the Rivers and Harbor Appropriation Act of 1899.²⁶ The Act regulated the dumping of refuse material and prohibited the construction of bridges and other structures without the approval of the Army Corps of Engineers (Corps).²⁷ The Act did not, however, cover discharges unless they affected ship navigation.²⁸ In 1948, the Federal Water Pollution Control Act was enacted, allowing the courts to grant relief for water pollution in the water of the United States.²⁹ Subsequently, in 1965, the Water Quality Act protected interstate waters.³⁰

In 1972, prompted by the Cuyahoga River fire in Cleveland, the CWA was passed to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”³¹ In addition to other protections the CWA provides, specifically relevant to this article, the CWA is “the principal law governing pollution control and water quality of the Nation's waterways.”³² Further, the CWA gives the EPA the authority to control pollution such as “setting wastewater standards for industry and water quality standards for all

²⁴ Sackett I, 566 U.S. 120, 125-26 (2012) (determine whether the court has subject-matter jurisdiction to review final agency action under the Administrative Procedure Act); Sackett II, 598 U.S. 651, 663 (2023) (“granting certiorari to decide the proper test for determining whether wetlands are ‘waters of the United States.’”).

²⁵ AM. BAR ASS’N, THE CLEAN WATER ACT HANDBOOK 1 (Mark A. Ryan, 4th ed. 2018).

²⁶ See The Rivers and Harbors Appropriation Act of 1899, 33 U.S.C. § 401 *et seq.*

²⁷ AM. BAR ASS’N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES *supra* note 16, at 1.

²⁸ *Id.*

²⁹ The Federal Water Pollution Control Act of 1948, 33 U.S.C. § 1251 (1948).

³⁰ AM. BAR ASS’N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES, *supra* note 16, at 1.

³¹ *Id.* at 2; *Introduction to the Clean Water Act*, EPA: Watershed Academy 2-3 https://cfpub.epa.gov/watertrain/moduleFrame.cfm?parent_object_id=2574 (last visited Jan. 30, 2024) [<https://perma.cc/J268-FVR6>];

Clean Water Act (CWA), U.S. DEP’T. OF THE INTERIOR: BUREAU OF OCEAN ENERGY MGMT., <https://www.boem.gov/environment/environmental-assessment/clean-water-act-cwa#:~:text=The%20CWA%20is%20the%20principle> (last visited Feb. 17, 2024) [<https://perma.cc/ZJ89-7QCA>]; see also The Clean Water Act, 33 U.S.C. § 1251 *et seq.* (1972).

³² *Clean Water Act (CWA)*, *supra* note 31; see also *id.* § 1251 *et seq.*

contaminants in surface waters.”³³ Under the CWA, “it is unlawful for any person to discharge any pollutant from a point source into waters of the United States, unless a [National Pollutant Discharge Elimination System] permit was obtained under its provisions.”³⁴

Congress has amended the CWA many times to address new toxic pollutants and other issues.³⁵ Moreover, the Court’s interpretation of the CWA has changed over time. The U.S. Supreme Court handed down the first decision interpreting the CWA in 1985 with *U.S. v. Riverside Bayview Homes Inc.*³⁶ In *Riverside*, a home builder filled in wetlands without receiving a permit from the Corps.³⁷ The CWA prohibits actors from discharging dredged or fill materials into “navigable waters” without a permit.³⁸ The Corps interpreted “navigable waters” to be “all ‘freshwater wetlands’ that were adjacent to other covered waters.”³⁹ The Corps filed suit against Riverside Bayview Homes, Inc. for not obtaining a permit prior to placing “fill materials on its property.”⁴⁰ The Federal Appeals Court of the Sixth Circuit found that the Corps’ permit requirement violated the Fifth Amendment and constituted a “take” because the regulation was too “narrowly construed.”⁴¹ Additionally, the Sixth Circuit ruled that Riverside’s property was not within the Corps’ jurisdiction “because its semiaquatic characteristics were not the result of frequent flooding by the nearby navigable waters.”⁴²

The Supreme Court overruled the Sixth Circuit’s finding that the Corps’ regulation constituted a “take” because a “take” only occurs “if the ordinance does not substantially advance legitimate state interests . . . or denies an owner economically viable use of his land.”⁴³ The Supreme Court found that because the existence of a permit system means that permission can be granted, the system does not automatically mean that a “take” occurs.⁴⁴

³³ *Id.*

³⁴ *Id.*

³⁵ *Introduction to the Clean Water Act*, supra note 31, at 3.

³⁶ STEPHEN MULLIGAN, CONG. RSCH. SERV., R44585, EVOLUTION OF THE MEANING OF “WATERS OF THE UNITED STATES” IN THE CLEAN WATER ACT 13 (2019).

³⁷ *U.S. v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 124 (1985).

³⁸ Clean Water Act, 33 U.S.C. § 1251 (1972); *see also Riverside*, 474 U.S. at 123.

³⁹ *Riverside*, 474 U.S. at 124.

⁴⁰ *Id.* at 124.

⁴¹ *Id.* at 127.

⁴² *Id.* at 125.

⁴³ *Id.* at 126 (quoting *Agins v. Tiburon*, 447 U.S. 255, 260 (1980)).

⁴⁴ *Id.* at 126-27.

Further, the Court found that the landowners could still use their land for other purposes even if the Corps denied the permit.⁴⁵

The Supreme Court held that “navigable waters” defined as “waters of the United States,” (WOTUS) included adjacent freshwater wetlands.⁴⁶ A “‘Freshwater wetland’ was defined as an area that is ‘periodically inundated’ and is ‘normally characterized by the prevalence of vegetation that requires saturated soil conditions for growth and reproduction.’”⁴⁷ The Court reversed the lower court and ruled that the Corps could require a permit for land that did not flood regularly because a wetland is defined by the vegetation and soil quality present on the land.⁴⁸ The land in *Riverside* was categorized as a freshwater wetland that is adjacent to navigable waters because the area was periodically flooded and the vegetation and soil quality was that of a wetland.⁴⁹

However, in 2006 the Supreme Court decided *Rapanos v. U.S.*, narrowing the definition of “navigable waters” to only cover adjacent wetlands if they were continuously connected with water.⁵⁰ The Petitioner in *Rapanos*, John A. Rapanos, backfilled the wetlands on a parcel of land he owned in Michigan so he could develop the property.⁵¹ A series of drains and ditches connected the wetland to the main body of water.⁵² The Court remanded the case to determine “whether the nearby drains and ditches contain continuous or merely occasional flows of water.”⁵³ If the drainage ditches were not continuously providing water flow, then *Rapanos* would not require a permit to fill the wetlands through the CWA.⁵⁴

Rapanos was a plurality opinion that resulted in two distinct tests, splitting the lower courts and causing inconsistent rulings.⁵⁵ In some rulings, a toxin could be covered while in others it would not be, depending on how the court defined WOTUS or which test they chose to apply.⁵⁶ The vote was 4-1-4, with Justice Roberts writing a concurrence that predicted the lower

⁴⁵ *Id.*

⁴⁶ *Id.* at 139.

⁴⁷ *Id.* (quoting 33 CFR § 209.120(d)(2) (1976)).

⁴⁸ *Id.* at 130.

⁴⁹ *Id.* at 131.

⁵⁰ *Rapanos v. U.S.*, 547 U.S. 715, 742 (2006).

⁵¹ *Id.* at 719-20.

⁵² *Id.*

⁵³ *Id.* at 729.

⁵⁴ *Id.*

⁵⁵ KATE BOWERS, CONG. RSCH. SERV., LSB10707 SUPREME COURT REVISITS SCOPE OF “WATERS OF THE UNITED STATES” (WOTUS) UNDER THE CLEAN WATER ACT (Mar. 11, 2022).

⁵⁶ *Id.*

courts' struggle.⁵⁷ Justice Scalia, writing a four-justice plurality decision, found that WOTUS only includes “those relatively permanent, standing, or continuously flowing bodies of water ‘forming geographic features’ that are described in ordinary parlance” and “does not include channels through which water flows intermittently or ephemerally, or channels that periodically provide drainage for rainfall.”⁵⁸ Justice Kennedy wrote the critical 5th vote concurrence where he found that a wetland is ‘navigable water’ protected under the CWA if the wetland has a ‘significant nexus’ with a ‘relatively permanent body of water.’⁵⁹

Defining WOTUS as defined by Justice Scalia’s definition in *Rapanos* could legalize the dumping of chemicals in bodies of water that were not encompassed under this definition of the CWA.⁶⁰ “‘The discharge of a pollutant’ is defined broadly to include ‘any addition of any pollutant to navigable waters from any point source,’ and ‘pollutant’ is defined broadly to include not only traditional contaminants but also solids such as ‘dredged soil, . . . rock, sand, [and] cellar dirt.’”⁶¹ Therefore, if a body of water does not fit under the current definition of “navigable waters,” then the EPA cannot regulate the dumping of contaminants therein under the CWA.⁶² Some polluters have taken advantage of the ambiguity caused by *Rapanos* to justify open dumping.⁶³

Finally, the *Sackett v. EPA* case has moved up and down the court system since 2012. The first case determined if the case could be brought to court and the second case resolved the merits of the case in 2023.⁶⁴ The first case, *Sackett v. EPA (Sackett I)* began when the Sacketts filled in part of their land before applying for a permit from the Corps.⁶⁵ The EPA determined that

⁵⁷ *Rapanos v. U.S.*, 547 U.S. 715, 742 (2006).

⁵⁸ *Id.* at 739.

⁵⁹ *Id.* at 767.

⁶⁰ See *Clean Water Act (CWA) and Federal Facilities*, ENV’T PROT. AGENCY, <https://www.epa.gov/enforcement/clean-water-act-cwa-and-federal-facilities> (last updated Dec. 14, 2023) [<https://perma.cc/N738-6G6F>].

⁶¹ *Rapanos*, 547 U.S. at 723 (quoting 33 U.S.C. 1362(6), (12)).

⁶² *Id.*

⁶³ *Clean Water Act (CWA) and Federal Facilities*, *supra* note 60.

See Charles Duhigg & Janet Roberts, *Rulings Restrict Clean Water Act, Foiling E.P.A.*, N.Y. TIMES (Feb. 28, 2010), <https://www.nytimes.com/2010/03/01/us/01water.html#:~:text=Thousands%20of%20the%20nation's%20largest,according%20to%20interviews%20with%20regulators> [<https://perma.cc/LJ2X-B26Q>].

⁶⁴ *Sackett v. Environmental Protection Agency Coverage*, SCOTUSBLOG, <https://www.scotusblog.com/case-files/cases/sackett-v-environmental-protection-agency/> (last visited Oct. 29, 2022) [<https://perma.cc/5BZE-LDCM>].

⁶⁵ *Sackett I*, 566 U.S. 120, 127 (2012).

the Sacketts violated the CWA because they altered their land without a permit.⁶⁶ The CWA allows the EPA to correct a violation by issuing a compliance order, initiating a civil enforcement action, or both.⁶⁷ In *Sackett I*, the EPA first issued a compliance order to return the land to its original state.⁶⁸ After the Sacketts failed to do so, the EPA initiated a civil enforcement action.⁶⁹ After the Sacketts' case went through the EPA's channels of appeal, it went through the federal court system all the way to the Supreme Court.⁷⁰ Justice Antonin Scalia framed the presenting issue as "whether Michael and Chantell Sackett may bring a civil action under the Administrative Procedure Act, 5 U.S.C. § 500 et seq., to challenge the issuance by the Environmental Protection Agency (EPA) of an administrative compliance order under § 309 of the Clean Water Act, 33 U. S. C. § 1319."⁷¹ The Court found that there was no adequate remedy for the EPA's decisions beyond the Administrative Procedure Act review, and the CWA permitted that review.⁷² The Court reversed and remanded the Ninth Circuit Court of Appeals' judgment.⁷³

The Sacketts' case then found its way back through the district and circuit courts and went to the Supreme Court again.⁷⁴ The 2023 case, also entitled *Sackett v. EPA (Sackett II)*, determined that the CWA failed to protect the Sacketts' land, causing the Sacketts not to be held liable for their actions.⁷⁵ The Biden administration argued that the "restrictive version of the 'continuous surface connection' test articulated by the plurality in *Rapanos v. United States*. . . has no grounding in the CWA's text, structure, or history."⁷⁶ The administration argued that abandoning the significant nexus test would leave many adjacent wetlands not covered under the act.⁷⁷ The question in *Sackett II* is over the application of *Rapanos* and the proper test that should be used to determine the status of a wetland as WOTUS.⁷⁸ The Supreme Court ruled that federally protected wetlands only encompassed

⁶⁶ *Id.* at 123.

⁶⁷ *Id.* at 120-21; 33 U.S.C. § 1319(a)(3).

⁶⁸ *Sackett I*, 566 U.S. at 124

⁶⁹ *Id.* at 125.

⁷⁰ *Id.* at 131.

⁷¹ *Sackett I*, 566 U.S. at 122; 33 U.S.C. § 1319.

⁷² *Sackett I*, 566 U.S. at 129.

⁷³ *Id.*

⁷⁴ *Sackett v. Environmental Protection Agency Coverage*, *supra* note 64.

⁷⁵ *See Sackett II*, 598 U.S. 651 (2023).

⁷⁶ Brief for the Respondents at 17, *Sackett v. Env'tl Prot. Agency*, 598 U.S. 651 (2023) (No. 21-454), 2022 WL 2119244.

⁷⁷ *Id.*

⁷⁸ *Sackett II*, 598 U.S. at 663.

directly adjoining rivers, lakes, and other bodies of water.⁷⁹ This is a much narrower interpretation of the CWA, which opens up many wetlands across the United States to being developed.⁸⁰ Despite the holding, alternate protection of waterways and the broader environment should be investigated.

The Corps' ability to deny permits has also been defined by the courts.⁸¹ In *Solid Waste Agency v. Army Corps of Engineers*, the Supreme Court determined that the Corps' denial of a permit for disposal was improper because it lacked jurisdiction to deny the permit.⁸² In *Solid Waste Agency*, a group of municipalities in Illinois came together to build a disposal site on an abandoned gravel pit.⁸³ The Corps denied the municipalities' petition because migratory birds were using the pit.⁸⁴ The Migratory Bird Rule prohibits the 'take' of a protected migratory birds' habitat unless authorized by Fish and Wildlife.⁸⁵ The Court found that the Corps could not regulate the quarry because, as a seasonal pond, it was outside of the CWA's scope of navigable waters.⁸⁶ Further, the Court found that protecting wildlife was also outside of the scope of the CWA and therefore not within the Corps' authority to regulate.⁸⁷ Effectively, the *Solid Waste Agency* decision means that the EPA and the Corps cannot prevent dumping in wildlife habitats purely to protect them.⁸⁸

Several published EPA and Corps guidelines, multiple signed Executive Orders, and exceptions also complicate the CWA's application. In 2005, the EPA and Corps went through a rule-making process and issued the New Agency Guideline defining the CWA's jurisdiction.⁸⁹ These guidelines

⁷⁹ *Id.* at 684.

⁸⁰ Albert C. Lin, *The Supreme Court just narrowed protection for wetlands, leaving many valuable ecosystems at risk*, PBS NEWS HOUR (May 27, 2023, 8:58 AM), <https://www.pbs.org/newshour/science/the-supreme-court-just-narrowed-protection-for-wetlands-leaving-many-valuable-ecosystems-at-risk> [https://perma.cc/WVQ3-4Q89].

⁸¹ *See Solid Waste Agency v. U.S. Army Corps of Eng'rs*, 531 U.S. 159, 169 (2001).

⁸² *Id.*

⁸³ *Id.* at 162-63.

⁸⁴ *Id.* at 164.

⁸⁵ Migratory Bird Rule, 51 Fed. Reg. 41217 (Nov. 13, 1986). The Migratory Bird Rule is based upon the protections provided for in the Migratory Bird Treaty Act of 1918, 16 U.S.C. 703-712 (2020).

⁸⁶ *Solid Waste*, 531 U.S. at 163.

⁸⁷ *Id.* at 193.

⁸⁸ Rebecca Eisenberg, *Killing the Birds in One Fell Swoop: Solid Waste Agency of Northern Cook County vs. United States Army Corps of Engineers*, 253 FORDHAM ENVIRONMENTAL LAW REVIEW 254-55 (2004).

⁸⁹ Env't Prot. Agency, Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act (July 29, 2005).

lessened the CWA's control of some waterways, but most of its jurisdiction was unaltered.⁹⁰ In 2015, the EPA and Corps under the Obama administration issued the Clean Water Rule in response to the above court cases.⁹¹ The Clean Water Rule expanded the jurisdiction of the CWA. However, in 2017, President Trump signed an executive order aimed at undoing the Clean Water Rule, which rolled back the expansion of the CWA.⁹²

In 2020, another Executive Order from President Trump called the "Navigable Waters Protection Rule," greatly reduced the number of waterways and wetlands that the CWA protected.⁹³ Further, the Executive Order allowed the Corps to make regulatory determinations called jurisdictional determinations instead of getting a permit.⁹⁴ This resulted in the Corps' timeline for decision making moving to less than twenty-four hours instead of months. In 2021, an Executive Order from President Biden and *Pasqua Yaqui Tribe v. U.S. Environmental Protection Agency* invalidated Trump's 2017 executive order.⁹⁵ The EPA then issued a ruling for the current implementation of WOTUS narrowing what waterways were covered.⁹⁶ The executive order used the definition of WOTUS from the "Clean Water Rule: Definition of 'Waters of the United States,' 80 Fed. Reg. 37054."⁹⁷ The ruling defined WOTUS through the Critical Nexus Test.⁹⁸

The CWA is the main act that protects waterways and the environment. Though the CWA used to have a broad definition of what

⁹⁰ *See id.*

⁹¹ Clean Water Rule: Definition of "Waters of the United States", 80 Fed. Reg. 37054 (July 13, 2015) (to be codified at 40 C.F.R. pt. 23).

⁹² Lisa Friedman & Coral Davenport, *Trump Administration Rolls Back Clean Water Protections*, N.Y. TIMES (Sep. 19, 2019), <https://www.nytimes.com/2019/09/12/climate/trump-administration-rolls-back-clean-water-protections.html> [<https://perma.cc/N8EW-CC87>].

⁹³ Current Implementation of Waters of the United States, Env't Prot. Agency, <https://www.epa.gov/wotus/current-implementation-waters-united-states#Rapanos> (last updated February 21, 2024) [<https://perma.cc/9HYT-MA7E>].

⁹⁴ Amena Saiyid, *Companies Eager to 'lock in' Trump Era-Water Rule Exemptions*, BLOOMBERG LAW (Sep. 10, 2020, 5:00 AM), <https://news.bloomberglaw.com/environment-and-energy/companies-eager-to-lock-in-trump-era-water-rule-exemptions> [<https://perma.cc/ZH3J-WKKP>].

⁹⁵ *Pasqua Yaqui Tribe v. EPA*, 557 F. Supp. 3d 949, 957 (D. Ariz. 2021); Executive Order 13778—Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the "Waters of the United States" (Feb. 28, 2017), <https://www.presidency.ucsb.edu/documents/executive-order-13778-restoring-the-rule-law-federalism-and-economic-growth-reviewing-the> [<https://perma.cc/SQ5G-4FHD>].

⁹⁶ *Id.*

⁹⁷ 80 Fed. Reg. 37054 (June 29, 2015).

⁹⁸ *Id.* at Executive Summary.

WOTUS were protected, it was narrowed in *Riverside*, and then further narrowed in *Rapanos*. The decision over what bodies of water are covered by the CWA rested on the *Sackett II* decision, which was decided by the United States Supreme Court in 2023. The CWA cannot be directly used to protect wildlife because of the Court's decision in *Solid Waste Agency*.⁹⁹ All of the decisions and executive orders placed the application of the CWA back to where it stood after *Rapanos* until the Supreme Court published its decision on *Sackett II* in 2023. The *Sackett II* Court left the definition of WOTUS narrower than *Rapanos*.¹⁰⁰

B. *The History of Protecting Endangered Species*

The ESA was enacted to provide a framework to meet the obligations of international treaties in order to protect endangered species.¹⁰¹ A series of legislative actions were made in response to the loss of some of the United States' most iconic species.¹⁰² Since the ESA was enacted, the Court's application of the ESA has changed concerning its ability to protect endangered species. The cases discussed below illustrate where the protection of endangered species currently stands, though it took passing a series of legislation to get there.

Several species becoming extinct in the United States prompted the government to start passing laws to protect endangered species. At the turn of the 20th century, there were virtually no protections for endangered species. For example, carrier pigeons were once so numerous that they blackened the sky.¹⁰³ The bird's disappearance from North America was so abrupt and striking that it caused the first significant federal wildlife regulation, the Lacey Act, to pass in 1900.¹⁰⁴ The Lacey Act's stated purpose was "to utilize [the Department of Agriculture] for the reintroduction of birds that have become locally extinct or are becoming so" and the Act specifically outlawed the shipment of wildlife in interstate commerce.¹⁰⁵ The passage of

⁹⁹ Eisenberg, *supra* note 88.

¹⁰⁰ *Id.*

¹⁰¹ Endangered Species Act, NAT'L OCEANIC AND ATMOSPHERIC ADMIN., <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act#section-2.-findings,-purposes,-and-policy> (last updated June 6, 2023) [<https://perma.cc/PJ9C-PCSV>].

¹⁰² *Endangered Species Act Milestones: Pre 1973*, U.S. FISH AND WILDLIFE SERV., <https://www.fws.gov/node/266462> (last visited Mar 10, 2024) [<https://perma.cc/36KZ-QHSE>].

¹⁰³ AM. BAR ASS'N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES, *supra* note 16.

¹⁰⁴ *Id.*

¹⁰⁵ 33 Cong. Rec. 4871 (1900) (statement of Sen. John F. Lacey); *see also* The Lacey Act, 16 U.S.C. §§ 3371-3378.

the Lacey Act was a catalyst for further legislation with the similar objective of protecting endangered birds and wildlife.

The Department of the Interior's Bureau of Sport Fisheries and Wildlife (Bureau) was created in 1939 to research and perform conservation projects.¹⁰⁶ In 1940, the United States signed the Convention on Natural Protection and Wildlife Preservation in the Western Hemisphere, an agreement with over twenty-one countries to "protect and reserve in their natural habitat representatives of all species and genera . . . to assure them from becoming extinct."¹⁰⁷ In the early 1960s, the Department of the Interior established the Committee on Rare and Endangered Wildlife Species.¹⁰⁸ The Committee made the first list of endangered species.¹⁰⁹

In 1969, the United States passed the Endangered Species Conservation Act (ESCA), the first endangered species law with international implications.¹¹⁰ It called for the compilation of an official list of endangered species and also prohibited the importation of endangered species.¹¹¹ The ESCA had no prohibition on the hunting or selling of domestic animals and avoided protecting wildlife habitats.¹¹² The Endangered Species Act (ESA) was enacted in 1973 to correct these issues.¹¹³ The class of endangered species was divided into two categories.¹¹⁴ The first category is threatened species, a classification that results in flexible protections.¹¹⁵ The second is endangered species, which are afforded automatic strict protections.¹¹⁶ The ESA allows for the designation of 'critical habitat' for both threatened and endangered species.¹¹⁷ The ESA also holds federal agencies accountable for adversely modifying critical habitats or "taking" listed species.¹¹⁸ A 1982 amendment required that the Secretary use the best scientific and commercial

¹⁰⁶ AM. BAR ASS'N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES, *supra* note 16, at 14.

¹⁰⁷ Convention between the United States of America and other American Republics respecting Nature Protection and Wildlife Preservation in the Western Hemisphere, Apr. 30, 1942, 56 Stat. 1354.

¹⁰⁸ AM. BAR ASS'N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES *supra* note 16, at 14-15.

¹⁰⁹ *Id.*

¹¹⁰ Endangered Species Conservation Act, Pub. L. No. 89-669, §§ 1-3, 80 Stat. 926 (1969) (repealed 1973).

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ 50 C.F.R. § 17.1; 16 U.S.C. §1531 (1973).

¹¹⁴ 16 U.S.C. § 1533.

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ *Id.*

data available and designate critical habitats.¹¹⁹ The updated ESA is the main governing legislation for protecting endangered species.

The interpretation of “take” has been modified over time through case law. The first major case that dealt with the interpretation of “take” under the ESA was *TVA v. Hill*, where the Court halted the construction of a dam because it would modify the critical habitat of an endangered species.¹²⁰ The second major case to discuss “take” was *Babbitt v. Sweet Home Chapter of Cmty. for a Great Oregon (Sweet Home)*, wherein the Sweet Home Chapter of Cmty. for a Great Oregon (Sweet Home Chapter) fought the definition of “harm” under the ESA.¹²¹ The Secretary of the Interior of Fish and Wildlife stated that a “take” included “significant habitat modification or degradation where it actually kills or injures wildlife.”¹²² Sweet Home Chapter argued that “harm” did not include habitat modification and degradation and that it was beyond the authority of the ESA to regulate.¹²³ The Court found in favor of the Secretary’s decision and concluded that “harm” includes habitat degradation.¹²⁴

Justice O’Connor wrote a concurrence in *Sweet Home* where she stated that “regulation is limited by its terms to actions that actually kill or injure individual animals.”¹²⁵ She also commented on causation, stating that “even setting aside difficult questions of science, the regulation’s application is limited by ordinary principles of proximate causation.”¹²⁶ This was the beginning of the use of proximate cause for the ESA, shifting the rulings away from the use of science and narrowing the controlling agencies’ regulatory powers. *Sweet Home* “requires the wildlife agencies to prove that a person’s habitat modifying activity, such as diverting water, is the proximate cause of harm to an endangered or threatened animal.”¹²⁷ It also implemented “foreseeability,” meaning that a reasonable person would likely foresee the

¹¹⁹ 16 U.S.C. § 1533(b)(2) (amending 16 U.S.C. § 1533 (1973)).

¹²⁰ *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 162 (1978).

¹²¹ *Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. 687, 690 (1995).

¹²² *Id.*

¹²³ *Id.* at 693.

¹²⁴ *Id.* at 708.

¹²⁵ *Id.* at 709.

¹²⁶ *Id.* at 708.

¹²⁷ James Rasband, *Priority, Probability, and Proximate Cause: Lessons from Tort Law* *Priority, Probability, and Proximate Cause: Lessons from Tort Law About Imposing ESA Responsibility for Wildlife Harm on Water About Imposing ESA Responsibility for Wildlife Harm on Water Users and Other Joint Habitat Modifiers Users and Other Joint Habitat Modifiers*, 33 ENV’T L 598 (2003).

outcome being the result of the action.¹²⁸ The reasonable person refers to a person who is “of average caution, care and consideration.”¹²⁹

The next case, *Animal Welfare Institute v. Beech Ridge Energy LLC*, narrowed the definition of harm.¹³⁰ *Animal Welfare Institute* was a District Court case for the District of Maryland making the decision non-binding, except in Maryland. In the 2009 case, Beech Ridge Energy, LLC failed to apply for an Incidental Take Permit (ITP), and their wind turbines were killing endangered bats.¹³¹ The ESA defines “harm” as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” against an endangered species.¹³² Further, the Fish and Wildlife Service has defined “harass” as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.”¹³³ The court enjoined Beech Ridge Energy, LLC from operating its turbines during certain times and required the company to apply for an ITP.¹³⁴

The final case, *Aransas Project v. Shaw*, was about the “take” of Whooping Cranes and the proximate cause of their declining numbers.¹³⁵ *Aransas Project* was a Fifth Circuit case, and the Supreme Court did not grant certiorari.¹³⁶ The following is the causation breakdown of the case:

- (1) private parties withdrawing water from rivers, which led to
- (2) a significant reduction in freshwater inflow into the estuarine ecosystem, which, in combination with drought effects, led to
- (3) increased salinity in the bay, causing
- (4) a reduction in the abundance of blue crabs and wolfberries upon which the cranes rely, resulting in

¹²⁸ Cochran v. Securitas Sec. Servs. USA, Inc., 59 N.E.3d 234, 249 (4th Cir. 2016).

¹²⁹ Jeffrey Johnson, *Reasonable Person Standard: Legal Definition & Examples*, FORBES (Sep. 19, 2022, 9:19 AM). <https://www.forbes.com/advisor/legal/personal-injury/reasonable-person-standard/> [<https://perma.cc/45Q5-TLDY>].

¹³⁰ *Animal Welfare Inst. v. Beech Ridge Energy LLC*, 675 F. Supp. 2d 540, 541 (D. Md. 2009).

¹³¹ *Id.*

¹³² Endangered Species Act, 16 U.S.C. § 1532(19) (1973).

¹³³ 50 C.F.R. § 17.3 (2023).

¹³⁴ *Animal Welfare Inst.*, 675 F. Supp. at 583.

¹³⁵ *Aransas Project v. Shaw*, 775 F.3d 641, 645 (5th Cir. 2014).

¹³⁶ *The Aransas Project v. Shaw*, 576 U.S. 1035 (2015).

- (5) emaciation of the cranes,
- (6) engagement in stress behavior, and ultimately
- (7) the death of 23 cranes in the 2008–2009 wintering season.¹³⁷

The Court found that “[a]pplying a proximate cause limit to the ESA must . . . mean that liability may be based neither on the ‘butterfly effect’ nor on remote actors in a vast and complex ecosystem.”¹³⁸ The 5th Circuit found that the connection between Shaw’s actions and the birds’ deaths was too remote to hold the company accountable.¹³⁹

II. COHO SALMON, SOUTHERN RESIDENT KILLER WHALES, AND THE CHEMICAL 6PPD-QUINONE

In order to apply the discussed history of the law to a new litigation technique for the case of 6PPD-Quinone and its harm to Southern Resident Killer Whales and Coho Salmon, the environmental and scientific background of the situation needs to be explained. The first subsection herein will examine the Southern Resident killer whales, discussing their designation under the ESA, and listing the reasons that caused them to make the list. The second section will look at one of the whales’ food sources, the Coho salmon, and their decline in numbers. The final section will look at the chemical that is causing the Coho salmon’s decline and in consequence, the killer whales’ decline. Together these sections will paint a picture of why this new litigation technique is needed to help prevent the extinction of the Southern Resident killer whale.

A. *Southern Resident Killer Whales*

The Southern Resident killer whale populations are declining, and they have been declared a critically endangered subspecies under the ESA.¹⁴⁰ Southern Resident killer whales were added to the endangered species list in 2005.¹⁴¹ The National Marine Fisheries Service is the regulatory agency responsible for the protection of the killer whales.¹⁴² Southern Resident killer whales are a subspecies of killer whales found in the eastern North Pacific,

¹³⁷ AM. BAR ASS’N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES, *supra* note 16, at 160-61.

¹³⁸ *Id.*

¹³⁹ *Id.* at 664.

¹⁴⁰ *Id.*

¹⁴¹ *Southern Resident Killer Whale Health Assessment*, *supra* note 1.

¹⁴² *Southern Resident Killer Whales*, *supra* note 6.

mainly in Washington, Oregon, and British Columbia.¹⁴³ The whales' status as an endangered species is due to four major factors.

The four major factors that are causing the extinction of the killer whales are being addressed, except for their depleted food source. The first reason that the Southern Resident killer whales are facing extinction is because in the 1960s and 1970s, juvenile whales were taken from their pods and placed in sea parks; however, this practice has stopped.¹⁴⁴ The second is the focus of this note, which is the reduction of the whale's food quality and quantity.¹⁴⁵ The third reason is the presence of "persistent organic pollutants that could cause immune or reproductive system dysfunction."¹⁴⁶ The Stockholm Convention is a global treaty that requires countries to limit and reduce the use of Persistent Organic Pollutants (POP), which went into effect in 2004.¹⁴⁷ The final factor is the noise produced by vessels that disturbs the whales' ability to echolocate their prey.¹⁴⁸ In response, the Northwest has launched a program called Quiet Sound to reduce the noise for killer whales.¹⁴⁹ The program states that "[w]hen large vessels slow their speed they reduce the amount of underwater noise they create and less underwater noise means better habitat for the endangered Southern Resident killer whales."¹⁵⁰ The slow rate of cleanup of POPs, as well as action already taking place to reduce noise, make protecting the killer whales' food source a high priority.¹⁵¹

¹⁴³ *Id.*

¹⁴⁴ *Killer Whale*, NAT'L OCEANIC AND ATMOSPHERE ADMIN., <https://www.fisheries.noaa.gov/species/killer-whale> (last visit on Mar. 11th, 2024) [<https://perma.cc/VE5M-HUZS>].

¹⁴⁵ *Id.*

¹⁴⁶ West Coast Regional Office, *Southern Resident Killer Whale (Orcinus Orca)*, NAT'L OCEANIC AND ATMOSPHERIC ADMIN., <https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/southern-resident-killer-whale-orcinus-orca> (last updated Feb. 5, 2024) [<https://perma.cc/5G8L-3EEP>].

¹⁴⁷ Karissa Kovner, *Persistent Organic Pollutants: A Global Issue, A Global Response*, ENV'T PROT. AGENCY, <https://www.epa.gov/international-cooperation/persistent-organic-pollutants-global-issue-global-response> (last updated Jan. 23, 2024) [<https://perma.cc/M7NS-6QHS>].

¹⁴⁸ Danielle Hall, *When Killer Whales Hunt the King of Salmon*, SMITHSONIAN INST. (July 2021) <https://ocean.si.edu/ocean-life/marine-mammals/when-killer-whales-hunt-king-salmon> [<https://perma.cc/3KSG-TYX6>].

¹⁴⁹ Tom Banse, *Big ships transiting North Puget Sound asked to slow down, quiet down for orcas*, KUOW NEWSROOM (Oct. 17, 2022, 8:54AM) <https://www.kuow.org/stories/big-ships-transiting-north-puget-sound-asked-to-slow-down-quiet-down-for-orcas> [<https://perma.cc/3F7H-AU2X>].

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

Killer whales are found in every ocean but have distinct populations and species.¹⁵² Killer whales are not whales at all, but rather a kind of dolphin.¹⁵³ Southern Resident killer whales differ from other populations of killer whales because they only eat fish, have unique calls, and are not migratory.¹⁵⁴ While the entire population of killer whales is not endangered, the ESA allows the protection of species, subspecies, or distinct populations.¹⁵⁵ This results in the protection of the subspecies Southern Resident killer whales.¹⁵⁶ The Southern Resident killer whale population consists of three designated pods: J, K, and L.¹⁵⁷ Most Southern Resident killer whales spend their whole lives in their pod, a quality unique to this subpopulation.¹⁵⁸ However, the Southern Resident killer whale population used to consist of about 140 whales, and now it has fallen to around seventy-five.¹⁵⁹ Female and male killer whales have different life expectancies; female killer whales live from fifty to ninety years and male killer whales live from about thirty years to sixty years.¹⁶⁰ Female killer whales reach sexual maturity in their teenage years, but offspring have a higher survival rate when the female is in her twenties.¹⁶¹ A female's reproductive period ends between thirty and forty.¹⁶² Their gestation period is around fifteen to eighteen months, and they typically only have one calf per pregnancy.¹⁶³ Southern Residents have an estimated fifty percent infant mortality rate, contributing to their decline.¹⁶⁴

Chinook salmon constitute the main food in the Southern Resident killer whales' diet,¹⁶⁵ though the primary food source for the whales changes throughout the year. For example, the main food source for the killer whales

¹⁵² *Southern Resident Killer Whale Health Assessment*, *supra* note 1.

¹⁵³ *Killer Whale*, *supra* note 144.

¹⁵⁴ *Id.*

¹⁵⁵ Off. of Protected Res., *Glossary Endangered Species Act*, NAT'L OCEANIC ATMOSPHERIC ADMINISTRATION, <https://www.fisheries.noaa.gov/laws-and-policies/glossary-endangered-species-act#distinct-population-segment> (last updated Nov. 15, 2022). [<https://perma.cc/9Z3V-FPUJ>].

¹⁵⁶ See Endangered Species Act, 16 U.S.C. §§ 1531-1544.

¹⁵⁷ *Southern Resident Killer Whale*, *supra* note 6.

¹⁵⁸ *Killer Whale*, *supra* note 144.

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *Southern Resident Killer Whale Health Assessment*, *supra* note 1.

¹⁶² Robin Mckie, *Killer whales explain the mystery of the menopause*, THE GUARDIAN (Jan. 15, 2017) <https://www.theguardian.com/science/2017/jan/15/killer-whales-explain-meaning-of-the-menopause> [<https://perma.cc/YST4-PW9A>].

¹⁶³ *Id.*

¹⁶⁴ *Southern Resident Killer Whale Health Assessment*, *supra* note 1.

¹⁶⁵ Danielle Hall, *supra* note 148.

in October is Coho salmon, representing 53.8% of their diet.¹⁶⁶ Any depletion of Coho salmon could hurt the killer whale's chance of survival, and is of great concern, especially since Chinook salmon are already considered endangered.¹⁶⁷ Although most of the issues affecting the killer whales are being addressed, their numbers continue to decline. Thus, it has become essential for their survival to stop the decimation of salmon populations.

B. Coho Salmon

The Southern Resident killer whales primarily eat Coho salmon in October. Coho salmon is indigenous to Washington State¹⁶⁸ and is so ubiquitous within the local area that the Lummi Nation, a local indigenous tribe, identifies as “salmon people.”¹⁶⁹ The life of a salmon is complex and filled with different stages that correlate with different locations, from streams to the ocean.¹⁷⁰ While Coho Salmon are not currently endangered in Washington, outside of the Columbia River, they may soon join the endangered species list due to pollutants from tires, pushing the salmon further toward the brink of extinction.¹⁷¹

Salmon are also sacred to local indigenous people, including the Lummi Nation.¹⁷² “In the Point Elliott Treaty of 1855, the Lummi, not yet devastated by smallpox and fur trappers and sawmills, gave up their lands in exchange for political sovereignty, reservations, and fishing and hunting rights in their ‘usual and accustomed’ places—the latter, an expansive promise of the treaty.”¹⁷³ The Treaty shows how important fishing is to the

¹⁶⁶ M. Bradley Hanson et al., *Endangered predators and endangered prey: Seasonal diet of Southern Resident killer whales*, PLOS ONE, March 3, 2021, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7928517/> [<https://perma.cc/88PF-C7BL>].

¹⁶⁷ *Id.*

¹⁶⁸ *Coho Salmon (Oncorhynchus kisutch)*, WASH. DEP'T OF FISH AND WILDLIFE <https://wdfw.wa.gov/species-habitats/species/oncorhynchus-kisutch>. (last visited Mar. 7, 2024) [<https://perma.cc/D572-DB4K>].

¹⁶⁹ E. Tammy Kim, *Can This Tribe of ‘Salmon People’ Pull off one more win?*, N.Y. TIMES (Oct. 24, 2021), <https://www.nytimes.com/2021/10/22/opinion/lummi-climate-change-port-terminal.html> [<https://perma.cc/375T-PPE3>].

¹⁷⁰ West Coast Regional Office, Salmon Life Cycle and Seasonal Fishery Planning, NAT'L OCEAN ATMOSPHERIC ADMIN., <https://www.fisheries.noaa.gov/west-coast/sustainable-fisheries/salmon-life-cycle-and-seasonal-fishery-planning>. (last updated Oct. 6, 2022) [<https://perma.cc/2SZR-UZQ4>].

¹⁷¹ *Salmon Status*, WASH. GOV'T: STATE OF SALMON IN WATERSHEDS, <https://stateofsalmon.wa.gov/executive-summary/salmon-status/> (last visited on Mar. 7, 2024) [<https://perma.cc/W6GF-9D3A>].

¹⁷² Pamela T. Amoss, *The Fish God Gave Us: The First Salmon Ceremony Revived*. 24 ARCTIC ANTHROPOLOGY, no. 1 56, 57-66. (1987).

¹⁷³ E. Tammy Kim, *supra* note 169.

Lummi Nation, who perform celebratory salmon ceremonies.¹⁷⁴ Now that the number of salmon has dwindled, the tribe catches crabs and crustaceans instead.¹⁷⁵ “Julius, the elected leader of the 6,500-member tribe” stated that “[t]he bottom line is the Salish Sea and the whales and the tribes need more salmon,’ . . . ‘We’re at the point now where we don’t have much time. We are possibly the last generation that can do anything about it.’”¹⁷⁶ This demonstrates the strong connection that the local indigenous communities have, not only to the Southern Resident killer whales but also to the salmon.

Coho salmon’s reproductive behaviors leave them open to becoming endangered because they only reproduce once. Coho salmon hatch from eggs laid on stream beds as alevins and soon become fry.¹⁷⁷ Coho fry normally spend a year in freshwater before going to the open ocean, where they turn into parr.¹⁷⁸ Coho salmon spend about 18 months at sea before returning to the river to spawn.¹⁷⁹ To reproduce, Coho salmon return to the rivers where they were born.¹⁸⁰ A single female can have between 2,500 and 7,000 eggs during this time.¹⁸¹ The adult salmon die soon after they reproduce.¹⁸²

It can be devastating for the salmon population when a female salmon is unable to reach her spawning grounds, given the number of eggs she lays. Further, at most only 0.1% of salmon eggs laid return to their stream to spawn, so every fish killed before spawning can be disastrous to the population.¹⁸³ The Coho salmon population is affected by several factors, including global warming, habitat loss, dam construction, and degraded water

¹⁷⁴ Amoss, *supra* note 172.

¹⁷⁵ E. Tammy Kim, *supra* note 169.

¹⁷⁶ Levi Pulkkinen, *A pod of orcas is starving to death. A tribe has a radical plan to feed them*, THE GUARDIAN (Apr. 25, 2019, 6:00AM), <https://www.theguardian.com/environment/2019/apr/25/orca-starving-washington-feed-salmon-lummi-native-american>. [<https://perma.cc/FY9P-DYN3>].

¹⁷⁷ *The Salmon Lifecycle*, Nat’l Park Services, <https://www.nps.gov/olym/learn/nature/the-salmon-life-cycle.htm> [<https://perma.cc/35HC-K82S>] (last updated July 22, 2019).

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

¹⁸⁰ *Id.*

¹⁸¹ *Salmon Fact Sheet*, PBS: NATURE BLOG, (Dec. 10, 2021), <https://www.pbs.org/wnet/nature/blog/salmon-fact-sheet/> [<https://perma.cc/SEL6-X28V>]

¹⁸² *The Salmon Lifecycle*, *supra* note 177.

¹⁸³ McQuate, *supra* note 1; *see also* Western Fisheries Research Center, *Questions and Answers About Salmon*, U.S. GEOLOGICAL SURV.: SCIENCE FOR A CHANGING WORLD, <https://www.usgs.gov/centers/western-fisheries-research-center/questions-and-answers-about-salmon> (last visited Mar 7, 2024) [<https://perma.cc/ZBC6-69HD>].

quality.¹⁸⁴ Beyond this, scientists have noticed that the fish are dying in large numbers before spawning.¹⁸⁵ Scientists set out to figure out why and found that a chemical called 6PPD-quinone was the reason.¹⁸⁶

C. 6PPD-quinone

Coho salmon are not currently considered endangered or threatened in Washington state, except in the Columbia River;¹⁸⁷ however, the risk posed by 6PPD-quinone could change this. Returning Coho often gather at the mouths of streams and wait for the water flow to rise before heading upstream.¹⁸⁸ 6PPD-quinone levels are the highest after rainstorms and floods.¹⁸⁹ Stopping this chemical from entering our waterways could stop the extinction of the salmon, and subsequently halt the endangerment of Southern Resident killer whales, whose diet relies on Coho. The chemical has also recently been shown to negatively affect Chinook Salmon, which is the Southern Resident killer whales' main food source during different parts of the year.¹⁹⁰

Local universities, including Washington State University Puyallup and the University of Washington, started noticing that the salmon were dying off when they returned to the rivers before they could spawn.¹⁹¹ “When poisoned [6PPD-quinone] causes the fish to turn on their sides and turn in circles; it makes it look like they are desperately gasping for air.”¹⁹² These universities examined more than 3,000 chemicals and identified 6PPD-

¹⁸⁴ Coho Salmon, Nat’l Oceanic and Atmospheric Admin. <https://www.fisheries.noaa.gov/species/coho-salmon> (last updated Oct. 12, 2023). [<https://perma.cc/995E-8M86>].

¹⁸⁵ Univ. of Wash. News, *Worn Tires Contribute to Chemical that Kills Coho Salmon*, YOUTUBE (Dec. 3, 2020), https://www.youtube.com/watch?v=vxmojuC_dJE [<https://perma.cc/RUY2-DFWD>].

¹⁸⁶ McQuate, *supra* note 1.

¹⁸⁷ *Coho Salmon*, *supra* note 184.

¹⁸⁸ *Coho Salmon (Oncorhynchus kisutch)*, *supra* note 168.

¹⁸⁹ McQuate, *supra* note 1.

¹⁹⁰ *Scientists Discover Silent Threats to Pacific Coast Salmon Populations*, Nat’l Park Servs. <https://www.nps.gov/articles/000/scientists-discover-silent-threats-to-pacific-coast-salmon-populations.htm> (last updated Feb. 5, 2021). [<https://perma.cc/P2WJ-GR78>]; Nat’l Oceanic and Atmospheric Admin, *Roadway Runoff Known to Kill Coho Salmon also Affects Steelhead, Chinook Salmon*, NOAA FISHERIES: NEWS (Aug. 24, 2022) <https://www.fisheries.noaa.gov/feature-story/roadway-runoff-known-kill-coho-salmon-also-affects-steelhead-chinook-salmon> [<https://perma.cc/F7L9-VYTA>].

¹⁹¹ DTSCgreen, *Safer Consumer Products - 6PPD in Tires*, YOUTUBE (May 23, 2022), <https://www.youtube.com/watch?v=aTe-qlh-xQY> [<https://perma.cc/H8DK-97CX>].

¹⁹² *Id.*

quinone as the primary chemical that was killing the fish.¹⁹³ The reaction matched what was happening in the lab when they exposed the fish to the same chemical.¹⁹⁴

California and Washington have started to take action to ban the use of 6PPD in tires.¹⁹⁵ 6PPD is used as a tire preservative that prevents tires from cracking and extends their use.¹⁹⁶ The chemical is in tires all over the world.¹⁹⁷ When cars are driving on roads, pieces of the tires that contain this preservative break off onto the road.¹⁹⁸ These particles then get washed into waterways when it rains.¹⁹⁹ When 6PPD is mixed with the gas ozone it creates 6PPD-quinone.²⁰⁰ Heavy rain sweeps this chemical into rivers and streams, coinciding with salmon's return to the rivers to spawn.²⁰¹ The fish coming into contact with this chemical causes them to die before they are able to spawn, depleting the population.²⁰² The State of Washington has started some clean-up projects, including cleaning up thousands of tires that were dropped into the ocean as fish housing.²⁰³

The chemical is used throughout the process of making tires, and more research is needed to find workable alternatives.²⁰⁴ The University of California Berkeley published a report about alternatives to using 6PPD in tires.²⁰⁵ The four alternatives they suggest include (1) the modification of

¹⁹³ Zhenyu Tian et al., *A ubiquitous tire rubber-derived chemical induces acute mortality in coho salmon*, 371 SCIENCE 185, 185-89 (2021) <https://www.science.org/doi/10.1126/science.abd6951>. [<https://perma.cc/849Q-J34L>].

¹⁹⁴ DTSCgreen, *supra* note 191.

¹⁹⁵ News Release, Meredith Williams, Director, Cal. Dep't. of Toxic Substances Control, California Proposes Requiring Tiremakers to Consider Safer Alternative to Chemical that Kills Coho Salmon (May 23, 2022), https://dtsc.ca.gov/2022/05/23/news-release_t-07-22/. [<https://perma.cc/7V53-B69R>];

Dep't of Ecology State of Wash., *Tire anti-degradant (6PPD) and 6PPD-quinone*, DEP'T OF ECOLOGY: WASTE & TOXICS, <https://ecology.wa.gov/waste-toxics/reducing-toxic-chemicals/addressing-priority-toxic-chemicals/6ppd> (last visited on Mar. 7, 2024) [<https://perma.cc/8SB9-GCS6>].

¹⁹⁶ Meredith Williams, *supra* note 195.

¹⁹⁷ Univ. of Wash. News, *supra* note 185.

¹⁹⁸ *See id.*

¹⁹⁹ *Id.*

²⁰⁰ *Id.*

²⁰¹ *Id.*

²⁰² McQuate, *supra* note 1.

²⁰³ Faith Wimberley & Scarlet Tang, *Partnerships fuel removal of toxic tires from Washington's waters*, STATE OF WASH. DEP'T OF ECOLOGY (June 23, 2022), <https://ecology.wa.gov/Blog/Posts/June-2022/Tackling-tire-debris-in-Washington-s-waters>. [<https://perma.cc/8HT8-U8KZ>].

²⁰⁴ Elizabeth Boxer et al., *Saving Coho Salmon: Alternatives for 6PPD In Tire Manufacturing*, UC BERKELEY CENTER FOR GREEN CHEMISTRY (Dec. 18, 2021).

²⁰⁵ *Id.*

6PPD; (2) using food preservatives called gallates; (3) using a plant-based polymer called Lignin; and (4) developing an alternative rubber formulation.²⁰⁶ The report found that “[o]f the four alternative schemes discussed in this report, no single solution can be deemed optimal due to the vast amount of safety and performance testing required following tire reformulation.”²⁰⁷ The report goes on to state that “among the four options we have considered herein, modification of 6PPD will likely result in the easiest industry replacement option.”²⁰⁸ The U.S. Tire Manufacturers Association admits that it is likely that 6PPD’s byproduct is hurting the Coho salmon, but has not worked to find an alternative to the chemical.²⁰⁹ Given the harm from the chemical in tires and the Association’s knowledge, steps should be taken to require the tire companies to actively test alternatives.

As the application of the CWA becomes more unpredictable, other means must be found to save the environment, the waterways, and all the species that live within them. This is where the application of the ESA can be used to stop the dumping of chemicals into streams. Here, the goal is to save the Southern Resident killer whales from extinction by stopping them from starving to death. One of their main food sources for part of the year is Coho Salmon, which are being killed by the dumping of a tire preservative every time people drive. The chemical 6PPD becomes toxic when combined with ozone, and results in the decimation of the killer whales’ food source. A new litigation technique is needed to hasten the removal of 6PPD from tires.

III. LEGAL ANALYSIS OF THE CWA AND ESA

With the uncertainty over the CWA’s ability to protect waterways and the environment, new protective mechanisms should be pursued. A solution to protect waterways, fish, and the Southern Resident killer whales might be found by turning to the ESA to fill the ever-growing gap in enforcement created by the courts. The analysis in each of the following cases, which were also discussed earlier, will be applied to the chemical dumping of 6PPD. The first case is *Babbitt v. Sweet Home Chapter of Cmty.*²¹⁰ The second, *Aransas Project v. Shaw*, helps refine *Sweet Home*.²¹¹ The third, *Animal Welfare Institute v. Beech Ridge Energy*, further defines harm. This section will also look at the “harass” provision within the ESA.

²⁰⁶ *Id.* at 5.

²⁰⁷ *Id.* at 38.

²⁰⁸ *Id.*

²⁰⁹ See *6PPD and Tire Manufacturing*, U.S. TIRE MFR. ASS’N <https://www.ustires.org/6ppd-and-tire-manufacturing> (last visited Mar. 7, 2024). [<https://perma.cc/EX2X-VFD2>].

²¹⁰ *Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. 687, 691 (1995).

²¹¹ *Aransas Project v. Shaw*, 775 F.3d 641 (5th Cir. 2014).

The ESA states it is “unlawful for any person to take an endangered species of fish or wildlife.” For this discussion, the “take” refers to the endangered Southern Resident killer whales. They are a listed endangered species because of the population loss from starvation and the resulting high infant mortality rate.²¹² This causes the “harm and harass” provision to be applicable. The harm provision is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”²¹³ “Harass” is defined as, “significant environmental modification that has had the effect of actually injuring or killing wildlife, including acts which annoy it to such an extent as to significantly disrupt essential behavioral patterns, which include, but are not limited to, breeding, feeding or shelter.”²¹⁴

The first case, *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, addresses the harm provision, specifically whether an actual killing or harm to a species constitutes a “take,” if habitat modification is included, and if a “take” requires intentionality.²¹⁵ The Court found that “[h]arm in the definition of 'take' in the Act means an act which actually kills or injures wildlife.”²¹⁶ This ruling settled if a “likely take” could be a “take,” but there has to be an “actual harm” to the animals for the action to be defined as a “take.”²¹⁷ Concerning the harm provision, the Court found that habitat modification was part of Congress’s original intent when drafting the bill.²¹⁸ Defining “take” under the harm provision, the Court stated, “Congress intended 'take' to apply broadly to cover indirect as well as purposeful actions.”²¹⁹ Injunctive relief is easier to achieve under the harm provision because the death or injury does not require intentionality.²²⁰ In the Southern Resident case, the chemical 6PPD-quinone is introduced as a pollutant into the environment from tires. 6PPD-quinone modifies the environment by killing the Coho salmon and disrupting the killer whales’ feeding habits by depleting their food source. The dumping is not intentional, but a “take” still occurs.

²¹² *Southern Resident Killer Whales Health Assessment*, *supra* note 1.

²¹³ H.R. Rep. No. 412, 93d Cong. 1st Sess. 11 (1973), reprinted in 1973 U.S.C.C.A.N. 2989.

²¹⁴ *Id.*

²¹⁵ *Sweet Home*, 515 U.S. at 691.

²¹⁶ *Id.*

²¹⁷ *Id.*

²¹⁸ *Id.* at 693.

²¹⁹ *Id.* at 704.

²²⁰ *Id.* at 692-93.

In the Southern Resident killer whale situation, the court would likely apply a proximate cause analysis to the new litigation technique. One of the first major cases in which the proximate cause standard was used was *Aransas Project v. Shaw*.²²¹ The United States Supreme Court stated that proximate cause “requires the causal factors and the result to be reasonably foreseeable.”²²² In other words, it must be foreseeable that a “take” will occur.²²³ In *Aransas*, the federal trial court found that there was proximate causation as proven by the scientific data.²²⁴ The trial court’s finding was overturned by the Fifth Circuit Court which stated, “every link of this chain depends on modeling and estimation. At best, the court found but-for causation.”²²⁵ This case was a Fifth Circuit Court of Appeals case meaning that it is only binding to the Fifth Circuit, though a total of eight courts have also cited this case for its use of causation.²²⁶ There were no cases countering the ruling.²²⁷ In the Southern Resident case, the evidence of causation is overwhelming to show the “take” of the Southern Resident killer whale from 6PPD in tires.²²⁸ The University of Washington and a group of other local universities tested over 3,000 chemicals to see which was killing the salmon and they narrowed it down to one.²²⁹ However, Justice O’Connor’s proximate cause standard from the *Sweet Home* standard for proximate cause could be harder to prove.²³⁰ In the Southern Resident case, the causation can be broken down into the following chain:

²²¹ *Aransas Project v. Shaw*, 775 F.3d 641, 645 (5th Cir. 2014). Despite *Aransas Project v. Shaw* being the first case to apply the proximate cause standard in ESA litigation, Justice O’Connor first suggested using proximate cause principles in *Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. at 709 (O’Connor, J., Concurring) (stating that liability under the “harm” provision should be limited to “ordinary principles of proximate causation”).

²²² *Aransas Project*, 775 F.3d at 660.

²²³ *Id.*

²²⁴ *Aransas Project*, 775 F.3d at 660.

²²⁵ *Id.*

²²⁶ Shep: *Aransas Project v. Shaw*, 775 F.3d 641 (2014), LEXIS PLUS, <https://plus.lexis.com/shepards/shepardspreviewpod/?pdmfid=1530671&crd=b0ad328a-11fa-40cb-ac95-3f6caae52e8a&pdshepid=urn%3AcontentItem%3A5G2V-FXC1-DXC8-71HW-00000-00&pdshepcat=initial&pdoctabclick=false&prid=74367d57-0001-46ef-b465-6f62fce6f061&ecomp=2gntk#/citingref> (last visited Mar. 7, 2024).

²²⁷ *Id.*

²²⁸ McQuate, *supra* note 1.

²²⁹ *Id.*

²³⁰ AM. BAR ASS’N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES, *supra* note 16, at 162-63.

- (1) The tire preservative comes off of the tires onto roads and 6PPD is released.²³¹
- (2) The chemical is then combined with rainwater where it turns into toxic chemical 6PPD-quinone and washes into streams.²³²
- (3) The tire preservative kills Coho salmon.²³³
- (4) There are not enough salmon for the endangered species to eat, causing the Southern Resident killer whale to die from starvation.²³⁴

The first step occurs when tires hit the road and particles are released.²³⁵ Tire companies readily admit putting 6PPD in their tires.²³⁶ Second, the production of the chemical 6PPD-quinone is a recognized chemical reaction.²³⁷ The third step could perhaps be a stretch for someone such as Justice O'Connor due to her heightened concern with foreseeability.²³⁸ However, step three backed by the reasonable person standard, as relates to foreseeability, given that encountering 6PPD-quinone produces a visible reaction in the fish that is identical during laboratory testing and when the fish encounter the chemical in the streams.²³⁹ This reaction involves the fish swimming on their sides in circles, seeming to gasp for air.²⁴⁰ The evidence is clear enough that some states have already moved to ban the substance.²⁴¹ No one has contested that the chemical caused the salmon's death, including the tire manufacturers.²⁴² Although other factors

²³¹ McQuate, *supra* note 1.

²³² *Id.*

²³³ *Id.*

²³⁴ *Southern Resident Killer Whales*, *supra* note 6.

²³⁵ McQuate, *supra* note 1.

²³⁶ *6PPD and Tire Manufacturing*, *supra* note 209.

²³⁷ *Id.*

²³⁸ *Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. 687, 697 (1995).

²³⁹ *Id.*

²⁴⁰ McQuate, *supra* note 1.

²⁴¹ See Dep't of Toxic Substance Control: Safer Consumer Products, *Adopted Priority Product: Motor Vehicles Tires Containing 6PPD*, GOV. OF CAL. https://dtsc.ca.gov/scp/motor_vehicle_tires_containing_6ppd/ (last visited Mar. 24, 2024) [<https://perma.cc/A66F-CJPC>]; MATT SHEPARD-KONINGSOR, AN ACT RELATING TO EXPEDITING THE SAFER PRODUCTS FOR WASHINGTON PROCESS REGARDING MOTORIZED VEHICLE TIRES CONTAINING 6PPD, S.B. REP. 5931 (Wash. 2024).

²⁴² 45-Day Public Notice from Dep't of Toxic Substances Control, Meredith Williams, Ph.D., Director (May 31, 2022) (on file with Cal. Dep't of Toxic Substances Control) https://dtsc.ca.gov/wp-content/uploads/sites/31/2022/05/6PPD-in-Tires-_NOPA-wo-hearing-1.pdf. [<https://perma.cc/9U5A-35YE>].

contribute to the decline of the Coho salmon, nothing else has such a clear connection to the death of the fish as this chemical.²⁴³

The final step of the causation analysis involves how food loss affects the endangered killer whales. The main reason that the Southern Resident killer whales are going extinct is because there is not a large enough food supply for them to have a full, adequate, healthy diet.²⁴⁴ This results in a high infant mortality rate because the mothers are not gaining the critical mass they need to produce a healthy calf that will survive into adulthood.²⁴⁵ This is worsened by the loss of food in critical months such as in October when the Coho salmon become the endangered whales' most important food source.²⁴⁶ Simply put, if the chemical was not released into the environment, the Southern Resident killer whales would have more food, be healthier, and have a higher survival rate.²⁴⁷ This case differs from *Shaw* because there was a long chain of causation and complex scientific data used to prove that the action of the government resulted in a take of the Whooping Cranes.²⁴⁸ Here, the chain is simple, straightforward, and enough to make any reasonable person concerned about the consequences of the continual release of 6PPD into the environment.

The last case is *Animal Welfare Institute v. Beech Ridge Energy*, which further defined harm and refined the degree of certainty required to constitute a preponderance of the evidence.²⁴⁹ The commentary in this regulation explains that harm cannot be speculative.²⁵⁰ When explaining their application of injury “[t]he [Fish and Wildlife Service] stated that it inserted the term ‘actually’ before ‘kills or injures’ because ‘existing language could be construed as prohibiting the modification of habitat even where there was no injury.’”²⁵¹ In this case, it means that fish must be actually dying and that these fish are the food source of the endangered killer whales. There is actual harm to their feeding habits because there is such a high death rate of the Coho salmon from 6PPD-quinone.²⁵²

²⁴³ McQuate, *supra* note 1.

²⁴⁴ *Southern Resident Killer Whale*, *supra* note 6.

²⁴⁵ *Id.*

²⁴⁶ *Id.*

²⁴⁷ *Southern Resident Killer Whale Health Assessment*, *supra* note 1.

²⁴⁸ *Aransas Project v. Shaw*, 775 F.3d 641, 659 (5th Cir. 2014).

²⁴⁹ *Animal Welfare Inst. v. Beech Ridge Energy LLC*, 675 F. Supp. 2d 540, 541 (D. Md. 2009).

²⁵⁰ *Id.* at 562.

²⁵¹ *Id.*

²⁵² McQuate, *supra* note 1.

The preponderance of the evidence is the standard used to prove a "take."²⁵³ *Animal Welfare* used the Ninth Circuit court case *Marbled Murrelet v. Pacific Lumber Co.*'s definition of the preponderance of the evidence as a "reasonable certainty of imminent harm."²⁵⁴ The court also stated that absolute certainty was not required to prove a "take,"²⁵⁵ finding that "to require absolute certainty, as proposed by Defendants, would frustrate the purpose of the ESA to protect endangered species before they are injured and would effectively raise the evidentiary standard above a preponderance of the evidence."²⁵⁶ In *Animal Welfare*, the court found that there was "virtual certainty" that the wind turbines were taking the endangered Indiana bats.²⁵⁷ The *Animal Welfare* case is a Federal District of Maryland court case, meaning that it is not binding, but it was still cited by eight courts.²⁵⁸ Only one case, *Nextera Energy Re., LLC*, countered the *Animal Welfare* ruling and it was overturned.²⁵⁹ A court would likely find the same in this case because over 3,000 chemicals were tested, and it was determined that 6PPD was the chemical causing harm to the salmon, and consequently the killer whales.²⁶⁰

Another provision that could be used to stop the dumping of 6PPD is the harassment provision in the ESA. The U.S. Fish and Wildlife Service defines "harass" as "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include but are not limited to, breeding, feeding, or sheltering."²⁶¹ This provision could be used to address 6PPD in tires because the dumping hinders the breeding of the Coho salmon by killing them before they can spawn. Further, the death of the salmon disrupts the feeding of the Southern Resident killer whales by depleting their food source.²⁶² Though these claims are often dropped because of the stricter requirements that "harass" has compared to "harm," in

²⁵³ *Marbled Murrelet v. Pacific Lumber Co.*, 83 F.3d 1060, 1066 (9th Cir. 1996).

²⁵⁴ *Id.* at 1068.

²⁵⁵ *Animal Welfare*, 675 F. Supp. 2d at 564.

²⁵⁶ *Id.*

²⁵⁷ *Id.* at 575.

²⁵⁸ *Id.*

²⁵⁹ *Friends of Merrymeeting Bay v. Nextera Energy Res., LLC*, No. 2:11-cv-38-GZS, 2013 U.S. Dist. LEXIS 5063 (D. Me. Jan. 14, 2013); *Friends of Merrymeeting Bay v. Hydro Kennebec, LLC*, 759 F.3d 30 (July 14, 2014).

²⁶⁰ McQuate, *supra* note 1.

²⁶¹ 50 C.F.R. § 17.3, accord. § 222.102; Nat'l Marine Fisheries Serv., Endangered Species Act (ESA) Section 7(a)(2) Biological Opinion and Section 7(a)(2) "Not Likely to Adversely Affect" Determination: Continuing Operation of the Pacific Coast Groundfish Fishery, NWR2012876, 120 n.7 (Dec. 7, 2012) (defining harass "consistent with the [FWS's] interpretation of the term").

²⁶² M. Bradley Hanson et al., *supra* note 166.

the Southern Resident case, they should still be used.²⁶³ This is because “to harass” does not specifically address habitat modification, where harm does. In this case, it is not necessary to show that there is habitat modification because the chemical is having a direct impact on the Coho salmon and consequently the Southern Resident killer whales.²⁶⁴

The ESA is a tool that can be used to protect the food sources and environment of endangered species. In this case, the death of the salmon falls under *Sweet Home*’s definition of “harm” to the killer whales because they are included in the destruction of their habitat.²⁶⁵ Under the proximate cause standard in *Aransas*, the dumping of the chemical should be stopped because it causes the extinction of the Southern Resident killer whales.²⁶⁶ The preponderance of the evidence standard from *Animal Welfare* is passed because there is actual harm caused by the death of the salmon, and subsequently the endangered dolphins. The harassment provision could also be used to stop the dumping of 6PPD. This case could result in the ESA being used to stop the dumping of 6PPD.

IV. RECOMMENDATION OF FILING CIVIL SUITS THROUGH VICARIOUS LIABILITY AND DIRECT ACTION

Under section 11 of the ESA, “any person’ may bring a citizen suit in federal district court to enjoin anyone who is alleged to be in violation of the ESA or its implementing regulations.”²⁶⁷ The goal of initiating this litigation strategy is to seek injunctive relief from the tire manufacturers that are putting 6PPD into their tires through a civil suit. In *Animal Welfare*, the court found “that the citizen-suit provision includes within its scope wholly-future violations of the statute.”²⁶⁸ Here, the goal is to stop the chemicals from getting into the environment and killing the Coho salmon. This may be accomplished through the use of vicarious liability.²⁶⁹ That is when the agency should prevent a take and it fails to, then the agency may be held liable for that take.²⁷⁰ The EPA should restrict the use of 6PPD in tires, and because it has not, it can be held accountable for the results of the chemical’s use. Tire companies could also be directly sued for injunctive relief for

²⁶³ AM. BAR ASS’N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES, *supra* note 16, at 158.

²⁶⁴ McQuate, *supra* note 1.

²⁶⁵ *Babbitt v. Sweet Home Chapter of Comtys. for a Great Or.*, 515 U.S. 687, 691 (1995).

²⁶⁶ *Aransas Project v. Shaw*, 775 F.3d 641, 656 (5th Cir. 2014).

²⁶⁷ 16 U.S.C. § 1540(g).

²⁶⁸ *Animal Welfare Inst. v. Beech Ridge Energy LLC*, 675 F. Supp. 2d 540, 560 (D. Md. 2009).

²⁶⁹ AM. BAR ASS’N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES, *supra* note 16, at 162-63.

²⁷⁰ *Id.*

putting the preservative in their tires. Further, the Department of Transportation should restrict the import of tires with this chemical to avoid being liable for the take that the chemicals cause. The outcome of a civil suit against the EPA, Department of Transportation, or the tire companies for a take of the Southern Resident killer whales could end in injunctive relief, with tire manufacturers not being able to use this chemical in their tires.

The EPA is not the governing agency involved with either the Coho salmon or the Southern Resident killer whales, but they are still required to consult the ESA under section 7. Further, section 7 of the ESA, called “Federal Agency Actions and Consultations,” states that “[e]ach Federal agency shall . . . ensure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.”²⁷¹ This means that an agency must first ensure its own compliance with the ESA and its action to ensure it is not the cause of a take. If the agency has failed to comply then “[c]ourts have repeatedly held government officers liable for violating the take prohibition when the officers authorized activities undertaken by others that caused a take.”²⁷² In this case, the chemical 6PPD is known to cause not only the death of endangered species but also the death of an endangered species’ food stock.

The EPA should be regulating a chemical as toxic as 6PPD. The EPA has a rating system that grades the toxicity of chemicals by establishing aquatic life criteria (ALC).²⁷³ The ALC is based on how likely a chemical is to kill aquatic life.²⁷⁴ At this moment there is not an ALC for 6PPD. A toxicity assessment of the chemical suggests “compare the LC50 for Coho exposed to 6PPD-quinone with that of the most sensitive test organisms used to derive ALC. Among the ‘very highly toxic’ chemicals for which we have ALC, the toxicity of 6PPD-quinone is similar to that of the most toxic of 12 chemicals.”²⁷⁵ This means that the EPA should already be regulating this chemical by its own standards. Additionally, the EPA should be consulting

²⁷¹ Endangered Species Act, 16 U.S.C. § 1536(a)(2).

²⁷² *Seattle Audubon v. Sutherland*, No. CV06-1608MJP, 2007 WL 1300964, at *9 (W.D. Wash. May 1, 2007).

²⁷³ Zhenyu Tian et al, *6PPD-Quinone: Revised Toxicity Assessment and Quantification with a Commercial Standard*, 9 ENV’T SCI. & TECH. LETTERS 140 (2022).

²⁷⁴ Env’t Prot. Agency, *Aquatic Life Criteria and Methods for Toxics*, <https://www.epa.gov/wqc/aquatic-life-criteria-and-methods-toxics#guide> (last updated Oct. 2, 2023) [<https://perma.cc/V5XG-6ZCL>].

²⁷⁵ *Id.*

with the secretary in charge of the ESA to ensure that its actions are not killing endangered species pursuant to its own standards.

The EPA should restrict the use of 6PPD, and the Department of Transportation should stop importing tires that contain this chemical because it is toxic to the environment. The California Department of Toxic Substance Control has determined that 6PPD is a priority product.²⁷⁶ A priority product is “[a] product-chemical combination identified in regulations adopted by DTSC that has the potential to contribute to significant or widespread adverse impacts to humans or the environment.”²⁷⁷ There are two requirements for a chemical to be categorized as a priority product, per the Safer Consumer Products: “(1) There must be potential public and/or aquatic, avian, or terrestrial animal or plant organism exposure to the Candidate Chemical(s) in the product; and (2) There must be the potential for one or more exposures to contribute to or cause significant or widespread adverse impacts.”²⁷⁸ This means that 6PPD should be regulated by other agencies.

The Department of Transportation did not consult the Secretary to see if its actions were affecting endangered species.²⁷⁹ All tires that are imported must comply with strict safety standards under 49 CFR § 571.²⁸⁰ These standards do not include the restriction of 6PPD, which is devastating endangered species populations.²⁸¹ Though it may seem like a burden on industry to stop this import, a First Circuit Court found that “the balance of hardships and the public interest tips heavily in favor of protected species.”²⁸² The agency should not be importing these tires without consulting the Secretary. Their failure to consult with the secretary opens them up to vicarious liability and may permit injunctive relief.²⁸³

The test for injunctive relief has four parts.²⁸⁴ The first part is that the plaintiff must suffer irreparable injury. In this case, the decimation of the Coho salmon and, in consequence, the death of the endangered killer whales constitute the injury. The second part is that the remedies available at law are inadequate to compensate for the injury.²⁸⁵ The plaintiff will be “likely to

²⁷⁶ Simona Bălan et al, *Product - Chemical Profile for Motor Vehicle Tires Containing N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine (6PPD)*, DEP'T OF TOXIC SUBSTANCES CONTROL 3 (March 2022).

²⁷⁷ *Id.*

²⁷⁸ *Id.*

²⁷⁹ H.R. Rep. No. 118-155, at 59 (2023).

²⁸⁰ Federal Motor Vehicle Safety Standards, 49 C.F.R. § 571.1 *et seq.*

²⁸¹ *Id.*

²⁸² *Strahan v. Coxe*, 127 F.3d 155, 160 (1st Cir. 1997).

²⁸³ Endangered Species Act, 16 U.S.C. § 1536(a)(2).

²⁸⁴ *Winter v. Nat'l Res. Def. Counsel, Inc.*, 555 U.S. 7, 20 (2008).

²⁸⁵ *Id.*

suffer irreparable harm in the absence of preliminary relief.”²⁸⁶ Here, the injury is aesthetic, scientific, recreational, educational, and economic. One cannot put a value on an endangered species. If there was an award of monetary compensation, the injury would still occur. The third part is “that the balance of equities tips in [their] favor.”²⁸⁷ This means that between the two parties, there is an imbalance, and the power is in the hands of the opposing party. A citizen does not have the sole power to stop tire manufacturers from using 6PPD in their tires without directly suing them, but the Agency does. Thus, the imbalance portion of the test is passed. The final element is that “an injunction is in the public interest.”²⁸⁸ Preventing the extinction of one of the most iconic creatures in the nation is in the public interest. The local indigenous tribes would also be positively affected because of their sacred connection with the Coho salmon.

Vicarious liability can be used to receive injunctive relief from the tire manufacturers, preventing them from using the preservative 6PPD in their tires.²⁸⁹ The courts have applied vicarious liability to agencies inconsistently.²⁹⁰ Theoretically, “when the government operates in a regulatory arena, to the extent that it issues a permit for or otherwise authorizes an activity that can result in a take, the agency is liable for any such take.”²⁹¹ Vicarious liability could be the mechanism by which agencies are held accountable for their action or inaction by everyday citizens.²⁹² Even having the risk of being held accountable through this mechanism could encourage positive outcomes from the agencies.²⁹³

Many cases have come out on either side of the vicarious liability issue; however, they are district court cases, meaning they are not binding authority.²⁹⁴ For example, in *Red Wolf Coal v. N.C. Wildlife Res. Comm’n*, “a recent district court order granted a preliminary injunction to plaintiffs who claimed that the North Carolina state wildlife agency was liable for unauthorized take.”²⁹⁵ The take resulted from the agency authorizing the killing of coyotes in the area where the endangered red wolves reside. There

²⁸⁶ *Id.*

²⁸⁷ *Id.*

²⁸⁸ *Id.*

²⁸⁹ AM. BAR ASS’N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES, *supra* note 16, at 162-63.

²⁹⁰ *Id.*

²⁹¹ *Id.*

²⁹² *Id.*

²⁹³ *Id.*

²⁹⁴ *Id.*

²⁹⁵ *Red Wolf Coal v. N.C. Wildlife Res. Comm’n*, No. 2:13-CV-60-BO, 2014 WL 1922234 (E.D.N.C. May 13, 2014) (granting preliminary injunction).

was likely misidentification of the wolves compared to the coyotes, which resulted in a take.²⁹⁶ The court in *Strahan v. Pritchard* found that while the agency could be held liable for the loss of endangered whales being caught in fishing nets, it would not be.²⁹⁷ The district court found that the agency was not responsible for the take of the whales.²⁹⁸ Further, in *Loggerhead Turtle v. Cnty. Council of Volusia Cnty.*, the court held that the agency was not accountable for the take of endangered sea turtles in part because they had no obligation to regulate the actions of the beachfront property owners.²⁹⁹ In *Aransas Project*, the court did not address the issue despite the case coming in front of several courts.³⁰⁰ Overall, trying this approach would be worth it to test the outcome. If courts start ruling that agencies can be accountable in this way, it could have a positive impact on citizens' ability to hold agencies accountable.³⁰¹

Another option for injunctive relief would be to sue the tire manufacturers themselves. The application of injunctive relief still applies—as in *Animal Welfare*, an organization or individual can sue companies to stop them from putting the preservative in their tires.³⁰² In this case, the twelve main manufacturers make almost all of the tires in the United States.³⁰³ 6PPD is in virtually all tires on the road, and to prevent it from entering the ecosystem and killing the salmon, all manufacturers have to discontinue its use.³⁰⁴ The other challenge to this tactic is that tires are shipped into the United States from all over the world, thus needing regulation.

The biggest hurdle to overcome in presenting a civil suit in court is covering the jurisdictional requirement of standing.³⁰⁵ In Federal court, the plaintiff must show that they have standing to bring a case forward in that

²⁹⁶ AM. BAR ASS'N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES, *supra* note 16, at 162-63.

²⁹⁷ *Strahan v. Pritchard*, 473 F. Supp. 2d 230, 241 (D. Mass. 2007).

²⁹⁸ *Id.*

²⁹⁹ *Loggerhead Turtle v. Cty. Council of Volusia Cty.*, 148 F.3d 1231, 1258 (11th Cir. 1998).

³⁰⁰ AM. BAR ASS'N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES, *supra* note 16, at 162-63.

³⁰¹ *Id.*

³⁰² AM. BAR ASS'N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES, *supra* note 16, at 162.

³⁰³ *About Us*, U.S. TIRE MFR. ASS'N, <https://www.ustires.org/about-us> (last visited on Mar. 7, 2024).

³⁰⁴ McQuate, *supra* note 1.

³⁰⁵ AM. BAR ASS'N, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES, *supra* note 16, at 250-55.

court.³⁰⁶ In *Lujan v. Defenders of Wildlife*, the Court stated that the “irreducible constitutional minimum of standing” has three requirements:

- (1) actual or imminent injury that is concrete and particularized;
- (2) “a causal connection between the injury and the conduct complained of”; and
- (3) likelihood that a favorable decision will redress the injury.³⁰⁷

This is under the civil suit provision meaning that “the prudential standing doctrine that a plaintiffs' grievance must fall within the zone of interests protected by the statute does not apply to the ESA due to the Act's citizen-suit provision.”³⁰⁸

All of the parties' injuries caused by the extinction of the endangered Southern Resident killer whale can be combined. Ideally, an organization can be formed, or an already existing organization can be used. It would not be difficult to find people and organizations willing to show that they have standing to obtain injunctive relief. It would be ideal to have a group of people that can show different aspects of standing, including locals who grew up with the whales, whale-watching business owners, tourists, the local tribes, and other concerned individuals. Several injuries can be used in this case including aesthetic, scientific, recreational, educational, and loss of profit. To pass the test to prove standing three parts must be met.³⁰⁹ The first part of standing has two prongs.³¹⁰ The first prong is that the injury is actual or imminent.³¹¹ Here, the whale-watching ships go out every summer full of tourists to see these endangered species. Organizations such as Wild Orca exist to research and save killer whales.³¹² This organization and others study this endangered species year-round.³¹³ Local residents of Washington go and see the Southern Resident killer whales in the wild regularly and even host

³⁰⁶ *Id.*

³⁰⁷ *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560-61 (1992).

³⁰⁸ *Animal Welfare Inst. v. Beech Ridge Energy LLC*, 675 F. Supp. 2d 540, 559 (D. Md. 2009) (quoting *Bennett v. Spear*, 520 U.S. 154, 162-66 (1997)).

³⁰⁹ *Lujan*, 504 U.S. at 560-61.

³¹⁰ *Id.*

³¹¹ *Id.*

³¹² *About*, WILDORCA.ORG, <https://www.wildorca.org/about/> (last visited Mar. 7, 2024) [<https://perma.cc/F58Q-3FSF>].

³¹³ West Coast Regional Office, *Take Action for Southern Resident Killer Whales*, NAT'L OCEANIC AND ATMOSPHERIC ADMIN, <https://www.fisheries.noaa.gov/west-coast/outreach-and-education/take-action-southern-resident-killer-whales> (last updated Nov. 1, 2022) [<https://perma.cc/YQC7-PJ2F>].

viewing events.³¹⁴ All of these activities make the injury actual and imminent. The second prong of the first part of injury-in-fact is that the injury is concrete and particularized.³¹⁵ Without whales to watch, locals, tourists, scientists, and whale-watching tourists will not have an opportunity to see and study the animals.

The second part of injury-in-fact is that there is a causal connection between the injury and the conduct complained of.³¹⁶ The killer whales are almost extinct due to a depleted food source, so killing the remaining fish at a high rate will directly cause the decline of the species.³¹⁷ The death of the Coho is caused when the chemical 6PPD combines with ozone making 6PPD-Quinone—a chemical that the Department of Transportation imports without consulting the secretary in charge of the ESA.³¹⁸ The EPA also should be regulating this chemical because they are required to regulate chemicals toxic to fish.³¹⁹ 6PPD is just as toxic to aquatic life as the top twelve most toxic chemicals.³²⁰ The final part of injury-in-fact is that a favorable decision will reduce the injury.³²¹ Here, the tire manufacturers stopping the use of 6PPD in their tires will save the Coho and other salmon. The U.S. Tire Manufacturers Association openly agrees that 6PPD is likely causing death and harm to Coho salmon.³²² In turn, it will save the Southern Resident killer whales, meaning that the court will likely find that the case has standing.

A citizen suit is a viable option for compelling the EPA to regulate 6PPD under the ESA to stop the death of the salmon because they are a major food source of the endangered Southern Resident killer whales. This can be accomplished through vicarious liability. The use of vicarious liability could result in injunctive relief of the manufacturers no longer being able to put this preservative in their tires. The biggest hurdle to overcome is whether the parties have standing, though this should be achievable. This means that if this case found itself in the right court, it could save the Endangered Southern Resident killer whales.

³¹⁴ See, e.g., The Whale Trail, *Welcome to the Whale Trail*, <https://thewhaletrail.org/> (last visited Mar. 7, 2024) [<https://perma.cc/4W8P-87A4>].

³¹⁵ *Id.*

³¹⁶ *Id.*

³¹⁷ *Southern Resident Killer Whale Health Assessment*, *supra* note 1.

³¹⁸ H.R. Rep. 118-155, at 59.

³¹⁹ Env't Prot. Agency, National Recommended Water Quality Criteria - Aquatic Life Criteria Table, <https://www.epa.gov/wqc/national-recommended-water-quality-criteria-aquatic-life-criteria-table> (last visited Dec. 29, 2023) [<https://perma.cc/V896-LKPE>].

³²⁰ Zhenyu Tian et al., *supra* note 273.

³²¹ *Id.*

³²² *6PPD and Tire Manufacturing*, *supra* note 209.

CONCLUSION

New litigation techniques need to be implemented to save endangered species, the environment, and waterways such as using the EPA to challenge the dilution of the CWA. The volatility of EPA's application of the CWA is the result of the Supreme Court's rulings, Administrative Rulings, and Presidential Executive Orders. Therefore, we need to move beyond the CWA and find other means to protect the environment, endangered species, and waterways. The harm provision of the Endangered Species Act can be used to show a take of the endangered Southern Resident killer whales. The tire preservative 6PPD is causing large-scale devastation of the Coho salmon, which is one of their main food sources. The ESA can be used to prevent this "take", as seen in previous court cases.

Injunctive relief should be sought through the court system to stop tire companies from using 6PPS in tires. Injunctive relief can be accomplished through vicarious liability because the EPA is allowing its use, and therefore is responsible for the consequences of it being in the environment. The biggest hurdle will be to find a group that has standing. Eliminating the chemical 6PPD from the environment may save the Southern Resident killer whales.

NATIONAL MONUMENTS AND THE ANTIQUITIES ACT: THE
PRESIDENT'S POWER TO CONSERVE 30 PERCENT OF OUR
NATION'S LANDS BY 2030

*Hunter Collins**

Climate change is an existential threat to the United States, as well as the entire world. The enormity of the problem cannot be overstated, yet the United States has failed to respond to this growing crisis appropriately. Despite the immense importance of land conservation in mitigating the impact of climate change, the United States has only conserved 12% of its land and 23% of its oceans for biodiversity. Land conservation helps protect and restore tracts of land, thereby increasing carbon storage, preventing significant greenhouse gas emissions ("GHGs"), providing habitats for wildlife, and building communities resilient to the effects of climate change.

This Article is the first comprehensive analysis of how the American Antiquities Act, a century-old law, can address contemporary environmental issues and their solutions that are intrinsic to humanity's continued survival. This Article discusses how the Biden Administration can achieve the "30 By 30" plan described in Executive Order 14008, entitled "Tackling the Climate Crisis at Home and Abroad," by single-handedly conserving land across the United States. However, former President Donald Trump's enormous reductions in Grand Staircase-Escalante and Bears Ears National Monuments serve as a reminder that future presidents could significantly reduce national monuments by predecessors, at least based on current case law.

This Article is divided into several parts. Part I provides additional background information relevant to the creation, use, and limitations of the Antiquities Act. Part II described President Biden's Executive Order 14008. Part III examines America's current environmental crises, obstacles to solutions for the crises, and the urgent need for action. Part IV analyzes the Antiquities Act's definitions of "land," "historic or scientific interest," and "smallest area," which limit the president's ability to designate land as national monuments. Part V illustrates the lesser-known barriers to successfully designating national monuments, such as the legal ambiguity surrounding monument abolishment; historical precedents and interpretations; the Youngstown framework for analyzing presidential

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power; legislative attempts, congressional inertia, and the Property Clause; scope and limits of presidential authority; and recent monument reductions and President Biden’s conservation efforts. Lastly, this Article concludes that the Antiquities Act can be utilized to accomplish 30 By 30 with the continued cooperation of individual states or backing by the United States Congress

INTRODUCTION

We have become great because of the lavish use of our resources. But the time has come to inquire seriously what will happen when our forests are gone, when the coal, the iron, the oil, and the gas are exhausted, when the soils have still further impoverished and washed into the streams, polluting the rivers, denuding the fields and obstructing navigation.

– Former President Theodore Roosevelt¹

The United States has only conserved 12% of all its lands and 23% of its oceans for biodiversity.² Yet, nature is one of America’s most precious—and life-sustaining—resources.³ Conserving 30% of lands and oceans by 2030, and thereby achieving the Biden Administration’s “30 By 30” plan described in Executive Order 14008,⁴ would increase the approximately 289

¹ *Theodore Roosevelt Quotes*, NAT’L PARK SERV. (Apr. 10, 2015), <https://www.nps.gov/thro/learn/historyculture/theodore-roosevelt-quotes.htm> [<https://perma.cc/7M25-G9QL>].

² See *Conserving and Restoring America the Beautiful*, NAT’L CLIMATE TASK FORCE (2021), <https://www.doi.gov/sites/doi.gov/files/report-conserving-and-restoring-america-the-beautiful-2021.pdf> [<https://perma.cc/75TP-ET49>] (stating that the United States is one of the top four countries in the world with the most amount of intact natural land); see also *Fact Sheet: President Biden to Take Action to Uphold Commitment to Restore Balance on Public Lands and Waters, Invest in Clean Energy Future*, U.S. DEP’T INTERIOR (Jan. 27, 2021), <https://www.doi.gov/pressreleases/fact-sheet-president-biden-take-action-uphold-commitment-restore-balance-public-lands> [<https://perma.cc/7AEW-CWT6>] (stating that “[a]pproximately 60% of land in the continental U.S. is in a natural state, but we are losing a football field worth of it every 30 seconds” and “across the globe, approximately one million animal and plant species are at risk of extinction in the coming decades, including one-third of U.S. wildlife”).

³ See generally *Nature Makes You...*, NAT’L PARK SERV. (May 17, 2019), <https://www.nps.gov/articles/naturesbenefits.htm> [<https://perma.cc/5L6E-6CLH>] (stating that nature makes people smarter, stronger, healthier, happier, and more productive); see also Gregory N. Bratman et al., *Nature and Mental Health: An Ecosystem Service Perspective*, 5 SCI. ADV. 7 (July 24, 2019), <https://www.science.org/doi/10.1126/sciadv.aax0903> [<https://perma.cc/6U99-P576>]; *Water, Air, and Soil*, U.S. FOREST SERV., <https://www.fs.usda.gov/science-technology/water-air-soil> [<https://perma.cc/2K6K-JYQF>].

⁴ Tackling the Climate Crisis at Home and Abroad, 86 Fed. Reg. 7619 (Jan. 27, 2021).

million acres⁵ of land protected for biodiversity (12% of America) to 729 million acres⁶ (30%) and increase the approximately 798.7 million acres⁷ (26% of marine waters located in Marine Protected Areas) to 921.6 million acres (30%).

This Article is primarily concerned with evaluating whether President Biden will exceed his statutory authority under the Antiquities Act if the Act is used to achieve the 30 By 30 plan, despite Constitutional issues⁸ that some may raise. In short, President Biden can likely use the Antiquities Act of 1906, recognized as 54 U.S.C. § 320301,⁹ to conserve natural spaces as national monuments, thereby singlehandedly accomplishing the 30 By 30 goal without any additional Congressional support. Achieving this conservation goal would allow the United States to affirmatively join a coalition of sixty¹⁰ other countries that support the 30 By 30 conservation target, which was introduced during the United Nations Convention on Biological Diversity¹¹ in 2021.¹²

⁵ See Jacqueline Tran, *Environmental Laws & Executive Orders*, OC HABITATS (Mar. 8, 2021), <https://www.ochabitats.org/post/environmental-laws-executive-orders> [<https://perma.cc/4UMB-DENR>]; see also *Protected Areas*, U.S. DEP'T INTERIOR/GEOLOGICAL SURV., <https://www.usgs.gov/programs/gap-analysis-project/science/protected-areas> [<https://perma.cc/X4M8-8EU8>]. President Biden has designated new national monuments since this calculation. See *infra* notes 287–94.

⁶ See Sarah Gibbens, *The U.S. Commits to Tripling Its Protected Lands. Here's How It Could Be Done*, NAT'L GEOGRAPHIC (Jan. 27, 2021), <https://www.nationalgeographic.com/environment/article/biden-commits-to-30-by-2030-conservation-executive-orders> [<https://perma.cc/DUC2-UHU7>].

⁷ See *Marine Protected Areas 2020: Building Effective Conservation Networks*, NAT'L MARINE PROT. AREAS CTR. (2020), <https://nmsmarineprotectedareas.blob.core.windows.net/marineprotectedareas-prod/media/docs/2020-mpa-building-effective-conservation-networks.pdf> [<https://perma.cc/2N56-JJ7J>] (stating the “U.S. encompasses more than 4.8 million square miles . . . of marine waters”).

⁸ See *Mountain States Legal Found. v. Bush*, 306 F.3d 1132, 1137 (D.C. Cir. 2002); see also *Tulare Cty. v. Bush*, 306 F.3d 1138, 1141–42 (D.C. Cir. 2002) (raising issue of the Property Clause, U.S. CONST. Art. IV § 3, cl. 2, delegation of congressional authority, and conflicts with other federal statutes).

⁹ National Park Service and Related Programs, 54 U.S.C. § 320301.

¹⁰ See Joe McCarthy, *The World Must Protect 30% of Land and Oceans by 2030. Is It Possible?*, GLOB. CITIZEN (Aug. 16, 2021), <https://www.globalcitizen.org/en/content/30x30-land-and-ocean-by-2030-explainer/> [<https://perma.cc/3X7G-JEWX>].

¹¹ See *Convention on Biological Diversity, Key International Instrument for Sustainable Development*, UNITED NATIONS, <https://www.un.org/en/observances/biological-diversity-day/convention> [<https://perma.cc/Z6H5-R3AG>].

¹² See *A New Global Framework for Managing Nature Through 2030: 1st Detailed Draft Agreement Debuts*, CONVENTION BIOLOGICAL DIVERSITY (July 12, 2021),

I. BACKGROUND INFORMATION ON THE ANTIQUITIES ACT

The Antiquities Act states, “the [p]resident may, in the [p]resident’s discretion, declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated on land owned or controlled by the Federal Government to be national monuments.”¹³ The law requires that the parcels “shall be confined to the smallest area compatible with the proper care and management of the objects to be protected.”¹⁴ Furthermore, if the land is situated on “bona fide unperfected claim¹⁵ or held in private ownership,” but the land is “necessary for the proper care and management of the object,” the “Federal Government and the Secretary may accept the relinquishment of the parcel on behalf of the Federal Government.”¹⁶

Former President Theodore Roosevelt signed the Antiquities Act into law on June 8, 1906.¹⁷ The first national monument, Devils Tower in Eastern Wyoming, was designated by former President Theodore Roosevelt on September 24, 1906.¹⁸ In the remainder of his term, former President Theodore Roosevelt dedicated seventeen more national monuments.¹⁹ Since Roosevelt signed the Antiquities Act, all but three presidents—Richard Nixon, Ronald Reagan, and George H. W. Bush—have enlarged or dedicated

<https://www.un.org/sustainabledevelopment/blog/2021/07/a-new-global-framework-for-managing-nature-through-2030-1st-detailed-draft-agreement-debuts/> [<https://perma.cc/52DD-6WHB>] (stating that the “framework includes 21 targets for 2030 that call for, among other things: [a]t least 30% of land and sea areas global (especially areas of particular importance for biodiversity and its contributions to people) conserved through effective, equitably managed, ecologically representative and well-connected systems of protected areas (and other effective area-based conservation measures)”; see also *Roadmap to 30x30*, HIGH AMBITION COAL., <https://www.hacfornatureandpeople.org/roadmap> [<https://perma.cc/YXY5-D5V9>]).

¹³ National Park Service and Related Programs, 54 U.S.C. § 320301(a).

¹⁴ *Id.*

¹⁵ *The Antiquities Act of 1906*, NAT’L PARK SERV. (Oct. 25, 2021), <https://www.nps.gov/subjects/archeology/antiquities-act.htm> [<https://perma.cc/Z3BJ-8VSJ>] (meaning “presidents may use the Antiquities Act only to establish national monuments on Federal land”).

¹⁶ National Park Service and Related Programs, 54 U.S.C. § 320301(c).

¹⁷ 16 U.S.C. § 431-433; see ERIN H. WARD, CONG. RSCH. SERV., R45718, *THE ANTIQUITIES ACT: HISTORY, CURRENT LITIGATION, AND CONSIDERATIONS FOR THE 116TH CONGRESS* (2019).

¹⁸ Devils Tower National Monument, Wyoming, 34 Stat. 3236 (Sep. 24, 1906).

¹⁹ Gary Scott, *The Presidents and the National Parks*, WHITE HOUSE HIST. ASS’N, <https://www.whitehousehistory.org/the-presidents-and-the-national-parks> [<https://perma.cc/NMX2-J5E6>].

new national monuments.²⁰ Former President Obama dedicated twenty-six new monuments, more than any president before him.²¹ Further, over the past century, fifteen presidents,²² from both parties, have used the Act to designate 158 national monuments across the United States.²³ Together, these monuments have protected millions of acres of land for the American people.²⁴

The ambitious 30 By 30 initiative requires a significant increase in land conservation across the United States, beyond the current federal land holdings, thereby necessitating a collaborative effort among federal, state, and local governments to achieve its goals or require Congress to act. In total, the federal government owns 640 million acres of land, constituting about 28% of the total 2.27 billion acres in the United States.²⁵ However, achieving 30 By 30 would require a much larger commitment—729 million acres of land.²⁶ If Congress proves unable or unwilling to take action for conservation, states can step forward—as they have been—to fill the gap. Examples of states that have taken action to reach 30 By 30 include California, Nevada, South Carolina, New York, Michigan, Hawaii, New Mexico, and Maine, as well as several local county commissions.²⁷ Through this collective action between the federal, state, and local governments, the United States has the

²⁰ *National Monuments Designated by Presidents 1906-2009*, NAT'L PARK SERV., https://www.nps.gov/parkhistory/hisnps/NPSHistory/national_monuments.pdf [<https://perma.cc/9BPZ-537A>]; see also CAROL HARDY VINCENT, CONG. RSCH. SERV., R41330, NATIONAL MONUMENTS AND THE ANTIQUITIES ACT (2021).

²¹ Gregory Korte, *Obama's National Monuments are About More than Conservation*, USA TODAY (June 26, 2016, 4:19 PM), <https://www.usatoday.com/story/news/politics/2016/06/26/obamas-national-monuments-more-than-conservation/82931356/> [<https://perma.cc/7WMN-BAXW>] (stating that former President Obama used the Antiquities Act to “recognize sites important to Latinos, labor unions, African Americans, Japanese Americans, and women”); see also Simone Leiro, *President Obama Designates Stonewall National Monument*, OBAMA WHITE HOUSE ARCHIVES (June 24, 2016, 12:00 PM), <https://obamawhitehouse.archives.gov/blog/2016/06/24/president-obama-designates-stonewall-national-monument> [<https://perma.cc/WMH9-MTWC>] (quoting former President Obama as saying that he “believe[s] our national parks should reflect the full story of our country, the richness and diversity and uniquely American spirit that has always defined us. That we are stronger together. That out of many, we are one.”).

²² Scott, *supra* note 19.

²³ CAROL HARDY VINCENT, CONG. RSCH. SERV., R41330, NATIONAL MONUMENTS AND THE ANTIQUITIES ACT (2021).

²⁴ See Ward, *supra* note 17.

²⁵ CAROL HARDY VINCENT et al., CONG. RSCH. SERV., R42346, FEDERAL LAND OWNERSHIP: OVERVIEW AND DATA (2020).

²⁶ See *supra* notes 5-6.

²⁷ *Progress Toward 30x30*, ROAD TO 30, <https://www.roadto30.org/30x30progress> [<https://perma.cc/WQM6-33W6>].

potential to conserve a substantial portion of land for environmental conservation and the enjoyment of future generations.

Thus, in order to achieve the 30 By 30 plan, President Biden will need to dedicate additional or new land as national monuments, and either partner with the state governments to conserve land²⁸ or encourage Congress to increase federal lands through the Fifth Amendment's Takings Clause.²⁹

II. PRESIDENT BIDEN'S EXECUTIVE ORDER 14008

The Biden Administration signed Executive Order 14008 (the "Order") on January 27, 2021, because the "United States and the world face a profound climate crisis."³⁰ The Biden Administration, claiming to have a "narrow moment to pursue action at home and abroad to avoid the most catastrophic impacts of that crisis and seize the opportunity that tackling climate change presents," executed the Order to tackle these growing domestic and international challenges.³¹ This Order was intended to place the climate crisis "at the center of United States foreign policy and national security."³²

The Order directs "[t]he Secretary of the Interior, in consultation with the Secretary of Agriculture, the Secretary of Commerce, the Chair of the Council on Environmental Quality, and the heads of other relevant agencies" to submit a report to the National Climate Task Force "recommending steps that the United States should take, working with [s]tate, local, [t]ribal, and territorial governments, agricultural and forest landowners, fishermen, and other key stakeholders, to achieve the goal of conserving at least 30 percent of our lands and waters by 2030."³³ The report "shall propose guidelines for determining whether lands and waters qualify for conservation" and "shall establish mechanisms to measure progress towards the 30-percent goal"

²⁸ *Id.*; see generally *Support for 30x30*, AM. NATURE CAMPAIGN, <https://www.natureamerica.org/supporters> [<https://perma.cc/J23Z-EMB5>] (showing "86% of voters in the United States support a national 30x30 goal").

²⁹ See *Juliana v. U.S.*, 947 F.3d 1159, 1165 (9th Cir. 2020); see also U.S. CONST. amend. V.

³⁰ Exec. Order No. 14008, 86 Fed. Reg. 7619 (Jan. 27, 2021).

³¹ *Id.*

³² *Id.*; see Stephanie Meredith, *Tackling the Climate Crisis from the Inside*, AM. FOREIGN SERV. ASS'N, <https://afsa.org/tackling-climate-crisis-inside> [<https://perma.cc/Z5HW-A4MS>]; see also John Kerry, *Tackling the Climate Crisis, Together*, U.S. DEP'T STATE (Nov. 19, 2021), https://www.state.gov/tackling_climate_crisis_together [<https://perma.cc/TA5N-RX9X>] (concluding that "[w]e can still secure cleaner air, safer water, and a healthier planet. Let's get to work.").

³³ Exec. Order No. 14008, *supra* note 30.

through “annual reports.”³⁴ The Preliminary Report recommended a “ten-year, locally[-]led campaign to conserve and restore the lands and waters upon which we all depend, and that bind us together as Americans,” called the “America the Beautiful campaign.”³⁵

III. NAVIGATING THE CLIMATE CRISIS AMID CONGRESSIONAL DYSFUNCTION

Climate change poses an existential threat to the United States, as well as the entire world. Yet, amid this crisis, Congress remains paralyzed. Despite efforts by the Biden Administration to address climate change, effective and long-term solutions continue to be hindered by partisanship, limited time, and political division.

The urgency of the climate crisis is further highlighted by scientific research that reveals the detrimental effect climate change has on human health.³⁶ The Centers for Disease Control and Prevention, for instance, stated the health effects of physical, biological, and ecological system disturbances, originating in the United States and elsewhere, include “increased respiratory and cardiovascular disease, injuries and premature deaths related to extreme weather events, changes in the prevalence and geographical distribution of food- and water-borne illnesses and other infectious diseases, and threats to mental health.”³⁷ Troublingly, the health risks caused by climate change are “unevenly distributed and both create new inequities and exacerbate those that already exist.”³⁸

This evidence underscores the desperate need for immediate action to conserve land and tackle climate change, a task made impossible by congressional dysfunction. The direct connection between Congress’s

³⁴ *Id.*

³⁵ *Conserving and Restoring America the Beautiful*, *supra* note 2.

³⁶ See generally *Climate Effects on Health*, CTRS. DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/climateandhealth/effects/default.htm> [<https://perma.cc/FKW2-7MMQ>].

³⁷ *Id.*

³⁸ Kristie Ebi & Jeremy Hess, *Health Risks Due to Climate Change: Inequity in Causes and Consequences*, HEALTH AFFS. (Dec. 2020), <https://www.healthaffairs.org/doi/10.1377/hlthaff.2020.01125> [<https://perma.cc/3GDG-9ZS4>]; see generally Rachel Baird, *The Impacts of Climate Change on Minorities and Indigenous Peoples*, MINORITY RTS. GRP. INT’L, <https://minorityrights.org/wp-content/uploads/old-site-downloads/download-524-The-Impact-of-Climate-Change-on-Minorities-and-Indigenous-Peoples.pdf> [<https://perma.cc/3SGD-QW2C>] (summarizing that “[i]t should not be surprising that minority groups and indigenous peoples are especially badly hit by climate change, that they get less help coping with its effects and that they have to fight harder to influence decisions about mitigating and adapting to climate change. Their needs, problems and voices are all too easily ignored at every stage”).

legislative inaction and the worsening health risks associated with climate change demonstrates the pressing need for a decisive and immediate response.

A. The Obstacles of Partisanship, Limited Time, and Political Division

The Biden Administration's Order seeks input from relevant stakeholders and requires that all relevant agencies cooperate and support the conservation goal. More importantly, the plan will most likely need either state government cooperation or the bipartisan support of Congress, which currently requires 60 Senators to end debate and consider the proposal.³⁹ In today's polarized political environment, the use of cloture motions⁴⁰—which are used to indicate a filibuster in the Senate—is significantly⁴¹ higher than during the 20th and 21st centuries. For example, there have been more than 2,000 cloture motions filed since 1917, with about half occurring in just the last 12 years.⁴² Therefore, without bipartisan support, it is very unlikely that the Biden Administration will be able to overcome the Senate filibuster and successfully implement the 30 By 30 plan through federal legislation.

Furthermore, months after President Biden signed Executive Order 14008, Republican opponents attempted to block 30 By 30 through 117 H.R. 5042.⁴³ The bill, introduced by former Representative Liz Cheney, would have expressly overridden the Order so it would have “no force or effect.”⁴⁴ Despite dying shortly after introduction, the bill continues to symbolize the polarized response to President Biden's Order and highlights the unlikelihood that the Order's goal can be achieved via bipartisan legislation.

³⁹ See Molly Reynolds, *What is the Senate Filibuster, and What Would it take to Eliminate it?*, BROOKINGS (Sep. 9, 2020), <https://www.brookings.edu/policy2020/votervital/what-is-the-senate-filibuster-and-what-would-it-take-to-eliminate-it/> [<https://perma.cc/UQC5-5GUF>]; see also *About Filibusters and Cloture*, U.S. SENATE, <https://www.senate.gov/about/powers-procedures/filibusters-cloture.htm> [<https://perma.cc/FJ92-M7KH>].

⁴⁰ CHRISTOPHER DAVIS, CONG. RSCH. SERV., RL98-425, INVOKING CLOTURE IN THE SENATE (2017).

⁴¹ Reynolds, *supra* note 39.

⁴² *Cloture Motions*, U.S. SENATE, <https://www.senate.gov/legislative/cloture/clotureCounts.htm> [<https://perma.cc/ULH5-GWBH>]; see generally Tim Lau, *The Filibuster, Explained*, BRENNAN CENTER (Apr. 26, 2021), <https://www.brennancenter.org/our-work/research-reports/filibuster-explained> [<https://perma.cc/LFS5-2895>] (stating that “the 26 least populous states are home to just 17 percent of the U.S population,” meaning “a group of senators representing a small minority of the country can use the filibuster to prevent the passage of bills with broad public support”).

⁴³ H.R. 5042, 117th Cong. (2021).

⁴⁴ *Id.*

B. The Need for Immediate Action

The Intergovernmental Panel on Climate Change⁴⁵ (“IPCC”) released the Climate Change 2021⁴⁶ Summary for Policymakers (“Summary”), which states it is “unequivocal that human influence has warmed the atmosphere, ocean and land” and that “widespread and rapid changes have occurred.”⁴⁷ The Summary further stated that “human influence has warmed the climate at a rate that is unprecedented in at least the last 2000 years” and is “already affecting many weather and climate extremes in every region across the globe.”⁴⁸ Global warming dangers “include increases in the frequency and intensity of hot extremes, marine heatwaves, heavy precipitation, . . . agricultural and ecological droughts in some regions, . . . intense tropical cyclones; and reductions in Arctic Sea ice, snow cover, and permafrost.”⁴⁹ Furthermore, many of the changes caused by GHGs—namely, changes in the ocean, ice sheets, and global sea level—are irreversible for centuries to millennia.⁵⁰

The dangers highlighted in the report are best summarized by the U.N. Secretary-General, António Guterres, who described the report as “a code red for humanity.”⁵¹ As a consequence, the IPCC Working Group I Co-Chair Panmao Zhai urged countries to reduce GHG emissions, reach net-zero CO₂ emissions, and limit other GHGs and air pollutants to avoid further harm from an increasingly warming planet.⁵²

Moreover, the effects of climate change are already impacting the world. The average global temperature in 2019 was “1.1°C above the pre-

⁴⁵ See INT’L PANEL CLIMATE CHANGE, <https://www.ipcc.ch/> [<https://perma.cc/ZY4X-NZEY>] (stating that the “IPCC was created to provide policymakers with regular scientific assessments on climate change, its implications and potential future risks, as well as to put forward adaptations and mitigation options”).

⁴⁶ Richard P. Allan et al., *Climate Change 2021: The Physical Science Basis*, INT’L PANEL CLIMATE CHANGE (Aug. 7, 2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf [<https://perma.cc/8WSE-GHPW>].

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.*; see generally *Ice is Melting and the Sea Level is Rising*, UNIV. EDINBURGH, SCH. GEOSCIENCES RSCH. (Nov. 4, 2021), <https://www.ed.ac.uk/geosciences/research/impact/ipcc/ar6-report/oceans> [<https://perma.cc/PY7Z-D4PC>].

⁵¹ Allan et al., *supra* note 46.

⁵² *Id.*

industrial level,”⁵³ according to the World Meteorological Organization (“WMO”), an intergovernmental organization with a membership of 193 Member States and Territories. Consequently, the increased global temperature has led to more frequent and extreme weather events, ranging “from heat waves, droughts, flooding, winter storms, hurricanes, and wildfires.”⁵⁴

Programs have been proposed to monitor and stifle the growing threat of climate change. For instance, the Paris Agreement⁵⁵ was enacted by concerned countries, aiming to “limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.”⁵⁶ Still, the difference between 1.5 degrees and 2 degrees is from “destructive to catastrophic.”⁵⁷ At a 2°C increase in pre-industrial level temperatures, “1.7 billion more people will experience severe heat waves at least once every five years, seas will rise almost 4 inches, up to several hundred million more people become exposed to climate-related risks and poverty, coral reefs that support marine environments around the world could decline by 99 percent, and global fishery catches could decline by another 1.5 million tons.”⁵⁸

Solutions are within reach, such as protecting remaining natural environments that would conserve biodiversity and sequester carbon.⁵⁹ Tropical forests, for instance, are home to more than half of all species on

⁵³ *Climate Action is a Priority and a Driver of World Affairs: UN Chief*, WORLD METEOROLOGICAL ORG. (Feb. 4, 2020), <https://public.wmo.int/en/media/news/climate-action-priority-and-driver-of-world-affairs-un-chief> [<https://perma.cc/FM72-3LHU>].

⁵⁴ *Facts about the Climate Emergency*, U.N. ENV’T PROGRAMME, <https://www.unep.org/explore-topics/climate-action/facts-about-climate-emergency> [<https://perma.cc/SL7J-YDYL>].

⁵⁵ *The Paris Agreement*, UNITED NATIONS, <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement> [<https://perma.cc/H6CF-5FE2>] (stating the Paris Agreement is a legally binding international treaty on climate change, which was adopted by 196 Parties at COP 21 in Paris, on December 12, 2015, and went into effect on November 4, 2016).

⁵⁶ Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104, https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf [<https://perma.cc/U3YM-JY27>].

⁵⁷ *Why is 1.5 Degrees the Danger Line for Global Warming?*, CLIMATE REALITY PROJECT (Mar. 18, 2019, 10:22 AM), <https://www.climaterealityproject.org/blog/why-15-degrees-danger-line-global-warming> [<https://perma.cc/BF3C-VTJB>].

⁵⁸ *Id.*

⁵⁹ Nicole Schwab & Kristin Rechberger, *We Need to Protect 30% of the Planet by 2030. This Is How We Can Do It*, WEFORUM (Apr. 22, 2019), <https://www.weforum.org/agenda/2019/04/why-protect-30-planet-2030-global-deal-nature-conservation/> [<https://perma.cc/6ZHJ-XZDG>].

land and capture more carbon pollution than any other terrestrial ecosystem.⁶⁰ Additionally, mangroves and seagrass beds are sites of great biodiversity and absorb and store large quantities of GHG carbon dioxide from the atmosphere.⁶¹ As such, these locations are vitally important lands to prevent catastrophic levels of global warming, but their protection should not be to the exclusion of other important ecosystems.⁶² As the global rate of species loss exceeds the natural extinction rate by a factor of 1000, well-managed protected areas throughout the world are effective in safeguarding biodiversity and increasing the resilience of ecosystems, both on land and in the ocean.⁶³ Therefore, land conservation is vital to slowing the effects of global warming. Scientists believe halting the loss and degradation of natural systems and promoting their restoration have the potential to contribute over one-third of the total climate change mitigation required by 2030.⁶⁴

Land cover changes can occur in response to both human and climate drivers. For example:⁶⁵

The demand for new settlements often results in the permanent loss of natural and working lands, which can result

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Id.*; see Stuart L. Pimm et al., *The Biodiversity of Species and Their Rates of Extinction, Distribution, and Protection*, 344 *SCI.* 987, available at https://www.researchgate.net/publication/262787160_The_biodiversity_of_species_and_their_rates_of_extinction_distribution_and_protection [<https://perma.cc/MR3P-8APB>]; but see Gerardo Ceballos et al., *Accelerated Modern Human-induced Species Losses: Entering the Sixth Mass Extinction*, 1 *SCI. ADVANCES* 5 (Jun. 19, 2015), <https://www.science.org/doi/10.1126/sciadv.1400253> [<https://perma.cc/D4CC-9LG9>] (stating that even under “extremely conservative assumptions . . . the average rate of vertebrate species loss over the last century is up to 100 times higher than the background rate,” which reveals an “exceptionally rapid loss of biodiversity over the last few centuries, indicating that a sixth mass extinction is already under way”).

⁶⁴ *Forests and Climate Change*, INT’L UNION CONSERVATION NATURE (Feb. 2021), <https://www.iucn.org/resources/issues-briefs/forests-and-climate-change> [<https://perma.cc/2FY9-TDP8>] (stating that “[a]pproximately 2.6 billion tonnes of carbon dioxide, one-third of the CO₂ released from burning fossil fuels, is absorbed by forests every year”).

⁶⁵ James Wickham et al., *Land Cover and Land-Use Change: Chapter 5*, FOURTH NAT’L CLIMATE ASSESSMENT, <https://nca2018.globalchange.gov/chapter/5/> [<https://perma.cc/6WCW-J9DG>].

in localized changes in weather patterns,⁶⁶ temperature,⁶⁷ and precipitation.⁶⁸ Aggregated over large areas, these changes have the potential to influence Earth's climate by altering regional and global circulation patterns,⁶⁹ changing the albedo (reflectivity) of Earth's surface,⁷⁰ and changing the amount of carbon dioxide (CO₂) in the atmosphere.⁷¹

⁶⁶ Roger Pielke Sr., *Land Use and Climate Change*, 310 SCI. 1625, 1625–26, <https://www.science.org/doi/10.1126/science.1120529> [<https://perma.cc/5QNL-AXLD>]; see also William Cotton & Roger Pielke Sr., *Human Impacts on Weather and Climate*, CAMBRIDGE UNIV. PRESS (June 5, 2012), <https://doi.org/10.1017/CBO9780511808319.015> [<https://perma.cc/P3D6-PEHK>].

⁶⁷ Eugenia Kalnay & Ming Cai, *Impact of Urbanization and Land-Use Change on Climate*, 423 NATURE 528, 528–31 (May 29, 2003), <https://www.nature.com/articles/nature01675> [<https://perma.cc/P57Z-UXB7>]; see also Robert C. Hale et al., *Land Use/Land Cover Change Effects on Temperature Trends at U.S. Climate Normals Stations*, 33 GEOPHYSICAL RSCH. LETTERS 1, 1–4 (June 3, 2006), <https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2006GL026358> [<https://perma.cc/3WZD-ZH4J>].

⁶⁸ Roger Pielke Sr. et al., *An Overview of Regional Land-Use and Land-Cover Impacts on Rainfall*, 59 TELLUS B: CHEMICAL & PHYSICAL METEOROLOGY 587, 588–91 (May 11, 2007), <https://www.tandfonline.com/doi/pdf/10.1111/j.1600-0889.2007.00251.x> [<https://perma.cc/Y6T7-FHUV>].

⁶⁹ M. Zhao et al., *The Impact of Land Cover Change on the Atmospheric Circulation*, 17 CLIMATE DYNAMICS 467, 467–77 (Mar. 2001), <https://link.springer.com/article/10.1007/PL00013740> [<https://perma.cc/8ZZZ-55BJ>]; see also Rezaul Mahmood et al., *Land Cover Changes and their Biogeophysical Effects on Climate*, 34 INT'L J. CLIMATOLOGY 929, 937 (June 21, 2013), available at <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1444&context=natrespapers> [<https://perma.cc/L6FR-8JGU>]; Alvaro Salazar et al., *Land Use and Land Cover Change Impacts on the Regional Climate of Non-Amazonian South America: A Review*, 128 GLOB. & PLANETARY CHANGE 103, 104 (May 2015), <https://www.sciencedirect.com/science/article/abs/pii/S0921818115000557> [<https://perma.cc/GQ4W-KMWX>].

⁷⁰ R. A. Betts et al., *Climate and Land Use Change Impacts on Global Terrestrial Ecosystems and River Flows in the HadGEM2-ES Earth System Model using the Representative Concentration Pathways*, 12 BIOGEOSCIENCES 1317, 1317 (Mar. 3, 2015), <https://bg.copernicus.org/articles/12/1317/2015/> [<https://perma.cc/L5UM-66QB>]; see Christopher Barnes & David Roy, *Radiative Forcing over the Conterminous United States due to Contemporary Land Cover Land Use Albedo Change*, 35 GEOPHYSICAL RSCH. LETTERS 1, 1–5 (May 9, 2008), <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2008GL033567> [<https://perma.cc/8TVS-988Q>].

⁷¹ R. A. Houghton et al., *The U.S. Carbon Budget: Contributions from Land-Use Change*, 285 SCI. 574, 574–78 (July 23, 1999), <https://www.science.org/doi/10.1126/science.285.5427.574> [<https://perma.cc/K2TX-43GC>]; see Richard Houghton, *Carbon Flux to the Atmosphere from Land-Use Changes 1850-2005*, CARBON DIOXIDE INFO. ANALYSIS CTR. (2008), <https://cdiac.ess-dive.lbl.gov/trends/landuse/houghton/houghton.html> [<https://perma.cc/NCG4-U2E8>].

Conversely, climate change can also influence land cover, resulting in a loss of forest cover from climate-related increases in disturbances,⁷² the expansion of woody vegetation into grasslands,⁷³ and the loss of coastal wetlands and beaches due to increased inundation and coastal erosion amplified by rises in sea level.⁷⁴

Therefore, climate change is, indeed, a “code red” for humanity and immediate action must be taken to protect human life.⁷⁵

IV. CONSERVING 30% OF AMERICA’S LAND AND OCEAN WITH THE ANTIQUITIES ACT

By passing the Antiquities Act, Congress delegated “broad power” to the president in the designation of national monuments and reservation of land for those monuments.⁷⁶ Accordingly, the Antiquities Act grants the president substantial flexibility to preserve historical landmarks, expressly leaving the definition of a monument and its boundaries to the president’s

⁷² Mike Flannigan et al., *Impacts of Climate Change on Fire Activity and Fire Management in the Circumboreal Forest*, 14 GLOB. CHANGE BIOLOGY 1, 1 (Nov. 7, 2008), [available at https://sites.ualberta.ca/~flanniga/publications/2009Impact%20of%20climate%20change%20on%20fire%20activity%20and%20fire%20management%20in%20the%20circumboreal%20forest.pdf](https://sites.ualberta.ca/~flanniga/publications/2009Impact%20of%20climate%20change%20on%20fire%20activity%20and%20fire%20management%20in%20the%20circumboreal%20forest.pdf) [https://perma.cc/C2X2-XXMC]; see Barbara J. Bentz et al., *Climate Change and Bark Beetles of the Western United States and Canada: Direct and Indirect Effects*, 60 BIOSCIENCE 602, 602 (Sep. 2010), <https://www.jstor.org/stable/10.1525/bio.2010.60.8.6> [https://perma.cc/K95M-MHPC]; LeRoy Westerling, *Increasing Western US Forest Wildfire Activity: Sensitivity to Changes in the Timing of Spring*, 371 PHIL. TRANSACTIONS ROYAL SOC’Y B 1, 1 (June 5, 2016), <https://royalsocietypublishing.org/doi/10.1098/rstb.2015.0178> [https://perma.cc/6UMV-ARND].

⁷³ Andrew Kulmatiski & Karen Beard, *Woody Plant Encroachment Facilitated by Increased Precipitation Intensity*, 3 NATURE CLIMATE CHANGE 833, 833 (May 26, 2013), <https://www.nature.com/articles/nclimate1904> [https://perma.cc/AK96-Q32Z].

⁷⁴ Sean Vitousek et al., *Doubling of Coastal Flooding Frequency within Decades due to Sea-Level Rise*, 7 SCI. REPS. 1, 1 (May 18, 2017), <https://www.nature.com/articles/s41598-017-01362-7> [https://perma.cc/G2YA-E3TX] (stating “even gradual sea-level rise can rapidly increase the frequency and severity of coastal flooding” and that the “10 to 20 cm of sea-level rise expected no later than 2050 will more than double the frequency of extreme water-level events in the Tropics, impairing the developing economies of equatorial coastal cities and the habitability of low-lying Pacific island nations”).

⁷⁵ Allan et al., *supra* note 46.

⁷⁶ *Murphy Co. v. Trump*, No. 1:17-CV-00285-CL, 2019 WL 2070419, at *8 (D. Or. Apr. 2, 2019), *report and recommendation adopted*, No. 1:17-CV-00285-CL, 2019 WL 4231217 (D. Or. Sept. 5, 2019), *aff’d sub nom. Murphy Co. v. Biden*, 65 F.4th 1122 (9th Cir. 2023).

discretion.⁷⁷ Upon a claim of abuse of the Antiquities Act, “judicial review of the presidential decision making is limited to: (1) ensuring that the actions by the [p]resident are consistent with constitutional principles,^[78] and (2) ensuring that the [p]resident has not exceeded [their] statutory authority.”⁷⁹ Therefore, the question of whether federal lands are included within a national monument raises “a question only of [p]residential intent, not of [p]residential power.”⁸⁰ Despite the broad powers allocated to the president, Congress can override a president’s decision to dedicate federal land as a national monument and can approve actions that use federal lands despite their status as national monuments.⁸¹

The Antiquities Act states “[t]he [p]resident may . . . declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated on land owned or controlled by the Federal Government to be national monuments,”⁸² and that the parcels “shall be confined to the smallest area.”⁸³ Ambiguity over the Antiquities Act’s words of limitation—“land,” “historic or scientific interest,” and “smallest area”—is frequently examined in court and will determine whether or not the Biden Administration can lawfully use the Antiquities Act to achieve 30 By 30.

As discussed in detail below, President Biden’s dedication of national monuments to accomplish the 30 By 30 initiative comports with Congress’s broad delegation of power under the Antiquities Act.

A. *Land Definition*

The explicit language in the Antiquities Act allows only for the preservation of “land.”⁸⁴ Yet, in order to lawfully use the Antiquities Act to accomplish 30 By 30, the Antiquities Act must confer the president authority to preserve both land and ocean.

Case law has interpreted the word “lands” broadly, including:

⁷⁷ *Id.*

⁷⁸ *Id.* (stating presidents only need to have invoked the correct statutory standards under the Antiquities Act and made explicit findings consistent with those standards).

⁷⁹ *Id.*

⁸⁰ *U.S. v. California*, 436 U.S. 32, 36 (1978).

⁸¹ *Am. Forest Res. Council v. Hammond*, 422 F. Supp. 3d 184, 192 (D.D.C. 2019).

⁸² *National Park Service and Related Programs*, 54 U.S.C. § 320301(a). Land can be owned by private and other nonfederal landowners, if donated. *See* CAROL HARDY VINCENT, CONG. RSCH. SERV., R41330, NATIONAL MONUMENTS AND THE ANTIQUITIES ACT (2021).

⁸³ *National Park Service and Related Programs*, 54 U.S.C. § 320301(b).

⁸⁴ *Id.*

[E]verything which the land carries or which stands upon it, whether it be natural timber, artificial structures, or water, and that an ordinary grant of land by metes and bounds carries all pools and ponds, non-navigable rivers and waters of every description by which such lands, or any portion of them, may be submerged.⁸⁵

Therefore, “[a]lthough the Antiquities Act refers to ‘lands,’ [the Supreme Court] has recognized that it also authorizes the reservation of waters located on or over federal lands.”⁸⁶ Additionally, the federal government can claim “land” that lies outside the three-mile geographical boundaries of coastal states.⁸⁷ The U.S. Exclusive Economic Zone (“EEZ”), established by former President Ronald Reagan, extends federal ownership from a “line 3 miles off the coast of the United States and its island territories out to 200 nautical miles,” the equivalent of 3.9 billion acres of marine land.⁸⁸ Ergo, the federal government could lawfully conserve marine environments between the three geographical mile boundaries of coastal states and the maximum distance of 200 nautical miles from the coastline. Furthermore, courts interpret “land” to also include submerged lands, such as glaciers.⁸⁹

Although the Antiquities Act limits national monuments to “land” situated on land owned or controlled by the federal government, previous presidents and courts have construed this word liberally, arguing that “land” applies to oceans as well.⁹⁰ In *Cappaert v. United States*, the Supreme Court first held that the Antiquities Act reaches submerged lands and associated waters at the national monument designation of the Devil’s Hole—which included an underground pool of water near Death Valley that housed a rare species of fish.⁹¹ In *United States v. California*, the Supreme Court reaffirmed this holding, stating that there “can be no serious question that the [p]resident . . . had power under the Antiquities Act to reserve the submerged lands and

⁸⁵ Ill. C. R. Co. v. Chicago, 176 U.S. 646, 659 (1900).

⁸⁶ U.S. v. California, 436 U.S. 32, 36 n. 9 (1947).

⁸⁷ See *id.* at 36.

⁸⁸ *Federal Offshore Land*, BUREAU OCEAN ENERGY MGMT., <https://www.boem.gov/oil-gas-energy/leasing/federal-offshore-lands> [<https://perma.cc/JJ8N-MRZN>]; see *The Exclusive Economic Zone: An Exciting New Frontier*, U.S. DEP’T INTERIOR/GEOLOGICAL SURV., <https://pubs.usgs.gov/gip/7000049/report.pdf> [<https://perma.cc/8YGK-4UX6>] (comparing the new 3.9 billion acre area to the “Louisiana Purchase of 1803, which doubled the area of our country by extending its border west to the Rocky Mountains”).

⁸⁹ *Alaska v. U.S.*, 545 U.S. 75, 103 (2005).

⁹⁰ See *Mass. Lobstermen’s Ass’n v. Raimondo*, 141 S. Ct. 979, 980 (2021) (Roberts, J., concurring in denial of certiorari).

⁹¹ *Cappaert v. U.S.*, 426 U.S. 128, 141 (1976).

waters” of the Channel Islands National Monument.⁹² Additionally, in *Massachusetts Lobstermen's Association v. Ross*, the United States Court of Appeals for the District of Columbia Circuit affirmed the dismissal of the commercial-fishing associations’ challenge to a marine national monument, which was created under the Antiquities Act, because the Act reaches submerged lands and the waters associated with them.⁹³ Lastly, in *Alaska v. United States*, the Supreme Court held that the Antiquities Act of 1906 empowered the president of the United States to reserve submerged lands, even if those lands were within the boundaries of the state.⁹⁴ Therefore, the Court held that the president lawfully expanded Glacier Bay National Monument.⁹⁵ Taken together, these cases indicate that “land” includes features upon the land, including any water.

The land, however, does need to be “owned or controlled by the Federal Government to be national monuments.”⁹⁶ This rule is best illustrated by *Treasure Salvors, Inc. v. Unidentified Wrecked & Abandoned Sailing Vessel*, where two Florida corporations sued for possession and confirmation of title to an unidentified wrecked and abandoned vessel, thought to be the *Nuestra Senora de Atocha*, which sank in the Marquesas Keys in 1622 while en route to Spain.⁹⁷ There, the Supreme Court held that the cargo, worth a contemporary value of \$250 million, was located on the outer continental shelf of the United States and, therefore, beyond the scope of the Antiquities Act’s limiting terms of “lands owned or controlled by the Government of the United States.”⁹⁸

Additionally, the Supreme Court in *United States v. California* ruled that the State of California does not own the land, minerals, and other things of value underlying the Pacific Ocean outside the 3-mile belt seaward from the ordinary low watermark.⁹⁹ Consequently, the federal government owns and operates land, minerals, and other valuables beyond the 3-mile

⁹² U.S. v. California, 436 U.S. 32, 36 (1978); see *Mass. Lobstermen's Ass'n v. Ross*, 349 F. Supp. 3d 48, 56 (D.D.C. 2018) (reasoning that “[h]ad later Congresses understood the Antiquities Act not to reach submerged lands in the oceans . . . one might expect them to have effectuated that understanding somewhere in the U.S. Code”).

⁹³ *Mass. Lobstermen's Ass'n v. Ross*, 945 F.3d 535, 544 (D.C. Cir. 2019).

⁹⁴ *Alaska v. U.S.*, 545 U.S. 75, 107, 110 (2005).

⁹⁵ *Id.* at 109–11.

⁹⁶ National Park Service and Related Programs, 54 U.S.C. § 320301(a).

⁹⁷ *Treasure Salvors, Inc. v. Unidentified Wrecked & Abandoned Sailing Vessel*, 569 F.2d 330, 333 (5th Cir. 1978).

⁹⁸ *Id.* at 337.

⁹⁹ U.S. v. California, 436 U.S. 32, 42 (1978).

boundary¹⁰⁰ and up to the boundary of the outer continental shelf.¹⁰¹ The Court believed that this allocation of jurisdiction between the state and the federal government would ensure the protection of state rights and resources, while also allowing the federal government to protect and control national interests.¹⁰² However, under *Pollard v. Hagan*, the Supreme Court held that California retained ownership of the shores of its navigable waters, and the soils under them, even after admission into the Union.¹⁰³ Therefore, the federal government has legal rights to the land beyond the 3-mile mark off coastal states, allowing for marine national monuments and marine land preservation beyond that point.

When applied to the Biden Administration's possible use of the Antiquities Act to accomplish the 30 By 30 plan, "land" designations apply to both physical landforms and the ocean. Already, administrations have construed "land" to include land beneath oceans bordering the United States: Papahānaumokuākea Marine National Monument,¹⁰⁴ Mariana Trench Marine National Monument,¹⁰⁵ Pacific Remote Islands Marine National Monument,¹⁰⁶ Rose Atoll Marine National Monument,¹⁰⁷ and The Northeast Canyons and Seamounts Marine National Monument¹⁰⁸ exhibit this practice and its legality.¹⁰⁹

¹⁰⁰ *Id.*

¹⁰¹ *Federal Offshore Land*, *supra* note 88.

¹⁰² *Id.*; see *U.S. v. Curtiss-Wright Exp. Corp.*, 299 U.S. 304, 320 (1936) (stating "it is quite apparent that if, in the maintenance of our international relations, embarrassment -- perhaps serious embarrassment -- is to be avoided and success for our aims achieved, congressional legislation which is to be made effective through negotiation and inquiry within the international field must often accord to the [p]resident a degree of discretion and freedom from statutory restriction which would not be admissible were domestic affairs alone involved"); see also *U.S. v. Maine*, 469 U.S. 504, 513 (1985) (stating "[w]aters landward of the coastline therefore are internal waters of the State, while waters up to three miles seaward of the coastline are also within a State's boundary as part of the 3-mile ring referred to as the marginal sea").

¹⁰³ *Pollard v. Hagan*, 44 U.S. 212, 230 (1845).

¹⁰⁴ Establishment of the Northwestern Hawaiian Islands Marine National Monument, 71 Fed. Reg. 36441 (June 15, 2006).

¹⁰⁵ Establishment of the Marianas Trench Marine National Monument, 74 Fed. Reg. 1555 (Jan. 6, 2009).

¹⁰⁶ Establishment of the Pacific Remote Islands Marine National Monument, 74 Fed. Reg. 1565 (Jan. 6, 2009).

¹⁰⁷ Establishment of the Rose Atoll Marine National Monument, 74 Fed. Reg. 1577 (Jan. 6, 2009).

¹⁰⁸ Northeast Canyons and Seamounts Marine National Monument, 81 Fed. Reg. 65159 (Sep. 15, 2016).

¹⁰⁹ See *Marine National Monuments*, U.S. FISH & WILDLIFE SERV. <https://www.fws.gov/glossary/marine-national-monument> (last visited Mar. 19, 2024).

Opponents argue that the ordinary meaning of the word “land” excludes oceans.¹¹⁰ However, such arguments have been repeatedly rejected, such as in *Massachusetts Lobstermen's Association v. Ross*, where the United States District Court for the District of Columbia court questioned, “what about that part of the earth that lies beneath the seas?”¹¹¹ To answer this question, opponents of a broad definition of land point to the plain definition of the term.¹¹² Yet, the Supreme Court has already expressly defined “lands” as including “everything which the land carries or which stands upon it, . . . carries all pools and ponds, non-navigable water, and waters . . . [and] may be submerged.”¹¹³ As stated in *Queen v. Leeds & L. Canal Co.*, “[l]ands are not the less land for being covered with water.”¹¹⁴ Therefore, the Antiquities Act protects both dry and wet lands.¹¹⁵

In total, the Supreme Court has concluded—on three separate occasions—that the Antiquities Act does reach submerged lands and the water associated with them.¹¹⁶ Furthermore, the Court in *Alaska* created a two-part test to determine whether the federal government had title to the submerged lands: first, it asked whether the federal government clearly intended to include submerged lands within a federal reservation; second, it inquired whether the federal government had expressed its intent to retain federal title to submerged lands within the reservation.¹¹⁷ Thus, opponents of a broad definition of “land” cannot correctly argue that the inclusion of submerged lands is merely *dictum*; it was a holding.¹¹⁸ Nevertheless, even if

(showing that there are “four marine national monuments in the Pacific Ocean and one in the Atlantic”) [<https://perma.cc/MT9F-9ZRS>].

¹¹⁰ See, e.g., *Mass. Lobstermen's Ass'n v. Ross*, 349 F. Supp. 3d 48, 57 (D.D.C. 2018).

¹¹¹ *Id.* at 57.

¹¹² Establishment of the Pacific Remote Islands Marine National Monument, 74 Fed. Reg. 1565 (Jan. 6, 2009).

¹¹³ *Id.*

¹¹⁴ *Id.*; *Queen v. Leeds & L. Canal Co.*, 7 Ad. & El. 671, 685.

¹¹⁵ See *Queen*, 7 Ad. & El. at 685.

¹¹⁶ See *Cappaert v. U.S.*, 426 U.S. 128, 131, 141–42 (1976) (concluding that Devil’s Hole was properly reserved under the Antiquities Act); see also *U.S. v. California*, 436 U.S. 32, 36 (1978) (holding that there “can be no serious question . . . that the [p]resident . . . had power under the Antiquities Act to reserve the submerged lands and waters . . . as a national monument”); *Alaska v. U.S.*, 545 U.S. 75, 103 (2005) (affirming that the “Antiquities Act empowers the [p]resident to reserve submerged lands”).

¹¹⁷ *Alaska*, 545 U.S. at 100.

¹¹⁸ *Dictum*, Black’s Law Dictionary 1102 (8th ed. 2004) (stating “dictum” is “[a] judicial comment made while delivering a judicial opinion, but one that is unnecessary to the decision in the case and therefore not precedential”); see *Mass. Lobstermen's Ass'n v. Ross*, 349 F. Supp. 3d 48, 56–57.

the statement was treated as *dictum*, the language of the Supreme Court must still be treated as authoritative.¹¹⁹

Likewise, arguments that other acts, such as the National Marine Sanctuaries Act, have impliedly repealed the Antiquities Act's applicability to oceans have been rejected¹²⁰ because "repeals by implication are not favored"¹²¹ and courts do not infer a statutory repeal unless the later statute "expressly contradict[s] the original act" or unless such a construction "is absolutely necessary in order that the words of the later statute shall have any meaning at all."¹²²

Furthermore, and as indicated, past presidents frequently dedicated submerged lands as national monuments, including Devil's Hole, Channel Islands, Glacier Bay monuments, Fort Jefferson National Monument, Buck Island Reef National Monument, and Papahānaumokuākea Marine National Monument.¹²³

Therefore, under current court precedent, "land" has been interpreted to include both dry and wet land. Thus, the federal government may be able to lawfully preserve 30% of America's lands through the Antiquities Act.

B. Historic or Scientific Interest Definition

The Antiquities Act explicitly states that land may only be dedicated as a national monument for the preservation of a "historic or scientific interest."¹²⁴ Therefore, to accomplish the 30 By 30 goal using the Antiquities Act, the Biden Administration must show that at least 30% of America's lands and oceans are of historic or scientific interest.

¹¹⁹ See *U.S. v. Oakar*, 111 F.3d 146, 153 (D.C. Cir. 1997).

¹²⁰ See *id.* at 58–60 (stating that the Antiquities Act does not "conflict with the National Marine Sanctuaries Act, which gives the Executive Branch the authority to designate certain areas of the marine environment as 'national marine sanctuaries' and to issue regulations protecting those areas," despite the plaintiffs' claims that the "Sanctuaries Act impliedly repealed the Antiquities Act, at least as it applied to the oceans" and that "oceans are excluded from the reach of the Antiquities Act"); see also *Mountain States Legal Found. v. Bush*, 306 F.3d 1132, 1138 (2002) (stating that the contention that the presidential proclamations establishing national monuments "facially defy congressional intent regarding the scope and purpose of 'a host' of other statutes enacted to protect various archeological and environmental values . . . misconceives federal laws as not providing overlapping sources of protection").

¹²¹ *Watt v. Alaska*, 451 U.S. 259, 267 (1981).

¹²² *Radzanower v. Touche Ross & Co.*, 426 U.S. 148, 153 (1976).

¹²³ See *Mass. Lobstermen's Ass'n v. Ross*, 349 F. Supp. 3d 48, 57 (D.D.C. 2018).

¹²⁴ National Park Service and Related Programs, 54 U.S.C. § 320301(a).

The Antiquities Act intends to facilitate the preservation of objects of historical importance.¹²⁵ The Act also intends to promote the “public interest in and respect for the culture and heritage of [N]ative Americans [which] requires protection of their sacred places, past and present, against commercial plundering.”¹²⁶ However, presidential authority under the Antiquities Act is not limited to protecting only archeological sites; it includes items such as ecosystems and scenic vistas as well.¹²⁷ Additionally, the “interest” can include water preservation because it is a feature of the reservation of national monuments.¹²⁸ Furthermore, the president does not need to fulfill any detailed requirement to justify a historic or scientific interest and designate a national monument.¹²⁹

The Antiquities Act’s broad language, illustrating Congress’s desire for the designation and protection of national monuments of “historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest,”¹³⁰ has long facilitated the conservation of varied landscapes throughout the United States. For instance, in *Cappaert*, the Court held that “the pool in Devil's Hole [National Monument] and its rare inhabitants are ‘objects of historic or scientific interest.’”¹³¹ Additionally, because the president designated the area as a national monument to include water, the Court held that the United States acquired “water rights in unappropriated appurtenant water sufficient to maintain the level of the pool to preserve its scientific value and thereby implement” the president’s national monument proclamation.¹³² Similarly, in *Mountain States Legal Foundation v. Bush*, the United States Court of Appeals for the District of

¹²⁵ See *Treasure Salvors, Inc. v. Unidentified Wrecked & Abandoned Sailing Vessel*, 569 F.2d 330, 341 (5th Cir. 1978).

¹²⁶ *U.S. v. Diaz*, 499 F.2d 113, 114 (9th Cir. 1974).

¹²⁷ See *Cappaert v. U.S.*, 426 U.S. 128, 141–42 (1976); see also *Mountain States Legal Found. v. Bush*, 353 U.S. App. D.C. 306, 311 (2002) (holding the argument that “Congress intended only that rare and discrete man-made objects, such as prehistoric ruins and ancient artifacts, were to be designated” failed “as a matter of law in light of Supreme Court precedent”).

¹²⁸ See *Cappaert v. U.S.*, 426 U.S. 128, 138 (1976).

¹²⁹ See *Tulare Cty. v. Bush*, 306 F.3d 1138, 1141 (D.C. Cir. 2002) (stating the Antiquities Act authorizes the president, “in [their] discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest,” and that “identifying historic sites and objects of scientific interest located within the designated lands” is all that is required to “advert[] to the statutory standard”); see also *infra* notes 140–44. *But see infra* notes 205–07.

¹³⁰ *Tackling the Climate Crisis at Home and Abroad*, 86 Fed. Reg. 7619 (Jan. 27, 2021).

¹³¹ *Cappaert*, 426 U.S. at 142; see *Cameron v. U.S.*, 252 U.S. 450, 455 (1920) (holding that the Grand Canyon is an object of “unusual scientific interest”).

¹³² *Cappaert*, 426 U.S. at 147.

Columbia Circuit rejected the plaintiffs' assertion that "Congress intended only that rare and discrete man-made objects, such as prehistoric ruins and ancient artifacts, were to be designated" because the Supreme Court interpreted the Act to authorize the president to designate the Grand Canyon and similar sites as national monuments.¹³³ Therefore, these two cases make clear the Act's pivotal role in conserving diverse landscapes, not only for preserving the nation's cultural heritage but also its natural heritage.

Montana Wilderness Association v. Connell, which initially appears as an outlier because it presented a different question than in *Cappaert* and *Mountain States Legal Foundation*, still reached a similar conclusion.¹³⁴ There, plaintiffs argued that the Bureau of Land Management ("BLM") had not adequately protected the Upper Missouri River Breaks National Monument's Bullwhacker area, "as opposed to the wildlife habitat and archeological and historic sites *within* the Bullwhacker area, *an object of the Monument*."¹³⁵ The national monument proclamation, however, only described an "array of biological, geological, and historical objects of interest," never explicitly referencing the need to protect the area itself—only the objects within that area.¹³⁶ Consequently, the court upheld the BLM's interpretation of only needing to protect the *objects* of the monument because the court deemed it a reasonable interpretation of the proclamation and one entitled to deference under *Kester v. Campbell*.¹³⁷ Thus, despite nuanced arguments, caselaw is clear the primary purpose of the Act is to conserve objects and areas the president declares to be of interest, thereby delegating broad authority to grant protections to both cultural and natural features.

Although the explicit desire of Congress was to protect Native American cultural sites, the Act has been used to protect against the "commercial plundering" of public lands.¹³⁸ Two cases best illustrate this proactive approach to land protection. First, *Cappaert v. United States* illustrates that the Act not only protects the land and objects within a national monument but also the "unappropriated appurtenant water *sufficient to maintain*" the scientific value of designated national monuments.¹³⁹

¹³³ *Mountain States Legal Found. v. Bush*, 353 U.S. App. D.C. 306, 311 (2002).

¹³⁴ *See Montana Wilderness Ass'n v. Connell*, 725 F.3d 988, 1000–01 (9th Cir. 2013).

¹³⁵ *Id.* at 1000 (emphasis added).

¹³⁶ *Id.*

¹³⁷ *See id.* *Kester v. Campbell*, 652 F.2d 13, 15 (9th Cir. 1981) (holding that courts review agency interpretations of executive orders with "great deference").

¹³⁸ *See U.S. v. Diaz*, 499 F.2d 113, 114 (9th Cir. 1974); *see also* *Mass. Lobstermen's Ass'n v. Raimondo*, 141 S. Ct. 979, 980 (2021) (Roberts, J., concurring in denial of certiorari) (stating "[t]he Antiquities Act originated as a response to widespread defacement of Pueblo ruins in the American Southwest").

¹³⁹ *Cappaert v. U.S.*, 426 U.S. 128, 147 (1976) (emphasis added).

Additionally, the Supreme Court found in that case that the president's Antiquities Act authority is not limited to protecting only archeological sites.¹⁴⁰ Second, in *Tulare County v. Bush*, the United States Court of Appeals for the District of Columbia Circuit held "[n]o such requirement exists" for the president to "include a certain level of detail" in a national monument proclamation.¹⁴¹ Further, the court held that the Act leaves "'other objects of historic or scientific interest'" at the president's discretion, thereby making it difficult to argue a proclamation includes "nonqualifying objects for protection."¹⁴² Therefore, a proclamation's inclusion of objects such as "ecosystems and scenic vistas" does not violate the terms of the Antiquities Act.¹⁴³

Similarly to the Court's acceptance of using the Antiquities Act to protect Devil's Hole's "pool and its rare inhabitants"¹⁴⁴ as "objects of historic or scientific interest," the Court in *Cameron v. United States* held that the Grand Canyon was found to be an "object of unusual scientific interest" because of its status as the greatest eroded canyon in the United States.¹⁴⁵ Likewise, the United States Court of Appeals for the District of Columbia Circuit held the Sonoran Desert was also an "object of unusual scientific interest" as it is a "desert ecosystem containing an array of biological, scientific, and historic resources."¹⁴⁶

The Antiquities Act has been used by presidents to conserve areas of the natural environment for a variety of different reasons. The purpose has not been limited to the preservation of Indian reservations or Indian relics.¹⁴⁷ Thus, the president has broad authority in designating national monuments for an array of "historic and scientific interest[s]."¹⁴⁸ This broad authority would likely include the authority to conserve oceans and lands to rectify environmental concerns.

¹⁴⁰ *Id.* at 141–42.

¹⁴¹ *Tulare Cty. v. Bush*, 306 F.3d 1138, 1141 (D.C. Cir. 2002).

¹⁴² *Id.* at 1141–42.

¹⁴³ *Id.* at 1142.

¹⁴⁴ *Cappaert*, 426 U.S. at 142.

¹⁴⁵ *Cameron v. U.S.*, 252 U.S. 450, 455, 465 (1920).

¹⁴⁶ *Mountain States Legal Found. v. Bush*, 306 F.3d 1132, 1134 (D.C. Cir. 2002).

¹⁴⁷ *Cappaert*, 426 U.S. at 147. *But see* *Mass. Lobstermen's Ass'n v. Raimondo*, 141 S. Ct. 979, 980 (2021) (Roberts, J., concurring in denial of certiorari) (referencing an "antiquity" to be "defined as a 'relic or monument of ancient times,' Webster's International Dictionary of the English Language 66 (1902)").

¹⁴⁸ *Cameron*, 252 U.S. at 455, 465–66; *see also Cappaert*, 426 U.S. at 142; *U.S. v. California*, 436 U.S. 32, 33 (1978).

With the passage of time and the escalating severity of climate change effects, both existing and potential future national monuments are increasingly vulnerable, further justifying the president's need to use the Antiquities Act.¹⁴⁹ Global warming has the potential to affect historical sites, national landmarks, essential services, and human and natural life; consequently, there is no greater or more pressing issue than addressing this pending crisis. The Biden Administration, upon nominating land for national monuments, may successfully claim that the dangers and consequences of global warming are so apparent that the prevention of further harm is of historical or scientific importance.¹⁵⁰ The growing trend of environmental law cases, specifically climate change litigation, illustrates the growing concern over global warming and its harmful effects.¹⁵¹

In the United States, the most predominant case is *Juliana v. United States*, wherein plaintiffs claimed that the president, the United States, and federal agencies, violated: “(1) the plaintiffs’ substantive rights under the Due Process Clause of the Fifth Amendment; (2) the plaintiffs’ rights under the Fifth Amendment to equal protection of the law; (3) the plaintiffs’ rights under the Ninth Amendment; and (4) the public trust doctrine” for failing to combat climate change.¹⁵² “The district court denied the government’s motion to dismiss, concluding that the plaintiffs had standing to sue, raised justiciable questions, and stated a claim for infringement of a Fifth Amendment due process right to a ‘climate system capable of sustaining human life.’”¹⁵³ The Ninth Circuit, however, reversed the district court’s order and remanded the case with instructions to dismiss for lack of Article

¹⁴⁹ See Rachel Hartigan, *Climate Change Threatens National Landmarks*, NAT’L GEOGRAPHIC (May 20, 2014), <https://www.nationalgeographic.com/science/article/140520-threatened-historic-landmarks-climate-change> [<https://perma.cc/FLB3-E72U>].

¹⁵⁰ See *supra* notes 66-75.

¹⁵¹ *Global Trends in Climate Change Litigation: 2020 Snapshot*, LONDON SCH. ECON. & POL. SCI. (2020), https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2020/07/Global-trends-in-climate-change-litigation_2020-snapshot.pdf [<https://perma.cc/A4XS-K93J>] (stating “1,587 cases of climate litigation have been identified as being brought between 1986 and the end of May 2020,” with the “majority of climate litigation cases recorded since 1986 have occurred from the mid-2000s onwards”).

¹⁵² *Juliana v. U.S.*, 947 F.3d 1159, 1165 (9th Cir. 2020); see generally *Comment on: Juliana v. United States*, 134 HARV. L. REV. 1929, 1936 (Mar. 10, 2021), <https://harvardlawreview.org/2021/03/juliana-v-united-states/> [<https://perma.cc/WLL9-R7R3>] (stating the decision “may come to stand for broad and significant limitations on the powers of federal district courts sitting in equity”).

¹⁵³ *Juliana*, 947 F.3d at 1165.

III standing due to a lack of redressability.¹⁵⁴ Plaintiffs sought “not only to enjoin the [president] from exercising discretionary authority expressly granted by Congress, . . . but also to enjoin Congress from exercising power expressly granted by the Constitution over public lands.”¹⁵⁵ Even the plaintiffs conceded this would not, alone, solve global climate change.¹⁵⁶ Therefore, the court held that the “plaintiffs’ case must be made to the political branches or to the electorate at large,” and not an Article III court, which would have difficulty supervising and enforcing their desired remedy.¹⁵⁷

Judge Staton dissented from the order, stating that “[n]o case can singlehandedly prevent the catastrophic effects of climate change predicted by the government and scientists,” but that the “Constitution does not condone the Nation’s willful destruction.”¹⁵⁸ Judge Staton argued that “determining when a court must step in to protect fundamental rights is not an exact science” and one that has been illustrated by the Supreme Court’s decision to desegregate schools ninety-one years after the Emancipation Proclamation in *Brown v. Board of Education*.¹⁵⁹

Therefore, despite the loss experienced by environmental activists in *Juliana*, the Biden Administration could help provide the remedy plaintiffs sought by taking affirmative steps to stabilize the global climate.¹⁶⁰ As noted by the Ninth Circuit in *Juliana*, the case record made it “increasingly difficult . . . for the political branches to deny that climate change is occurring, that the government has had a role in causing it, and that our elected officials have a moral responsibility to seek solutions.”¹⁶¹ Thus, President Biden may capitalize on the fact that there is “little basis for denying that climate change is occurring at an increasingly rapid pace,”¹⁶² as noted by the Ninth Circuit Court of Appeals, and further justify the scientific and/or historical need to dedicate more lands as national monuments to stave off climate change.

More recently in the United States, climate activists won a monumental case in *Held v. Montana*.¹⁶³ There, sixteen young climate

¹⁵⁴ *Id.* at 1171.

¹⁵⁵ *Id.* at 1170.

¹⁵⁶ *Id.* at 1171.

¹⁵⁷ *Id.* at 1173, 1175.

¹⁵⁸ *Id.* (Staton, J., dissenting).

¹⁵⁹ *Id.* at 1191 (stating “arc of the moral universe is long, but it bends towards justice”).

¹⁶⁰ *See id.* at 1173, 1175; Hartigan, *supra* note 149, *supra* notes 65-74.

¹⁶¹ *Juliana*, 947 F.3d at 1175.

¹⁶² *Id.* at 1166.

¹⁶³ Zahra Hirji, *Youths Sued Montana over Climate Change and Won. Here’s Why it Matters*, SUN J. (Aug. 20, 2023), <https://www.sunjournal.com/2023/08/20/youths-sued->

activists sued the state of Montana over a provision in the Montana Environmental Policy Act that limits climate change considerations during environmental reviews of proposed fossil fuel projects.¹⁶⁴ The activists alleged that the law conflicted with Montana’s Constitution, which states that the “state and each person shall maintain and improve a clean and healthful environment in Montana for present and future generations.”¹⁶⁵ After a trial, the Montana state judge ruled in favor of the activists, holding that the state law limiting the consideration of climate change in environmental reviews was unconstitutional.¹⁶⁶ Although the ruling applies only to the State of Montana, and an appeal is all but guaranteed, the decision is important because it could influence other climate cases in the future, creates a roadmap for future lawsuits, and illustrates the movement behind climate change litigation.¹⁶⁷ Aside from Montana, at least six other states—including Hawaii, Illinois, Massachusetts, New York, Pennsylvania, and Rhode Island—have an express, constitutionally protected right to a healthy environment.¹⁶⁸

Abroad, in *Urgenda Foundation v. State of the Netherlands*, a Dutch environmental group, the Urgenda Foundation, and nine hundred Dutch citizens sued the Dutch government to require more action to prevent global climate change.¹⁶⁹ The case centered on whether the Dutch government was required to limit its GHG emissions to 25% below its 1990s levels by 2020 to help reach the UN goal of keeping global temperature increases within two degrees Celsius of pre-industrial conditions.¹⁷⁰ In a landmark ruling, the Supreme Court of the Netherlands held that the Dutch government had a duty to take climate change mitigation measures due to the “severity of the consequences of climate change and the great risk of climate change occurring.”¹⁷¹

Yet, courts have foreshadowed that not all interests may qualify as “historic or scientific interest” under the Antiquities Act.¹⁷² In *Wyoming v. Franke*, the United States District Court for the District of Wyoming posed a hypothetical, stating that “if a monument were to be created on a bare stretch

montana-over-climate-change-and-won-heres-why-it-matters/ [https://perma.cc/C869-RW4R].

¹⁶⁴ *Id.*

¹⁶⁵ Mont. Const. Art. IX, § 1.

¹⁶⁶ Hirji, *supra* note 163.

¹⁶⁷ *See id.*

¹⁶⁸ *Id.*

¹⁶⁹ Hof’s-Gravenhage 9 oktober 2018, AB 2018, 417 m.nt. GA van der Veen, Ch.W. Backes (Staat der Nederlanden/Stichting Urgenda).

¹⁷⁰ *Id.*

¹⁷¹ *Id.*

¹⁷² *See, e.g., Wyoming v. Franke*, 58 F. Supp. 890, 895 (D. Wyo. 1945).

of sage-brush prairie in regard to which there was no substantial evidence that it contained objects of historic or scientific interest, the action in attempting to establish it by proclamation as a monument, would undoubtedly be arbitrary and capricious and clearly outside the scope and purpose of the Monument Act.”¹⁷³ This proposition is *dicta* but foreshadows that monument designations across bare stretches of land—without substantial evidence of historic or scientific interest—are likely outside the scope of the Antiquities Act. Yet even there, the court noted that “evidence of experts and others as to what the area contains in regard to objects of historic and scientific interest” will bind a court in finding that the monument designation was justified.¹⁷⁴

Further, the court in *Wyoming v. Franke* stated that “if the Congress presumes to delegate its inherent authority to Executive Departments which exercise acquisitive proclivities not actually intended, the burden is on the Congress to pass such remedial legislation as may obviate any injustice brought about as the power and control over and disposition of government lands inherently rests in its Legislative branch.”¹⁷⁵ Congress has delegated its authority to the president to establish national monuments under the condition that the objects reserved be of historic or scientific interest—a broad limitation that is under the sole discretion of the president.¹⁷⁶ Therefore, as long as there is evidence of some historic and scientific interest, the designation is proper. If Congress disagrees with the president’s use of its delegated authority, then it is up to Congress—not the courts—to step in and rectify its intent.

Even if the courts do step in, plaintiffs who wish to challenge a national monument designation on the grounds of lack of “historic or scientific interest” must allege facts to support the claim that the president acted beyond their authority under the Antiquities Act.¹⁷⁷ This is a high burden to meet, as a presidential proclamation that identifies particular objects or sites of interest and recites grounds for the designation comports with the Act’s policies and requirements.¹⁷⁸ Furthermore, courts typically

¹⁷³ *Id.*

¹⁷⁴ *Id.* at 895–96.

¹⁷⁵ *Id.* at 896 (emphasis added).

¹⁷⁶ See generally *Martin v. Mott*, 25 U.S. 19, 31 (1827) (stating “[t]he law does not provide for any appeal from the judgment of the [p]resident, or for any right in subordinate officers to review his decision, and in effect defeat it”).

¹⁷⁷ See *Mountain States Legal Found. v. Bush*, 306 F.3d 1132, 1137 (D.C. Cir. 2002); see also *Utah Ass’n of Ctys. v. Bush*, 316 F. Supp. 2d 1172, 1178 (D. Utah 2004).

¹⁷⁸ *Mountain States Legal Found.*, 306 F.3d at 1137; *Utah Ass’n of Ctys.*, 316 F.Supp.2d. at 1178.

resort to discerning congressional intent in interpreting an ambiguous statute, a circumstance that is not applicable to the straightforward Antiquities Act.¹⁷⁹

Therefore, it is likely that the Biden Administration could successfully preserve large tracts of land with a historic or scientific interest in climate change resilience in order to accomplish the 30 By 30 plan, especially because the Supreme Court itself has held that “[t]he harms associated with climate change are serious and well recognized” and that “a number of environmental changes have already inflicted significant harm.”¹⁸⁰ Since scientists have reached a “strong consensus” that climate change will result in a rise in sea levels by the end of the century, a significant reduction in water storage in winter snowpack in mountainous regions, an increase in the spread of disease, and rising ocean temperatures, the requirement that monument designations be made for historic or scientific interests will likely be met.¹⁸¹ Moreover, presidential proclamations that dedicate national monuments for “natural resources and ecosystems” have already been upheld by the courts to fulfill a portion of the Act’s requirement.¹⁸² Similar language could be used to protect lands across the country, allowing for the protection and dedication of scientific and historically valuable natural resources and ecosystems as national monuments, which would help stave off climate change and fulfill the goal of the 30 By 30 plan.

C. *Smallest Area Definition*

The final limitation on the president’s dedication of national monuments is that the monuments must be the “smallest area compatible with the proper care and management of the objects to be protected.”¹⁸³ While courts have described the Act as intended for “small land areas surrounding specific objects,” case law unequivocally illustrates that the judicial inquiry does not extend to determining “whether the [p]resident’s designation best fulfill[s] the general congressional intention embodied in the Antiquities Act.”¹⁸⁴

Early versions of the Act included a maximum size limitation of 640 acres, but that provision was deleted before the final passage and enactment

¹⁷⁹ See *Utah Ass’n of Ctys*, 316 F. Supp. 2d at 1186.

¹⁸⁰ *Mass. v. Env’t Prot. Agency*, 549 U.S. 497, 521 (2007).

¹⁸¹ See *id.* at 521–22.

¹⁸² See *Mass. Lobstermen’s Ass’n v. Ross*, 945 F.3d 535, 544 (2019); see also *Tulare Cty. v. Bush*, 306 F.3d 1138, 1142 (2002) (stating “[i]nclusion of such items as ecosystems and scenic vistas in the Proclamation did not contravene the terms of the statute by relying on nonqualifying features”).

¹⁸³ National Park Service and Related Programs, 54 U.S.C. § 320301(b).

¹⁸⁴ *Utah Ass’n of Ctys. v. Bush*, 316 F. Supp. 2d 1172, 1178 (D. Utah 2004).

of the law.¹⁸⁵ Thus, Congress clearly manifested an intention to delegate decision-making to the sound discretion of the president, so “how the [p]resident chooses to exercise the discretion Congress has granted [them] is not a matter for [judicial] review.”¹⁸⁶

Although national monuments must still be of the smallest area,¹⁸⁷ neither the legislature nor the courts have defined this phrase, illustrating that such designation is within the president’s *sole* discretion.¹⁸⁸ This idea is reflected in *Massachusetts Lobstermen’s Association v. Ross*, wherein the United States District Court for the District of Columbia held that to “obtain judicial review of claims about a monument’s size, plaintiffs must offer specific, nonconclusory factual allegations establishing a problem within its boundaries.”¹⁸⁹ There, the Lobstermen’s Association argued that the Northeast Canyons and Seamounts Marine National Monument reserved large areas of ocean beyond the objects the Proclamation designated for protection.¹⁹⁰ However, the court rejected the commercial-fishing associations’ position, holding it was “based on the incorrect factual assumption that the only objects designated for protection are the canyons and seamounts themselves,” despite the Proclamation’s inclusion of the phrase “the natural resources and ecosystems *in and around them*.”¹⁹¹ Therefore, the bar establishing a national monument is relatively low: as long as the national monument designation is of a size that protects the items of interest and purpose for the proclamation, it is likely sufficient under the Act.¹⁹²

Opponents argue that presidents have incorrectly used the Act to carry out their environmental agendas, contrary to the original congressional intent.¹⁹³ These accusations are insufficient alone; instead, opponents must “allege that some part of the [m]onument did not, in fact, contain natural

¹⁸⁵ *Utah Ass’n of Ctys. v. Clinton*, No. 2:97-cv-479, 1999 U.S. Dist. LEXIS 15852, at *10 (D. Utah Aug. 11, 1999); H.R. REP. No. 59-2224, at 1 (1906).

¹⁸⁶ *Dalton v. Specter*, 511 U.S. 462, 476 (1994).

¹⁸⁷ 54 U.S.C. § 320301.

¹⁸⁸ *See Mass. Lobstermen’s Ass’n v. Raimondo*, 141 S. Ct. 979, 981 (2021) (Roberts, J., concurring in denial of certiorari) (stating the Supreme Court “may be presented with other and better opportunities to consider this issue without the artificial constraint of the pleadings in this case”).

¹⁸⁹ *Mass. Lobstermen’s Ass’n v. Ross*, 349 F. Supp. 3d 48, 67 (D.D.C. 2018).

¹⁹⁰ *Id.*

¹⁹¹ *Id.* at 67–68 (emphasis added).

¹⁹² *See id.*

¹⁹³ *See Utah Ass’n of Ctys.*, 316 F. Supp. 2d at 1186; *see also Wyoming v. Franke*, 58 F. Supp. 890, 894 (D. Wyo. 1945).

resources that the [p]resident sought to protect.”¹⁹⁴ Accordingly, the accusation must offer specific, nonconclusory factual allegations establishing a problem with the national monument’s boundaries.¹⁹⁵ This is most clearly illustrated by *Tulare County*, where the court ruled that, despite a determination that only six percent of the Giant Sequoia National Monument comprised sequoia groves, the plaintiffs had failed to demonstrate that the monument exceeded the “smallest area.”¹⁹⁶ Upon appeal, the United States Court of Appeals for the District of Columbia Circuit emphasized that the president’s intentions in the proclamation were to safeguard both giant sequoias and the surrounding ecosystem.¹⁹⁷ Similarly to *Tulare County*, in *Massachusetts Lobstermen's Association v. Ross*, the fishermen alleged that the national monument improperly reserved large areas of submerged land beyond just the canyons and seamounts.¹⁹⁸ There, the court held the monument was designated to protect “the natural resources and ecosystems in and around” the specific items of significance, which satisfied the Act’s requirements.¹⁹⁹ Together, these cases illustrate the difficult burden opponents face when challenging a president’s dedication of a national monument under a theory of being “grossly oversized.”²⁰⁰

Nevertheless, critics persist in referencing congressional records in an effort to capture Congress’s alleged intention of restricting national monuments to small land areas surrounding specific objects.²⁰¹ House Report No. 2224 states that “there are scattered throughout the southwest quite a large number of very interesting ruins . . . the bill proposes to create small reservations reserving only so much land as may be absolutely necessary for the preservation of these interesting relics.”²⁰²

¹⁹⁴ *Tulare Cty. v. Bush*, 306 F.3d 1138, 1142 (D.C. Cir. 2002), *cert. denied*, 540 U.S. (U.S. Oct. 6, 2003) (No. 02-1623); *see* *Mass. Lobstermen's Ass'n v. Ross*, 945 F.3d 535, 544 (2019).

¹⁹⁵ *Mass. Lobstermen's Ass'n v. Ross*, 349 F. Supp. 3d 48, 67 (D.D.C. 2018).

¹⁹⁶ *Tulare Cty. v. Bush*, 185 F. Supp. 2d 18, 25 (D.D.C. 2001), *aff'd*, 306 F.3d 1138 (D.C. Cir. 2002).

¹⁹⁷ *Tulare Cnty. v. Bush*, 306 F.3d 1138 (D.C. Cir. 2002); Establishment of the Giant Sequoia National Monument, 65 Fed. Reg. 24095 (Apr. 15, 2000).

¹⁹⁸ *Mass. Lobstermen's Ass'n*, 945 F.3d at 544.

¹⁹⁹ *Id.*

²⁰⁰ *Tulare Cnty.*, 306 F.3d at 1142 (internal quotation marks omitted).

²⁰¹ *See* *Utah Ass'n of Ctys. v. Bush*, 316 F. Supp. 2d 1172, 1186 (D. Utah 2004) (declining “plaintiffs’ invitation to substitute its judgment for that of the [p]resident, particularly in an arena in which the congressional intent most clearly manifest is an intention to delegate decision-making to the sound discretion of the [p]resident”).

²⁰² *Id.*; H.R. REP. NO. 59-2224, at 1 (1906).

The Supreme Court, as illustrated in *Massachusetts Lobstermen's Association v. Raimondo*, remains skeptical of the Antiquities Act, stating that the “smallest area compatible” requirement does not “pose any meaningful restraint.”²⁰³ Specifically, the Court stated, “[a] statute permitting the [p]resident in his sole discretion to designate as monuments ‘landmarks,’ ‘structures,’ and ‘objects’—along with the smallest area of land compatible with their management—has been transformed into a power without any discernible limit to set aside vast and amorphous expanses of terrain above and below the sea.”²⁰⁴ Thus, as noted by the Supreme Court, the creation of marine national monuments “demonstrates how far we have come from indigenous pottery.”²⁰⁵ Despite all these comments, the Court nevertheless denied the petition for a writ of certiorari, which asked the Supreme Court to define the “smallest area compatible,” because the petition did not “satisfy [the Court’s] usual criteria for granting certiorari”—i.e., no court of appeals has yet addressed the question.²⁰⁶

Despite the Supreme Court’s sudden concerns about the potential unchecked power under the Act, the Court fails to acknowledge the long history of presidents utilizing the Act to conserve large tracts of land. Notably, in 1978, Former President Jimmy Carter designated the Wrangell-St. Elias National Monument,²⁰⁷ which encompassed a monumental 10,950,000 acres.²⁰⁸ Furthermore, Congress later adopted Wrangell-St. Elias National Monument as a national park and even increased the size of the protected lands to a total of 13.2 million acres, affirmatively approving of the president’s discretion.²⁰⁹ Therefore, the Court’s concerns as to an allegedly unchecked power of the president are unsubstantiated; Congress already provides a meaningful check as to the president’s power.

Despite the clear history of the Act, the opposition will likely argue that the dedication of an aggregated 440 million acres of national monuments is antithetical to the Antiquities Act’s intent. However, presidents have used the Antiquities Act to protect well over 100 land and marine areas, totaling

²⁰³ *Mass. Lobstermen's Ass'n v. Raimondo*, 141 S. Ct. 979, 981 (2021) (Roberts, J., concurring in denial of certiorari).

²⁰⁴ *Id.*

²⁰⁵ *Id.*

²⁰⁶ *Id.*

²⁰⁷ *Wrangell-St. Elias National Monument*, 93 Stat. 1470 (Dec. 1, 1978).

²⁰⁸ *Mission and Purpose of Wrangell-St. Elias*, NAT’L PARK SERV. (Apr. 14, 2015), <https://home.nps.gov/wrst/learn/management/mission-and-purpose.htm> [<https://perma.cc/N39F-CF9Q>].

²⁰⁹ *See America’s Largest National Park*, NAT’L PARK SERV. (Oct. 13, 2020), <https://www.nps.gov/wrst/index.htm> [<https://perma.cc/CX8W-G5CH>].

hundreds of millions of acres.²¹⁰ Former President Obama, who has designated more land, by hundreds of millions of acres, than any other president, designated 8.8 million acres in new monuments and added 544.7 million acres of land to existing monuments—a total of 553.6 million acres within his two four-year terms.²¹¹ More importantly, all of former President Obama’s proclamations have been upheld by the courts, including the expansion of Papahānaumokuākea Marine National Monument by 283.4 million acres on August 26, 2016.²¹²

In sum, the Biden Administration will likely be able to designate sufficient national monuments to accomplish 30 By 30 by utilizing the analysis of various district courts and appeals courts across America but might be limited by the Supreme Court, which has already implied—through *dicta*—its inclination to limit the scope of the Antiquities Act.²¹³ Thus, this is the toughest hurdle for the Biden Administration, or any future administration, to overcome.

V. THE LESSER-KNOWN BARRIERS

When a president designates a national monument under the Antiquities Act, Congress,²¹⁴ the courts,²¹⁵ and future presidents²¹⁶ can

²¹⁰ ALEXANDRA M. WYATT, CONG. RSCH. SERV., R44687, ANTIQUITIES ACT: SCOPE OF AUTHORITY FOR MODIFICATION OF NATIONAL MONUMENTS (2016); see Robert Lawrence, *The Antiquities Act, Graphed*, COGNITIVE FEEDBACK LOOP (Jan. 27, 2017), <https://cognitivefeedbackloop.com/https-medium-com-cognitive-feedback-loop-2017-01-27-6c92f373a996> [<https://perma.cc/2M46-UG4Y>] (stating the Antiquities Act has preserved over “843 million acres of federal land”).

²¹¹ CAROL HARDY VINCENT, CONG. RSCH. SERV., R41330, NATIONAL MONUMENTS AND THE ANTIQUITIES ACT (2021).

²¹² See *id.*; see also *Mass. Lobstermen's Ass'n v. Ross*, 349 F. Supp. 3d 48, 55 (D.D.C. 2018) (stating that “review would be available only if the plaintiff were to offer plausible and detailed factual allegations that the [p]resident acted beyond the boundaries of authority that Congress set” and that “Plaintiffs have not offered sufficient factual allegations to succeed”); but see *Mass. Lobstermen's Ass'n v. Raimondo*, 141 S. Ct. 979, 980–81 (2021) (Roberts, J., concurring in denial of certiorari) (stating the Antiquities Act “transformed into a power without any discernible limit to set aside vast and amorphous expanses of terrain above and below the sea” and that “[n]o court of appeals has addressed . . . how to interpret the Antiquities Act’s ‘smallest area compatible’ requirement”).

²¹³ See *Mass. Lobstermen's Ass'n*, 141 S. Ct. at 981 (Roberts, J., concurring in denial of certiorari).

²¹⁴ H.R. 5042, 117th Cong. (2021).

²¹⁵ *Wyo. v. Franke*, 58 F. Supp. 890, 895 (D. Wyo. 1945); *Mass. Lobstermen's Ass'n*, 141 S. Ct. at 981 (Roberts, J., concurring in denial of certiorari).

²¹⁶ *Modifying the Grand Staircase-Escalante National Monument*, 82 Fed. Reg. 58089 (Dec. 4, 2017); *Review of Designations Under the Antiquities Act*, 82 Fed. Reg. 20429 (Apr. 26, 2017); Nadja Popovich, *Bears Ears National Monument Is Shrinking. Here's*

provide a meaningful check to a president's designation power. The Biden Administration's goal to conserve 30% of the United States' land and oceans by 2030 can be accomplished,²¹⁷ but there are additional barriers to achieving this goal, such as legal ambiguity surrounding the abolition of national monuments; historical precedents and interpretations; the *Youngstown* framework for analyzing presidential power²¹⁸; legislative attempts, congressional inertia, and the Property Clause; and recent monument reductions as well as President Biden's conservation actions.

A. Legal Ambiguity Surrounding Monument Abolishment

The Antiquities Act grants the president sole authority to designate national monuments, which will then be cared for by federal agencies.²¹⁹ The Act does not delegate power to the president to reduce, let alone abolish, national monuments.²²⁰ Therefore, under a narrow interpretation, presidents likely cannot abolish or significantly reduce the size of national monuments, meaning that the Biden Administration's creation of national monuments to achieve the 30 By 30 plan could be successful despite a future change in administrations.

B. Historical Precedents and Interpretations

The historical inquiry led by former President Franklin D. Roosevelt and Attorney General Homer Cummings in 1938, along with the application of the nondelegation doctrine, demonstrates the long-established belief that presidents lack the authority to abolish national monuments, as they are considered equivalent to acts of Congress and the Act did not provide an intelligible principle for the abolition of national monument designations. As analyzed in other legal scholarship,²²¹ former President Franklin D.

What Is Being Cut, N.Y. TIMES (Dec. 8, 2017), <https://www.nytimes.com/interactive/2017/12/08/climate/bears-ears-monument-trump.html> [<https://perma.cc/3Y4K-H5CC>].

²¹⁷ See Tackling the Climate Crisis at Home and Abroad, 86 Fed. Reg. 7619 (Jan. 27, 2021).

²¹⁸ See *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 635–38 (1952) (Jackson, J., concurring).

²¹⁹ See *Kester v. Campbell*, 652 F.2d 13, 16 (9th Cir. 1981) (holding that an agency's interpretation is considered reasonable unless plainly erroneous or inconsistent); see also *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (holding that there must be a rational connection between the facts found and the choice made by agencies).

²²⁰ National Park Service and Related Programs, 54 U.S.C. § 320301.

²²¹ See, e.g., Christian Termyn, *No Take Backs: Presidential Authority and Public Land Withdrawals*, 19 SUSTAINABLE DEV. L. & POL'Y 4, 9-10 (2019); John C. Ruple, *The Trump Administration and Lessons Not Learned from Prior National Monument Modifications*, 43 HARV. ENVTL. L. REV. 1, 30-31 (2019); Kevin O. Leske, "Un-

Roosevelt asked Attorney General Homer Cummings to consider whether he could abolish Castle Pinckney National Monument.²²² After review, Attorney General Cummings concluded that the president does not have the authority to abolish national monuments because national monument designations are equivalent to acts of Congress, although earlier presidents have reduced the size of monuments.²²³ Therefore, Attorney General Cummings was “of the opinion that the president is without authority to issue” an order to abolish national monuments.²²⁴

Another framework for interpreting the potential caveats in the Act is the nondelegation doctrine, whereby Congress is allowed to delegate legislative power—subject to limitations.²²⁵ The nondelegation doctrine is “rooted in the principle of separation of powers that underlies our tripartite system of Government.”²²⁶ In accordance with the doctrine, authority may be delegated as long as the delegation contains an “intelligible principle,” or a minimum standard on how the delegated authority should be exercised.²²⁷ Where a president wishes to abolish national monuments, there is no intelligible principle that allows a president to remove national monument protections; there is only an intelligible principle providing for the president to enact more national monuments.²²⁸ Therefore, the absence of such intelligible principle, which delegates the power to reduce or remove national monument protections by the president, illustrates Congress’s sole retention of such an important power.

C. *Youngstown Framework for Analyzing Presidential Power*

For half a century, Former Justice Jackson’s concurrence from *Youngstown* has provided courts with a framework for analyzing the extent of presidential power under the Constitution.²²⁹ The framework divides presidential actions into three categories. First, when the president is acting

Shelving” Lands Under the Outer Continental Shelf Lands Act (Ocsla): Can A Prior Executive Withdrawal Under Section 12(a) Be Trumped by A Subsequent President?, 26 N.Y.U. ENVTL. L.J. 1, 38 (2017).

²²² See 39 Op. Att’y Gen. 185, 185–86.

²²³ *Id.* at 188.

²²⁴ *Id.* at 189.

²²⁵ *Mistretta v. U.S.*, 488 U.S. 361, 371–72 (1989) (emphasizing that the “separation-of-power principle, and the nondelegation doctrine in particular, do not prevent Congress from obtaining the assistance of its coordinate Branches”).

²²⁶ *Id.* at 371.

²²⁷ *Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 472 (2001).

²²⁸ See *id.*

²²⁹ See *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 635–38 (1952) (Jackson, J., concurring); see also Joseph Landau, *Chevron Meets Youngstown: National Security and the Administrative State*, 92 B.U.L. REV. 1917, 1919–20.

under statutory authorization, his constitutional power is at its maximum because it includes both inherent and statutory authority.²³⁰ Therefore, the only limitation to this presidential authority is when the “federal government as undivided whole lacks power.”²³¹ Second, when the president acts in the absence of either a congressional grant or denial of authority, then the president’s only authority comes from their Article II constitutional powers.²³² In this category, there is a “zone of twilight” where the president has concurrent authority with Congress where “congressional inertia, indifference or quiescence may sometimes, at least as a practical matter, enable, if not invite, measures on independent presidential responsibility.”²³³ The third category is when the president acts in defiance of Congress and where the president’s power is at its weakest.²³⁴ In this category, the president can only act when his or her power is exclusive.²³⁵

Applied to the Antiquities Act, if the president has the authority to *reduce or eliminate* national monuments, the power must be in the first or second *Youngstown* category.²³⁶ If the power falls under the third *Youngstown* category, and because the Constitution gives Congress plenary authority over public lands, then the president lacks the authority to reduce national monuments entirely because the power is not exclusive.²³⁷ Therefore, presidents’ actions to reduce or revoke a national monument are likely considered to be within *Youngstown*’s second category, where “congressional inertia, indifference or quiescence may sometimes, at least as a practical matter, enable, if not invite, measures on independent presidential responsibility.”²³⁸

Even if the president does have the authority to reduce the size of national monuments, the scope of that authority is unclear. For example, some scholars argue that the “smallest area compatible” requirement only gives the president authority to correct mistakes in the original designation or to clarify indeterminate boundaries,²³⁹ while others suggest that the

²³⁰ See *Youngstown Sheet & Tube Co.*, 343 U.S. at 635–36 (Jackson, J., concurring).

²³¹ *Id.* at 636–37.

²³² *Id.* at 637–38.

²³³ *Id.* at 637.

²³⁴ *Id.* at 637–38.

²³⁵ *Id.*

²³⁶ See *id.* at 635–37.

²³⁷ See *id.* at 637–38.

²³⁸ *Id.* at 635–38.

²³⁹ See Mark Squillace et al., *Presidents Lack the Authority to Abolish or Diminish National Monuments*, 103 VA. L. REV. 55, 69 (2017) (stating that similar acts, such as the Forest Service Organic Act of 1897 authorized the president to make modifications

requirement gives the president broad authority to reduce national monuments entirely.²⁴⁰ There is conflicting evidence for each proposal as presidents have, historically, reduced the size of national monuments, both as a result of border inaccuracies and for the sole purpose of cutting the size, and Congress has repeatedly failed to enact a more explicit statute.²⁴¹ All the more challenging, no presidential decision to reduce the size of a national monument has made its way through the court systems, so no court has ever affirmatively ruled on the legality of such an action.²⁴²

The Antiquities Act does not explicitly establish that a president may reduce, revoke, or eliminate a national monument but this has not prevented presidents from doing so.²⁴³ In total, there have been more than 250 occasions where presidents have used the authority of the Antiquities Act to protect land,²⁴⁴ but there have only been a few times where a president has diminished, reduced, or modified the size of national monuments.²⁴⁵ Nevertheless, no national monument has been abolished in its entirety by a president.²⁴⁶ In summary, despite the more than two hundred times that the Act has been used to designate national monuments, the rare instances of

to reduce the area, change the boundary lines of such reserve, or vacate altogether any order creating such reserve).

²⁴⁰ See Richard Seamon, *Dismantling Monuments*, 70 FLA. L. REV. 553, 579 (2018) (stating that there has never once been a legal challenge over president's reducing a national monument and Congress knew of them, compelling the conclusion that the Antiquities Act authorizes the president to reduce national monuments); see generally John Yoo & Todd Gaziano, *Presidential Authority to Revoke or Reduce National Monument Designations*, 35 Y. J. ON REG. 617, 665 (2018) (concluding that “[i]f [p]residents choose not to protect their policies through Congress's bicameral process, they leave those policies vulnerable to their successors by constitutional design”).

²⁴¹ See S. Rep. No. 69-423 (1926); S. 3826, 68th Cong. (1925); S. 2703, 69th Cong. (1926); S. 3840, 68th Cong. (1925); H.R. 11357, 68th Cong. (1925); S. 4617, 71st Cong. (1930); H.R. 3990, 115th Cong. (2017); *National Monument Facts and Figures*, NAT'L PARK SERV. (Oct. 26, 2021), <https://www.nps.gov/subjects/archeology/national-monument-facts-and-figures.htm> [<https://perma.cc/S93M-DBFZ>]; see also Ruple, *supra* note 221, at 38.

²⁴² See *Mass. Lobstermen's Ass'n v. Raimondo*, 141 S. Ct. 979, 981 (2021) (Roberts, J., concurring in denial of certiorari).

²⁴³ See *National Monument Facts and Figures*, *supra* note 241.

²⁴⁴ *Id.*

²⁴⁵ *Id.*

²⁴⁶ *Abolished National Monuments*, NAT'L PARK SERV. (Feb. 17, 2021), <https://www.nps.gov/articles/000/abolished-national-monuments.htm> [<https://perma.cc/GA2J-HDUN>] (“Most often, the abolishment occurred because the nationally important resources for which the monument was established originally became diminished or were found to be of less than national significance,” while “[s]ome national monuments were abolished because they were publicly inaccessible or ill-suited to park development” or “abolished due to mismanagement”).

presidential modification or revocation of national monuments illustrate the Act's resilience and inability for a president to abolish a national monument by a later executive order.

D. Legislative Attempts, Congressional Inertia, and the Property Clause

First, Congress's repeated refusal to grant the president the power to *reduce* the size of national monuments has exacerbated uncertainties surrounding presidential authority.²⁴⁷ Members of Congress have introduced legislation on seven occasions seeking to explicitly permit presidents to eliminate or reduce national monuments, yet all of these attempts have met significant opposition and failed to pass.²⁴⁸

Second, Congress has enacted subsequent legislation, such as the Federal Land Policy and Management Act ("FLPMA"), to "modernize and streamline the management of federal lands."²⁴⁹ Through FLPMA, Congress repealed twenty-nine different statutes that authorized the president to make withdrawals of federal land and even repealed the Supreme Court's decision in *United States v. Midwest Oil Company*.²⁵⁰

In *Midwest Oil Company*, the Supreme Court held that congressional delegation of power to the president can be found where Congress has acquiesced to prior related executive actions.²⁵¹ The Court concluded that congressional acquiescence to 109 executive orders establishing or enlarging military reservations, 99 executive orders establishing or enlarging Indian reservations, and 44 executive orders establishing bird refuges indicated acquiescence in an implied power to reserve public lands from development.²⁵² Because presidents had issued "a multitude of orders extending over a long period, and affecting vast bodies of land, . . . [and t]hese orders were known to Congress, as principal, and in not a single instance was the act of the agent disapproved" the court reasoned that, if Congress had objected to the withdrawals, it would not have allowed these "unauthorized

²⁴⁷ See James Rasband, *Stroke of the Pen, Law of the Land?*, 63 ROCKY MT. L. INST. 21, 21–22 (2017) (stating that Congress successfully amended the Antiquities Act on two occasions "without moving to limit the president's power either to proclaim or to revoke or to modify").

²⁴⁸ See S. Rep. No. 69-423 (1926); S. 3826, 68th Cong. (1925); S. 2703, 69th Cong. (1926); S. 3840, 68th Cong. (1925); H.R. 11357, 68th Cong. (1925); S. 4617, 71st Cong. (1930); H.R. 3990, 115th Cong. (2017). See also Ruple, *supra* note 221, at 38.

²⁴⁹ Ward, *supra* note 17, at 26.

²⁵⁰ See *id.*

²⁵¹ *U.S. v. Midwest Oil Co.*, 236 U.S. 459, 483 (1915).

²⁵² *Id.* at 470, 475 (noting that "[i]ts acquiescence all the more readily operated as an implied grant of power in view of the fact that its exercise was not only useful to the public but did not interfere with any vested right of the citizen").

acts . . . to be so often repeated as to crystallize into regular practice.”²⁵³ Therefore, inaction by Congress raised the presumption that “the withdrawals had been made in pursuance of its consent or of a recognized administrative power of the [president] in the management of public lands,” demonstrating “acquiescence . . . equivalent to consent to continue the practice until the power was revoked by some subsequent action by Congress.”²⁵⁴

Thus, by enacting FLPMA, Congress overruled the Supreme Court’s interpretation of implied executive authority.²⁵⁵ This is important because FLPMA explicitly eliminated the “implied authority of the [p]resident to make withdrawals and reservations resulting from [the] acquiescence of the Congress,” which commentators have often cited in an attempt to diminish the power of the Antiquities Act.²⁵⁶ To be clear, Congress’s enactment of the FLPMA did not revoke the president’s *Antiquities Act* power, which solely addresses the president’s authority to *designate* national monuments.²⁵⁷

Nonetheless, the Supreme Court has made clear that “[p]ast practice does not, by itself, create power.”²⁵⁸ Therefore, although presidents have reduced the size of national monuments in the past, that does not necessarily give current and future presidents the legal right to do so. Historical practice, however, is important for courts to analyze because courts “must hesitate to upset the compromises and working arrangements that the elected branches of Government themselves have reached.”²⁵⁹ A prime example of such an agreement was in *Medellin v. Texas*, where former President Bush argued that presidents had historically used their constitutional authority to make treaties and resolve disputes with foreign nations and could, therefore, act to incorporate the International Court of Justice’s decisions into binding domestic law.²⁶⁰ The Court, examining whether Congress had acquiesced to this specific action, found no evidence that it did.²⁶¹ Thus, the Court declined to find authority through Congress’s acquiescence to other uses of the president’s treaty and dispute resolution powers, which the Court viewed as

²⁵³ *Id.* at 475.

²⁵⁴ *Id.* at 481.

²⁵⁵ See Congressional Declaration of Policy, 43 U.S.C. § 1701.

²⁵⁶ Federal Land Policy and Management Act of 1976, 94 Pub. L. 579, 90 Stat. 2743 (1976); see, e.g., *Mountain States Legal Found. v. Bush*, 306 F.3d 1132, 1138 (D.C. Cir. 2002).

²⁵⁷ See generally National Park Service and Related Programs, 54 U.S.C. § 320301(a).

²⁵⁸ *Dames & Moore v. Regan*, 453 U.S. 654, 686 (1981).

²⁵⁹ *NLRB v. Canning*, 573 U.S. 513, 550 (2014).

²⁶⁰ *Medellin v. Texas*, 552 U.S. 491, 503 (2008).

²⁶¹ *Id.* at 532.

dissimilar.²⁶² Under this standard, courts must define any claim of congressional acquiescence in very narrow terms.²⁶³ Particularly, the president must show acquiescence to the action in the particular situation and not just a generalized claim of congressional acquiescence in an entire field.²⁶⁴

Third, the United States Constitution's Property Clause allocates exclusive authority to Congress to "dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States."²⁶⁵ However, Congress "may delegate this authority as it deems appropriate."²⁶⁶ Claims that the Antiquities Act, or the Biden Administration's 30 By 30 plan, is a "federal land grab"²⁶⁷ overlook the clear statutory and case precedent, which reflect that Congress has constitutionally delegated the power to designate monuments to the president and that the lands are already under Federal ownership.²⁶⁸ Courts have repeatedly upheld delegations of land as national monuments where the "[p]resident exercised . . . delegated powers under the Antiquities Act, and [the] statute include[d] intelligible principles to guide the [p]resident's actions."²⁶⁹ Therefore, the president may designate national monuments on federal land without violating the United States Constitution's Property Clause.²⁷⁰

On the other hand, the Antiquities Act does not expressly delegate presidential authority to *revoke* or *diminish* national monuments in the Antiquities Act; therefore, any significant reductions to a monument are likely per se unconstitutional. This is evidenced by *Utah Association of Counties v. Bush*, where the Utah District Court held that Congress may

²⁶² *Id.*; see *Dames & Moore v. Regan*, 453 U.S. at 686; see also *U.S. v. Midwest Oil Co.*, 236 U.S. 459, 474 (1915).

²⁶³ *Medellin*, 552 U.S. at 532.

²⁶⁴ *Id.* at 524-25.

²⁶⁵ U.S. CONST. Art. IV § 3, cl. 2.

²⁶⁶ *Utah Ass'n of Ctys. v. Bush*, 316 F. Supp. 2d 1172, 1191 (D. Utah 2004); see *Whitman v. Am. Trucking Ass'ns*, 531 U.S. 457, 472 (2001).

²⁶⁷ See *Remarks by President Trump at Signing of Executive Order on the Antiquities Act*, TRUMP WHITE HOUSE ARCHIVES (Apr. 26, 2017), <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-president-trump-signing-executive-order-antiquities-act/> [<https://perma.cc/T8RG-ENDY>] (suggesting the "massive federal land grab . . . [has] gotten worse and worse and worse, and now we're going to free it up, which is what should have happened in the first place. This should never have happened.").

²⁶⁸ See, e.g., *Mountain States Legal Found. v. Bush*, 306 F.3d 1132, 1135 (2002).

²⁶⁹ *Id.* at 1137.

²⁷⁰ *Supra* note 8.

delegate its authority as it deems appropriate.²⁷¹ However, because Congress included no grant of presidential authority to *revoke or substantially diminish* national monuments in the text of the Antiquities Act, it is likely that the power was not delegated.

E. Recent Monument Reductions and President Biden's Conservation Actions

The largest, and most recent, reduction to a national monument involved Grand Staircase-Escalante and Bears Ears. Former President Clinton designated Grand Staircase-Escalante as a national monument with 1.7 million acres.²⁷² In 2017, former President Trump reduced the size of the monument via Executive Order 13792, which directed the Secretary of the Interior to review all national monument designations since 1996 that were greater than 100,000 acres.²⁷³

In response, Secretary Zinke claimed that previous presidents arbitrarily defined object protection in national monuments by utilizing objects such as “viewsheds” and “ecosystems” to circumvent the legislative process, thereby failing to make the land available for economic development.²⁷⁴ In essence, Secretary Zinke concluded that previous presidents failed to comply with the requirement that monuments be “the smallest area compatible with the proper care and management of the

²⁷¹ Utah Ass'n of Ctys. v. Bush, 316 F. Supp. 2d 1172, 11991 (D. Utah 2004) (holding that “the non-delegation doctrine is not violated, nor is the Property Clause, which has repeatedly been construed as allowing Congress to delegate its authority to the [E]xecutive and [J]udicial [B]ranches”).

²⁷² Establishment of the Grand Staircase-Escalante National Monument, 61 Fed. Reg. 50223 (Sep. 18, 1996); see *Remarks Announcing the Establishment of the Grand Staircase-Escalante National Monument at Grand Canyon National Park, Arizona*, AM. PRESIDENCY PROJECT (Sept. 18, 1996), <https://www.presidency.ucsb.edu/documents/remarks-announcing-the-establishment-the-grand-staircase-escalante-national-monument-grand> [<https://perma.cc/TS7T-Y8S8>] (quoting former President Clinton as saying “[i]n protecting it, we live up to our obligation to preserve our natural heritage. We are saying very simply, our parents and grandparents saved the Grand Canyon for us; today we will save the grand Escalante Canyons and the Kaiparowits Plateaus of Utah for our children. Sometimes progress is measured in mastering frontiers, but sometimes we must measure progress in protecting frontiers for our children and all children to come”).

²⁷³ Modifying the Grand Staircase-Escalante National Monument, 82 Fed. Reg. 58089 (Dec. 4, 2017); Review of Designations Under the Antiquities Act, 82 Fed. Reg. 20429 (Apr. 26, 2017).

²⁷⁴ Ryan Zinke, *Final Report Summarizing Findings of the Review of Designations Under the Antiquities Act*, DEP'T INTERIOR, at 7, https://www.doi.gov/sites/doi.gov/files/uploads/revised_final_report.pdf [<https://perma.cc/3QMF-7XRD>].

objects” in the monuments and that some designations were “likely politically motivated.”²⁷⁵ Therefore, Secretary Zinke recommended former President Trump use his “lawful exercise of . . . discretion granted by the Act” to amend or revise the boundaries of ten national monuments.²⁷⁶ In pertinent part, Secretary Zinke suggested:

The Act has been used to designate or expand national monuments on Federal lands more than 150 times. It has also been used at least 18 times by [p]residents to reduce the size of 16 national monuments, including 3 reductions of the Mount Olympus National Monument by Presidents Taft, Wilson, and Coolidge that cumulatively reduced the size of the 639,200-acre Monument by a total of approximately 314,080 acres, and a reduction of the Navajo National Monument by President Taft from its original 360 acres to 40 acres. President Franklin Roosevelt also modified the reservation of the Katmai National Monument to change management of the Monument.²⁷⁷

Interestingly, unlike the previous proclamations by presidents which modified the boundaries of national monuments, former President Trump thoroughly explained the reductions to Grand Staircase-Escalante.²⁷⁸ Executive Order 13792, issued by former President Trump, stated that determining the appropriate protective area involves “examination of a number of factors, including the uniqueness and nature of the objects, the nature of the needed protection, and the protection provided by other laws.”²⁷⁹ Under this “factors test”—created by the president, not a court or Congress—the monument was not of any “unique or distinctive scientific or historic significance” because similar geologic features and archeological objects are prevalent throughout the region.²⁸⁰ The proclamation also claimed

²⁷⁵ *Id.* at 1–2. *But see* Utah Ass'n of Ctys. v. Bush, 316 F. Supp. 2d 1172, 1185 (D. Utah 2004) (stating “[f]or the judiciary to probe the reasoning which underlies this Proclamation would amount to a clear invasion of the legislative and executive domains”) (quoting U.S. v. George S. Bush & Co., 310 U.S. 371, 380 (1940)); Wyoming v. Franke, 58 F. Supp. 890, 896 (D. Wyo. 1945) (stating “[n]either can the Court take any judicial interest in the motives which may have inspired the Proclamation described as an attempt to circumvent the Congressional intent and authority in connection with such lands”).

²⁷⁶ Zinke, *supra* note 274, at 9–18.

²⁷⁷ *Id.* at 4.

²⁷⁸ *See* Modifying the Grand Staircase-Escalante National Monument, 82 Fed. Reg. 58089 (Dec. 4, 2017).

²⁷⁹ *Id.*

²⁸⁰ *Id.* at 58089–90.

that many of the objects in the original monument do not need to be protected because they are already adequately protected by other laws.²⁸¹ Consequently, the proclamation excluded 861,974 acres from Grand Staircase and divided it into three separate monuments: Grand Staircase, Kaiparowits, and Escalante Canyons.²⁸²

Bears Ears National Monument, another national monument, was dedicated by former President Obama and consisted of approximately 1.35 million acres.²⁸³ In 2017, and in a similar fashion as before, former President Trump modified Bear Ears by almost 85%, from 1.35 million acres to 201,876 acres.²⁸⁴ Again, former President Trump claimed that existing federal laws, like the Wilderness Act, FLPM, and the National Forest Management Act adequately protected many of the objects and areas identified in the original monument.²⁸⁵ The history of the Grand Staircase-Escalante and Bears Ears National Monuments serve as a reminder that future presidents could significantly reduce national monuments by predecessors, at least based on current case law.

However, during his first year as president, President Biden restored the lands of both national monuments to be consistent with Obama's executive order.²⁸⁶ President Biden has designated additional national

²⁸¹ *Id.* at 58090.

²⁸² *Id.* at 58091-93; see generally *Grand Staircase-Escalante National Monument and Kanab-Escalante Planning Area, Utah*, BUREAU LAND MGMT. (Feb. 2020), https://www.blm.gov/sites/blm.gov/files/Utah_GSENM_Infographic.pdf [<https://perma.cc/NWS9-PHV6>].

²⁸³ Establishment of the Bears Ears National Monument, 82 Fed. Reg. 1139, 1143 (Dec. 28, 2016).

²⁸⁴ Nadja Popovich, *Bears Ears National Monument Is Shrinking. Here's What Is Being Cut*, N.Y. (Dec. 8, 2017), <https://www.nytimes.com/interactive/2017/12/08/climate/bears-ears-monument-trump.html> [<https://perma.cc/3Y4K-H5CC>].

²⁸⁵ Modifying the Bears Ears National Monument, 82 Fed. Reg. 58081, 58085 (Dec. 8, 2017).

²⁸⁶ Bears Ears National Monument, 86 Fed. Reg. 57321 (Oct. 15, 2021); see *Fact Sheet: President Biden Restores Protections for Three National Monuments and Renews American Leadership to Steward Lands, Waters, and Cultural Resources*, WHITE HOUSE (Oct. 7, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/10/07/fact-sheet-president-biden-restores-protections-for-three-national-monuments-and-renews-american-leadership-to-steward-lands-waters-and-cultural-resources/> [<https://perma.cc/WW8N-T2Q6>]; *President Biden Signs Historic Proclamation to Restore and Expand the Bears Ears National Monument*, NAVAJO NATION (Oct. 8, 2021), <https://www.navajonnsn.gov/News%20Releases/OPVP/2021/Oct/FOR%20IMMEDIATE%20RELEASE%20-%20President%20Biden%20signs%20historic%20proclamation%20to%20restore%20>

monuments as well. The first national monument President Biden designated was the Camp Hale – Continental Divide National Monument in Colorado, a 53,804-acre monument.²⁸⁷ The monument was designated to “honor our nation’s veterans, Indigenous people, and their legacy by protecting this Colorado landscape.”²⁸⁸ The second national monument that President Biden designated was Avi Kwa Ame in Nevada, known as “Spirit Mountain,” which is considered sacred by a dozen tribes.²⁸⁹ The 506,814-acre monument was dedicated to “honor Tribal Nations and Indigenous peoples,” protect “one of the world’s largest Joshua tree forests, and provide continuous habitat or migration corridors for species such as the desert bighorn sheep, desert tortoise, and Gila monster.”²⁹⁰ The third national monument President Biden designated was Castner Range in Texas, a former Army artillery facility.²⁹¹ The 6,600-acre national monument was designated to “protect the cultural, scientific and historic objects found within the monument’s boundaries, honor our veterans, servicemembers, and Tribal Nations, and expand access

and%20expand%20the%20Bears%20Ears%20National%20Monument.pdf [https://perma.cc/7V2A-635Z] (praising the “historic signing of the proclamation and restoration of the Bears Ears National Monument” as a “victory for our people, our ancestors, and future generations” because it is “home to many of our historical and cultural sites, plants, water, traditional medicines, and teachings for our people”); *BLM, Forest Service and Five Tribes of the Bears Ears Commission Commit to Historic Co-management of Bears Ears National Monument*, U.S. DEP’T INTERIOR (June 21, 2022), <https://www.doi.gov/pressreleases/blm-forest-service-and-five-tribes-bears-ears-commission-commit-historic-co-management> [https://perma.cc/NYP6-9249] (detailing the Inter-governmental Cooperative Agreement between the Ute Mountain Ute Tribe, Navajo Nation, Ute Indian Tribe of the Uintah Ouray, Hopi Nation, and Pueblo of Zuni, in a historic and unprecedented agreement to share management responsibilities for the Bears Ears National Monument).

²⁸⁷ *FACT SHEET: President Biden Designates Camp Hale – Continental Divide National Monument*, WHITE HOUSE (Oct. 12, 2022), <https://www.whitehouse.gov/briefing-room/statements-releases/2022/10/12/fact-sheet-president-biden-designates-camp-hale-continental-divide-national-monument/> [https://perma.cc/U8NU-YZVN].

²⁸⁸ *Id.*

²⁸⁹ Ximena Bustillo, *Biden is Creating New National Monuments to Protect Land in Nevada and Texas*, NAT’L PUBLIC RADIO (Mar. 21, 2023, 5:50 PM), <https://www.npr.org/2023/03/21/1164885621/biden-national-monuments-nevada-texas> [https://perma.cc/YZP7-TXRE].

²⁹⁰ *FACT SHEET: President Biden Designates Avi Kwa Ame National Monument*, WHITE HOUSE (Mar. 21, 2023), <https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/21/fact-sheet-president-biden-designates-avi-kwa-ame-national-monument/> [https://perma.cc/L59N-H5FN].

²⁹¹ Bustillo, *supra* note 289; see Ellen Montgomery & Luke Metzger, *Castner Range Should be a National Monument*, ENV’T AMERICA (Mar. 26, 2022), <https://environmentamerica.org/articles/castner-range-should-be-a-national-monument/>.

to outdoor recreation on our public lands.”²⁹² The fourth, and most recent, national monument that President Biden designated was the Emmett Till and Mamie Till-Mobley National Monument, comprising 5.70 acres of land across three separate historic sites in Illinois and Mississippi.²⁹³ Through this designation, the Biden Administration seeks to “tell the story of the events surrounding Emmett Till’s murder, their significance in the civil rights movement and American history, and the broader story of Black oppression, survival, and bravery in America.”²⁹⁴ With these four new national monuments, which have a combined total of half a million acres of federal land, the Biden Administration has made progress towards accomplishing 30 By 30.

President Biden is reportedly in the process of designating a new national monument, a marine sanctuary, of “777,000 square miles of islands, reefs[,] and diverse marine life” around the Pacific Remote Islands southwest of Hawaii.²⁹⁵ It would be the largest marine sanctuary on the planet if designated and would accomplish half of the 30 By 30 conservation goal by exceeding 30% of marine land preservation.²⁹⁶

In summary, based on the evaluation of other statutes, legislative history, and prior legal opinions, it is likely that the president does not have the authority to outright abolish a national monument or weaken the protections afforded by a proclamation declared by a predecessor; however, presidents have previously downsized national monuments and will likely continue to do so, without clarification by courts and/or Congress, endangering the possibility of using the Antiquities Act to provide long-term protection to America’s natural lands. Despite this risk, the Biden Administration can successfully accomplish its 30 By 30 initiative and

²⁹² *FACT SHEET: President Biden Designates Castner Range National Monument*, WHITE HOUSE (Mar. 21, 2023), <https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/21/fact-sheet-president-biden-designates-castner-range-national-monument/> [https://perma.cc/DZ3W-KNYD].

²⁹³ *FACT SHEET: President Biden Designates Emmett Till and Mamie Till-Mobley National Monument*, WHITE HOUSE (July 25, 2023), <https://www.whitehouse.gov/briefing-room/statements-releases/2023/07/25/fact-sheet-president-biden-designates-emmett-till-and-mamie-till-mobley-national-monument/> [https://perma.cc/H9JJ-NXX5].

²⁹⁴ *Id.*

²⁹⁵ Bustillo, *supra* note 289; see *FACT SHEET: Biden-Harris Administration Takes New Action to Conserve and Restore America’s Lands and Waters*, WHITE HOUSE (Mar. 21, 2023), <https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/21/fact-sheet-biden-harris-administration-takes-new-action-to-protect-america-lands-and-waters/> [https://perma.cc/SP6V-HA9V].

²⁹⁶ Bustillo, *supra* note 289; see *supra* note 7.

preserve land across America by utilizing the Antiquities Act and complying with Congress's broad delegation of authority to act expeditiously in protecting America's natural resources and heritage.

CONCLUSION

Congress enacted the Antiquities Act in 1906, delegating sole discretion to the president of the United States to designate land within Federal ownership, with an object of historic or scientific interest, and of the smallest size compatible, as national monuments. Since courts have been able, thus far, to interpret Congress's delegation of power, the Antiquities Act needs no revisions. The president already has the authority, based on current precedent, to use the Antiquities Act to designate the lands needed to achieve the 30 By 30 goal without modification.

To address the urgent and existential threat of global warming facing humanity, the Executive Branch must take proactive measures to safeguard America's interests, allies, and citizens. The Antiquities Act, which encourages national monuments designation for historic or scientific interest, presents a viable avenue to advance the 30 By 30 plan. Achieving the Biden Administration's goal of conserving 30% of U.S. lands and oceans by 2030, would require designating an additional 440 million acres of land and 123 million acres of marine land. Moreover, the expedited accomplishment of 30 By 30 would depend on the continued cooperation of individual states or support from the United States Congress. Nonetheless, such conservation efforts would not only preserve America's remaining wild places and natural resources but also protect the health and well-being of Americans from the deadly threats posed by climate change and other man-made disasters.