

POLLUTERS PARADISE: THE DARK CANON OF THE UNITED STATES SUPREME COURT IN POLLUTION CONTROL LAW

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This Article is the last in a series of four articles exploring the Supreme Court's destructive legacy on environmental protection in the United States. This Article specifically explores the relationship between the Supreme Court and pollution through the lens of four landmark cases. Perhaps unsurprisingly, these cases together evince the Court's tendency to distort both facts and law to reach outcomes that will benefit industrial polluters and emitters alike.

*In the first case, *Coeur Alaska, Inc. v. Southeast Alaska Conservation Council*, the Court disregarded EPA regulations banning the discharge of toxic materials into waters to approve a pollution-heavy mining operation. In the second case, *Michigan v. EPA*, the Court struck down the EPA's attempts to regulate coal plants for failure to consider the costs, despite the absence of any statutory direction to do so. In the third case, *West Virginia v. EPA*, the Court stalled meaningful climate change regulation by granting West Virginia's extraordinary request to stay the case itself. Finally, the Article discusses *Juliana v. United States*, a case whose turbulent history led it to the Supreme Court twice, and which was ultimately led to its defeat in the Ninth Circuit.*

This Article critiques the Court's reasoning in each of these cases—demonstrating the at-times Olympian level of mental gymnastics the Court employs to avoid embracing pollution control at any cost. While some read these cases as the Court fashioning the United States into a kind of paradise for polluters, the reader is invited to contemplate these cases and decide for yourself.

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INTRODUCTION

In the early 1970's a widely-perceived crisis in air quality, toxic wastes, and rivers that caught fire produced a suite of pollution control

laws that led the world.¹ The Congress left little doubt or room for evasion in the statutes it confected, some running hundreds of pages, each seeking to abate and, where possible, eliminate pollution. In the decade that followed, the Supreme Court supported these laws, and gave considerable leeway for the way the Environmental Protection Agency (EPA) and other agencies interpreted and applied them.

Starting in 1980, the politics of the country and the Court shifted dramatically. Gone was deference to agency decision making, particularly decisions of the EPA, which were probed with deep suspicion. The four cases described in this article, although quite different from one another, take this attitude to an extreme which frustrates Congress's goals and prevents proper implementation of environmental legislation.

In the first case, *Coeur Alaska, Inc. v. Southeast Alaska Conservation Council*,² the Court approved a misbegotten mining operation despite EPA regulations banning the discharge of toxic materials into waters of the United States.³ On the basis of an unpublished memorandum by an EPA functionary who had no idea of the consequences of her decision, the Court found that a far more permissive regulation by the Army Corps of Engineers (“the Corps”) controlled.⁴ One consequence was that the company managed to make a profit only because its toxic discharges proved to be free. Another was the utter destruction of a pristine alpine lake.

The second case, *Michigan v. EPA*,⁵ involved EPA regulation of coal-fired power plants, and in particular their discharges of mercury, one of the most dangerous toxins known to man.⁶ Stymied by coal interests for decades over coal toxins, in 1990 Congress developed a logical, three-step plan for EPA to assess the harm from these emissions, assess standards to best eliminate them, and then promulgate the standards.⁷ EPA did so, twice, in multi-year, completely transparent decisions

1. Matthew Green, *When Rivers Caught Fire: A Brief History of Earth Day*, KQED (Apr. 22, 2022), <https://www.kqed.org/news/11813529/when-rivers-caught-fire-a-brief-history-of-earth-day> [https://perma.cc/VC6Q-LUCD].

2. 557 U.S. 261 (2009).

3. *Id.* at 277–78.

4. *Id.* at 283–85 (deferring to the agency’s interpretation of the regulatory regime as described in a 2004 memorandum written by Diane Regas, then-Director of the EPA’s Office of Wetlands, Oceans, and Watersheds).

5. 135 S. Ct. 2699 (2015).

6. *Id.* at 2704–05.

7. *Id.* at 2715.

resulting in a mercury ban.⁸ Many power companies supported the ban, and others were coming around, when the Supreme Court stepped in.⁹ Justice Scalia, writing for a 5–4 majority, invalidated the rule for inadequate consideration of costs, although costs were not mentioned in the statute.¹⁰ Thousands of Americans have since died from coal mercury emissions.¹¹

The third case, *West Virginia v. EPA*,¹² involved the Obama administration’s Clean Power Plan (CPP), a multi-year effort providing states with flexible approaches, deadlines, and possible exceptions for reducing carbon emissions.¹³ West Virginia, backed by the carbon industries, filed suit in the D.C. Circuit Court of Appeals, and applied for an immediate stay.¹⁴ The court denied the stay because the facts of the case had yet to be developed, and ordered the matter for early trial.¹⁵ West Virginia and its fellow plaintiffs then petitioned the Supreme Court directly to stay the case itself, a highly unusual request and one guided by no procedural rules at all.¹⁶ Chief Justice Roberts then granted the stay. With this delay, the CPP was overtaken by the Trump administration, followed by a weaker rule and litigation. Climate change regulation has remained stalled to this day.

The fourth and last case in this series is *Juliana v. United States*,¹⁷ the “children’s climate change case” which, given the astonishing rate of global warming and its attendant floods, fires, and related disasters,

8. *Id.* at 2716.

9. *Erasing Lives: The EPA’s Crooked Scheme Could Cause Thousands to Lose Their Lives*, EARTHJUSTICE (May 13, 2021), <https://earthjustice.org/features/mercury-air-toxics-standards-report-people-stories> [<https://perma.cc/3ND2-RA2F>].

10. 135 S. Ct. at 2712.

11. Ashley Maiolatesi, *Mercury Pollution from Coal Plants Is Still a Danger to Americans. We Need Stronger Standards to Protect Us*, ENV’T DEF. FUND (Feb. 22, 2022), <https://blogs.edf.org/climate411/2022/02/22/mercury-pollution-from-coal-plants-is-still-a-danger-to-americans-we-need-stronger-standards-to-protect-us> [<https://perma.cc/5KH4-SNMS>].

12. No. 20-1530, slip op. (June 30, 2022).

13. *Id.* at 7.

14. Motion for Stay and for Expedited Consideration of Petition for Review, *West Virginia v. EPA*, 2019 BL 375517, No. 15-01363 (D.C. Cir. Oct. 23, 2015).

15. Per Curiam Order, *West Virginia*, 2019 BL 375517 (No. 15-01363).

16. *West Virginia v. EPA*, 136 S. Ct. 1000, 1000 (2016); *see also West Virginia*, slip op. at 3 (Kagan, J., dissenting).

17. 947 F.3d 1159 (9th Cir. 2020).

may be the most important pollution control litigation in history.¹⁸ The case, vigorously opposed by the government and the carbon industries, has run a roller-coaster of opinions and venues at all levels, twice to the Supreme Court and back, which ultimately led to the Ninth Circuit denying the petition for a rehearing *en banc*.¹⁹

Emerging from these cases, one is struck by the Court's negativity toward even the idea of pollution control, running it through a gauntlet of obstacles of the Court's own confection. This said, it is up to the reader to read on and decide for yourself. I hope you enjoy the journey.

I. COEUR ALASKA

*“There’s gold, and its haunting and haunting;
It’s luring me on as of old;
Yet it isn’t the gold that I’m wanting
So much as just finding the gold.”*

— Robert Service, “The Spell of the Yukon”²⁰

A. *Simply Gold*

The history of America was written in gold. Christopher Columbus brought traces home from Cuba to show the King and Queen that his voyage had been successful.²¹ The brutal Spanish incursions that followed were driven by their vision of “El Dorado”²² which, like Atlantis, existed only in the mind. The 1848 discovery of gold at Sutter’s Mill in California triggered a tidal wave of fortune seekers to the shores of the Pacific, forever changing the balance of America, and

18. See, e.g., *id.* at 1165 (describing the plaintiffs as “twenty-one young citizens, an environmental organization and a ‘representative of future generations’”); McKayla Haack, *Missoula Community Members Take Part in Nationwide Rally*, KECI (Oct. 29, 2018), <https://nbcmontana.com/news/local/missoula-community-members-take-part-in-nationwide-rally> [<https://perma.cc/QE9C-S695>].

19. 947 F.3d 1159 (9th Cir. 2020), *denial en banc*, 986 F.3d 1295 (9th Cir. 2021).

20. ROBERT SERVICE, *The Spell of the Yukon*, in *THE COMPLETE POEMS OF ROBERT SERVICE* 3–5 (Dodd, Mead & Co. 1947).

21. *Columbus Reports on His First Voyage, 1493*, THE GILDER LEHRMAN INST. OF AM. HIST., <https://ap.gilderlehrman.org/resource/columbus-reports-his-first-voyage-1493> [<https://perma.cc/7PX8-TVU8>].

22. JOHN HEMMING, *THE SEARCH FOR EL DORADO* 15 (1978).

bringing a new language and a new power in the West.²³ Then came Alaska.

The Alaskan boom came slowly. It was a long way away from the rest of the country, and it was incredibly harsh on those who set out to find their fortunes. In 1896, two Tagish First Nation members, Jim Mason and Dawson Charlie, found gold in the Yukon's Rabbit Creek, immediately renamed "Bonanza Creek."²⁴ The name was a false promise. Approximately 100,000 men abandoned their lives back East to make the journey.²⁵ Only 30,000 arrived.²⁶ For these few the labor was brutal, standing knee deep in icy streams to sift pebbles from the bottom, hoping for an occasional glint of yellow. The others had either died en route or lost heart on the mountain passes that were so frozen and steep that they required 1,500 steps to be carved into the ice, and killed more than 3,000 pack horses.²⁷

In the end, the Klondike boom made fortunes for a few, good livings for others selling dry goods and whiskey for small pokes of gold, and ruined the rest. From this hardship a particular culture evolved, indelibly macho (there were few women on the trail and they did not pan the streams), and remains today in the stories of Jack London,²⁸ the poetry of Robert Service,²⁹ and such songs as "North, to Alaska."³⁰ To the Alaskan mind, these miners, most of them miserable failures, were heroes conducting an heroic trade. This mystique would mark the state's reception to the Coeur Alaska gold mine, the *casus belli* to follow.³¹

23. JUSTIN D. GARCIA, *California Gold Rush*, in MULTICULTURAL AMERICA: A MULTIMEDIA ENCYCLOPEDIA, 415–18 (Carlos E. Cortés ed. 2013).

24. *Klondike Gold Rush*, HIST. CHANNEL (Jan. 17, 2018), <https://www.history.com/topics/westward-expansion/klondike-gold-rush> [<https://perma.cc/ZCD9-FU6N>] [hereinafter *Klondike I*]; *The Klondike Gold Rush*, UNIV. OF WASH. (Feb. 4, 2002), <https://content.lib.washington.edu/extras/goldrush.html> [<https://perma.cc/M7UE-VXBF>] [hereinafter *Klondike II*].

25. *Klondike I*, *supra* note 24.

26. *Klondike II*, *supra* note 24.

27. *Klondike I*, *supra* note 24.

28. JACK LONDON, *THE CALL OF THE WILD* (1903).

29. SERVICE, *supra* note 20.

30. JOHNNY HORTON, *NORTH TO ALASKA* (Columbia Recs. 1960).

31. Indeed, the State of Alaska joined Coeur Alaska in its petition to the Supreme Court. *Coeur Alaska, Inc. v. Se. Alaska Conservation Council*, 557 U.S. 261, 265 (2009). While it was certainly supporting jobs and tax revenues, there is yet more to gold mining in Alaska.

All of this begs a question about this extraordinary activity surrounding a single mineral: gold. What is it good for? The Holy Bible refers to it over 400 times,³² including references to the streets of Heaven being paved with gold.³³ Not very good streets, those. They would buckle within in weeks under the pounding of hooves and carts. The lion's share, over eighty percent, of the world's gold is extracted these days by mercury and cyanide³⁴ and melted into rings and necklaces to demonstrate love, wealth, and power.³⁵ The rest lies in the vaults of investors and banks, where it largely remains.³⁶

What we are left with is a myth. Something we value because we value it. Something we can display like King Ptolemy of Ancient Egypt who ordered a parade of animals "preceded by a group of men carrying a gilded phallus 180 feet tall."³⁷

Before one gets to the law, this is what *Coeur Alaska* was all about.

B. Law to Apply

Two federal laws were in play in *Coeur Alaska*, although there should only have been one. In 1972 the Congress completely overhauled the nation's approach to water pollution.³⁸ The Clean Water Act³⁹ (CWA) vested federal authority in the Environmental Protection Agency (EPA or "the Agency") which, under section 301, would issue permits for pollution dischargers based on the best available technology (BAT) to be found.⁴⁰ These technology standards were to be regularly upgraded

32. PETER L. BERNSTEIN, *THE POWER OF GOLD* 11 (2000).

33. *Revelation* 21:18 ("and the city was pure gold"); *Revelation* 21:21 ("And the main street was pure gold, as clear as glass.").

34. BERNSTEIN, *supra* note 32, at 229; B. Yarar, *Long Term Persistence of Cyanide Species in Mine Waste Environments*, in *TAILINGS AND MINE WASTE 2002: PROCEEDINGS OF THE 9TH INTERNATIONAL CONFERENCE*, FORT COLLINS, COLORADO 197 (2002).

35. BERNSTEIN, *supra* note 32, at 10.

36. *Distribution of Global Gold Demand by Industry 2019*, TUL. UNIV. (on file with author) (showing that of the top three sectors, approximately fifty percent of demand is for adornment, thirty percent for investment, and fifteen percent by central banks).

37. BERNSTEIN, *supra* note 32, at 3.

38. 33 U.S.C. §§ 1251–1389.

39. *Id.*

40. See OLIVER A. HOUCK, *THE CLEAN WATER ACT TMDL PROGRAM: LAW, POLICY, AND IMPLEMENTATION* 3 (2d ed. 2002) (describing failure of state-based federal water pollution control programs and their rejection by the Congress in 1972 in favor of a new approach based on Environmental Protection Agency (EPA) permits and technology standards). For the key elements of this approach see 33 U.S.C.

toward the stated goal of “zero discharge.”⁴¹ The BAT approach produced instant results from even preliminary BAT standards, lowering discharge rates by more than a third, and improving water quality by the same amount.⁴² BAT worked.

The Agency then began a decades-long process for determining the final BAT standards for more than 100 categories and subcategories of industries.⁴³ Where pollution discharges could be completely eliminated, the permitted BAT levels were just that: zero discharge.⁴⁴ A classic case was where these wastes could either be recycled or stored on land where they did not reach the water.⁴⁵

Gold mining turned out to be a priority for the development of BAT because the toxins involved were so particularly lethal. Since this BAT was for a new source, the Coeur Alaska mine . . . it was to require the most exigent restrictions of all.⁴⁶ After an extended process of rulemaking involving the mining industry itself, EPA determined that the wastes from gold mining could and should be disposed of on land.⁴⁷ Zero discharge, in action.

Unfortunately, BAT levels determined by the EPA is inky half the story because the Corps also plays a critical role in the administration of the CWA. In adopting the CWA, however, its sponsors needed the

§ 1251(a)(1) (discharges to be “eliminated” by 1985); *id.* § 1311 (permit requirement) and § 1314(b) (effluent limitations based on Best Available Technology). Particularly pertinent to the case at hand, while preliminary standards called for a benefit-cost analysis, the BAT determination required only a “consideration” of “cost[s].” *See id.* § 1314(b)(1)(B). Industry was not allowed to claim, “too expensive.”

41. *See Rybachek v. EPA*, 904 F.2d 1276, 1298 (9th Cir. 1990) (detailing placer mining regulations).

42. *See EPA, WATER QUALITY IMPROVEMENT STUDY* 7 tbl. 1-2, 31 tbl. 3-1(1989) (showing a drop in coal mining sediment discharges from over 225 million tons per day to 1.6 million and concomitant improvements in receiving water quality by over one-third).

43. *See HOUCK, supra* note 40, at 44 n.144 (listing industry challenges to every EPA standard promulgated).

44. *See Rybachek*, 904 F.2d. at 1298 (describing “zero discharge” as the desired standard).

45. *Kennecott v. EPA*, 780 F.2d 445, 454 (4th Cir. 1985) (holding that an EPA requirement that a blast furnace discharge no waste water was not an abuse of discretion when other blast furnaces achieved zero discharge by recycling 100% of their waste water).

46. *See* 33 U.S.C. § 1316(a) (requiring the EPA Administrator to adopt federal performance standards for new sources).

47. *See* 40 C.F.R. § 440.104(a) (2021) (describing that the EPA new source performance standards (NSPS) standard for gold mining is set at zero discharge).

support of southern Senators, who were deeply suspicious of this new agency with the word “environmental” in its name, and deeply wedded to the Army Corps of Engineers whose dredged canals and levees served their constituents and allowed the Senators to funnel massive amounts of construction money back home.⁴⁸

The ensuing debate resulted in a compromise, a hybrid program to regulate the dredge and fill of waters of the United States. Under CWA section 404 the Corps would issue the permits,⁴⁹ but it would do so under EPA guidelines that required the use of alternative sites where available⁵⁰ and in compliance with water quality standards that, of particular importance to the case that followed, forbade filling if it would cause “significant degradation” to the nation’s waters.⁵¹ EPA was also authorized to veto activities it found to be unreasonably damaging,⁵² but there was less here than met the eye. For political reasons the vetoes were as scarce as hens’ teeth, and some administrations simply refused to issue them at all.⁵³ The Bush administration was one.

In *Coeur Alaska* the company received a Corps permit to discharge 210,000 gallons of process wastewater daily, and deposit 4.5 million tons of mining tailings as a “slurry” into Lower Slate Lake, in effect burying it.⁵⁴ The lake was fifty-one feet deep,⁵⁵ which, after receiving this volume of wastes, would rise fifty feet.⁵⁶ Indeed, it would cease to be a lake at all. The discharges themselves would also contain aluminum, mercury and lead, each a significant toxin in its own right.⁵⁷ The government acknowledged that Coeur Alaska’s discharges would

48. See WILLIAM L. WANT, LAW OF WETLANDS REGULATION 2-7 (1990).

49. 33 U.S.C. § 1344(a).

50. *Id.* § 1344(b) (authorizing EPA guidelines); 40 C.F.R. § 230.10(a) (explaining the guideline no-alternative requirement).

51. 40 C.F.R. § 230.10(c).

52. 33 U.S.C. § 1344(c).

53. *Clean Water Act Section 404(c) “Veto Authority,”* EPA (2022), <https://www.epa.gov/sites/default/files/2016-03/documents/404c.pdf> [<https://perma.cc/2Q8X-KMQK>]. Over the forty-eight years of the CWA, the Agency has issued only thirteen vetoes. *Id.* Given the momentum behind wetland development, the political price of a veto to the Agency and the Administration is steep.

54. *Coeur Alaska, Inc. v. Se. Alaska Conservation Council*, 557 U.S. 261, 296–97 (2009) (Ginsburg, J., dissenting).

55. *Id.* at 267 (majority opinion).

56. *Id.* at 297 (Ginsburg, J., dissenting).

57. *Id.*

kill “all of the lake’s fish” and “nearly all of its other aquatic life,” but that they would “later” be replaced to restore “equivalent productivity.”⁵⁸ It would take a remarkable fish indeed to survive this onslaught. No mention was made of the toxins.

Nor are we done yet. The company would construct a tall dam along Lower Slate’s far shore to protect its outlet stream from the “transformed” lake’s massive discharges.⁵⁹ The discharges themselves would be cleaned by “purification systems” before being released into the natural world.⁶⁰ No mention was made of what kind of purification system, nor whether it had worked elsewhere on these wastes, nor was there any assurance that it would be installed at all.⁶¹

In effect, Coeur Alaska, with Corps and EPA permission, was burying a lake—exactly the kind of thing the Clean Water Act intended to prevent.

C. *The Litigation Begins*

The lawsuit was brought by the Southeast Alaska Conservation Commission (SEACC), which was appalled by the loss of a pristine lake in a pristine environment to such an enterprise.⁶² The district court dismissed the case on summary judgement, approving the mine’s permit under section 404 and rejecting the application of section 301.⁶³ The amount of attention the district court actually gave to this issue may be reflected by the judge’s decision not to include any mention of section 301 in their opinion.⁶⁴

The Ninth Circuit Court of Appeals thought otherwise, holding unanimously that a Corps permit in this case violated section 301 of the Act by ignoring EPA’s gold mining-specific new source standard: zero discharge.⁶⁵ The application of section 301 better fit Congress’s

58. *Id.*; see Brief for the Federal Respondents at 10–11, *Coeur Alaska*, 557 U.S. 261 (Nos. 07-984 and 07-990) (specifying “at least equivalent productivity”).

59. *Coeur Alaska*, 557 U.S. at 268 (majority opinion).

60. *Id.*

61. *See id.* (describing how the purified lake water would flow to a stream but not the process of purification itself).

62. *Se. Alaska Conservation Council v. U.S. Army Corps of Eng’rs*, 486 F.3d 638, 643 (9th Cir. 2007), *rev’d sub nom. Coeur Alaska, Inc. v. Se. Alaska Conservation Council*, 557 U.S. 261 (2009) (referencing the District Court opinion).

63. *Se. Alaska Conservation Council v. U.S. Army Corps of Eng’rs*, No. 1:05-cv-00012-JKS, 2006 WL 5483382, at *6 (D. Alaska Aug. 3, 2006), *rev’d*, 486 F.3d 638.

64. *Id.*

65. *Se. Alaska Conservation Council*, 486 F.3d at 655.

stated intent “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” that were here under siege.⁶⁶ It also better fit the structure of the Act, in which EPA played the dominant role.⁶⁷ Permit vacated.

Coeur Alaska then petitioned for review of the decision en banc, which was also denied.⁶⁸ This decision was also unanimous.⁶⁹ One would think that at this point the game was over, but there was one more card to play and the ideal player to play it.

Theodore Olson was a highly regarded Washington lawyer specializing in cases at the Supreme Court level, where he enjoyed a remarkable seventy-five percent success rate.⁷⁰ He was best known for his representation of George W. Bush in the challenge to his election results in Florida.⁷¹ With the aid of a five-four majority, all Republican, their candidate on the line, he won an opinion so dubious that the Court enjoined its use as a precedent.⁷² Nonetheless, Olson had won and now had a President quite beholden to him.

After losing large in the Ninth Circuit, Coeur Alaska hired Olson to represent it before the High Court.⁷³ When he did, he was before another Republican majority⁷⁴ that would decide the case his way,

66. See 33 U.S.C. § 1251(a) (declaring the goals and policy objectives of the Act).

67. See *id.* § 1251(d) (assigning responsibility for administering the Act to the EPA). The appellate court’s finding of EPA dominance within the CWA has ample precedent within the 404 program including the threshold determination of whether an area was a wetland at all. See Oliver A. Houck, *Rescuing Ophelia: Avoyelles Sportsmen’s League and the Bottomland and Hardwood Controversy*, 81 MISS. L.J. 1473, 1515–17 (2012) (describing the Opinion of the Legal Advisor to the U.S. Department of Justice, Benjamin Civiletti that, as between the two agencies, under the *structure* of the Act EPA played the dominant role for such a pivotal decision).

68. Tom Waldo, *Court Refuses to Re-hear Kensington Mine Decision*, EARTHJUSTICE (Nov. 2, 2007), <https://earthjustice.org/news/press/2007/court-refuses-to-re-hear-kensington-mine-decision> [<https://perma.cc/45H2-KD76>].

69. *Id.* (“None of the court’s 27 active judges agreed to re-hear the case.”).

70. Theodore B. Olson Biography, GIBSON DUNN, <https://www.gibsondunn.com/lawyer/olson-theodore-b> [<https://perma.cc/UFD4-VRPU>].

71. *Id.*

72. *Bush v. Gore*, 531 U.S. 98, 109 (2000) (per curiam) (“Our consideration is limited to the present circumstances, for the problem of equal protection in election processes generally presents many complexities.”); Jack M. Balkin, *Bush v. Gore and the Boundary Between Law and Politics*, 110 YALE L.J. 1407, 1407–09 (2001).

73. *Coeur Alaska, Inc. v. Se. Alaska Conservation Council*, 557 U.S. 261, 264 (2009).

74. The Court’s composition at the time included conservative Justices Alito, Thomas, Scalia, Kennedy, and Roberts. *Id.*

largely on the grounds of an internal, unpublished memorandum by a mid-level EPA employee that was not intended to be disseminated outside of the agency.⁷⁵ Although the EPA employee may not have been aware of her memo's significance, it gave away the store.

D. The Supreme Court Rules

Coeur Alaska was a case that did not have to be. The U.S. Solicitor General had submitted a brief urging the Court to reject Attorney Olson's petition for certiorari on the (quite persuasive) grounds that the case was *sui generis*, there had never been one like it in the past, and it was unlikely to come up again.⁷⁶ Olson's argument prevailed, however, and the case was on.

Justice Kennedy's opinion for the majority got off on the wrong foot, and never found the way to the right one. Rather than deal with the Ninth Circuit's lengthy and well-reasoned opinion, it accepted the Corps jurisdiction as a starting point and went on to accept *Coeur Alaska*'s descriptions of its operations, alternatives, and mitigation measures, even if they were non-binding or void of detail.⁷⁷ The Lower Slate Lake "will be isolated" from the industry discharges;⁷⁸ the discharges "will be cleaned by purification systems;"⁷⁹ the company would "regularly monitor" these systems,⁸⁰ and it will restore the Lake when done.⁸¹ These statements were made as facts. Unfortunately, years later none of them had happened.

The Justice went on to frame the question of regulatory jurisdiction as a toss-up, without even alluding to the EPA primacy so important to the Ninth Circuit and to his dissenting colleagues.⁸² Either interpretation was possible. To favor the plaintiffs, he opined, would leave applicants wondering to which agency they should apply (though

75. *See id.* at 284, 286 (noting that the memo was not "subject to sufficiently formal procedures to merit Chevron deference").

76. *See* Brief for the Federal Respondents in Opposition at 6, 12, *Coeur Alaska, Inc.*, 557 U.S. 261 (Nos. 07-984 and 07-990).

77. *Coeur Alaska*, 557 U.S. at 269.

78. *Id.* at 268.

79. *Id.*

80. *Id.* at 270.

81. *Id.* at 269.

82. *Id.* at 281, 283 (noting the statute is "ambiguous" and agency regulations "do not give a definitive answer").

a simple phone call would resolve this question),⁸³ and leave them subject to “many hundreds” of EPA standards (when in any single case, such as gold mining, only one standard would apply).⁸⁴ The Justice was parading the horribles, though in fact they were not horrible at all.

What ended up swinging his opinion was the discovery of a memorandum from Diane Regas of EPA’s Wetlands Office concluding that EPA standards “such as those applicable to gold ore mining” did not apply to deposits into the “proposed impoundment [of Lower Slate Lake].”⁸⁵ There was no evidence that the memo, though it drew a legal conclusion, was vetted through EPA Office of Counsel.⁸⁶ Nor was it vetted through Administrative Procedure Act (APA) notice-and-comment rulemaking allowing other relevant agencies such as the U.S. Fish and Wildlife Service, the scientific community, and environmental groups to weigh in.⁸⁷ It was nonetheless “entitled to a measure of deference,” per Justice Kennedy, as it interpreted the Agency’s regulations.⁸⁸ Unsaid, perhaps because it would have been inconvenient, was that all agency interpretations of law with immediate effect require APA rulemaking.⁸⁹ To Justice Kennedy, whatever its basis in law, the memo was a statesmanlike compromise.

Unfortunately, it was anything but that, and Justice Kennedy’s rationales were highly disingenuous. He pointed to the fact that the memo did not invalidate EPA’s gold mining/zero discharge standard,⁹⁰ but it clearly did when it most mattered, in the first and only case of its kind. He also “preserve[d]” Corps authority to determine whether the discharge was “in the public interest,”⁹¹ which

83. *Id.* at 276–77; *see also id.* at 302 n.4 (Ginsburg, J., dissenting) (rebutting the presumed difficulty).

84. *Id.* at 277 (majority opinion).

85. *Id.* at 284 (alteration in original). Regas, who retired from EPA to join the Environmental Defense fund shortly after Coeur Alaska was decided, later defended her memo to the attorney who had represented the plaintiffs in the case, saying that Agency lawyers had told her this was the law, and that she had no idea that the CWA could be interpreted as Justice Ginsburg had in the dissent . . . favoring EPA jurisdiction. Then again, Ms. Regas was herself a lawyer.

86. *Id.* at 283–84.

87. *Id.* at 287.

88. *Id.* at 284.

89. *See* Keith Werhan, *PRINCIPLES OF ADMINISTRATIVE LAW* (2d ed. 2014) 281–82 (showing how informal notice and comment rulemaking is required where action creates legal rights); 5 U.S.C. § 553.

90. *Coeur Alaska*, 557 U.S. at 288.

91. *Id.* at 285.

unfortunately replaced a fixed standard with one so subjective it was no standard at all. The Corps also, he pointed out, had “significant expertise” in evaluating aquatic impacts,⁹² apparently unaware that this type of expertise was by law vested in EPA and that in this case the Corps had used its “expertise” only to deny or minimize the impacts themselves.⁹³

Justices Breyer and Scalia wrote concurrences basically to the effect that such issues are best left to the agencies, without bothering to mention what the CWA said, and why.⁹⁴ Justice Ginsburg along with Justices Stevens and Souter dissented, dissecting the Act as had the Ninth Circuit and finding its reasons persuasive.⁹⁵ As the Court read the Act, Justice Ginsburg wrote, Congress had “silently upended . . . its painstaking pollution-control scheme” based first and foremost on best available technology.⁹⁶ The use of waters of the United States as “settling ponds’ for harmful mining waste,” she concluded, was “antithetical to the text, structure, and purpose of the Clean Water Act.”⁹⁷

It was, indeed. In the end, the Supreme Court in *Coeur Alaska* conferred a water pollution decision on a development agency whose statutory authority, history, and expertise lay in building dikes and canals—an agency that had no standard for saying yes or no to private parties other than what it thought was in the public interest—in lieu of one with the mandate, history, expertise, and carefully developed standards for making such decisions, ones it made routinely every day.⁹⁸ In so doing, the Court stood the Clean Water Act on its ear. It had also put a huge question mark over the future of Lower Slate Lake.

E. Epilogue

The answer to Lower Slate Lake’s future was not long in coming. An EPA news release of August 8, 2019, revealed a shopping list of Coeur Alaska’s violations accrued over the previous five years, going to

92. *Id.*

93. *Id.*; see 33 U.S.C. § 1317(a)(2).

94. See *Coeur Alaska*, 557 U.S. at 291–92 (Breyer, J., concurring); see also, *id.* at 295 (Scalia, J., concurring).

95. *Id.* at 296–98, 303–04 (Ginsburg, J., dissenting).

96. *Id.* at 303.

97. *Id.* at 304.

98. *Id.* at 291–93 (Breyer, J., concurring).

virtually every aspect of the operation itself.⁹⁹ Obliging, in 2019 the State of Alaska relaxed its permit limits to authorize the discharge of residual acid rock into the Lake, which had been one of the EPA's bones of contention.¹⁰⁰ If the corporation had been doing anything to fulfill the representations on which Justice Kennedy relied in his opinion,¹⁰¹ it is not easy to see which ones. The Supreme Court had cut Coeur Alaska loose, the Corps of Engineers was out of the picture, and EPA was now left with after-the-fact remedies, holding the bag. Meanwhile, Coeur Alaska has applied for permits to double the size of its operation at Lower Slate Lake, which will greatly increase its discharges, require yet a higher retention dam to hold them, and end

99. *See EPA and Coeur Alaska Settle over Alleged Kensington Mine Pollution Discharges: Company Will Pay Fines After 2015 Inspection Reveals Violations of Multiple Environmental Rules*, EPA (Aug. 8, 2019), <https://www.epa.gov/newsreleases/epa-and-coeur-alaska-settle-over-alleged-kensington-mine-pollution-discharges> [https://perma.cc/SNY7-TDKR]. The violations listed included:

Unauthorized discharge of acid rock drainage into Lower Slate Lake; Improper operation and maintenance of sampling equipment; Multiple effluent sampling violations; Failure to develop a complete Stormwater Pollution Prevention Plan; Failure to repair a secondary containment structure for over a year that holds a majority of the facility's fuel; Failure to conduct required monitoring, assessments, inspections and trainings; Failure to use proper sample handling and analysis procedures; Failure to report releases of [toxic] nitrate compounds annually from 2013 to 2017. Mine water discharges that are not properly controlled and treated can harm water quality and aquatic life.

Id. *See also* Letter from Guy Archibald, Chief Scientist, Southeast Alaska Coalition Counsel, to Sylvia A. Kreel, Large Project Director, Alaska DNR Office of Project Management and Permitting (Aug. 21, 2020) (on file with author) (identifying chronic failings in pollution assessments, monitoring and reporting requirements). Alaska regulators apparently do not take the water quality of Lower Slate Lake very seriously.

100. *See supra* text accompanying notes 52–55, 64–66.

101. Telephone Interview with Guy Archibald Chief Scientist, Southeast Alaska Coalition Counsel (Sept. 20, 2020) (on file with author). *See also* Letter from Guy Archibald, Chief Scientist, Southeast Alaska Coalition Counsel, to Troy D. Heithecker, Acting Forest Supervisor, Tongass National Forest (Nov. 7, 2019) (on file with author) (describing the massive scope of the new proposal and, inter alia, its threat to Berner's Bay, an important fishery and recreation area, from "the almost certain eventual failure of the [Coeur Alaska] dam" holding a projected nine million tons of semi-liquid tailings by 2033).

any hope of the lake's recovery.¹⁰² There is no reason to believe this expansion will be denied.¹⁰³

The sacrifice of Lower Slate Lake was complete.

II. MICHIGAN V. EPA

“Researchers estimated that exposure to particulate matter from fossil fuel emissions accounted for 18 percent of total global deaths in 2018—a little less than 1 out of 5.”

—Leah Burrows, 2021¹⁰⁴

A. *The Other Side of Coal*

There may be no other substance on earth, natural or man-made, that kills more ways and more widely than coal. It was the bane of human health for centuries, made a sick bed of London, and ate into its limestone buildings like a cancer.¹⁰⁵ Those who mine coal have been crushed by wall failures, roof collapses, and explosions on a depressingly regular basis.¹⁰⁶ More than 100,000 workers have been killed in the mines, more than those lost in the Korean and Vietnam

102. *Public Notice No. POA-2020-00592-M9*, ALASKA DEP'T OF ENV'T CONSERVATION (Jan. 7, 2021), <https://dec.alaska.gov/media/22182/poa-2020-592-pn.pdf> [<https://perma.cc/77NU-XG8Y>].

103. Since this Article was written, the U.S. Forest Service has approved the permit. Elwood Brehmer, *Forest Service Approves 10-Year Extension for Southeast Gold Mine*, ALASKA J. COM., (Mar. 2, 2022, 9:23 AM), <https://www.alaskajournal.com/2022-03-02/forest-service-approves-10-year-extension-southeast-gold-mine> [<https://perma.cc/W3HM-87K5>].

104. Leah Burrows, *Deaths from Fossil Fuel Emissions Higher than Previously Thought: Fossil Fuel Air Pollution Responsible for More than 8 Million People Worldwide in 2018*, HARV. JOHN A. PAULSON SCH. OF ENG'G & APPLIED SCIS. (Feb. 9, 2021), <https://www.seas.harvard.edu/news/2021/02/deaths-fossil-fuel-emissions-higher-previously-thought> [<https://perma.cc/8LAY-D7SG>].

105. See Christopher Klein, *The Great Smog of 1952*, HIST. CHANNEL (Aug. 22, 2018), <https://www.history.com/news/the-killer-fog-that-blanketed-london-60-years-ago> [<https://perma.cc/3GWS-CLPZ>]; *Acid Rain Effects on Buildings*, ELMHURST COLL., <http://chemistry.elmhurst.edu/vchembook/196buildings.html> [<https://perma.cc/A8ER-8KUA>] (showing photographs of corroded stone sculptures).

106. See *The World's Worst Coal Mining Disasters*, MINING TECH. (Oct. 25, 2021, 1:29 PM), <https://www.mining-technology.com/analysis/feature-world-worst-coal-mining-disasters-china> [<https://perma.cc/26FG-5TYR>]; see also, e.g., T. Mason, *The Hartley Pit Disaster*, DURHAM MINING MUSEUM, http://www.dmm.org.uk/archives/a_hart01.htm [<https://perma.cc/4VLE-F9F5>].

wars combined.¹⁰⁷ Even the United States, with purportedly high safety standards, saw an average of more than thirty-two deaths per year between 2005 and 2014.¹⁰⁸ Those miners who were spared have suffered from “black lung disease” and related cancers, leading to long illness and slow death.¹⁰⁹ This is before one comes to the nature of the pollution itself.

According to the World Health Organization small particulates in coal emissions cause “up to 4.2 million premature deaths worldwide per year through cardiovascular and respiratory diseases, and cancers.”¹¹⁰ The tall stacks of coal-fired power plants also send oxides of sulfur that can travel great distances, penetrate the lungs and are linked with asthma, bronchitis, and acid rain.¹¹¹ Coal and its waste products (fly ash and boiler slag) contain a shopping list of twenty separate toxins including arsenic, lead, mercury, nickel, vanadium, uranium, beryllium, cadmium, barium, chromium, copper, molybdenum, zinc, hydrogen chloride, and dioxins.¹¹² They are found at low percentages, to be sure, but in such volumes as to be highly dangerous.¹¹³ The most ubiquitous of them is mercury, a tale of its own.

Mercury is a first-class toxin. In 2010 coal-fired power plants released over sixty-six thousand pounds of mercury, more than all other

107. *Compare Coal Fatalities for 1900 Through 2020*, U.S. DEP’T OF LAB., <https://arlweb.msha.gov/stats/centurystats/coalstats.asp> [<https://perma.cc/3L9R-22XZ>], with *Vietnam War U.S. Military Fatal Casualty Statistics*, NAT’L ARCHIVES, <https://www.archives.gov/research/military/vietnam-war/casualty-statistics> [<https://perma.cc/37RF-2PX4>], and *Korean War Casualty/Fatality Information*, KOREAN WAR EDUCATOR, <http://www.koreanwar-educator.org/topics/casualties/index.htm> [<https://perma.cc/B5EJ-Y2ZR>].

108. See U.S. DEP’T OF LAB., *supra* note 107.

109. See *Pneumoconiosis*, JOHNS HOPKINS MED., <https://www.hopkinsmedicine.org/health/conditions-and-diseases/pneumoconiosis> [<https://perma.cc/W863-J46W>].

110. See Wolfgang Rattay, *Analysis of New U.S. Coal Plant Rules Shows Deadly Dangers of Air Pollution*, U.N. ENV’T PROGRAMME (Aug. 25, 2018), <https://www.unenvironment.org/news-and-stories/story/analysis-new-us-coal-plant-rules-shows-deadly-dangers-air-pollution> [<https://perma.cc/9B9N-WYA2>] (citation omitted).

111. *Id.*

112. See Alex Gabbard, *Coal Combustion: Nuclear Resource or Danger*, ORNL REV., 1993, at 1, 2. <https://www.nrc.gov/docs/ML0932/ML093280447.pdf> [<https://perma.cc/79Z6-R8ZC>]; U.S. GEOLOGICAL SERV., TRACE ELEMENTS IN COAL ASH 1–3 (2015), <https://pubs.usgs.gov/fs/2015/3037/pdf/fs2015-3037.pdf> [<https://perma.cc/9PRL-KY8Z>]; PAMELA L. SPATH, MARGARET K. MANN & DAWN R. KERR, LIFE CYCLE ASSESSMENT OF COAL-FIRED POWER PRODUCTION 73–74, 78 (1999).

113. Gabbard, *supra* note 112, at 1–2.

industrial sources combined,¹¹⁴ killing thousands of people every year.¹¹⁵ Far from abating, in 2008 mercury levels in bald eagles of New York's Catskill Mountains spiked at record levels.¹¹⁶ The element concentrates up the food chain where it is converted to methylmercury, and reaches human consumption through bioaccumulation in the aquatic food chain.¹¹⁷ Children are particularly susceptible, starting at birth.¹¹⁸ EPA scientists have found that the risks are greatest for “women of child-bearing age,” where the mercury “readily passes . . . to the fetus and fetal brain,” producing “abnormalities and developmental delays.”¹¹⁹ Unfortunately, these findings were not new to the world.

Perhaps the most dramatic incident arose in 1956 from mercury discharges into water outfalls in Minamata, Japan.¹²⁰ The impacts first appeared in cats, whose convulsions were called “the dancing disease.”¹²¹ It then attacked children playing in the company's wastewater, who suffered muscle failure and loss of sight, smell, and hearing.¹²² In all, the “Minamata disease” touched 3,000 victims, over

114. See TRAVIS MADSEN & LAUREN RANDALL, *AMERICA'S BIGGEST MERCURY POLLUTERS: HOW CLEANING UP THE DIRTIEST POWER PLANTS WILL PROTECT PUBLIC HEALTH* 119 (2011), <https://publicinterestnetwork.org/wp-content/uploads/2012/01/Biggest-Mercury-Polluters-FLE.pdf> [<https://perma.cc/SG74-RLFS>].

115. See Fabio Caiazzo, Akshay Ashok, Ian A. Waitz, Steve H.L. Yim & Steven R.H. Barrett, *Air Pollution and Early Deaths in the United States. Part 1: Quantifying the Impact of Major Sectors in 2005*, 79 *ATMOSPHERIC ENV'T* 198, 198–208 (2013).

116. Anthony DePalma, *Bald Eagles in Catskills Show Increasing Mercury*, *N.Y. TIMES* (Nov. 24, 2008), <https://www.nytimes.com/2008/11/25/science/25eagl.html> [<https://perma.cc/QE6T-7CFD>].

117. *Atmospheric Mercury*, NAT'L OCEANIC & ATMOSPHERIC ADMIN. <https://www.arl.noaa.gov/research/surface-atmosphere-exchange-home/sae-programs-mercury> [<https://perma.cc/3QL3-U4BK>].

118. Flavia Ruggieri, Costanza Majorani, Francesco Domanico & Alessandro Alimonti, *Mercury in Children: Current State on Exposure Through Human Biomonitoring Studies*, 14 *INT'L J. ENV'T RSCH. & PUB. HEALTH* 519, 519 (2017).

119. *White Stallion Energy Ctr. v. EPA*, 748 F.3d. 1222, 1245–46 (D.C. Cir. 2014).

120. See Noriyuki Hachiya, *The History and the Present of Minamata Disease: Entering the Second Half a Century*, 49 *JAPAN MED. ASS'N J.* 112, 112–14 (2006), https://www.med.or.jp/english/pdf/2006_03/112_118.pdf [<https://perma.cc/K5HQ-MYGH>].

121. See S.J. Withrow and D.M. Vail, *WITHROW AND MACEWEN'S SMALL ANIMAL CLINICAL ONCOLOGY* 73 (4th ed. 2007).

122. See Jonathan Watts, *Mercury Poisoning of Thousands Confirmed*, *GUARDIAN* (Oct. 16, 2001), <https://www.theguardian.com/world/2001/oct/16/japan.jonathanwatts>

eighty percent of whom, after immense suffering, eventually died.¹²³ Others remain crippled for life.¹²⁴ The Japanese did not just die from mercury poisoning, they died horribly, and those who survived lived horribly as well.¹²⁵ Ten years later the mercury poisoning was repeated in another prefecture, the same kind of emissions, the same outcomes.¹²⁶ While Japan eventually paid compensation to at least some of the victims,¹²⁷ it remained committed to industrial production.¹²⁸ The country was not ready for regulation.

The United States was not ready either. The coal lobby was strong, as were states dependent on coal production.¹²⁹ It took the U.S. Congress more than two decades after passage of the Clean Air Act to even begin to deal with these issues.¹³⁰ Moreover, when Congress finally did act, it continued to provide the coal industry years of slack, instead ordering the EPA to (1) conduct a study of the health risks from mercury emissions, (2) study the availability of controls, and then (3)

[<https://perma.cc/RQ4B-HGEA>]; Douglas Allchin, *The Poisoning of Minamata*, SHIPS EDUC., <https://shipseducation.net/ethics/minamata.htm> [<https://perma.cc/7D4T-JGAU>].

123. See Minami Funakoshi & Kyung Hoon Kim, *More than 60 Years on, Japan's Mercury-Poison Victims Fight to be Heard*, REUTERS (Sept. 20, 2017, 6:12 PM), <https://www.reuters.com/article/us-japan-minamata-victims/more-than-60-years-on-japans-mercury-poison-victims-fight-to-be-heard-idUSKCN1BV326> [<https://perma.cc/NM2U-ZVJH>].

124. See Masamitsu Oku, Shomei Nagatsuma, Rina Horikoshi & Makoto Hokao, *Court Blocks Bid by 7 for Minamata Disease Recognition*, ASAHI SHIMBUN (Mar. 31, 2022, 6:43 PM), <https://www.asahi.com/ajw/articles/14586947> [<https://perma.cc/XH63-GJMF>]; see also Hirano Keiji, *Photo Show Spans Minamata Woes*, JAPAN TIMES (Nov. 12, 2013), <https://www.japantimes.co.jp/news/2013/11/12/national/photo-show-spans-minamata-woes> [<https://perma.cc/NST3-H6KZ>].

125. See Funakoshi & Kim, *supra* note 123.

126. See Hachiya, *supra* note 120, at 115.

127. *Id.* at 115–18.

128. Sadami Maruyama, *2 Responses to Minamata Disease*, UNITED NATIONS UNIV., <https://archive.unu.edu/unupress/unupbooks/uu211e/uu211e05.htm> [<https://perma.cc/JVK5-GFL9>].

129. Adele Morris, *The Challenges of State Reliance on Revenue from Fossil Fuel Production*, BROOKINGS (Aug. 9, 2016), <https://www.brookings.edu/research/the-challenges-of-state-reliance-on-revenue-from-fossil-fuel-production> [<https://perma.cc/RSP3-5B9K>] (describing the monetary attraction that keeps states reliant on fossil fuel, such as coal).

130. See *infra* Section II.B. (summarizing the requirements of the Clean Air Act and subsequent events).

promulgate regulations requiring these controls.¹³¹ It was the kind of logical process one would expect from a science-based agency whose mission was to protect human health and the environment.

The EPA followed these steps faithfully, with a detailed record.¹³² Following an extensive administrative process in which the industry participated actively, and with accommodations for coal fired power plants needing time to phase in, the Agency promulgated a rule that had been more than twenty years in the making.¹³³ All coal-plants began moving towards compliance.¹³⁴ Many were already there. It was at this late date that the Supreme Court intervened, overruled the U.S. Court of Appeals for the District of Columbia, and stopped the rule cold.¹³⁵

In consequence, the regulation of mercury emissions, one of the most deadly substances to be found, was postponed indefinitely. A few years later, a new administration killed the regulations outright, inviting further regulatory battles.¹³⁶ In the meantime, millions of Americans remained as exposed to mercury emissions as they had been in 1990 when Congress moved to address them, once and for all.

B. *EPA and Coal: The Lost Years*

The Clean Air Act of 1970¹³⁷ (“CAA”) was the first modern pollution control law in the world.¹³⁸ It was also the most complex pollution control in the world and has become only more-so as Congress came to grips with the holes in its fabric. The momentum for clean air was there. America was reeling from brownouts in urban areas, the sudden

131. *Mercury Study Report to Congress*, EPA, <https://www.epa.gov/mercury/mercury-study-report-congress> [<https://perma.cc/PY7P-XQ6Z>].

132. *Id.*

133. *Mercury and Air Toxics Standards*, EPA, <https://www.epa.gov/stationary-sources-air-pollution/mercury-and-air-toxics-standards> [<https://perma.cc/4DDW-ZET7>].

134. *Id.*

135. *Michigan v. EPA*, 576 U.S. 743, 760 (2015) (setting aside the rule because the EPA had acted “unreasonably when it deemed cost irrelevant to the decision to regulate power plants”).

136. Revocation of the 2020 Reconsideration, and Affirmation of the Appropriate and Necessary Supplemental Finding; Notice of Proposed Rulemaking, 87 Fed. Reg. 7624, 7624–26 (Feb. 9, 2022).

137. Clean Air Act, 42 U.S.C. §§ 7401–7671 (q) (1970).

138. *Id.* § 7401 (describing Act’s mission to protect air quality through research and providing technical and financial support to governments’ efforts to control air pollution); *Evolution of the Clean Air Act*, EPA, <https://www.epa.gov/clean-air-act-overview/evolution-clean-air-act> [<https://perma.cc/K6N8-EXVB>].

deaths in New York City, and thick clouds of pollution in Pittsburgh and Denver.¹³⁹ The CAA was passed less than a year before Earth Day, and polls showed public concern over air and water pollution topping even those for crime, inflation, or unemployment.¹⁴⁰ Eighty-eight percent of Americans supported heavy fines against pollution law violators, and nearly one-half would shut them down.¹⁴¹

This was hardly the case, however, with the coal producing and burning states that were accustomed to dealing with weak state regulatory programs, and greatly feared federal intervention.¹⁴² Congress's response to these countervailing pressures was led by Senator Muskie of Maine, who had been advocating for stronger federal clean air and water legislation throughout the previous decade.¹⁴³ By 1969 he was Chair of the Senate Subcommittee on Air and Water Pollution of the Committee on Public Works, but the full Committee was chaired by Senator Randolph of West Virginia, at the time America's leading coal producer.¹⁴⁴ The corresponding House of Representatives Committee was Representative Staggers, also of West Virginia.¹⁴⁵ As much as Muskie favored federal controls, he would have to compromise.

The first was to maintain state programs as the primary actors in air pollution abatement. The CAA created an unwieldy system in which EPA set ambient air quality criteria for a handful of listed pollutants (none of which were carbons) and goals to be achieved through state

139. See Alayna Alvarez, *Clearing the Air: Decades After the 'Brown Cloud' Was Part of Life in Denver, the Stay-at-Home Orders May Have Shown a Way out*, COLO. POL., (May 13, 2020), https://www.coloradopolitics.com/coronavirus/cover-story-clearing-the-air-decades-after-the-brown-cloud-was-part-of-life-in/article_0500b63e-8f21-11ea-9c52-dbc9a0b59ea2.html [<https://perma.cc/RZV2-HWBY>]; Mark Byrnes, *What Pittsburgh Looked Like When it Decided it Had a Pollution Problem*, BLOOMBERG (June 5, 2012), <https://www.bloomberg.com/news/articles/2012-06-05/what-pittsburgh-looked-like-when-it-decided-it-had-a-pollution-problem> [<https://perma.cc/FMA9-BAE4>]; Jim Dwyer, *Remembering a City Where the Smog Could Kill*, N.Y. TIMES (Feb. 28, 2017), <https://www.nytimes.com/2017/02/28/nyregion/new-york-city-smog.html> [<https://perma.cc/8EQA-T3FG>].

140. Brigham Daniels, Andrew P. Follett & Joshua Davis, *The Making of the Clean Air Act*, 71 HASTINGS L.J. 901, 911 (2020).

141. *Id.*

142. *Id.* at 945–46.

143. *Id.* at 924.

144. Craig N. Oren, *Struggling for Context: An Appraisal of "Struggling for Air,"* 46 ENV'T L. REP. 10,838, 10,841 (2016).

145. *Id.*

implementation plans.¹⁴⁶ The next twenty years would be spent trying to make them work.¹⁴⁷ Some of them did, at least until a failing economy and political pressure weakened them.¹⁴⁸ For most chronically underfunded state agencies, lacking resources in science and technology, unable to track when violations occurred and to prove who was causing them, short on the willpower to impose sanctions, the ambient-based approach to air pollution control here fared no better here than it would for water and other pollution.¹⁴⁹ In the end, the polluters ended up walking.

Senator Muskie and others were not at all confident that the state programs would reach all sectors. They developed a second program for EPA to permit major stationary sources such as coal-fired power plants directly on the basis of best available technology.¹⁵⁰ Compliance would require the installation of expensive “scrubbers” to filter out pollutants, or the equally expensive import of low-sulfur coal.¹⁵¹ The coal states, heavily represented in both houses, rebelled.¹⁵² Senator Muskie, the Act’s primary sponsor, was forced into another compromise in which new coal plants would have high performance standards, set by the federal government, but existing plants were excepted, and could continue to pollute as usual.¹⁵³ The expectation

146. 42 U.S.C. § 7408(a) (air quality criteria and standards); *id.* § 7410(a) (state implementation plans).

147. Oren, *supra* note 144, at 10,842–43.

148. *Id.* at 10,842.

149. See 1 WILLIAM H. RODGERS JR., ENVIRONMENTAL LAW: AIR AND WATER § 3.10 at 258–64 (1986) (describing the many challenges to state implementation plans). For a more detailed description of the failure of ambient-based pollution control for air, water, and other media, see Oliver A. Houck, *Of BATs, Birds and B-A-T: The Convergent Evolution of Environmental Law*, 63 MISS. L.J. 403 (1994) (showing both failure of ambient-based and success of technology-based standards).

150. See 42 U.S.C. § 7411(b)(1)(A) (categories of sources); *id.* § 7411(a)(1) (best technology standards).

151. Oren, *supra* note 144, at 10,839.

152. See *id.* at 10,842 (reporting that many coal states abandoned emissions efforts).

153. *Id.* at 10,841 (describing pressure on Muskie); *Id.* at 10,838 (citing RICHARD L. REVESZ & JACK LIENKE, STRUGGLING FOR AIR: POWER PLANTS AND THE “WAR ON COAL” (2016) (grandfathering existing plants was a “tragic flaw” in the Clean Air Act)); RICHARD REVESZ & JACK LIENKE, STRUGGLING FOR AIR: POWER PLANTS AND THE “WAR ON COAL” 50 (2016) (paraphrasing Senator Clark’s advice to Muskie “that legislative purity is impossible and that there are too many vested interests” to accommodate).

was that, as the old plants phased out, the new ones would come with advanced technology.¹⁵⁴

It did not turn out that way. Twenty years later there were still 145 plants in operation that had been built before 1950, and it made perfect economic sense.¹⁵⁵ No owners of sane mind would build a new facility if they had an old one that could be kept alive. And not many did. The plants stayed online and were smoking out pollutants at more than six times the rate of new plants with scrubbers.¹⁵⁶ In the words of one analyst, we had bred “an electric generation fleet dominated by coal-fired clunkers.”¹⁵⁷ As with the state implementation plans, coal had dodged another bullet. Coal emissions between 1970 and 1990 did not significantly change.¹⁵⁸

Senator Muskie and his colleagues had yet a third program, however, intended to come to bear on coal and more particularly its mercury problem. Section 112 of the CAA required EPA to reduce “hazardous air pollutants” by listing those that could “reasonably be anticipated” to cause serious health problems, and then by setting emission standards for the emitting facilities within 365 days.¹⁵⁹ The listing, standard-setting, permits, and enforcement were to be done by the EPA.¹⁶⁰ All plants were included this time, not just new ones.¹⁶¹ Unfortunately, this didn’t happen either. Setting safe levels for substances that had no known safe threshold led logically to a standard of zero emissions, which would shut down many industries flat.¹⁶² Over the next eighteen years EPA established standards for only eight

154. See Carl Pope, *The Clean Air Act Story: Back to the Beginning*, GRIST (Aug. 10, 2009), <https://grist.org/article/2009-08-10-the-clean-air-act-story-back-to-the-beginning> [<https://perma.cc/F4SD-G3R3>].

155. *Id.*

156. REVESZ & LIENKE, *supra* note 153, at 33.

157. *See id.*

158. *Id.* at 39 (explaining how coal plants were able to continue grandfathering old plants); Ian Tiseo, *U.S. SO₂ Emissions from Coal Plants 1970–2017*, STATISTA (Aug. 20, 2018), <https://www.statista.com/statistics/875026/us-so2-emissions-from-coal-plants> [<https://perma.cc/9N5W-9QGA>].

159. 42. U.S.C. § 7412(b)(1)(A) (lists); *id.* § 7412(b)(2) (standards); *id.* § 7412(c)(1).

160. *Id.* § 7412(b)(2), (e)(4), (f)(1)–(2).

161. *Id.* § 7412(d)(3).

162. RODGERS JR., *supra* note 149, § 3.20 at 348.

pollutants, and only for a limited number of sources.¹⁶³ Once again, coal walked. Mercury was not even mentioned.

In the years ahead, the regulation of coal was handicapped by the Energy Supply and Environmental Coordination Act of 1974,¹⁶⁴ passed in response to the 1973 oil crisis, which encouraged electric power plants to switch from oil to coal.¹⁶⁵ A few years later, under the same pressures, President Carter and the CEO's of leading coal companies celebrated "National Miners' Day" on the White House Lawn.¹⁶⁶ The Reagan administration that followed openly expressed its hostility to "big government" in general, and environmental governance in particular.¹⁶⁷ It established a Task Force on Regulatory Relief, within which the Office of Management and Budget (OMB) would ensure that no action unfriendly to industry would see the light of day.¹⁶⁸ Whatever Congress had decreed in 1970 about industrial emissions and hazardous air pollution simply went on hold.

C. *The 1990 Amendments: Coming to Grips at Last*

By 1990 the Congress had finally had enough, supported by President George W. Bush who had campaigned on a platform of clean air.¹⁶⁹ It amended the CAA to address hazardous pollutants directly via new technology standards requiring the maximum achievable degree of reductions (MACT), which were to be at least as stringent as those

163. HOLLY DOREMUS, ALBERT C. LIN, RONALD H. ROSENBERG & THOMAS SCHOENBAUM, *ENVIRONMENTAL POLICY LAW* 610 (5th ed. 2002). Attorney David Doniger of the Natural Resources Defense Council (NRDC) has called this all-but-unused provision the "40-year-old virgin of the CAA," Oren, *supra* note 144, at 10,841.

164. Energy Supply and Environmental Coordination Act of 1974, Pub. L. No. 93-319, 88 Stat. 246 (1974).

165. William F. Pedersen, Jr., *Coal Conversion and Air Pollution: What the Energy Supply and Environmental Coordination Act of 1974 Provides*, 4 ENV'T L. REP. 50,101, 50,102, 50,104 (1973).

166. On file with author.

167. See Oliver Houck, *President X and the New (Approved) Decisionmaking*, 36 AM. U. L. REV. 535, 536-38 (1987).

168. See *Task Force on Regulatory Relief*, SOURCE WATCH, https://sourcewatch.org/index.php/Task_Force_on_Regulatory_Relief [<https://perma.cc/PL3J-82VF>] (creation of Task Force); Houck, *supra* note 167, at 536-44 (1987) (describing OMB's role in delaying, amending or simply refusing to release proposed EPA regulations).

169. See Andrew Carter, *Alchemical Rulemaking and Ideological Framing: Lessons from the 40-Year Battle to Regulate Mercury Emissions from Electric Power Plants*, 58 NAT. RES. J. 125, 154 (2018).

used by the top twelve percent of performing members of an industry.¹⁷⁰ As a safeguard, Congress viewed these standards as “floors” beyond which EPA could ratchet down yet further based on human health impacts.¹⁷¹ Had this approach included the coal industry, Congress would have solved the biggest problem on its plate. But it did not. Instead, coal received a sweetheart deal that would at the least ensure it could continue with pollution-as-usual for decades and, with luck, perhaps forever.¹⁷² The argument for the deal was that technologies to reduce coal plant sulfur emissions would eliminate mercury risks a well.¹⁷³ Unfortunately, they did not.

As mentioned above, the prescription for coal began with several studies by EPA and other authorities on the health risks from mercury emissions, accompanied by a review of potential controls.¹⁷⁴ Together, they would set the stage for the Agency to determine whether regulation would be to be “appropriate and necessary.”¹⁷⁵ After several delays prompted by the coal and seafood industries, and a congressional request for yet another study of the health risks,¹⁷⁶ EPA was finally poised to make a decision on regulation. In December of 2000, it published notice that it had found the regulation of coal industry to be “appropriate and necessary.”¹⁷⁷ An immediate industry lawsuit challenging this finding was rejected as premature: no regulation had happened yet.¹⁷⁸ What happened instead was politics, and it would both confuse and jam the process for nearly another decade.

170. 42 U.S.C. § 7412(d)(2), (d)(3)(A).

171. *Id.* § 7412(d)(2); *see also* *White Stallion Energy Ctr. v. EPA*, 748 F.3d 1222, 1259–60 (D.C. Cir. 2014) (*per curiam*), *rev'd sub nom.* *Michigan v. EPA*, 576 U.S. 743 (2015) (“beyond the floor” limits).

172. *See* 748 F.3d at 1250 (concluding that separate EPA standards for coal CFBs were not warranted).

173. *See Michigan*, 576 U.S. at 743, 765–68 (Kagan, J., dissenting) (explaining this rationale).

174. 42 U.S.C. § 7412(n)(1)(A) (health hazards); *id.* § 7412(n)(1)(B) (control technologies); *id.* § 7412(n)(1)(C) (threshold effects); *see supra* notes 131–132 and accompanying text.

175. *Id.* § 7412(n)(1)(A).

176. Carter, *supra* note 169, at 149–50.

177. *See* Arnold W. Reitze, Jr., *State and Federal Command-and-Control Regulation of Emissions from Fossil-Fuel Electric Power Generating Plants*, 32 ENV'T L. 369, 396 (2002).

178. *See Util. Regul. Grp. v. EPA*, No. 01-1074, 2001 WL 936363, at *1 (D.C. Cir. July 26, 2001) (*per curiam*).

Then President George W. Bush had a very different view of clean air from his father. He was guided on domestic issues by Vice President Cheney, former CEO of the Haliburton Energy Company,¹⁷⁹ and on the administration's list was the replacement of the EPA's 2000 mercury rule for coal-fired power plants.¹⁸⁰ Bush's "Clean Skies" program featured instead a complicated cap-and-trade system similar to the EPA's sulfur control plan.¹⁸¹ Opponents argued that the 2000 plan based on MACT would lead to a ninety percent reduction of mercury toxins, far more than the Clear Skies proposal.¹⁸²

At this point coal industry leaders pulled out all the stops against the EPA 2000 plan, arguing that the control technologies did not exist, would be too costly, the mercury reductions would only benefit "sensitive population[s]," and that coal itself was too vital to the economy to cripple in this way.¹⁸³ To the contrary, Lee Coburn of the Northeast States for Coordinated Air Use Management, stated:

[W]e can and should do more to reduce mercury emissions. Given the availability of highly effective control technologies, and the bioaccumulative effect posed by this toxin, we should not depend only on co-benefits from other controls. Mercury

179. See *Cheney Energy Task Force*, NAT'L RES. DEF. COUNCIL, <https://www.nrdc.org/resources/cheney-energy-task-force> [<https://perma.cc/DV68-SA6M>] ("In the spring of 2002, under order from a federal judge, the U.S. Department of Energy released to NRDC roughly 13,500 pages relating to previously secret proceedings of the Bush administration's energy task force. (President Bush formed the task force in early 2001 to develop a national energy policy, with Vice President Cheney at the helm.) Even though the government heavily censored the documents before supplying them to NRDC, they reveal that Bush administration officials sought extensive advice from utility companies and the oil, gas, coal and nuclear energy industries, and incorporated their recommendations, often word for word, into the energy plan.") *Id.*; Press Release, Halliburton, Dick Cheney Resumes Role as Chairman of Halliburton Company (Feb. 1, 2000), <https://ir.halliburton.com/node/9036/pdf> [<https://perma.cc/G3M6-HYRJ>].

180. NAT'L RES. DEF. COUNCIL, NEW COAL GENERATION CAPACITY IS REQUIRED TO MEET FUTURE DEMANDS NATIONAL ELECTRICITY AND ENVIRONMENTAL TECHNOLOGY ACT 1220 (2002).

181. See Carter, *supra* note 169, at 154. For the political background of the "Clear Skies Initiative," see JEFF GOODELL, BIG COAL: THE DIRTY SECRET BEHIND AMERICA'S ENERGY FUTURE 137-40 (2006).

182. Carter, *supra* note 169, at 154.

183. See *Clear Skies Act of 2003: Hearings on S. 485 Before the Senate Subcommittee on Clean Air, Climate Change, and Nuclear Safety of the Committee on Environment and Public Works*, 108th Cong. 352-53 (statement of Larry S. Monroe, representing Pollution Control Research, Southern Company, and Edison Electric).

emissions should be capped at a level around half what Clear Skies proposes.¹⁸⁴

David Hawkins of the Natural Resources Defense Council (NRDC) opposed the inclusion of industry costs without reference to human health benefits, for a toxin that, once released to the environment, will stay there for decades.¹⁸⁵ Finally, with things at an impasse over the Bush plan, a group of fifteen states, two environmental departments, the City of Baltimore and several environmental groups filed suit against the EPA claiming the Bush “de-listing” of coal emission requirements was unlawful.¹⁸⁶ The U.S. Court of Appeals for the District of Columbia agreed: the EPA had no discretion to chart a course so different from that the Congress had mandated.¹⁸⁷

The worm finally turned in 2008 with the election of President Obama. Environmental groups had sued the EPA to enforce the MACT standards for coal fired power plants, originally imposed in 2000.¹⁸⁸ The result was a 2011 consent decree leading to new proposed regulations that reduced mercury emissions from twenty-nine tons per year to six, a dramatic outcome.¹⁸⁹ The coal industry opposed everything in the proposal, as it had ten years earlier, the harm, the feasibility of controls, and balance of costs in the process.¹⁹⁰

Finally, in February 2012, the EPA issued its final rule, bolstered by a report by its own Scientific Advisory Board and modeling, in response to industry claims, showing that the mercury emissions remained a hazard to human life, and that mercury controls were both reasonable

184. *Id.* at 57–58 (statement of Ken Coburn, Executive Director, Northeast States for Coordinated Air Use Management).

185. *Id.* at 59 (statement of David Hawkins, Attorney, NRDC); N.H. DEP’T OF ENV’T SCIS., MERCURY: SOURCES TRANSPORT, DEPOSITION AND IMPACTS 1 (2019), <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/ard-28.pdf> [<https://perma.cc/KB3R-LC9T>].

186. *New Jersey v. EPA*, 517 F.3d. 574, 581 (D.C. Cir. 2008).

187. *Id.* at 583–84.

188. *Am. Nurses Ass’n v. Jackson*, No. 08-2198 (RMC), 2010 WL 1506913, at *1 (D.D.C. Apr. 15, 2010).

189. *Id.* State and industry actors sought to stop the consent decree, but failed. *See* National Emission Standards for Hazardous Air Pollutants from Coal and Oil-Fired Electric Utility Steam Generating Units, 76 Fed. Reg. 24,976, 25,014–15 (May 3, 2011) (reductions in mercury achieved).

190. *See* E-Mail from Thomas C. Perry, Director of Air Quality, Nat’l Mining Ass’n, to EPA (Aug. 4, 2011) (alleging prohibitive costs).

and appropriate.¹⁹¹ The Agency stated that, while it had considered costs in the process, they played no role in its final rule because this section of the statute did not include them as a factor, while other related provisions had included them specifically.¹⁹² Under the statutory scheme, and logically, these costs would be more properly assessed when the actual technologies to be used were better known, as well as the lead time for their application.¹⁹³

Down to its last card, industry took a final shot against the rule, appealing it to the U.S. Court of Appeals in Washington, DC. In *White Stallion Energy Center v. EPA*,¹⁹⁴ the court found that the EPA had complied with the Act's prescriptions for coal plant MACT, and that the Agency's decision not to include costs at this stage was lawful.¹⁹⁵ The word "appropriate" alone did not imply them, citing Webster's New Oxford Dictionary,¹⁹⁶ and their absence from this section, when the Congress clearly could have included them, was instructive.¹⁹⁷ Under *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*,¹⁹⁸ even were the statute on its face ambiguous, the EPA's interpretation of it here was certainly "permissible,"¹⁹⁹ and therefore dispositive.²⁰⁰

Twenty-four years after Congress had set out to control mercury emissions from coal-fired power plants, after every objection and

191. National Emission Standards for Hazardous Air Pollutants from Coal and Oil-Fired Electric Utility Steam Generating Units, 77 Fed. Reg. 9304 (Feb. 16, 2012). The rule was supported by an independent review by its Scientific Advisory Board. *Id.* at 9312–13.

192. *Id.* at 9327.

193. *Id.*

194. 748 F.3d 1222 (D.C. Cir. 2014) (per curiam), *rev'd sub nom.* Michigan v. EPA, 576 U.S. 743 (2015).

195. *Id.* at 1234.

196. *Id.* at 1237.

197. *Id.* at 1235.

198. 467 U.S. 837 (1984).

199. *White Stallion*, 748 F.3d at 1234–35.

200. *Id.* At the time, Chief Judge Garland sat on the court, whose nomination to the Supreme Court was rejected by Senate Majority Leader McConnell for being insufficiently Republican. Coincidence or no, McConnell represented Kentucky, a state heavily dependent on coal. It seems possible, even likely, that Garland's support for this opinion, with such consequence for the coal industry, was a factor in the demise of his nomination, but short of an unlikely tell-all memoir by the Senate Leader one will never know. Judge Kavanaugh, who dissented from the Garland opinion, was nominated instead.

obstacle imaginable, they were now a reality. Many in the industry had already accepted the controls, and yet others were well on their way.

Then came the Supreme Court.

D. *The Supreme Court Rules*

The Supreme Court, in a badly-divided opinion, reversed the mercury rule.²⁰¹ To Justice Scalia, writing for a five-four majority, the misstep was the EPA's refusal to consider costs at the beginning of its rulemaking, although the Agency had done so, fulsomely, when it came to the nitty gritty of fashioning the rule's requirements.²⁰² The Ninth Circuit had found this a permissible approach, given that the statute did not mention costs at all.²⁰³ Justice Scalia found it a fatal flaw. In so doing he relied on two cases that he had authored, neither of which supported him here.

Justice Scalia began with the unremarkable proposition that agency action had to be "reasonable."²⁰⁴ Being reasonable, he continued, required "some attention" to costs, citing his decision in *Entergy Corp. v. Riverkeeper, Inc.*²⁰⁵ He should have known better. In *Riverkeeper*, as he himself explained, when a statute was silent as to costs the Agency had the *discretion* to include them.²⁰⁶ On the other hand in *Michigan v. EPA*, where the statute was equally silent, Scalia *required* them to be included.²⁰⁷ There is a world of difference in the world between "may" and "must." And as the dissent would point out, there were very good reasons to do it at a later stage.²⁰⁸ Justice Scalia's precedent did not hold water.

Justice Scalia then looked to his decision in *Whitman v. American Trucking Associations, Inc.*,²⁰⁹ which was doubly off point. The question in *Whitman* was whether EPA *could* consider costs in setting national ambient air quality standards when (as in *Michigan*) costs would be

201. *Michigan v. EPA*, 576 U.S. 743, 760 (2015).

202. *Id.* at 764–65.

203. *White Stallion*, 748 F.3d at 1238 (describing the ambiguity of the statute).

204. *Michigan*, 576 U.S. at 751.

205. *Id.* at 752; *see also* *Entergy Corp. v. Riverkeeper, Inc.*, 556 U.S. 208 (2009).

206. *Riverkeeper*, 556 U.S. at 241 ("Based largely on the observation that § 316(b)'s text offers little guidance and therefore delegates some amount of gap-filling authority to the EPA, the Court concludes that the Agency has discretion to rely on cost-benefit analysis.").

207. *Michigan*, 576 U.S. at 753.

208. *Id.* at 764–86 (Kagan, J., dissenting).

209. 531 U.S. 457 (2001).

considered later in plans to implement them.²¹⁰ Once again, this was not a case of “must,” but “may.” Surprisingly, Scalia held that costs could *not* be considered.²¹¹ He distinguished the criteria for *Whitman*’s standards (“requisite to protect the public health” with an “ample margin of safety”) from the criteria in *Michigan* (“necessary and appropriate” for public health) as if they came from different planets.²¹² One might conclude he was splitting hairs. The word “requisite” is indistinguishable from “necessary,” and the concepts of “public health” and “appropriate” are, in this context, two sides of the same coin. Regardless, Justice Scalia thought contrary to these principles and ultimately authored the opinion. Once again, the precedent he relied on was simply not there.

When it came to the costs of the mercury rule, the majority cited EPA estimates of costs at \$9.6 billion per year, as against benefits of up to \$6 million, claiming a stunning imbalance.²¹³ Justice Scalia could not ignore, however, the fact that the Agency had calculated additional benefits to human health of the mercury controls via the reduction of particulates and sulfur oxides at up to \$90 billion per year.²¹⁴ In so framing the facts he was laying the predicate for industry contentions that the mercury rule was about mercury, period, and that other health benefits, however real, were improper to include. Long after this case was decided, this argument would become a new battleground for the regulation of mercury emissions from coal fired power plants.²¹⁵

The majority’s final hurdle was *Chevron*; under this doctrine, in cases where statutes were ambiguous the courts had long deferred to agency

210. *Id.* at 462.

211. *Id.* at 486.

212. *Michigan*, 576 U.S. at 735 (majority opinion). Scalia failed to mention precedent on highly analogous Office of Health and Safety Administration health standards for cotton dust and benzene, “reasonably necessary and appropriate,” in which the Court rejected arguments that costs need be considered. *See Indus. Union Dep’t, AFL-CIO v. Am. Petroleum Inst.*, 448 U.S. 607, 639–40 (1980) (discussing benzene); *Am. Textile Mfrs. Inst., Inc. v. Donovan*, 452 U.S. 490, 512 (1981) (discussing cotton dust). *See generally* Neil Sullivan, *The Cotton Dust Decision: The Confusion Continues*, 34 ADMIN. L. REV. 483 (1982).

213. *Michigan*, 576 U.S. at 749 (“The costs to power plants were thus between 1,600 and 2,400 times as great as the quantifiable benefits from reduced emissions of hazardous air pollutants.”).

214. *Id.* at 750.

215. *See supra* Section II.D.

expertise and discretion.²¹⁶ To which Justice Scalia could only repeat his mantra that an agency had no discretion to be unreasonable,²¹⁷ which begged a question later both raised and rebutted in the dissent: What about EPA's behavior was unreasonable? Law Professor Daniel Farber, commenting on the case, said it was one of only two instances in the history of the Supreme Court where it had struck down an agency's interpretation as unreasonable under *Chevron*.²¹⁸ The question in *Michigan v. EPA*, however, was never about the need to consider costs. It was, rather, at what point it was most reasonable to do so.²¹⁹

The swing vote avoided Justice Scalia's argument altogether. Justice Thomas concurred on two points that he had been raising, unsuccessfully, for some time. The first was that *Chevron* was bad law and should be reversed.²²⁰ The daunting fact that this would leave the Court itself, with zero expertise on the subject matter, free to reverse any agency decision with which it disagreed probably explains why *Chevron* is still alive today.²²¹ Thomas' second argument was that delegation of this genre of rulemaking is unconstitutional.²²² The no less daunting prospect of vesting rulemaking of this scientific and technical complexity with a legislative body that had little more expertise than the Court, and many more political influences, probably explains why decisions on public health remain with the agencies more competent to make them.

Despite voting with the majority, Thomas's concurrence in *Michigan v. EPA* indicates at least some difference of opinion with the remaining four members of the majority, whose opinion is less persuasive than the dissent.²²³

Justice Kagan, writing for Justices Ginsburg, Breyer and Sotomayor as well, stated late in her dissent that the "central flaw in the majority

216. *Michigan*, 576 U.S. at 761.

217. *Id.* at 753.

218. See Jeremy P. Jacobs, *How Scalia Reshaped Environmental Law*, ENERGY & ENV'T NEWS (Feb. 15, 2016, 1:17 PM), <https://www.eenews.net/articles/how-scalia-reshaped-environmental-law> [<https://perma.cc/3XBY-APTY>].

219. *Michigan*, 576 U.S. at 747.

220. *Id.* at 761–64 (Thomas, J., concurring).

221. See *id.*

222. *Id.* at 762.

223. *Id.* at 744 (majority opinion).

opinion [was] that it ignore[d] everything but one thing EPA did.”²²⁴ What EPA actually did was impressive.

The Agency in fact considered costs throughout the regulatory process. A Presidential Executive Order required it,²²⁵ else the rule would never see the light of day. Accordingly, after the EPA’s first-step “appropriate and necessary” finding, it separated the affected plants by category based on the nature of the coal they burned, and their technical and financial ability to control emissions.²²⁶ The Agency then offered three options individual plants could use to minimize their costs, doubtless saving millions of dollars.²²⁷ In practice, then, costs were considered when they could most effectively be calculated, and acted upon.²²⁸ To attempt these calculations earlier would be at best a guessing game, and a field day for industry to challenge to their sufficiency and accuracy. Everything in the long record of this proceeding indicated that the coal industry would challenge everything it could.

Justice Kagan finally turned to human costs, hidden behind the estimates in dollars.²²⁹ While the EPA acknowledged it could not quantify many of the health gains from the rule, its annual benefits “would include between 4,200 and 11,000 fewer premature deaths from respiratory and cardiovascular causes, 3,100 fewer emergency room visits for asthmatic children, 4,700 fewer non-fatal heart attacks, and 540,000 fewer days of lost work.”²³⁰ She concluded that the majority had arrived at its conclusion:

only by disregarding most of EPA’s regulatory process. It insists that EPA must consider costs—when EPA did just that, over and over and over again. It concedes the importance of

224. *Id.* at 781 (Kagan, J., dissenting).

225. *See id.* at 749 (majority opinion); *see also* Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Oct. 4, 1993); *see also* OFF. OF BUDGET MGMT., CIRCULAR A-4 1 (2003), https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/circulars/A4/a-4.pdf [<https://perma.cc/8K9D-L6AH>] (requiring benefit/cost analysis).

226. *Michigan*, 576 U.S. at 775–76 (Kagan, J., dissenting).

227. *Id.* at 775. EPA’s rule would have (1) allowed plants to choose between input and output-based emissions calculations; (2) given plants the option to calculate emissions by averaging all emissions from sources within a site; and (3) provided relaxed standards for “limited use” plants. *Id.*

228. *Id.* at 777.

229. *See id.* at 776–77.

230. *Id.* at 777.

“context” in determining what the “appropriate and necessary” standard means, and then ignores every aspect of the rulemaking context in which the standard plays a part And the result is a decision that deprives the American public of the pollution control measures that the responsible Agency, acting well within its authority, found would save many, many lives.²³¹

This statement rather accurately sums up what happened. Left to itself, however, the opinion may not have mattered a great deal. Throughout the long process of the mercury rule most members coal industry saw the handwriting on the wall. While some fought what was coming tooth and nail, and eventually won a wafer-thin High Court opinion, many plants had adopted the abatement technologies and moved on.²³²

Then the politics changed, radically. Within a year of *Michigan v. EPA*, coal became the darling of a new administration and the war over the mercury rule was on once again, this time over benefit-cost principles that have haunted the field of public health and environmental law.

E. *Fallout: Benefits and Costs Revisited*

The Supreme Court did not kill the mercury rule. It enjoined it until the EPA considered costs in its first-step “appropriate and necessary” finding, which the Agency then proceeded to do.²³³ Using four different metrics, the EPA (to no one’s surprise) issued a supplemental rule confirming that direct and indirect benefits outweighed costs, much as both the majority and minority decisions in *Michigan v. EPA* had reported.²³⁴ Nothing in the statute or the High Court opinion

231. *Id.* at 786 (citations omitted).

232. See Coral Davenport, *E.P.A. to Reconsider Obama-Era Curbs on Mercury Emissions by Power Plants*, N.Y. TIMES, (Aug. 29, 2018), <https://www.nytimes.com/2018/08/29/climate/epa-mercury-emissions.html> [<https://perma.cc/A5B2-QWR5>] (“While owners of the coal plants fought the rule in the courts, most have since complied with the regulation.”).

233. *Michigan*, 576 U.S. at 752 (majority opinion); Supplemental Finding That it is Appropriate and Necessary to Regulate Hazardous Air Pollutants from Coal-and Oil-Fired Electric Utility Steam Generating Units, 81 Fed. Reg. 24,420, 24,420–21 (Apr. 25, 2016).

234. See 81 Fed. Reg. at 24,420–21; see also Steven Ferrey, *Phantom Regulation: New Supreme Court Algorithm Changing Executive Power*, 3 U. PA. J.L. & PUB. AFF. 107, 116 (2018).

prohibited the inclusion of “co-benefits” from the reduction of nitrogen oxides, sulfur dioxide and fine particulates, each of them lethal in its own right.²³⁵ Indeed, the Agency noted, the legislative history of this section of the statute recognized “collateral benefits” of controlling “criteria pollutants,” which included these three elements.²³⁶

The Murray Energy Corporation was the first to challenge the EPA decision, claiming that the inclusion of indirect benefits was unlawful.²³⁷ The U.S. Court of Appeals for the District of Columbia, which had ruled in favor of the first EPA decision,²³⁸ ruled in its favor again and refused to vacate the rule.²³⁹ In 2019, however, President Trump’s EPA Administrator, a former coal lobbyist, declared that the EPA supplemental rule was flawed because the co-benefits had boosted the benefit-cost ratio above parity.²⁴⁰ Upping the ante, he later announced new rulemaking to forbid co-benefits in all air pollution decisions.²⁴¹ The war over co-benefits was now front and center.

The balance of costs and benefits is one of those seductive concepts that seems eminently rational until they are applied to public health and environmental policy, where they have run into a storm of

235. Ferrey, *supra* note 234, at 138 (EPA based economic benefit of mercury reduction from the indirect reduction of nitrogen oxides, sulfur dioxides, and particulate matter).

236. *Id.* at 138. The benefits of particulate reductions become yet more important the more that is learned about them. See Jonathan Shaw, *Air Pollution’s Systemic Effects*, HARV. MAG., Apr. 2020, at 11–12 (“[E]ach increase of one microgram in concentration was associated with an annual increase of 634 deaths, 5,692 hospitalizations, as well as 32,314 patient-days in hospital.”).

237. See Petition for Judicial Review at 1, Murray Energy Corp., 2019 WL 3229205 (D.C. Cir. June 24, 2019) (No-16-1127) (filed Apr. 25, 2016).

238. See *White Stallion Energy Ctr., LLC v. EPA*, 748 F.3d 1222 (D.C. Cir. 2014) (per curiam), *rev’d sub nom. Michigan v. EPA*, 576 U.S. 743 (2015).

239. *Murray Energy Corp.*, 2019 WL 3229205, at *1.

240. See Joe Goffman, *Rolling Back on the Mercury and Air Toxics Standards: Proposed Withdrawal of “Appropriate and Necessary,”* HARV. ENV’T & ENERGY L. PROGRAM (Mar. 14, 2019), <https://eelp.law.harvard.edu/2019/03/rolling-back-the-mercury-and-air-toxics-standards-proposed-withdrawal-of-appropriate-and-necessary> [<https://perma.cc/94PU-CDG2>].

241. Reconsideration of Supplemental Finding and Residual Risk and Technology Review, 84 Fed. Reg. 2670, 2675–76 (Feb. 7, 2019). Leaving no stone unturned on its coal agenda, the Administration has since relaxed toxic standards for water discharges from the industry, see Lisa Friedland, *E.P.A. Relaxes Rules Limiting Toxic Wastes From Coal Plants*, N.Y. TIMES (Aug. 31, 2020), <https://www.nytimes.com/2020/08/31/climate/trump-coal-plants.html> [<https://perma.cc/ND8E-R364>].

criticism.²⁴² In the 1970's industry embraced it because the dollar benefits of what it was proposing were easily quantifiable and reached impressive sums of money, while the benefits of clean air and even good health were far more difficult to translate to dollars.²⁴³ Starting with President Reagan the OMB used this process to prohibit or weaken a wide range of pollution controls that had been mandated by Congress.²⁴⁴ Washington insiders played this game actively, lobbying OMB like a court of appeals to overrule agency decisions.²⁴⁵

The game changed in the 1990's when public health officials began correlating particulate emissions from carbon-fueled cars and power plants to respiratory ailments, heart disease and even cancer.²⁴⁶ Using these studies the EPA began to arrive at enormous dollar figures for benefits to justify their regulations, particularly when combined with co-benefits for reductions in other pollutants, some of them also quite lethal.²⁴⁷ All of which produced a number of counter-arguments for eliminating the co-benefits, no matter how proven and significant they may be.

The most frequent of these arguments is one articulated by Chief Justice Roberts during oral argument on the mercury rule.²⁴⁸ Reducing particulate emissions was not the purpose of this section of the CAA, he observed, and claiming it amounted to an "end run" around the real costs to industry.²⁴⁹ Therefore they should be ignored. Unhappily for his suggestion, including *all* benefits, direct and indirect, has long been a keystone of classical economics.²⁵⁰ It was also the cornerstone

242. See generally FRANK ACKERSON & LISA HEINZERLING, PRICELESS: ON KNOWING THE PRICE OF EVERYTHING AND THE VALUE OF NOTHING (2008); DOUGLAS A. KYSAR, REGULATING FROM NOWHERE (2010).

243. Amy Sinden, *The Cost-Benefit Boomerang*, AM. PROSPECT. (July 25, 2019), <https://prospect.org/economy/cost-benefit-boomerang> [<https://perma.cc/6ERP-CD>].

244. See Houck, *supra* note 167, at 539 ("[A]ll major new decisions, existing regulations, plans, and research that may 'influence' or 'lead to' agency action in the future are to be reviewed and cleared by the Office of Management and Budget.").

245. Sinden, *supra* note 243.

246. *Id.*

247. *Id.* ("Benefits estimates for such rules . . . typically swamp cost estimates by at least 2 to 1, but often even 10 to 1 or higher.").

248. *Id.*

249. *Id.* (quoting Chief Justice Roberts).

250. *Id.* ("[F]or an economist, co-benefits are no different from direct benefits. All must be counted to understand a rule's impact on economic efficiency.").

of an OMB guidance directive during the Bush administration,²⁵¹ when upping the ancillary benefits from, say, greater employment usually won the day. Now that these benefits include human health, they would be taken off the table.²⁵² Whatever this thinking is, it is not economics.

A corollary argument against indirect benefits is that the CAA required the EPA to set ambient air quality standards for pollutants like particulates and sulfur “with an adequate margin of safety,” hence air cleaner than those levels is unnecessary.²⁵³ We are already safe. As the House Committee on Interstate and Foreign Commerce said after early experience with the CAA, however, the idea that these standards were adequate to protect public health had been “belied.”²⁵⁴ “[T]here is no such thing,” Senator Muskie argued, as a “threshold for health effects.”²⁵⁵ Expert panels convened since by the National Academy of Sciences, the American Heart Association and the EPA itself have consistently rejected the notion, for example, of a “safe” threshold for particulates, a major co-benefit of the mercury rule.²⁵⁶ The air-quality-standards-are-sufficient argument also ran into the reality of how they do and do not work. As noted earlier, their implementation depended largely on state air plans that were largely unenforceable, and covered regions so broad they masquerade real harm to pockets of the working poor.²⁵⁷

None of these criticisms reduced the Trump Administration’s passion for coal, expressed years before his election. Under Trump’s rule, the EPA marched forward with its proposal forbidding the use of co-benefits.²⁵⁸ Fortunately, such proposals face the same long and

251. *Id.* (citing a Bush White House guidance memo for benefit-cost analysis).

252. *Id.*

253. *Id.* (“Ergo, lowering pollution below those levels cannot, by definition, cause any further improvement in public health.”).

254. *Id.*; H.R. REP. NO. 95-294, at 112 (1977) (“The idea that the national primary standards are adequate to protect the health of the public has been belied.”).

255. 123 CONG. REC. 18,460 (1977).

256. Robert D. Brook, Sanjay Rajagopalan, Adren Pope III, Jeffrey Brook, Aruni Bhatnagar, Ana V. Diez-Roux et al., *Particulate Matter Air Pollution and Cardiovascular Disease: An Update to the Scientific Statement from the American Heart Association*, 121 CIRCULATION 2331, 2365 (2010).

257. *See supra* note 149.

258. Juliet Eilperin & Brady Dennis, *Trump EPA Finalizes Rollback Making it Harder to Enact New Public Health Rules*, WASH. POST (Dec. 9, 2020, 10:38 AM), <https://www.washingtonpost.com/climate-environment/2020/12/09/trump-air-pollution> [<https://perma.cc/42SE-YSPM>].

difficult process of rulemaking that the mercury rule did, and the EPA has since reversed course on this issue under the Biden Administration.²⁵⁹

The future of coal in America's energy portfolio, is a guess. With all the support the administration has offered in leasing, regulation and subsidies, coal has dropped to nearly 20% of U.S. electricity production.²⁶⁰ Renewables, with virtually no support from the administration and outright hostility in many states, has risen to 17%,²⁶¹ and is rising still.

The Hobson's Choice at the heart of *Michigan v. EPA*—coal or health—may answer itself before long. This time, with luck, the Supreme Court may have nothing to do about it.

III. WEST VIRGINIA V. EPA

"[I]nsofar as the Solicitor General's increased resort to emergency or extraordinary relief may reflect that office's increasing prioritization of the politics of the moment over longer-term institutional considerations, the fact that it has not provoked any visible backlash (let alone a sharp one) suggests that a majority of the Justices' focus may have shifted along similar lines."

—Professor Stephen L. Vladeck, University of Texas²⁶²

A. Introduction

West Virginia v. EPA is a story of abuse of legal process with extraordinarily large consequences. It involves the Obama administration's CPP, the nation's first-ever executive program to arrest and reverse the phenomenon of climate change.²⁶³ It involves

259. See INST. FOR POL'Y INTEGRITY, *Roundup: Trump Era Agency Policy in the Courts*, NYU SCH. OF L. (Aug. 31, 2020), <https://policyintegrity.org/trump-court-roundup> [<https://perma.cc/5TE3-EL8T>] (of 128 lawsuits filed against Trump environmental agencies, 100 prevailed).

260. See *What Is U.S. Electricity Generation by Energy Source?*, U.S. ENERGY INFO. AGENCY, <https://www.eia.gov/tools/faqs/faq.php?id=427&t=3> [<https://perma.cc/Z9HT-XZDF>] (listing coal at 21.8% of the national portfolio).

261. *Id.* (listing renewables as 20.1% of the national portfolio).

262. Stephen I. Vladeck, *The Solicitor General and the Shadow Docket*, 133 HARV. L. REV. 123, 160 (2019).

263. *Fact Sheet: Overview of the Clean Power Plan*, EPA, <https://archive.epa.gov/epa/cleanpowerplan/fact-sheet-overview-clean-power-plan.html> [<https://perma.cc/4MTU-FMNQ>] [hereinafter *CPP Fact Sheet*].

the consideration of the case by the U.S. Court of Appeals for the District of Columbia Circuit, which has the longest history with administrative law.²⁶⁴ It involves the Circuit's quite rational decision to refuse to stay the implementation of the CPP pending its consideration of the plan, on an expedited basis, in order to develop the relevant facts and law.²⁶⁵ It also involves the Supreme Court's extraordinary grant of the stay, without reasons or argument,²⁶⁶ which allowed fossil fuel plants to continue to pollute unabated until the matter was heard at trial.²⁶⁷ During the time of the Supreme Court's *sua sponte* stay, the Trump administration repealed the CPP and substituted one of its own, a greatly weakened version, until the Supreme Court's decision inover which litigation was still pending until the Supreme Court's decision in 2022.²⁶⁸

In short, the case was a mess, and the rigmarole it was put through smelled more of Supreme Court politics than the reasoned judgement we have a right to expect. The Court's process does no favor to its image as a neutral arbiter; it is now prone to rule on an issue without ever hearing the facts and the merits.

The scope of the problem raised by West Virginia was far wider than the Obama CPP. In the past twenty years the Solicitor General has made twenty-nine requests for stays to the Supreme Court, the majority of which were granted.²⁶⁹ Eight of these stay requests arose under the George W. Bush and Barrack Obama administrations; twenty-one of them under Donald Trump.²⁷⁰ The issues themselves ran the gamut of headline controversies of their time: abortion rights, LGBTQ rights,

264. Eric M. Fraser, David K. Kessler, Matthew J.B. Lawrence & Stephen A. Calhoun, *The Jurisdiction of the D.C. Circuit*, 23 CORNELL L. REV. 131, 137–38 (2013).

265. *West Virginia v. EPA*, No. 15-1363 (D.C. Cir. Jan 21, 2016) (per curiam) (order).

266. See Jonathan H. Adler, Opinion, *Supreme Court Puts the Brakes on the EPA's Clean Power Plan*, WASH. POST (Feb. 9, 2016, 7:36 PM), <https://www.washingtonpost.com/news/volokh-conspiracy/wp/2016/02/09/supreme-court-puts-the-brakes-on-the-epas-clean-power-plan> [<https://perma.cc/S3UZ-NGUD>].

267. *Id.*

268. See Ellen Gilmer, *D.C. Circuit Scraps Clean Power Plan Litigation*, BLOOMBERG L. (Sept. 17, 2019, 4:31 PM), <https://news.bloomberglaw.com/environment-and-energy/d-c-circuit-scraps-clean-power-plan-litigation> [<https://perma.cc/7MF3-H5AQ>].

269. See Vladeck, *supra* note 262, at 125, 134, 162–63.

270. *Id.* at 125.

travel bans, DACA, climate change, the census, immigration and funding for the border wall.²⁷¹ Have we left anything out?

The process itself was also suspect, indeed fundamentally unfair. A Supreme Court stay may be issued by a single Justice, assigned by geography to respond to extraordinary writs.²⁷² The Court then has the opportunity to review the stay, which requires only three more Justices to concur.²⁷³ In this process the parties may not be allowed to submit pleadings, nor may they be allowed an opportunity for oral argument.²⁷⁴ For these reasons Professor Vladeck has called it the Court's "Shadow Docket."²⁷⁵ It could as easily be called the "Mad Hatter's Docket" as well.

Parties in all walks of life are expected to prove their cases, or at least the likelihood of their success, before obtaining an injunction. Except for the Solicitor General who, representing the government, carries the weight of his office before the Supreme Court and obtains his stays with a minimum of proof, in the words of Professor Vladeck quoted above, and a minimum of Court supervision.²⁷⁶ And no small whiff of politics.²⁷⁷

Given the Republican members who approved the stay in the case, politics apparently prevailed. In consequence, the catastrophe of climate change has been sidelined and unaddressed, to this day.

B. *The D.C. Circuit and the Four Factors Test*

Over time the judiciary developed a well-accepted, "four factor" test for deciding petitions for a stay of court proceedings.²⁷⁸ The *first* criterion set a high bar for granting a stay, a presumption against a stay

271. *Id.* at 135–52.

272. See PUB. INFO. OFF., SUP. CT. OF THE U.S., A REPORTER'S GUIDE TO APPLICATIONS PENDING BEFORE THE SUPREME COURT OF THE UNITED STATES 2 (2021), <https://www.supremecourt.gov/publicinfo/reportersguide.pdf> [<https://perma.cc/SV64-GESU>].

273. *Id.* at 2.

274. *Id.* at 3.

275. Vladeck, *supra* note 262, at 125.

276. See *id.* at 123–25.

277. *Id.* at 160 ("[T]he Solicitor General's increased resort to emergency or extraordinary relief may reflect that office's increasing prioritization of the politics of the moment.").

278. See *Niken v. Holder*, 556 U.S. 418, 426 (2009) (quoting *Hilken v. Braunskill*, 481 U.S. 770, 776 (1987)).

unless there are “extraordinary” circumstances.²⁷⁹ This is an overarching principle and it affects each of the three that follow. Stays, often without evidence or argument, get the judicial process backwards. First we take evidence, then we decide.

The *second* criterion required the applicant, West Virginia et al. and its industry allies in this case to show, against a presumption to contrary, that its petition is likely to “ultimately succeed on the merits of their [plea].”²⁸⁰ In this case no such showing could be made. The process through which the CPP was developed was highly reasonable and flexible in accommodating industry compliance through the grant of extensions of deadlines and of suite of technological options to meet the Plan’s target reduction goals.²⁸¹ Indeed, the Plan could not have been more accommodating and still constitute a plan. The finding against a stay under these circumstances was a lay-down.

The *third* criterion was whether they, the state and its industry allies, would suffer “irreparable harm” by waiting for judgment.²⁸² There is no way that West Virginia et al. could meet this burden. As seen above the EPA had been careful to provide the moving parties with considerable flexibility in complying with the CPP, including an expedited decision, the opportunity for West Virginia et al. to extend CPP deadlines, and the choice of technologies for them meet abatement requirements.²⁸³ With this very short timeline for experiencing injury, and abundant ways for the petitioners to avoid it, exactly how would the industry lose?

The *fourth* criterion was even more of a lay-down than the first three. Would the requested stay serve the “public interest?”²⁸⁴ Of course it would not. The CPP would *inter alia* protect public health and welfare. What could be more in the public interest? The industry interests are quintessentially private. Who could argue that health and welfare, by contrast, are not quintessentially public? No one. With the possible exception of one’s lawyers.

279. See *Heckler v. Lopez*, 463 U.S. 1328, 1330, 1333 (1983).

280. See Memorandum of Federal Respondents in Opposition at 4, *West Virginia v. EPA*, 577 U.S. 1126 (2016) (Nos. 15A773, 15A776, 15A778, 15A787 & 15A793) (opposing the stay application).

281. *Id.* at 14–15 (pollution control technology options).

282. *Id.* at 20.

283. *Id.* at 14–17.

284. *Id.* at 5.

In sum, the state and industry petition does not only not meet the four factors, it fails to meet *any* of the factors. The D.C. Circuit's rejection of the stay was not only reasonable, it was compelled by law.

C. *The Supreme Court and the Four Factors*

What happened here is easier to describe, if unhappily so. The Court's treatment of the issue could be summed up in the phrase: "Four Factors . . . What Four Factors?" Republican members of the Supreme Court led by Justice Scalia, vigorous supporters of industry throughout their terms, were in hurry to reverse the D.C. Circuit's refusal to stay its proceedings.²⁸⁵ If the D.C. Circuit, which appreciated fully what was at stake in the CPP, would not stay its proceedings, then the High Court would stay them itself.²⁸⁶ Which left industry to construct and operate fossil fuel power plants, beyond judicial reach, *ad infinitum*.

The High Court's opinion was remarkably short.²⁸⁷ Even more remarkably, it failed to even mention the four factors, much less consider or apply them.²⁸⁸ In a case of this importance to the country, of this complexity, briefed the gills by both parties, not a word. If nothing else, Justice Scalia and his four colleagues—to use an unseemly metaphor—lifted their middle finger to the EPA's CPP and buried it in a few short lines. The majority opinion, full, reads:

Application for stay submitted to THE CHIEF JUSTICE and by him referred to the Court granted. The Environmental Protection Agency's "Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units," 80 Fed. Reg. 64,662 (October 23, 2015), is stayed pending disposition of the applicants' petitions for review in the United States Court of Appeals for the District of Columbia Circuit and disposition of the applicant's petition for writ of certiorari, if such writ is sought. If writ of certiorari is sought and the Court denies the petition, this order shall terminate automatically. If the Court grants the petition for

285. *Am. Lung Ass'n v. EPA*, 985 F.3d 914, 999 (D.C. Cir. 2021) (per curiam), *rev'd sub nom.* *West Virginia v. EPA*, 136 S. Ct. 1000 (2016).

286. *West Virginia*, 136 S. Ct. at 1000.

287. *Id.*

288. *See id.*

writ of certiorari, this order shall terminate when the Court enters its judgement.²⁸⁹

In just over 100 words Justice Scalia and company canned the most important environmental plan in the world. They did not simply do this via a contrary reading of the long-standing four factors test. They did it with *no reasons* at all. Reading the opinion is like watching the smoke go up as the Vatican announced a new pope. Only in this case, it was a death. How could they do this? Well, when you are in a majority—even a wafer-thin one-vote majority such as here²⁹⁰—you can do anything you want. You *are* the law.

At the very least, viewed most favorably to the Court, its Justices were in too much of hurry to pay attention to the four factors. *West Virginia et. al* presented their appeal to the High Court on Day One; the Court issued its ruling on Day Two, less than twenty-four hours later, before discounting time to go home, eat and go to bed.²⁹¹ Why the rush? As Professor Lazarus of Harvard, a leading Supreme Court scholar has observed:

[T]he Justices were on break between argument sessions and spread literally all over the globe giving speeches and attending meetings (Scalia was in Asia) . . . There was no time for them to read anything about the case, let alone deliberate and discuss anything so consequential as this unprecedented stay of a massive regulatory proposal set forth by the executive branch entitled to a presumption of regularity. The five Justices in the majority clearly acted based on personal, ideological impulse rather than careful thought. There was not time for them to do anything else. They could not have possibly considered the competing legal arguments on the merits, which were extensive, and very complicated, to any meaningful extent. But that also was clearly the basis of the stay—an impulsive reaction that the CPP was unlawful—because the argument that as stay was needed to avoid irreparable harm was laughably weak.²⁹²

A powerful statement of truth to the High Court by a scholar, litigator, and a former member of the Solicitor General's Office, who

289. *Id.*

290. *Id.* (Justices Kagan, Sotomayor, Ginsburg, and Breyer would have denied the stay application).

291. Email of Richard Lazarus, Professor, Harvard Law School, to author (Jan. 22, 2012) (on file with author).

292. *Id.*

had appeared several times before it.²⁹³ The *West Virginia* case which Professor Lazarus was critiquing, was placed in a larger context of Supreme Court stay-order-abuse by Professor Steven Vladeck, cited earlier in this article:

[*West Virginia*] is the latest in a series of, you know, what we would call . . . interlocutory or premature rulings by the Supreme Court that's not actually resolving the legality of these actions by the Trump administration, but that simply preserving the Trump administration's ability to enforce these policies while the lawsuits challenging those actions go forward—in the process, getting rid of injunctions by district judges that had frozen those policies, pending litigation, so basically letting the Trump administration have its cake while we proceed to decide whether it's going to be able to eat it as well.²⁹⁴

In the same interview Professor Vladeck was questioned on National Public Radio, “And what about the [C]ourt's ruling on the transfer of \$2.5 billion in defense funds to help build a wall on the U.S.-Mexico border? This was a 5–4 ruling that overturned an appellate decision.”²⁹⁵ Professor Vladeck replied, “Yeah, I think it's part of the same pattern.”²⁹⁶

D. Stay Orders: the High Court's Choice

For the Trump administration, the festivities with stay orders continued unabated, a spree of abuse via a process that has been largely invisible, rule-less, and decided by a one-sided handful of Justices.²⁹⁷ As seen in *West Virginia v. EPA* and many other cases, it is a

293. Professor Richard Lazarus Biography, HARV. L. SCH., <https://scholar.harvard.edu/rlazarus/bio> [<https://perma.cc/6VSF-F3XG>].

294. *What to Make of the Supreme Court's Immigration Rulings*, NAT'L PUB. RADIO, at 0:34 (Sept. 14, 2019, 7:59 AM), <https://www.npr.org/2019/09/14/760780823/what-to-make-of-the-supreme-courts-immigration-rulings> [<https://perma.cc/WNK4-QRLD>]

295. *Id.* at 1:54.

296. *Id.* at 2:08.

297. See Lisa Heinzerling, *The Supreme Court's Clean-Power Power Grab*, 28 GEO. ENV'T L. REV. 425, 425–27, 439–40 (2016) (explaining how the decision of five Justices on the Supreme Court to grant a stay of the EPA's Clean Power Plan in 2015 was “the first time” the Court had “stopped a nationally applicable agency regulation prior to an initial decision on the merits of the rule in a lower court”); Josh Blackman, *Scotus After Scalia*, 11 N.Y.U. J. L. & LIBERTY 48, 58, 63–64, 82–85 (2017) (analyzing the Court's reluctance to grant certiorari for petitions until after the inauguration of a new President in January 2016).

process that is rife with political influences, more so now than at any time in the nation's history. It is the sort of thing that we reprimand authoritarian countries for doing, only now it is the Castle (on the Hill) doing it. The Court's use of the stay process lacks the fundamental elements of transparency, accountability, and due process inherent in our Constitution and way of life.

The High Court had a choice. Either it could have cleaned up its act, promulgating clear rules for handling stays, perhaps requiring unanimity in their exercise to avoid political misuse or it could have continued to act as an outlaw—literally outside the framework of law that is generally accepted as an essential element of the rule of law.

Continuing the status quo would of course not be good for the Court or the country. Unfortunately, by default it is unlikely to receive the attention it deserves. Attention would require action, and it is not in the Court's self-interest to act by limiting the exercise of its own powers, including its stay power, no matter how arbitrary and capricious its exercise may be.

One may hope for a Court that is more enlightened and more fair. May that day come early.

IV. JULIANA V. UNITED STATES

"It'll start getting cooler. You just watch . . . I don't think science knows, actually."

—President Donald Trump, 2020²⁹⁸

Short of a nuclear holocaust, it is difficult to imagine a phenomenon more dangerous to the planet than climate change. It is also difficult to imagine the resistance to acknowledging this phenomenon, whether based on religion, economics, politics, willful blindness . . . or all four at once. What we have here is a standoff among believers and non-believers in all three branches of government. Whatever one administration proposes the next is quick to unravel.

The nation would be paralyzed indeed, but for a remarkable series of lawsuits attempting to force the action forward. None of these suits

298. Kevin Breuninger, *'I Don't Think Science Knows,' Trump Responds when Challenged on Climate Change at Wildlife Briefing*, CNBC (Sept. 14, 2020, 4:09 PM), <https://www.cnbc.com/2020/09/14/trump-challenged-on-climate-change-during-wildfire-briefing.html> [<https://perma.cc/K46J-QKUS>].

is so bold as that filed in Oregon by a group of twenty-one children demanding that the government address climate change, right now, before it is too late to do anything about it at all.²⁹⁹ The case is styled *Juliana v. United States*,³⁰⁰ and it may be the most important environmental lawsuit ever filed on earth.

A. *Messengers*

One of the current messengers is the science journalist Nathaniel Rich whose focus on the decade between 1979 and 1989 was published in the New York Times as a special edition titled “Losing Earth” in January 2018.³⁰¹ He begins with history.

The world has warmed more than one degree Celsius since the Industrial Revolution. The Paris climate agreement—the nonbinding, unenforceable and already unheeded treaty signed on Earth Day in 2016—hoped to restrict warming to two degrees. The odds of succeeding according to a recent study based on emission trends are one in 20. If by some miracle we are able to limit warming to two degrees, we will have only to negotiate the extinction of the world’s tropical reefs, sea-level rise of several meters and the abandonment of the Persian Gulf. The climate scientist James Hansen has called two-degree warming “a recipe for long-term disaster.”³⁰²

“Long-term disaster,” he continues, “is now the best-case scenario.”³⁰³ Three degrees of warming leads to the loss of “Arctic forests and most coastal cities.”³⁰⁴ Robert Watson, a former director of the United Nations Intergovernmental Panel on Climate Change, has

299. *Juliana v. United States*, 217 F. Supp. 3d 1224, 1233 (D. Or. 2016), *rev’d*, 947 F.3d 1159 (9th Cir. 2020).

300. 217 F. Supp. 3d 1224 (D. Or. 2016). For a detailed description of the torturous path of litigation that followed this decision, see discussion *infra* Sections IV.E–I. This Article does not discuss civil damage claims based on climate change impacts filed by several states, Native American tribes and municipalities, none of which have yet reached the Supreme Court.

301. Nathaniel Rich, *Losing Earth: The Decade We Almost Stopped Climate Change*, N.Y. TIMES (Aug. 1, 2018), <https://www.nytimes.com/interactive/2018/08/01/magazine/climate-change-losing-earth.html#main> [<https://perma.cc/TM74-HHNB>]. The description of the impacts of climate change that follows is taken from this source.

302. *Id.*

303. *Id.*

304. *Id.*

argued that “three-degree warming is the realistic minimum.”³⁰⁵ Beyond this, the wheels fall off.

At four degrees of warming Europe is in “permanent drought,” “vast areas” of China and India “claimed by desert,” the Colorado River “thinned to a trickle,” and the American Southwest “largely uninhabitable.”³⁰⁶ To some of the world’s leading climate scientists, five degrees puts human civilization itself at risk.³⁰⁷ There is a time here when, like frogs in rapidly boiling water, we can no longer escape the pot. That time is not far away, either.

Nothing about global warming is news to science. It is news that was simply inconvenient and ignored. In the early 1800’s French Scientist Jean-Baptiste Joseph Fournier was speculating that fossil fuel burning would turn the planet into a “hothouse.”³⁰⁸ A century later Swedish chemist Svante Arrhenius, who won the Nobel Prize for his experiments on conductivity, went on to warn that the world was burning coal at an alarming rate, “evaporating our coal mines into the air.”³⁰⁹ The average global temperature, he concluded, would rise up to nine degrees as CO₂ levels increased.³¹⁰ Heat waves in mid-American latitudes would soar into the 110’s, the seas would rise by tens of meters.³¹¹

By the 20th century, these predictions increased in urgency. In 1959, Dr. Edward Teller, a nuclear physicist, was invited by the American Petroleum Institute to address over 300 government officials, economists, scientists and industry leaders on the topic of “Energy and Man.”³¹² Given his audience, his message was rather stunning. Fossil fuels created carbon dioxide, he began, which was worrisome; he continued:

305. *Id.*

306. *Id.*

307. *Id.*

308. William McKibben, *The End of Nature*, NEW YORKER (Sept. 3, 1989), <https://www.newyorker.com/magazine/1989/09/11/the-end-of-nature> [<https://perma.cc/V9BM-LV6V>].

309. *Id.*

310. *Id.*

311. *Id.*

312. Benjamin Franta, *On Its 100th Birthday in 1959, Edward Teller Warned the Oil Industry About Global Warming*, GUARDIAN (Jan. 1, 2018, 6:00 PM), <https://www.theguardian.com/environment/climate-consensus-97-percent/2018/jan/01/on-its-hundredth-birthday-in-1959-edward-teller-warned-the-oil-industry-about-global-warming> [<https://perma.cc/37PU-RKS7>].

At present the carbon dioxide in the atmosphere has risen by 2 per cent over normal. By 1970, it will be perhaps 4 per cent, by 1980, 8 per cent, by 1990, 16 per cent, if we keep on with our exponential rise in the use of purely conventional fuels. By that time, there will be a serious additional impediment for the radiation leaving the earth. Our planet will get a little warmer. It is hard to say whether it will be 2 degrees Fahrenheit or only one or 5. But when the temperature does rise by a few degrees over the whole globe, there is a possibility that the icecaps will start melting and the level of the oceans will begin to rise. Well, I don't know whether they will cover the Empire State Building or not, but anyone can calculate it by looking at the map and noting that the icecaps over Greenland and Antarctica are perhaps five thousand feet thick.³¹³

This was of course the message of Jean-Baptiste Fournier and Svante Arrhenius some 250 years earlier.³¹⁴ Sadly, time has proven all of them correct on every score. Glaciers on both poles, the Himalayas, and the high Andes are melting like ice cream.³¹⁵ Summer temperatures in Las Vegas and Phoenix regularly exceed 110 degrees;³¹⁶ western forests are going up in flame;³¹⁷ hurricane frequency and ferocity have nearly

313. *Id.*

314. *See supra* notes 308–311 and accompanying text.

315. Aryn Baker, *After Visiting Both Ends of the Earth, I Realized How Much Trouble We're In*, TIME (May 11, 2022, 7:00 AM), <https://time.com/6174966/north-south-pole-melting-climate-change> [<https://perma.cc/4M29-UDLL>]; Doyle Rice, *Himalayan Glaciers Melting at an 'Exceptional' Rate Because of Global Warming, Study Finds*, USA TODAY (Dec. 20, 2021, 5:01 AM), <https://www.usatoday.com/story/news/world/2021/12/20/himalayan-glaciers-melting-fast-pace-because-global-warming/8941101002> [<https://perma.cc/8WF4-AYUC>]; Amanda Magnani, *Andean Glaciers are Melting, Reshaping Centuries-Old Indigenous Rituals*, NAT'L GEOGRAPHIC (Apr. 19, 2021), <https://www.nationalgeographic.com/culture/article/andean-glaciers-melting-reshaping-centuries-old-indigenous-rituals> [<https://perma.cc/49SC-ZFHY>].

316. *See* Dan Hernandez, *The Hellish Future of Las Vegas in the Climate Crisis: 'A Place Where We Never Go Outside'*, GUARDIAN (Sept. 3, 2019, 1:00 AM), <https://www.theguardian.com/us-news/2019/sep/02/las-vegas-climate-crisis-extreme-heat-hellish-future> [<https://perma.cc/KZ3A-XRDT>] (explaining how Las Vegas is the fastest warming city in the United States); Ian Livingston, *Phoenix Has Hit 100 Degrees on Record-Breaking Half of the Days in 2020*, WASH. POST (Oct. 14, 2020, 6:18 PM), <https://www.washingtonpost.com/weather/2020/10/14/phoenix-record-heat-100-degrees> [<https://perma.cc/WNV8-EKAF>].

317. *Climate Change Indicators: Wildfires*, EPA, <https://www.epa.gov/climate-indicators/climate-change-indicators-wildfires> [<https://perma.cc/A696-9XKV>]

doubled;³¹⁸ and sea level rise is already prompting reluctant retreats from all four coasts.³¹⁹

One would think, then, that with these disasters looming America would be taking the lead to address them. Not exactly.

B. *The Presidents*

America's response to climate change has instead depended almost entirely on the person in the White House, leading to a roller-coaster that never stays up for long.

Perhaps surprisingly to a modern reader, President Richard Nixon began well with the environment. Facing a rising public demand for environmental protection and advised wisely by Russell Train (who at the time represented the Rockefeller Family), Nixon endorsed the creation of the EPA and the Council on Environmental Quality (CEQ), and included these initiatives his first State of Nation Address,³²⁰ and soon thereafter in a separate Message to the Congress on environmental quality.³²¹ Train, now appointed CEQ Chair, issued the Council's First Annual Report which described "Man's Inadvertent Modification of Weather and Climate" in great detail.³²² This was the first recognition of climate change as a serious issue at the White House level, and it would be, for Republican administrations, the last.

(discussing recent data showing the largest increase in forest fires between 1984-2018 occurred in the western United States).

318. *Hurricanes and Climate Change*, UNION OF CONCERNED SCIENTISTS, <https://www.ucsusa.org/resources/hurricanes-and-climate-change> (June 25, 2019) [<https://perma.cc/HHT3-B6J5>] ("The projected increase in intense hurricanes is substantial—a doubling or more in the frequency of category 4 and 5 storms by the end of the century—with the western North Atlantic experiencing the largest increase.")

319. Rebecca Hersher, *Ocean Water Along U.S. Coasts Will Rise About One Foot by 2050, Scientists Warn*, NPR (Feb. 15, 2022, 1:00 PM), <https://www.npr.org/2022/02/15/1080798833/ocean-water-along-u-s-coasts-will-rise-about-one-foot-by-2050-scientists-warn> [<https://perma.cc/QTW4-CNCG>] (explaining how much sea levels have risen in different U.S. coastal regions).

320. Lily Rothman, *Here's Why the Environmental Protection Agency Was Created*, TIME (Mar. 22, 2017, 9:00 AM), <https://time.com/4696104/environmental-protection-agency-1970-history> [<https://perma.cc/6FQ3-3MTA>].

321. Richard Nixon, *President's Message*, in COUNCIL ON ENV'T QUALITY, ENVIRONMENTAL QUALITY: THE FIRST ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY v-xv (1970) [hereinafter CEQ REPORT].

322. CEQ REPORT, *supra* note 321, at 93-97.

President Jimmy Carter's Council continued the climate change focus, its Tenth Annual Report of 1979 noting that "many scientists believe that the amount of CO₂ in the atmosphere could double over the hundred years ending in the middle of the next century," resulting in temperature rises of up to three degrees Celsius, with "larger increases in the . . . polar regions."³²³ This was the first White House recognition of not only the fact but the consequences of climate change.³²⁴

For the next eight years under President Reagan, CEQ annual reports made no mention to "did not prioritize." The Reagan CEQ reports mentioned climate change, specifically the 1981 CEQ report says, "[I]ncreased atmospheric CO₂ may be causing a warming trend that could increase mean global temperature between 2.5 and 4.5 degrees Celsius by the end of the 21st century."³²⁵ Instead, the President moved to surge coal production and de-regulate the surface mining industry (about which the President of the National Coal Association said he was "deliriously happy").³²⁶ Similarly, President George H.W. Bush offered lip-service to climate change during his campaign, but then deferred the issue to his Chief of Staff John Sununu, who actively loathed the EPA (the EPA Administrator called Sununu "Dr. No").³²⁷

Under President Bill Clinton the worm turned again. He set up a Climate Change Task Force that led to dramatic savings in energy use,³²⁸ and supported Vice President Al Gore in his crusade against global warming that ultimately led to the Paris Accords several years

323. COUNCIL ON ENV'T QUALITY, ENVIRONMENTAL QUALITY: THE TENTH ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY 621-22 (1979).

324. Jonathan Alter, *Climate Change Was on the Ballot with Jimmy Carter in 1980—Though No One Knew It at the Time*, TIME (Sept. 29, 2020), <https://time.com/5894179/jimmy-carter-climate-change> [<https://perma.cc/T4R3-L57B>] ("Carter was the first global leader to recognize the problem of climate change.").

325. See generally COUNCIL ON ENV'T QUALITY, ENVIRONMENTAL QUALITY: THE 12TH ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY 191 (1981) (briefly mentioning CO₂'s global warming effects).

326. NATHANIEL RICH, LOSING EARTH: A RECENT HISTORY 65 (2019).

327. Maureen Dowd, *Who's Environmental Czar, E.P.A.'s Chief or Sununu?*, N.Y. TIMES (Feb. 15, 1990), <https://www.nytimes.com/1990/02/15/us/who-s-environment-czar-epa-s-chief-or-sununu.html> [<https://perma.cc/B97U-LDSY>].

328. *Climate Change Task Force*, CLINTON WHITE HOUSE ARCHIVES, <https://clintonwhitehouse4.archives.gov/PCSD/tforce/cctf/index.html> [<https://perma.cc/FVB8-GQSC>].

later.³²⁹ Vice President Gore's book *An Inconvenient Truth* made a persuasive case for climate controls, and sold millions of copies.³³⁰

In the interim, however, President George W. Bush deferred the issue to his quite differently-minded Vice President Dick Cheney, whose National Energy Task Force, composed of carbon industry chiefs,³³¹ warmly embraced fossil fuel production and ridiculed energy conservation and alternative energy sources.³³²

Under President Barrack Obama the climate change issue leaped back into prominence. His EPA developed the CPP aiming to phase out the nation's dependence on fossil fuels.³³³ His special ambassador to the Paris Agreement, John Kerry, is largely credited with achieving consensus on this complex issue among points of view as different as those of Russia, China, and Brazil.³³⁴ In the end, every nation in the world signed the accord.³³⁵

Then came President Donald Trump, who not only ignored climate change but acted to accelerate the phenomenon as if he had intended

329. See, e.g., Imelda V. Abano, *Al Gore Urges World Leaders to Sign Paris Climate Deal*, REUTERS (Mar. 17, 2016, 7:35 AM), <https://www.reuters.com/article/us-global-climatechange-un/al-gore-urges-world-leaders-to-sign-paris-climate-deal-idUSKCN0WJ1FR> [<https://perma.cc/44RE-KB3V>]; *Statement from Former Vice President Al Gore on the Fifth Anniversary of the Paris Climate Agreement*, CLIMATE REALITY PROJECT (Dec. 11, 2020), <https://www.climateRealityProject.org/press/statement-former-vice-president-al-gore-fifth-anniversary-paris-climate-agreement> [<https://perma.cc/3XF3-C4R6>].

330. See generally AL GORE, *AN INCONVENIENT TRUTH: THE PLANETARY EMERGENCY OF GLOBAL WARMING AND WHAT WE CAN DO ABOUT IT* (2006).

331. Dana Milbank & Justin Blum, *Document Says Oil Chiefs Met with Cheney Task Force*, WASH. POST (Nov. 15, 2005), <https://www.washingtonpost.com/archive/politics/2005/11/16/document-says-oil-chiefs-met-with-cheney-task-force/03ca6ee6-3754-447e-8a24-45b2bc700d4e> [<https://perma.cc/F8GD-T3CL>].

332. Richard B. Cheney, Remarks by the Vice President at the Annual Meeting of the Associated Press in Toronto, THE AM. PRESIDENCY PROJECT (Apr. 30, 2001), <https://www.presidency.ucsb.edu/documents/remarks-the-vice-president-the-annual-meeting-the-associated-press-toronto> [<https://perma.cc/E2ZT-YRVC>].

333. *CPP Fact Sheet*, *supra* note 263.

334. Andrew Restuccia, *The One Word That Almost Sank the Climate Talks*, POLITICO (Dec. 12, 2015, 7:51 PM), <https://www.politico.com/story/2015/12/paris-climate-talks-tic-toc-216721> [<https://perma.cc/HN6P-2JF2>]; Rebecca Leber, *John Kerry's Appointment as Climate Envoy Shows the World We're Back in the Game*, MOTHERJONES (Nov. 23, 2020), <https://www.motherjones.com/environment/2020/11/john-kerrys-appointment-as-climate-envoy-shows-the-world-were-back-in-the-game> [<https://perma.cc/REA6-ZTEJ>].

335. *The Paris Agreement*, UNITED NATIONS, <https://www.un.org/en/climatechange/paris-agreement> [<https://perma.cc/GL9L-2UWW>].

it . . . which there is reason to believe he did.³³⁶ At the bottom of his actions, and their excuse, was a new phenomenon: flat denial that climate change was happening.³³⁷

C. *The Denial*

One of the anomalies of this history is that, as Nathaniel Rich documented, despite the occupant of the White House, there was a magic decade through the 1980's when America seemed poised to act.³³⁸ One of the key actors was, of all parties, ExxonMobil, which was in a real sense a government of its own.³³⁹ Corporation scientists published a study in 1957 tracking the enormous quantity of carbon dioxide in the atmosphere since the industrial revolution.³⁴⁰ One year later, American Petroleum Institute reached the same conclusion. This led to another Institute study, this one in 1968 by Stanford University. Stanford concluded that fossil fuel combustion would “bring ‘significant temperature changes,’” including melting the Antarctic ice cap and rising seas.³⁴¹

All of which makes the near-miss of the 1980's all the more remarkable. The momentum was there. Everyone who mattered was on board, or at least willing to follow. One reason for the flip is that by the end of the decade ExxonMobil had switched sides.³⁴² Whatever its scientists had concluded, and still concluded, about climate change, the corporation apparently realized that doing *anything* on carbon emissions would cost it major amounts of money.³⁴³ Less gas was not its business model. ExxonMobil launched a public relations campaign

336. Coral Davenport, *What Will Trump's Most Profound Legacy Be? Possibly Climate Damage*, N.Y. TIMES (Nov. 9, 2020), <https://www.nytimes.com/2020/11/09/climate/trump-legacy-climate-change.html> [<https://perma.cc/ETJ3-JYCF>].

337. Coral Davenport, *Climate Change Denialists in Charge*, N.Y. TIMES (Mar. 27, 2017), <https://www.nytimes.com/2017/03/27/us/politics/climate-change-denialists-in-charge.html> [<https://perma.cc/W6SB-YRL6>].

338. Rich, *supra* note 301.

339. See generally STEVE COLL, *PRIVATE EMPIRE: EXXONMOBIL AND AMERICAN POWER* (2012).

340. Rich, *supra* note 301.

341. *Id.*

342. *Id.*

343. *Id.* (noting that the reversal of Exxon's support for good-faith climate science was due in part to the realization that widespread knowledge of the impact of climate change could seriously impact Exxon's profits).

castigating its critics for “flawed academic reports” and “misrepresented its company research.”³⁴⁴

The industry and its political allies, largely the Republican Party, went one step further. They went after the science itself.³⁴⁵ As well-known Republican strategist Frank Luntz wrote, in an unpublished memo, to party members in the White House and Congress, “The scientific debate is closing [against us] but not yet closed. There is still a window to challenge the science.”³⁴⁶ Denial was born, and the war over “good science” had begun.

Indeed, American industry had been waging this war over other public health and environmental threats for decades. It was a war between corporations and science itself and each battle followed the same game plan: launch coordinated PR campaigns, find a few scientists for hire, instill doubt, vilify those speaking against you.³⁴⁷ As described in *Merchants of Doubt* by Harvard’s Naomi Oreskes and a colleague, it began in the 1960’s with the proposed ban on the pesticide DDT,³⁴⁸ which was in turn prompted by the publication of Rachael Carson’s *Silent Spring*.³⁴⁹ To the industry’s consternation the book remained at the top of the New York Times for fifty-one straight weeks, and has largely been credited with impelling both the National

344. *Understanding the #ExxonKnew Controversy*, EXXONMOBIL (Feb. 10, 2021), <https://corporate.exxonmobil.com/Sustainability/Environmental-protection/Climate-change/Understanding-the-ExxonKnew-controversy?print=true#WhatisExxonKnew> [<https://perma.cc/6T28-UWYK>]. For a detailed timeline of what the corporation actually knew, while later denying it, about its contributions to climate change, starting in the 1950’s, see *Exxon’s Climate Denial History: A Timeline*, GREENPEACE, <https://www.greenpeace.org/usa/fighting-climate-chaos/exxon-and-the-oil-industry-knew-about-climate-crisis/exxons-climate-denial-history-a-timeline> [<https://perma.cc/P9F8-QHUS>].

345. Oliver Burkeman, *Memo Exposes Bush’s New Green Strategy*, GUARDIAN (Mar. 3, 2003, 8:48 PM), <https://www.theguardian.com/environment/2003/mar/04/usnews.climatechange> [<https://perma.cc/BZN8-T38T>].

346. *Id.*

347. See generally NAOMI ORESKES & ERIK M. CONWAY, *MERCHANTS OF DOUBT: HOW A HANDFUL OF SCIENTISTS OBSCURED THE TRUTH ON ISSUES FROM TOBACCO SMOKE TO GLOBAL WARMING* 142–52 (2010) (detailing the processes American industry uses to convolute sound climate science).

348. *Id.* at 216–17.

349. *Id.*

Environmental Policy Act and the environmental movement in general.³⁵⁰

Oreskes and Conway go on to describe the similar corporate campaigns against acid rain, ozone thinning, and cigarettes.³⁵¹ All featured manufactured doubt, all hid evidence that was highly inculpatory once revealed, and all were featured events of their day, front-page headline material for years.³⁵² All were also a prelude to the campaigns against climate controls today: Uncertain science; untrustworthy scientists; too expensive; not all that urgent; eco-mania; attack on capitalism . . . all fodder for Fox News, Rush Limbaugh and a reliable stable of pundits.³⁵³ They have been sufficient to sow doubt in the mind of much of the general public and a body of non-believers sufficient to fund politicians and keep them on the fence.

The lead climate change denier of the instant century is President Trump, who campaigning against climate controls as early as 2016 declared global warming a “Chinese Hoax.”³⁵⁴ Rallying his base, he succeeded in making climate change the equivalent of a dirty word, and induced coastal states such as North Carolina to ban mention of the term.³⁵⁵

350. On this occasion, the game plan failed. On the other hand, it made serious inroads on Carson’s health and she died shortly after the DDT ban. Eliza Griswold, *How “Silent Spring” Ignited the Environmental Movement*, N.Y. TIMES (Sept. 21, 2012), <https://www.nytimes.com/2012/09/23/magazine/how-silent-spring-ignited-the-environmental-movement.html> [<https://perma.cc/UT7V-MBDL>].

351. See ORESKES & CONWAY, *supra* note 347, at 66–168 (discussing how successive corporate disinformation campaigns against the validity of good-faith scientific evidence on the risks posed by acid rain, the thinning ozone layer, and secondhand smoke chipped away at public confidence).

352. *Id.* at 66–168, 184, 202.

353. *Id.* at 169–215 (highlighting how the experiences of previous disinformation campaigns culminated in an industry-wide effort to concoct a counternarrative to contemporary science on climate change); see Dana Nuccitelli, *Fox News Found To Be a Major Driving Force Behind Global Warming Denial*, GUARDIAN (Aug. 8, 2013, 12:16 AM), <https://www.theguardian.com/environment/climate-consensus-97-percent/2013/aug/08/global-warming-denial-fox-news> [<https://perma.cc/8CLZ-2NLA>] (noting how conservative media skews public belief in climate science).

354. See Edward Wong, *Trump Has Called Climate Change a Chinese Hoax. Beijing Says it Is Anything But.*, N.Y. TIMES (Nov. 18, 2016), <https://www.nytimes.com/2016/11/19/world/asia/china-trump-climate-change.html> [<https://perma.cc/ZT4Y-TQJA>].

355. Eric Wolff, *Energy Department Climate Office Bans Use of Phrase ‘Climate Change,’* POLITICO (Mar. 29, 2017, 6:11 PM) <https://www.politico.com/story/2017/03/energy->

One of Trump's first acts in office was to withdraw the United States from the Paris Agreement.³⁵⁶ Meanwhile, Senator Inhofe of Oklahoma was doing him one better, writing a book entitled *The Greatest Hoax: How the Global Warming Conspiracy Threatens Your Future*.³⁵⁷ Inhofe was joined in his opposition to climate controls by Senate Leader Mitch McConnell of Kentucky, whose loyalty to a coal state, like that of Oklahoma, is absolute. More problematic yet, all three men, and particularly Trump and McConnell, were in positions to punish climate change believers. They even withheld support for incumbent Republicans who dared to question the party's positions.³⁵⁸ What we have here on the legislative side, then, is a not a paralysis of belief . . . but of fear.

On the executive side, Trump's initiatives met less success. His appointments to the Department of Interior, Energy, the EPA and CEQ were so unqualified, conflict-ridden, and short-term to take hold.³⁵⁹ The best one can say about them is that their initiatives to repeal and rewrite regulations were so rushed and badly-lawyered that

department-climate-change-phrases-banned-236655 [https://perma.cc/7VW6-N542]; see also, Brad Plummer, *Florida Isn't the Only State Trying to Shut Down Discussion of Climate Change*, VOX (Mar. 10, 2015, 2:10 PM), https://www.vox.com/2015/3/10/8182513/florida-ban-climate-change [https://perma.cc/388C-EP35] (noting subversion of climate-change discussion among coastal state governors' offices).

356. Matt McGrath, *Climate Change: US Formally Withdraws from Paris Agreement*, BBC NEWS (Nov. 4, 2020), https://www.bbc.com/news/science-environment-54797743 [https://perma.cc/8DYZ-2NHB].

357. JAMES INHOFE, *THE GREATEST HOAX: HOW THE GLOBAL WARMING CONSPIRACY THREATENS YOUR FUTURE* (2012).

358. See Melanie Zanona & Ella Nilsen, *GOP Push to Shake Label of Climate Crisis Denier Runs into Trump*, CNN (Nov. 5, 2021, 6:52 AM), https://www.cnn.com/2021/11/05/politics/republicans-climate-crisis-cop26/index.html [https://perma.cc/3LZP-AQ8J] (discussing how Donald Trump is actively undermining acceptance of climate change science by Republicans).

359. See Lisa Friedman & Claire O'Neill, *Who Controls Trump's Environmental Policy?*, N.Y. TIMES (Jan. 14, 2020), https://www.nytimes.com/interactive/2020/01/14/climate/fossil-fuel-industry-environmental-policy.html [https://perma.cc/K5VR-XXQZ] ("Among 20 of the most powerful people in government environment jobs, most have ties to the fossil fuel industry or have fought against the regulations they are supposed to enforce . . . During their time in government they have been responsible for loosening or undoing nearly 100 environmental protections from pollution and pesticides, as well as weakening preservation of natural resources and effects to curb planet-warming greenhouse gas emissions.").

most were invalidated by reviewing courts and sent back to the drawing board.³⁶⁰

In late 2020, the country took a look in the mirror, a very deep breath, and elected Joe Biden as President, who restored climate change to a top place on his agenda.³⁶¹ But he would face difficulty getting sufficient Republican votes in the Senate to overcome filibusters and move the ball.³⁶² How much he could do by executive order and new regulations remained to be seen. Unfortunately, the climate change curtain was falling and the hour was late.

Meanwhile, four years before Biden's election, twenty-one children had gone to court to stop climate change and their case, after an extraordinary journey of its own, was still pending.³⁶³

D. *Roots*

Few major events rise from a single taproot, and *Juliana* is no exception. It rose from several sources, including:

—*Mary Wood*, Professor of Law and Director of the Environment and Natural Resources Program of the University of Oregon in Eugene;³⁶⁴

360. See generally *Roundup: Trump-Era Agency Policy in the Courts*, INST. FOR POL'Y INTEGRITY, <https://policyintegrity.org/trump-court-roundup> [<https://perma.cc/W6UQ-744L>] (finding that 192 challenges to Trump regulations were successful, while fifty-four were not. The largest category of regulations examined related to energy, natural resources, and the environment).

361. *The Biden Plan for a Clean Energy Revolution and Environmental Justice*, JOE BIDEN, <https://joebiden.com/climate-plan/#> [<https://perma.cc/8BVT-QB59>].

362. Although President Biden won a clear majority of the votes by any rational standard, Trump's continuing (if evidence-less) claims of "fraud" and "vote stealing" have kept his base energized, and have intimidated Republicans in both houses to oppose Biden tooth and claw. Despite the Inflation Reduction Act's provisions providing funding for clean energy systems, whether President Biden and an evenly-divided Senate are ultimately able to enact meaningful legislation to arrest climate change is at least doubtful. He and his agencies can, however, place controls on fossil fuel leasing and emissions that, coupled with funding for renewable sources and transmission efficiency, will go some distance to mitigate the problem, once they clear the inevitable hurdles of notice-and-comment rulemaking, litigation, and funding. Even if the Biden program succeeds, however, without supporting legislation it will be vulnerable to reversal by a succeeding President with a Trumpian agenda, once again.

363. *Juliana v. United States*, 217 F. Supp. 3d 1224, 1233 (D. Or. 2016), *rev'd*, 947 F.3d 1159, 1164 (9th Cir. 2020).

364. *Mary Wood Biography*, UNIV. OF OR. SCH. OF L., <https://law.uoregon.edu/directory/faculty-staff/all/mwood> [<https://perma.cc/ZKE9-76NL>].

—*Julie Olson*, an environmental litigator with an equally impressive win-record in California;³⁶⁵

—*Dr. James Hansen*, a highly-regarded climate scientist who directed the U.S. NASA Goddard Space Institute in New York City and would appear in the litigation as the children’s guardian;³⁶⁶

—*Antonio Oposa* of Manila, an attorney and visionary whose lawsuit against rapacious logging in the Philippines featured his own children and several others as lead plaintiffs, the first public interest “children’s case” record in the world;³⁶⁷

—*Kelsey Juliana*—who marched from Nebraska to Washington, D.C. at the age of eighteen demanding climate action from elected officials—became the lead plaintiff in the case that carried her name;³⁶⁸ and

—*Alec Loorz*, who had been lead plaintiff in a previous climate change case, went on to form an organization called Kids vs. Global Warming and to speaking engagements in America and abroad.³⁶⁹

In the words of District Court Judge Anne Aiken some years later, the *Juliana* case was “no ordinary lawsuit,”³⁷⁰ and one of the reasons was the diversity and commitment of those who brought it to court, and of those who defended them.

Not only was *Juliana* an extraordinary lawsuit, on its face it seemed a near—impossible one. As noted above, the awesome threat of global warming was well established in science well before the turn of this

365. Julia Olson Biography, CLIMATE ONE, <https://www.climateone.org/people/julia-olson> [<https://perma.cc/2FQB-KER2>].

366. Dr. James E. Hansen Biography, COLUM. UNIV. CLIMATE SCH., <https://people.climate.columbia.edu/users/profile/james-e-hansen> [<https://perma.cc/L2JZ-DQVL>]; *Juliana*, 217 F. Supp. 3d at 1224.

367. Antonio A. Oposa Jr. Biography, UNIV. OF HAW. AT MANOA, <https://manoa.hawaii.edu/inouyechair/portfolio-item/antonio-a-oposa-jr> [<https://perma.cc/9W7E-3VUM>]; environmenToday, *Antonio Oposa—The Most Unconventional Environmental Litigator?*, MEDIUM (Apr. 30, 2019), <https://medium.com/@theenvironmenttoday/antonio-oposa-the-most-unconventional-environmental-litigator-34f0aa2d6afe> [<https://perma.cc/W9HC-CZ28>].

368. Kelsey Juliana Biography, OUR CHILDREN’S TRUST, <https://www.ourchildrenstrust.org/Kelsey> [<https://perma.cc/47EM-PX48>].

369. Michelle Nijhuis, *The Teen-Agers Suing over Climate Change*, NEW YORKER (Dec. 6, 2016), <https://www.newyorker.com/tech/annals-of-technology/the-teen-agers-suing-over-climate-change> [<https://perma.cc/72FJ-5JBA>].

370. *Juliana v. United States*, 217 F. Supp. 3d 1224, 1234 (D. Or. 2016), *rev’d*, 947 F.3d 1159, 1164 (9th Cir. 2020).

century, but it would not be recognized as a fact by the Supreme Court until *Massachusetts v. Environmental Protection Agency*,³⁷¹ which required the EPA to follow the mandate of the CAA and come to grips with it.³⁷² The fact that this was a 5–4 opinion, however, is some indication of the chasm remaining between those who took the phenomenon seriously and those who did not.³⁷³ The notion that federal courts would now favor a lawsuit against the entire federal government compelling it to arrest climate change—not on the basis of an applicable statute but rather on the Constitution and the rarely-used public trust doctrine—seemed somewhere between wishful thinking and delirium.³⁷⁴ But this is exactly what happened.

The notion to use the public trust to arrest climate change came from Mary Wood, though not all at once.³⁷⁵ Her early work focused on Native American rights, in themselves something of a trust, at a time when they were not well-developed.³⁷⁶ She then began to consider nature as a whole, leading to a book entitled *Nature's Trust*³⁷⁷ that extended the water-based trust concept to ecosystems.³⁷⁸ She was beginning to focus in on a trust for wildlife when she, like many others, was stopped in her tracks by Al Gore's climate book and documentary, *An Inconvenient Truth*.³⁷⁹ At the same moment she happened on Dr. Hansen's article about the science behind this phenomenon and our

371. 549 U.S. 497 (2007).

372. *See id.* at 517–26 (concluding that Congress intended to designate carbon dioxide as an air pollutant—placing its regulation under the purview of the EPA).

373. *See id.* at 501.

374. *See, e.g., Juliana*, 217 F. Supp. 3d. at 1233 (basing plaintiffs' claim on an alleged violation of their rights under the public trust doctrine).

375. Interview with Mary Christina Wood, Faculty Director, Environmental and Natural Resources Law Center, University of Oregon (on file with author) [hereinafter Wood Interview] (the description that follows of Wood's scholarship and evolution from Native American issues to Climate Change and the Atmospheric Trust is taken largely from this source).

376. *See, e.g.,* Mary C. Wood, *Indian Land and the Promise of Native Sovereignty: The Trust Doctrine Revisited*, 1994 UTAH L. REV. 1471, 1472 (1994) (discussing the relationship between the Federal Government and the Indian nations through the prism of the Indian trust doctrine).

377. MARY CHRISTINA WOOD, *NATURE'S TRUST: ENVIRONMENTAL LAW FOR A NEW ECOLOGICAL AGE* (2014).

378. *Id.* at 5–9, 14–15.

379. AL GORE, *AN INCONVENIENT TRUTH: THE PLANETARY EMERGENCY OF GLOBAL WARMING AND WHAT WE CAN DO ABOUT IT* (2006); *see* Wood Interview, *supra* note 375.

proximity to what he called a ticking “time bomb.”³⁸⁰ Before she had time to digest these ideas, Hurricanes Katrina and Rita slammed into the Gulf Coast as if some unseen hand were writing a script for her, leaving New Orleans under twelve feet of water.³⁸¹ Professor Wood had a new mission.

She also had a new name for it: an “atmospheric trust.”³⁸² Carbon emissions were destroying the atmosphere, the holding tank for rain, that should be held in trust like other waters for the public at large.³⁸³ She began to campaign for litigation to protect the atmospheric trust.³⁸⁴ The campaign caught on with the media, newspapers, radio interviews, and in her words was “the most publicity in history about a lawsuit that never got brought.”³⁸⁵ Then it did.

At this point Wood had a concept, but she was not the one to litigate it. She had no experience in a courtroom and she preferred the life of a scholar, generating the concepts and leaving the battle to others better able to wage it.³⁸⁶ By chance, just such an attorney, Julie Olson, moved to Eugene, home of Wood’s University and it was only a matter of days before they met, and connected.³⁸⁷ Very well.

Olson welcomed the challenge of climate change litigation and liked the public trust theory as well, which was well-developed in California.³⁸⁸ An atmospheric trust seemed a workable extension of the

380. James Hansen, *Defusing the Global Warming Time Bomb*, 290 SCI. AM. 68, 70 (2004); see Wood Interview, *supra* note 375 (discussing how Professor Wood professional focus shifted towards climate change and greenhouse-gas pollution).

381. Joseph B. Treaster & Kate Zernike, *Hurricane Katrina Slams into Gulf Coast; Dozens Are Dead.*, N.Y. TIMES (Aug. 30, 2005) <https://www.nytimes.com/2005/08/30/us/hurricane-katrina-slams-into-gulf-coast-dozens-are-dead.html> [<https://perma.cc/CPT2-DRWY>].

382. See, e.g., Mary Christina Wood, *Law and Climate Change: Government’s Atmospheric Trust Responsibility*, 38 ENV’T L. REP. 10,652, 10,656–57 (2008) (introducing the “atmospheric trust” concept).

383. *Id.*

384. See Mary Christina Wood, *Atmospheric Trust Litigation: Securing a Constitutional Right to a Stable Climate System*, 29 COLO. NAT. RESOURCES ENERGY & ENV’T L. REV. 321, 332–34 (2018) (outlining the atmospheric trust litigation campaign).

385. Wood Interview, *supra* note 375 (discussing Professor Wood’s atmospheric trust litigation advocacy and the recent case it spawned).

386. John Schwartz, *Young People Are Suing the Trump Administration over Climate Change. She’s Their Lawyer.*, N.Y. TIMES (Oct. 23, 2018), <https://www.nytimes.com/2018/10/23/climate/kids-climate-lawsuit-lawyer.html> [<https://perma.cc/JH8B-JMHV>].

387. *Id.*

388. See Wood Interview, *supra* note 375.

law. She particularly liked adopting Oposa's strategy of suing via children who had the most at stake as the living resources of the world diminished, and would be seen with more compassion than adults, scientists and environmental groups.³⁸⁹ Within a short time, she formed an organization called Our Children's Trust and put these elements to the test.³⁹⁰

What followed was a massive, coordinated campaign of public relations and litigation. In 2011, during Mother's Day Week (no accident), Olson and the Children's Trust launched petitions and/or lawsuits in every state of the Union, each in the name of children living in the state, each based on the atmospheric trust doctrine, and each demanding immediate action to abate climate change.³⁹¹ A federal case was also launched in California but transferred to the District of Columbia, where it did not fare well; the public trust, they were told, did not bind the federal government.³⁹² Many of the other cases were also dismissed on motions, without trial.³⁹³ A few succeeded at the trial court level but were reversed on appeal.³⁹⁴ It was time to regroup.

Meanwhile, the science kettle was beginning to boil over. Dr Hansen's research concluded that 350 million parts per million of carbon dioxide in the atmosphere would push planet earth past the tipping point within just a few years.³⁹⁵ This number stimulated a new

389. *Id.*

390. *About Us, OUR CHILD.'S TR.*, <https://www.ourchildrenstrust.org/mission-statement> [<https://perma.cc/5QDS-P4KJ>].

391. *Legal Proceedings in All 50 States, OUR CHILD.'S TR.*, <https://www.ourchildrenstrust.org/other-proceedings-in-all-522220-states> [<https://perma.cc/7CBB-6JMG>]; *see also* Wood Interview, *supra* note 375 (detailing California/District of Columbia case and its unfavorable results).

392. *See* *Alec. L. v. Jackson*, 863 F. Supp. 2d. 11, 13 (D.D.C. 2012), *aff'd sub nom* *Alec. L. ex rel. Loortz v. McCarthy*, 551 Fed. App. 7 (D.C. Cir 2014 (per curiam) (holding that the Supreme Court has rejected the notion that the public trust doctrine applies to the federal government).

393. *See, e.g., Sanders-Reed ex rel. Sanders-Reed v. Martinez*, 350 P.3d 1221, 1227 (N.M. Ct. App. 2015) (affirming New Mexico District Court's order granting summary judgement to the State).

394. *See, e.g., Martinez v. Colo. Oil & Gas Conservation Comm'n*, 434 P.3d 689 (Colo. App. 2017), *rev'd*, 433 P.3d 22, 33 (Colo. 2019) (en banc) (holding that Commission acted properly when denying plaintiffs' rulemaking petition).

395. *See Why 350?*, MN350, <https://mn350.org/understanding350> [<https://perma.cc/7379-SK3Y>] ("If humanity wishes to preserve a planet similar to that on which civilization developed and to which life on Earth is adapted, paleoclimate evidence and ongoing climate change suggest that CO2 will need to be reduced from [current levels] to at most 350 ppm.").

lobby called Climate 350 led by the author-turned activist Bill McKibben.³⁹⁶ Hansen also showed that the atmosphere was already at 400-plus ppm,³⁹⁷ which meant that we not only needed to stabilize world emissions, but cut them by a third.³⁹⁸ No one attempted a serious rebuttal.

Having run their string with state-based litigation, Olson and her colleagues, concluded that the only avenue left was a lawsuit against the entire United States government based not only on the Public Trust Doctrine but also on two new and quite compelling causes of action under the Constitution.³⁹⁹ One was due process for the deprivation of life, liberty and property; the children were losing their options for the future, permit by permit, lease by lease, and they just kept on coming.⁴⁰⁰ The second was equal protection.⁴⁰¹ While adults as a class would not live long enough to suffer the full weight of climate change, the children, who were not of age to vote or otherwise participate in adult decisions, would take it face on.⁴⁰² These were claims that anyone could understand, and relate to.

In August 2015, *Juliana* was filed in the U.S. District Court for the District of Oregon, located in Eugene.⁴⁰³

E. *The Opening Round*

Eugene was a perfect fit for this case. The theory of atmospheric trust had been developed in the law school here, and had garnered significant press and public support.⁴⁰⁴ The University of Oregon was

396. See Bill McKibben Biography, 350, <https://350.org/bill> [<https://perma.cc/4WK2-PWHK>] (Mr. McKibben's book, *The End of Nature*, was the first to bring the issue of climate change to a popular audience).

397. See *Why 350?*, *supra* note 395 (highlighting graph showing current levels at 400 ppm).

398. See *id.* (stating that carbon levels must be brought down to the 350 ppm mark).

399. See Wood Interview, *supra* note 375.

400. *Juliana v. United States*, 217 F. Supp. 3d 1224, 1233 (D. Or. 2016), *rev'd*, 947 F.3d 1159, 1164 (9th Cir. 2020).

401. *Id.* at 1248 n.6.

402. *Id.* at 1250, 1265.

403. Complaint for Declaratory and Injunctive Relief at 1, *Juliana v. United States*, 217 F. Supp. 3d 1224, 1233 (D. Or. 2016), *rev'd*, 947 F.3d 1159 (9th Cir. 2020) (No. 6:15-cv-01517-TC).

404. See James Conca, *Atmospheric Trust Litigation—Can We Sue Ourselves Over Climate Change?*, FORBES (Nov. 23, 2014, 9:42 PM), <https://www.forbes.com/sites/>

also a leader in the natural sciences and environmental law more broadly, while the Oregon legislature had been among the first to pass bottle-deposit legislation, eco-based zoning (for Portland), and similar initiatives.⁴⁰⁵ *Juliana* was a green case in a green place, and it is no surprise that the first moves of the government and fossil fuel interveners were to kill the lawsuit at birth, or take it to another venue as soon as possible.

The *Juliana* amended complaint, filed September 10, 2015, was both encyclopedic and anticipatory.⁴⁰⁶ Following a brief introduction and declaration of jurisdiction, the next thirty pages detailed the backgrounds of each of the twenty-one child plaintiffs: their educational and outdoor interests, college and professional ambitions, and the anticipated harm that was already being felt and would become considerably more aggravated in the future.⁴⁰⁷ In so doing it nailed down the basis for standing to sue.

The next fifteen pages identified twenty-two federal defendants starting with the President and the White House and including federal departments as major and implicated as Interior, Energy, Transportation, and Defense.⁴⁰⁸ The complaint argued it was not simply a challenge to a lease or permit from an arbitrarily selected branch of the government, but rather a targeted selection of issuing government agencies and bureaus.⁴⁰⁹ In plaintiff's view and that of

jamesconca/2014/11/23/atmospheric-trust-litigation-can-we-sue-ourselves-over-climate-change/?sh=7c84b9d54005 [https://perma.cc/Q34G-DUY6] (describing how the atmospheric trust legal theory was conceived in the Oregon University School of Law).

405. *Environmental and Natural Resources Law Ranked #7 Nationally by US News*, UNIV. OF OR. SCH. OF L., <https://law.uoregon.edu/academics/centers/enr/about/ranking> [https://perma.cc/H2RL-SHXB]; see OR. REV. STAT. ANN. § 459A.705 (West 2021) (“Bottle Bill”) (providing refund values for recyclable beverage containers); see also PORTLAND, OR., PLANNING AND ZONING CODE ch. 33.430 (2022) (outlining “environmental zones” throughout the city of Portland).

406. See First Amended Complaint for Declaratory and Injunctive Relief, *Juliana v. United States*, 217 F. Supp. 3d 1224, 1233 (D. Or. 2016) (No. 6:15-cv-01517-TC), *rev'd*, 947 F.3d 1159 (9th Cir. 2020) (superseding original complaint filed on August 12).

407. See generally *id.* at 6–36 (noting each plaintiff and the harms posed to them by climate change).

408. See generally *id.* at 36–51 (detailing each defendant and their failure to do more to arrest climate change).

409. See *id.* (listing each agency's role in combating climate change).

their experts, at issue was the fossil-fuel-based energy system as a whole.⁴¹⁰

The complaint then marshalled facts to show that government had long known that carbon dioxide was causing catastrophic climate change, that massive emission reductions and a transition from fossil fuels were urgent, and that despite knowing this the government continued to lease, permit and subsidize fossil fuels while failing to curb their emissions.⁴¹¹ As for impacts, they were already severe and likely to make civilization as we knew it problematical, if not untenable, by the end of the century.⁴¹² The good news was that there was still a practicable glide path to avoid these consequences, even now, if we were to act.

Finally came the law, four causes of action based on the Due Process Clause of the Fifth Amendment of the Constitution, the equal protection requirements based on the same Amendment, a catch-all reference to the “rights of the people” under the Ninth Amendment, and the Public Trust Doctrine.⁴¹³

As for relief, aside from two fact-specific injunctions, the complaint asked for (1) a declaration that the government had violated the constitutional rights of the *Juliana* children, (2) a government inventory of U.S. carbon dioxide emissions, and (3) an “enforceable national remedial plan” to phase out fossil fuel emissions and restore sustainable levels of carbon in the atmosphere, (4) a declaration that the government violated its duties under the public trust doctrine, and (5) an injunction against further violations from the government.⁴¹⁴

The first hearing on these allegations took place within weeks, prompted by motions to dismiss filed by the government and industry virtually simultaneously.⁴¹⁵ Together they claimed that the climate change issue presented a non-justiciable political question, that the children lacked standing to sue, and that public trust claims could not

410. See generally *id.* at 51–63 (highlighting how the Federal Government and the fossil fuel industry are bedfellows—contributing to the acceleration of global temperatures and carbon levels).

411. *Id.* at 51–64.

412. *Id.* at 34–35 (citing *inter alia* conclusions of Dr. Hansen).

413. *Id.* at 84–93.

414. *Id.* at 99.

415. Motion to Dismiss, *Juliana v. United States*, 217 F. Supp. 3d 1224, 1233 (D. Or. 2016) (No. 6:15-cv-01517-TC), *rev'd*, 947 F.3d 1159 (9th Cir. 2020) (filed by industry on November 12, 2015); Federal Defendants’ Motion to Dismiss, *Juliana*, 217 F. Supp. 3d 1224 (No. 6:15-cv-01517-TC) (filed by the government on November 17, 2015).

be filed against the federal government at all.⁴¹⁶ They further argued that the Constitutional claims (due process and equal protection) were not cognizable because they were based only on government inaction and were void of precedent in law.⁴¹⁷

1. *The District Court opinion*

These claims were first adjudicated by Magistrate Judge Thomas Coffin, whose Findings and Recommendation would be closely tracked for the life of the lawsuit.⁴¹⁸ In sum, he found the motions and the arguments behind them without merit.⁴¹⁹ Upon government and industry objections to these rulings the matter was elevated to District Court Judge Ann Aiken, whose fifty-four page opinion considered them more fully and arrived at the same conclusions.⁴²⁰

The opening question was the Political Question Doctrine: whether whatever the government did or didn't do about climate change was a matter of politics for to the President and the Congress, into which the judiciary should not tread.⁴²¹ The Supreme Court's seminal opinion on the doctrine was *Baker v. Carr*,⁴²² a race-based gerrymandering case which the Court found reviewable although the politics involved were obvious.⁴²³ Subsequent decisions supported trial on the merits even where the issues were of "great importance to the political branches."⁴²⁴ The decision to "deny access to judicial relief" should not be made lightly, Judge Aiken concluded, because federal courts have the constitutional "obligation" to decide cases and controversies presented to them.⁴²⁵

416. Motion to Dismiss at 2, *Juliana*, 217 F. Supp. 3d 1224 (No. 6:15-cv-01517-TC).

417. Federal Defendants' Motion to Dismiss at 13–14, *Juliana*, 217 F. Supp. 3d 1224 (No. 6:15-cv-01517-TC).

418. See Order and Findings & Recommendation at 8, *Juliana*, 217 F. Supp. 3d 1224 (No. 6:15-cv-01517-TC) ("[T]he intractability of the debates before Congress and state legislatures and the alleged valuing of short term economic interest despite the cost to human life, necessitates a need for the courts to evaluate the constitutional parameters of the action or inaction taken by the government.").

419. *Id.* at 24.

420. See *Juliana*, 217 F. Supp. 3d at 1234 (affirming Judge Coffin's Findings & Recommendation).

421. *Id.* at 1235.

422. 369 U.S. 186 (1962).

423. *Id.* at 237.

424. Dep't of Com. v. Montana, 503 U.S. 442, 458 (1992).

425. *Juliana*, 217 F. Supp. 3d at 1236 (citing *Alperin v. Vatican Bank*, 410 F.3d. 532, 539 (9th Cir. 2005)).

The *Baker* opinion offered six factors for determining whether a case was appropriate for judicial review.⁴²⁶ Each of them titled in favor of the *Juliana* plaintiffs. Did the words of the Constitution “commit” the question to another branch of government?⁴²⁷ Clearly not, on the face of the document itself and by Supreme Court precedent.⁴²⁸ Were there “manageable standards” for the decision?⁴²⁹ Clearly so. Per the Ninth Circuit a case is not unmanageable for being “large, complicated, or otherwise difficult to tackle from a logistical standpoint,” provided there is a framework for deciding in a “reasoned manner.”⁴³⁰ In this case, plaintiffs were not demanding that the court set emission standards or “issue or enforce any particular regulation.”⁴³¹ Rather they were asking the government to make an “enforceable national remedial plan to phase out fossil fuel emissions” in order to “stabilize the climate system.”⁴³² Courts require plans routinely where agencies failed to meet their constitutional duties.⁴³³

Was it “impossible” for the judiciary to make such decisions without treading on other branches of government?⁴³⁴ Judge Aikens noted similarly that federal courts “regularly adjudicate” such claims as “electronic surveillance,” “detention of undocumented immigrants,” and “international funding for birth control.”⁴³⁵ Each of these cases tread on government action.⁴³⁶

426. 369 U.S. at 217 (holding that the Political Question Doctrine applies in disputes involving (1) an explicit commitment of the issue to a coordinate branch or department of government; (2) a lack of manageable judicial standards to adjudicate the issue; (3) policy determinations beyond the limits of judicial discretion; (4) determinations expressing disrespect for coordinate branches of government; (5) an unusual need for adherence to previously resolved political decisions; or (6) potentially embarrassing pronouncements from political departments).

427. *Id.*

428. *Juliana*, 217 F. Supp. 3d at 1237 (citing *Nixon v. United States*, 506 U.S. 224, 226–33 (1993)).

429. *Baker*, 369 U.S. at 217.

430. *Juliana*, 217 F. Supp. 3d at 1239 (citing *Alperin* 410 F.3d at 552, 555).

431. *Id.*

432. *Id.*

433. *Id.* (citing *Coleman v. Schwarzenegger*, 2010 WL 99000, at *1 (E.D. Cal. & N.D. Cal., Jan. 12, 2010)).

434. *Id.* at 1245.

435. *Id.* at 1236 (citations omitted).

436. *See id.*

Judge Aiken’s treatment of the remaining factors was necessarily brief, because they were yet more far afield.⁴³⁷ Was the court expressing “lack of respect” for the foreign policy of the executive branch?⁴³⁸ No, a plea for climate change reductions did not conflict with foreign policy commitments because such reductions were what the Paris Accords, our only such action was all about.⁴³⁹ Nor was there “an unusual need for unquestioning adherence” to a political decision already made (unless the government’s sub-par response to climate change required unquestioning allegiance), and likewise the judiciary was not going to cause “embarrassment from multifarious . . . departments” on the question of climate change for the same reason.⁴⁴⁰ Obeying the law may be embarrassing, but it is what Article III courts do.

This said, one would think that the issue of “political question” was behind us, and with it its resurrection of sovereign immunity: the King (Richard Nixon, Donald Trump) can-do-no-wrong. Unfortunately, however, the issue continued to haunt the *Juliana* case, both expressly and impliedly. It would next be treated on appeal by the U.S. Court of Appeals for the Ninth Circuit, more than two years later as the action bounced wildly from motion to motion between the trial and appellate courts, with two visits to the Supreme Court along the way.⁴⁴¹ The government and industry were pulling out all the stops in an effort to keep *Juliana* from going to trial.

The second issue, standing to sue, should have been a laydown. The traditional formula required injury in fact and causation, to which the complaint addressed a full thirty pages, each child plaintiff and how harmed by climate change.⁴⁴² As Judge Aiken pointed out, these were not “generalized grievances,” and they were “imminent” as well;⁴⁴³ indeed the injury was already happening.⁴⁴⁴ The third element, redress, was met in two ways. First, the relief need not stop climate

437. *Id.* at 1238–41.

438. *Id.* at 1271.

439. *Id.* at 1240.

440. *Id.* at 1241.

441. For a chronology of the case, forty-three pleadings, actions and decisions at all court levels, see *Juliana v. United States, OUR CHILD.’S TR.*, <https://www.ourchildrenstrust.org/juliana-v-us> [<https://perma.cc/33LF-R8FH>].

442. See *Juliana*, 217 F. Supp. 3d. at 1243.

443. *Juliana*, 217 F. Supp. 3d. at 1242–46.

444. *Id.* at 1244.

change; it only needs a reasonable possibility of slowing to it down.⁴⁴⁵ In addition, the termination of fossil fuel permitting, and the requested plan would without question do this.⁴⁴⁶

The hurdles cleared, Judge Aiken turned at last to the merits. Both the due process and equal protection claims required violations of a “fundamental right.”⁴⁴⁷ Her opinion turned to the High Court’s recent jurisprudence on privacy,⁴⁴⁸ abortion,⁴⁴⁹ and gay marriage⁴⁵⁰ and found it applicable and convincing.⁴⁵¹ Writing for the majority in *Obergefell*, Justice Kennedy had cautioned that:

The nature of injustice is that we might not always see it in our own times. The generations that wrote and ratified the Bill of Rights . . . did not presume to know the extent of freedom in all its dimensions, and so they entrusted to future generations a charter protecting the right of all persons to enjoy liberty as we learn its meaning. When new insight reveals discord between the Constitution’s central provisions and a received legal stricture, a claim to liberty must be addressed.⁴⁵²

Such was the case here. Just as “marriage” was the “foundation of the family” in *Obergefell* and hence the social order, “a stable climate system [was] quite literally the foundation ‘of society, without which there would be neither civilization nor progress,’” a “necessary condition to exercising other rights to life, liberty and property.”⁴⁵³ The rights of the *Juliana* plaintiffs may be new, but they had a good pedigree in law.

The last cause of action, the public trust doctrine, was also well received.⁴⁵⁴ Rooted in Roman Law, it declared that “the air, running

445. *Id.* at 1247.

446. *Id.* at 1248.

447. *Id.* Were a fundamental right not involved, the government’s actions/inaction would be subject to a rather forgiving “rational basis” test, which simply requires a reason (i.e., in this case to promote fossil fuel energy, or achieve “energy dominance”). A fundamental right on the other hand is subject to “strict scrutiny,” which requires a compelling state interest that can be accomplished by no other means . . . in this case, alternative sources of energy. *Id.*

448. *Griswold v. Connecticut*, 381 U.S. 479, 484 (1965) (deriving a right to property from the “penumbras” of other constitutional provisions).

449. *Roe v. Wade*, 410 U.S. 113 (1973), *overruled by* *Dobbs v. Jackson Women’s Health Org.*, 142 S. Ct. 2228 (2022).

450. *Obergefell v. Hodges*, 576 U.S. 644 (2015).

451. *Juliana*, 217 F. Supp. 3d at 1249–50.

452. *Obergefell*, 576 U.S. at 664.

453. *Id.* at 666 (citation omitted); *Juliana*, 217 F. Supp. 3d at 1250.

454. *Id.* at 1252.

water, the sea, and consequently the seashore” were common to all, public property, and could not be alienated.⁴⁵⁵ In the seminal case of *Illinois Central Railroad Company v. Illinois*,⁴⁵⁶ the Supreme Court invalidated state legislation that conveyed part of Lake Erie to the railroad company, based on the public trust doctrine.⁴⁵⁷ Subsequent law decisions and scholarship had supported its application widely.⁴⁵⁸ Contrary to the government’s argument, the trust protected “the air” which included the atmosphere, and climate change itself caused “ocean acidification and rising ocean temperatures.”⁴⁵⁹

Judge Aiken had to recognize, however, that the public trust doctrine had not yet been applied to the federal government (indeed, she cited cases to the contrary),⁴⁶⁰ but in the end she found “no reason” why it, coming through the Roman and English roots of American law, it would bind the states but not federal authorities.⁴⁶¹ As had Magistrate Coffin, she was willing to make law she believed make sense.⁴⁶² She closed with words “etched into the walls of the Portland United States courthouse:” “A strong and independent judiciary is the cornerstone of our liberties.”⁴⁶³ They were “a daily reminder” that it is “emphatically the province and duty of the judicial department to say what the law is,”⁴⁶⁴ citing *Marbury v. Madison*,⁴⁶⁵ perhaps the most famous Supreme Court decision of them all.

Like her opinion or loathe it, Judge Aiken walked the walk and would continue to walk it for the next four years.

455. *Id.* at 1253 (citing J. Inst. 2.1.1. (J. B. Moyle, trans.)) (describing the origins of plaintiffs’ public trust claims).

456. 146 U.S. 387 (1892).

457. *Id.* at 426.

458. *Juliana*, 217 F. Supp. 3d at 1254 (citing cases and articles supporting the public trust doctrine).

459. *Id.* at 1255–56, 1255 n.10.

460. *Id.* at 1257–59.

461. *Id.* at 1259.

462. *See supra* notes 418–419 and accompanying text.

463. *Juliana*, 217 F. Supp. 3d at 1263.

464. *Id.*

465. 5 U.S. 137, 177 (1803).

F. *The Road to Appellate Review*

One of the first consequences of Judge Aiken's decision was that the fossil fuel interveners, pulled out of the case.⁴⁶⁶ In so doing they avoided discovery on what they knew and when they knew it, including collusion with government agencies. The public explanation offered, though, was that with Donald Trump in the White House the industry's interests would be fully protected.⁴⁶⁷ Ironically, this statement confirmed what the plaintiffs had long maintained: that on climate change the government was simply doing what industry told it to do. This claim was mostly true, but not all.

In 2015 when *Juliana* was filed, Barack Obama was in the White House, and it would have been difficult for anyone to contend that he was not responding affirmatively to climate change. His CPP was a comprehensive roadmap for switching to renewable energy within strong inducements and short deadlines.⁴⁶⁸ Unfortunately five members of the Supreme Court, led by Justice Scalia, then reached out to stay the CPP,⁴⁶⁹ which provided time for President Trump to repeal it.⁴⁷⁰

Once President Trump assumed office, ironically, the we're-already-acting-on-it defense disappeared. The President was calling it a fraud (at one point, from China),⁴⁷¹ and his policies were aggravating the problem like gasoline on a fire. All the more reason, then, for government and its industry allies to keep the *Juliana* case from going

466. See Chelsea Harvey, *These Fossil-Fuel Groups Joined a Historic Climate Change Lawsuit. Now, They Want to Get out of It*, WASH. POST (May 26, 2017, 12:02 PM), <https://www.washingtonpost.com/news/energy-environment/wp/2017/05/26/three-fossil-fuel-groups-joined-a-historic-climate-lawsuit-now-they-want-to-get-out-of-it> [<https://perma.cc/A6LH-VQAL>] (suggesting that the industry was avoiding depositions and discovery).

467. *Id.*

468. See *CPP Fact Sheet*, *supra* note ; see also Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (Oct. 23, 2015).

469. See *West Virginia v. EPA*, 577 U.S. 1126, 1126 (2016) (staying the Clean Power Plan).

470. Chelsea Harvey, *Trump Has Vowed to Kill the Clean Power Plan. Here's How He Might—and Might Not—Succeed*, WASH. POST (Nov. 11, 2016, 12:34 PM), <https://www.washingtonpost.com/news/energy-environment/wp/2016/11/11/trump-has-vowed-to-kill-the-clean-power-plan-heres-how-he-might-and-might-not-succeed> [<https://perma.cc/7MR8-YB5V>].

471. See Wong, *supra* note 354 (quoting Trump's tweet alleging that global warming was created by the Chinese).

to trial. The disclosure of what they knew, and kept hidden—including barring government experts from talking about climate change—would inevitably influence the public and the courts.

Accordingly, the government’s first move following the district court opinion was to seek a rehearing on whether plaintiffs’ claims stated a cause of action, which of course the court had already ruled on.⁴⁷² To the surprise of no one, motion denied.⁴⁷³ The government then took an “interlocutory appeal” to the Ninth Circuit for a writ of mandamus reversing the district court because, in its words, the plaintiffs sought “wholesale changes in federal government policy based on utterly unprecedented legal theories.”⁴⁷⁴ To proceed now to trial (the normal course for any lawsuit) would greatly harm the government due to the volume of data it would have to produce in (the dreaded) discovery.⁴⁷⁵ The difficulty with this argument, of course, is that the same could said of any major anti-trust or bankruptcy litigation that might include many depositions, truckloads of documents, several court hearings, and years to resolve. This is what courts *do*.

The Ninth Circuit, bending over backwards, set this motion down for oral argument, and temporarily stayed the district court’s opinion.⁴⁷⁶ The government victory was short-lived. Several months later the circuit court unanimously rejected the mandamus request⁴⁷⁷ and, once again, the trial of the case before Judge Aiken was on.

At this point the government did something extraordinary. Twice. It ran to the Supreme Court begging it to stop the show.⁴⁷⁸ The Court refused to take the bait. On July 30, 2018, Justice Kennedy, known for his increasingly moderate stance on controversial issues and the

472. Order at 1, *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016) (No. 6:15-cv-01517-T4).

473. *Id.* at 4.

474. See Climate Reality Project, *Young Climate Reality Leaders Take Climate Change Action to Courts*, CLIMATE REALITY PROJECT (Nov. 9, 2018), <https://www.climaterealityproject.org/blog/young-climate-reality-leaders-take-climate-action-courts> (including, inter alia, quotes of arguments from the government’s brief noted in text above).

475. *Id.*

476. *In re United States*, 884 F.3d 830, 833–34 (9th Cir. 2018).

477. *Id.* at 838.

478. Application for a Stay Pending Disposition by the United States Court of Appeals for the Ninth Circuit of a Petition for a Writ of Mandamus to the United States District Court for the District of Oregon and any Further Proceedings in this Court and Request for an Administrative Stay at 2, *United States v. U.S. Dist. Ct. for Dist. of Or.*, 139 S. Ct. 1 (2018) (No. 18A65).

designated judge for motions from the Ninth Circuit, denied the government's request as "premature."⁴⁷⁹ Balancing the scales a bit, Kennedy acknowledged that the "breadth" of the *Juliana* claims was "striking," and that the District Court should "take these concerns into account" in discovery and expeditious rulings on the government's motions.⁴⁸⁰ Once again, he had found the moderate middle.

Unfortunately for the government, Justice Kennedy's ruling left it at the mercy of the courts below, but not for long. Shortly after the ruling, however, Kennedy retired and was replaced by his former law clerk, Justice Kavanaugh.⁴⁸¹ As a practical matter, the dynamics of the court went from 4–1–4 to something more like 5–4.⁴⁸² Seizing the moment, the government returned to the High Court with the same arguments and requests that the Court had rejected just weeks before—a mandamus dismissing *Juliana* without trial.⁴⁸³

Once again, the Court refused to do so, at least directly. In a 7–2 ruling, Chief Justice Roberts found the request unnecessary because the government had "adequate relief" available on remand to the Ninth Circuit, which would have the opportunity to reconsider its up-to-now refusal to stop the trial.⁴⁸⁴ Roberts's opinion, however, made no secret of his expectations for the outcome. He presented the government's arguments about the lack of precedent and extraordinary scope of the case as if they were his own and making no reference to Judge Aiken's lengthy rebuttal, discussed below.⁴⁸⁵ Roberts was unmistakably telling the Ninth Circuit what to do.

479. *United States*, 139 S. Ct. at 1.

480. *Id.*

481. Robert Barnes, *Justice Kennedy Asked Trump to Put Kavanaugh on Supreme Court List, Book Says*, WASH. POST (Nov. 21, 2019, 3:03 PM), https://www.washingtonpost.com/politics/courts_law/justice-kennedy-asked-trump-to-put-kavanaugh-on-supreme-court-list-book-says/2019/11/21/3495f684-0b0f-11ea-8397-a955cd542d00_story.html [https://perma.cc/28SC-HQA8].

482. Dylan Matthews, *America Under Brett Kavanaugh*, VOX (Oct. 5, 2018, 3:50 PM), <https://www.vox.com/2018/7/11/17555974/brett-kavanaugh-anthony-kennedy-supreme-court-transform> [https://perma.cc/5MUS-ZHHL].

483. *United States*, 139 S. Ct. at 452.

484. *Id.*

485. *See id.* at 452–53 ("The Government notes that the suit is based on an assortment of unprecedented legal theories, such as a substantive due process right to certain climate conditions, and an equal protection right to live in the same climate as enjoyed by prior generations.").

K. *The Ninth Circuit Rules*

On January 17, 2020—after another twelve months of unsuccessful government motions and interlocutory appeals—the Ninth Circuit did what it was told. It delivered a split opinion reversing Judge Aiken with an opinion that strained to find a reason based in law, and wound up finding one to avoid applying the law altogether.⁴⁸⁶

Not surprisingly, there was no disagreement on the panel about the reality of climate change, nor of its impacts. As the majority itself wrote:

[The] extreme heat is melting polar ice caps and may cause sea levels to rise 15 to 30 feet by 2100. The problem is approaching the “point of no return.” Absent some action, the destabilizing climate will bury cities, spawn life-threatening natural disasters, and jeopardize critical food and water supplies.⁴⁸⁷

Nor was there any disagreement about the government’s misconduct:

The record also establishes that the government’s contribution to climate change is not simply a result of inaction. The government affirmatively promotes fossil fuel use in a host of ways, including beneficial tax provisions, permits for imports and exports, subsidies for domestic and overseas projects, and leases for fuel extraction on federal land.⁴⁸⁸

Turning to the law, the majority accepted that constitutional challenges can be brought against the government conduct just described.⁴⁸⁹ This so, the majority would now have to allow the District Court to proceed to trial on whether this misconduct rose to the level of due process, equal protection, or public trust violations . . . unless it could find another way out. It proceeded to do so via a time-honored method for dismissing a disfavored case: standing to sue.⁴⁹⁰

The standing doctrine in the United States rises from two sources, each of which clearly intended to open the courthouse door to litigants. Article III of the Constitution extends judicial authority to all

486. *Juliana v. United States*, 947 F.3d 1159, 1168–73 (9th Cir. 2020), *rev’d*, 947 F.3d 1159 (9th Cir. 2020).

487. *Id.* at 1166.

488. *Id.* at 1167.

489. *Id.* at 1167–68.

490. *Id.* at 1175.

cases and controversies under federal law,⁴⁹¹ which on its face *Juliana* was several times over. The Administrative Procedure Act⁴⁹² (APA) opened the same doors to any person “adversely affected” by government acts, without qualification.⁴⁹³ Here too, on the pleadings alone, the *Juliana* minors qualified. In thirty pages they showed just how adversely affected they were, and that government acts were behind it.⁴⁹⁴ The Ninth Circuit had no option other than to find this injury sufficient and the government, at the least, a significant cause.⁴⁹⁵

Unfortunately, the Supreme Court’s standing doctrine did not end here. Several years after the APA was enacted, the Court, in one particularly repugnant opinion, added a third requirement for standing: redressability.⁴⁹⁶ If plaintiffs could not show that a court could remedy the harm, went the theory, there was no reason to waste everyone’s time.⁴⁹⁷ As logical as this statement may sound in theory, redress became a weapon against plaintiffs in. It has led to the dismissal of highly compelling cases in fact and law on the grounds that the relief would not solve the entire problem or that some other event might intervene, however unlikely it might be.⁴⁹⁸

The Ninth Circuit seized on it. Plaintiffs could not show, it stated, that even the “total elimination” of the challenged programs would “halt the growth of [climate change],” or “prevent further injury to the [children].”⁴⁹⁹ This was because too many carbons had already been

491. U.S. CONST. art. III, § 2.

492. 5 U.S.C. §§ 551–59, 701–06, 1305, 3105, 3344, 4301, 5335, 5372, 7521.

493. *Id.* § 702.

494. First Amended Complaint for Declaratory and Injunctive Relief, *supra* note 406, at 6–36; *see also Juliana*, 947 F.3d at 1165–66.

495. *See Juliana*, 947 F.3d at 1167 (espousing the premise that the record supports the government contributing to climate change through action).

496. *See Simon v. E. Ky. Welfare Rts. Org.*, 426 U.S. 26, 41–42 (1976) (explaining that low-income and minority plaintiffs excluded from tax exempt hospital lacked standing to sue because hospital might opt to forego federal tax exemption).

497. *See id.* (stating that Article III does not allow federal court to hear cases that are not redressable).

498. *See Lujan v. Defs. of Wildlife*, 504 U.S. 555, 571 (1992) (plurality opinion) (holding that there is no redress because project might proceed without USAID assistance); *Steel Co. v Citizens for a Better Env’t*, 523 U.S. 83 (1998) (ruling that there is no redress where a company subsequently complied with its duty to release information, even though admission of fault and reimbursement of plaintiff costs would have provided some relief).

499. *See, e.g., Juliana*, 947 F.3d at 1170.

pumped into the atmosphere and would therefore persist until yet more dramatic de-carbonization efforts were made.⁵⁰⁰

This statement stated too much. Plaintiffs never claimed that their suit would solve the problem by itself. Rather, they asked that the government stop aggravating the problem and make a plan. This is the way, and the only sustainable way, change happens. It was also the rationale of the Supreme Court majority in *Massachusetts v. Environmental Protection Agency* that found that even a six percent reduction of worldwide transportation emissions would have a significant effect on climate change.⁵⁰¹ In effect, the *Juliana* Ninth Circuit majority adopted the *Massachusetts v. Environmental Protection Agency* minority position.⁵⁰² This position did not prevail then, and it should not have prevailed here.

Perhaps because the majority felt uncomfortable with its rejection of case on this ground (which it clearly seemed to be, stating that was “skeptical” about redressability)⁵⁰³ it found yet another reason to duck the case. It was “beyond the power” of a federal court, it explained, “to order, design, supervise or implement” the plaintiffs’ requested remedial plan.⁵⁰⁴ A judge, in this case District Judge Aiken whose competency cannot be doubted, would “be required to supervise the government’s compliance with any suggested plan for many decades.”⁵⁰⁵

Again, the statement overstated its case. Courts often order remedial plans, supervise their implementation, and retain jurisdiction to supervise it. Significant complexities for proceedings in antitrust and bankruptcy are by no means unique, and they too can go on for many years. Granted, a climate change reduction plan would be yet larger and have more moving parts, but that is hardly a qualitative difference. Magistrate judges often perform this function in multi-party civil

500. See *id.* at 1171 (detailing the different solutions cited by the Plaintiffs’ experts).

501. 549 U.S. 497, 525 (2006).

502. See *Juliana*, 947 F.3d at 1171 (“Relying on *Massachusetts v. EPA*, the district court apparently found the redressability requirement satisfied because the requested relief would likely slow or reduce emissions.”).

503. *Id.*

504. *Id.*

505. *Id.* at 1172.

litigation, as they did after the British Petroleum Deepwater Horizon blowout.⁵⁰⁶ The mechanisms were available in *Juliana*.

In the end, the majority opinion came down to the issue of a political question, an issue it had found to be no obstacle at its outset.⁵⁰⁷ “We reluctantly conclude” the opinion closes, “that the plaintiffs’ case must be made to the political branches or to the electorate at large”⁵⁰⁸ “Must” is simply the wrong word here. They did have a choice—apply the law.

If the majority had wanted to dismiss *Juliana* without simply sending it back to the Supreme Court for the final kill while at the same time preserving the favorable factual and legal holdings of the District Court. Dismissing the case on standing was certainly one way to get there. To the dissent, however, the majority opinion was an abuse of the standing doctrine, a gross exaggeration of the difficulties in retaining jurisdiction over the plan, and a total abdication of judicial authority when it was most needed.

Judge Stanton’s dissent deconstructed the most egregious elements of the majority opinion.⁵⁰⁹ *Juliana* was not beyond the judicial role; it was where the judiciary was most needed.⁵¹⁰ The science behind climate change was indisputable, this change was accelerating rapidly, the government was aggravating it, and the civilization we depended on was in jeopardy. What set this harm apart from other cases was “not just its magnitude, but its irreversibility.”⁵¹¹ Future generations would not be able to “simply pick up the pieces,” and restore the Nation.⁵¹²

Yet, “the government bluntly insists that it has the absolute and unreviewable power to destroy the Nation.”⁵¹³ Stanton argued that no such power existed, as the Civil War showed.⁵¹⁴ The “existential threat”

506. See *In re Oil Spill by the Oil Rig “Deepwater Horizon” in the Gulf of Mex.*, MDL No. 2179, 2021 WL 6053613, at *1 (E.D. La. Apr. 1, 2021) (demonstrating the complex relief plans the magistrate judge must institute in multidistrict litigation).

507. See *Juliana*, 947 F.3d at 1175 (holding that this is an issue for the political branches to deal with).

508. *Id.*

509. See generally *id.* at 1175–91 (Stanton, J., dissenting).

510. See *id.* at 1189 (explaining that the resolution of this case does not involve political questions).

511. *Id.* at 1176.

512. *Id.*

513. *Id.* at 1175.

514. *Id.* at 1179.

of secession at that time—the “political dissolution of the Union”—applied “equally to its physical destruction” today.⁵¹⁵

Nor did any such alleged “unreviewability” exist on the grounds that a plan to address climate change would not “by itself” solve the problem,⁵¹⁶ or that the proposed remedy (a carbon-reduction plan) lacked sufficient specificity.⁵¹⁷ To the contrary, plaintiffs’ scientists posited a ceiling of 350 parts per million of atmospheric carbon that, once passed, would “irreparably devastate our Nation.”⁵¹⁸ This ceiling would need to be proven at trial, but at this point the evidence was sufficient to move forward.

As for the judiciary’s ability to supervise a complex and multi-party plan, “our history is no stranger to widespread, programmatic changes” ushered in by the judiciary’s “commitment” to the Constitution, Judge Stanton noted.⁵¹⁹ While the High Court had exercised this duty in several ways, including prison reform, its “finest hour” was mandating “the racial integration of every public school—state and federal—in the Nation,” vindicating equal protection under law, in *Brown v. Board of Education*.⁵²⁰ In *Juliana*, the dissent continued:

[T]he Supreme Court was explicitly unconcerned with the fact that crafting relief would require individualized review of thousands of state and local policies that facilitated segregation. Rather, a unanimous Court held that the judiciary could work to disassemble segregation over time while remaining cognizant of the many public interests at stake⁵²¹

As we all know. Judge Stanton observed, it took decades to “even partially realize *Brown*’s promise,” but the slow pace of progress did not “dissuade the . . . Court,” and should not “dissuade us here.”⁵²²

His dissent concluded with a powerful question.

Where is the hope in today’s [majority] decision? Plaintiffs’ claims are based on science, specifically, an impending point of no return. If plaintiffs’ fears, backed by the government’s

515. *Id.*

516. *Id.* at 1182 (citing *Massachusetts v. EPA*, 549 U.S. 497 (2007)).

517. *Id.* at 1188.

518. *Id.* at 1187.

519. *Id.* at 1188.

520. *Id.* (citing *Brown v. Bd. of Educ.*, 347 U.S. 483, 495 (1954)).

521. *Id.* at 1188.

522. *Id.* at 1189.

own studies, prove true, history will not judge us kindly. When the seas envelop our coastal cities, fires and droughts haunt our interiors, and storms ravage everything between, those remaining will ask: Why did so many do so little?⁵²³

There was really no good answer.

G. *The En Banc Petition*

At this juncture, Julie Olson had three options, two of which were unthinkable. The first was simply to accept the loss, explain it as best she could to her clients, and fold tent. However, this was out of the question if there were still cards left to play. The most obvious card, appeal to the Supreme Court, was almost as unthinkable for an entirely different reason. The Court had already made its feelings about the case abundantly clear, two times, and could only be pleased by the opportunity to administer the *coup de grace*.⁵²⁴

This left the option of petitioning the full Ninth Circuit to review the case *en banc*, which could rule in favor of the children and send the case back to Judge Aiken again, this time for trial. To be sure, *en banc* review was an option far more often sought by losing parties than granted. But why not?

Olson's decision seemed easy. Judge Stanton wrote a powerful decision that would make an excellent basis for the petition.⁵²⁵ An impressive collection of congressmen, scientists, women's rights organizations, established environmental groups and academics were ready, indeed eager, to submit amicus briefs supporting the petition.⁵²⁶ On the other hand, all three judges involved in the *Juliana* appeal were appointed by President Obama and the remaining pool would have a more Republican flavor.⁵²⁷ Should the petition for review be granted by any chance, it might lead to a far less sympathetic opinion than the

523. *Id.* at 1191.

524. *See supra* notes 478–485 and accompanying text.

525. *See Juliana*, 947 F.3d at 1175 (beginning of Judge Stanton's dissent).

526. *See, e.g.*, Press Release, Our Child.'s Tr., National and Global Experts File Briefs in Support of *Juliana v. United States Youth-Led Climate Change Litigation*' (Mar. 13, 2020),

<https://static1.squarespace.com/static/571d109b04426270152febe0/t/5e6c0ae9a53943154a6de234/1584138985726/2020.03.13.Juliana+Amicus.pdf>

[<https://perma.cc/5BBZ-KPTQ>] (chronicling the supporting amicus briefs).

527. John Schwartz, *Judges Give Both Sides a Grilling in Youth Climate Case Against the Government*, N.Y. TIMES, (June 4, 2019), <https://www.nytimes.com/2019/06/04/climate/climate-lawsuit-juliana.html> [<https://perma.cc/58AT-CWK6>].

first, perhaps even dismissing the case on the. Lastly, should an *en banc* decision actually favor the children, the government would take it to the High Court in a heartbeat which would be all but certain to dismiss with new and more restrictive interpretations of standing, political question, or even due process. To Olson, however, *en banc* was her best shot.

In March 2020, Plaintiffs filed a petition for rehearing *en banc* with a new panel of eleven judges, none of whom had participated in the original opinion.⁵²⁸ The amicus briefs were close behind.⁵²⁹ Normally such petitions are decided with alacrity, but not so here.

The year 2020 ended without a word. Finally, on February 10, 2021, the Circuit ruled, upholding its original decision.⁵³⁰ There would be no rehearing *en banc*. The case appeared to be over.

But not to Julie Olson.

H. *The Second Motion to Amend*

As harsh as the Ninth Circuit majority opinion had been for the youth plaintiffs, it did not dismiss the case outright, but remanded it for Judge Aiken to do instead.⁵³¹ Seeing a glimmer of opportunity, Julie Olson filed a motion to amend the complaint for a second time, addressing only the redress prong for standing that the Ninth Circuit majority had seen as the Achilles tendon of the case.⁵³² The new complaint would seek a declaratory judgment.⁵³³

The motion began by noting the trial court's "wide discretion" to grant the motion where there was no question that the youth plaintiffs had established harm and causation, and "particularly where the Ninth Circuit had found a relatively narrow deficiency as to redressability . . ."⁵³⁴ As noted earlier, the majority opinion expressed only "skepticism" on this issue, dismissing the case instead on the grounds that the trial court could not "order, design, supervise or

528. Petition for Rehearing *En Banc* of Plaintiffs-Appellees at 5, *Juliana*, 947 F.3d 1159 (No. 18-36082).

529. See *supra* note 526 (listing some of the amicus briefs).

530. Order at 4, *Juliana*, 947 F.3d 1159 (No. 18-36082).

531. *Juliana*, 947 F.3d at 1175 (majority opinion).

532. Plaintiffs' Motion for Leave to Amend and File Second Amended Complaint for Declaratory and Injunctive Relief at 8, *Juliana*, 947 F.3d 1159 (No.: 6:15-cv-O1517-AA).

533. *Id.* at 9.

534. *Id.* at 2.

implement” the remedial plan.⁵³⁵ This issue had been decided, but the amended complaint would request a declaration that the government’s “energy policies” violated Plaintiffs’ constitutional and public trust rights.⁵³⁶ No new “facts or conditions” were alleged.⁵³⁷ No “‘design[ing],’ ‘supervis[ing]’ or ‘implement[ing]’” would be required of anyone.⁵³⁸ Issuing the declaration would itself provide the youth plaintiffs a measure of redress.

There was surprisingly strong authority for this request, beginning with the Declaratory Judgment Act,⁵³⁹ which authorizes a federal court to “‘declare the rights” of any interested party seeking it “whether or not further relief is or could be sought.”⁵⁴⁰ Such an order had “the force and effect of a final judgment.”⁵⁴¹ Under Supreme Court jurisprudence the court had the duty to decide the merits of a declaratory request “irrespective of its conclusion as to the propriety of the issuance of [an] injunction.”⁵⁴² All of which fit the instant case like a glove. Professor Samuel Bray wrote in the *Duke Law Journal*: “Many of the most momentous and controversial decisions of constitutional law over the last century have been declaratory judgements.”⁵⁴³ Climate Change was no less momentous.

The Supreme Court also adopted a four-factors test for rulings of this nature, based on prejudice to the opposing party, bad faith, usefulness (or futility), and undue delay.⁵⁴⁴ Prejudice was not an issue here because no additional facts or legal theories are required, nor additional discovery costs. Bad faith was hardly applicable here where a valid claim, not yet adjudicated, was made. Nor was futility an issue, as the High Court itself has recognized in several cases involving

535. *Juliana*, 947 F.3d at 1171.

536. Plaintiffs’ Motion for Leave to Amend and File Second Amended Complaint for Declaratory and Injunctive Relief, *supra* note 532, at 9.

537. *Id.* at 9.

538. *See id.* at 12 n.6 (arguing that the Plaintiffs did not ask for this type of relief).

539. 28 U.S.C. §§ 2201–02.

540. *Id.* § 2201.

541. *Id.*

542. *Zwickler v. Koota*, 389 U.S. 241, 254 (1967).

543. Samuel L. Bray, *The Myth of the Mild Declaratory Judgment*, 63 *DUKE L.J.* 1091, 1120 (2014) (citing *inter alia* *Roe v. Wade*, 410 U.S. 113 (1973), *overruled by* *Dobbs v. Jackson Women’s Health Org.*, 142 S. Ct. 2228 (2022) (abortion rights); *Buckley v. Valeo*, 424 U.S. 1 (1976) (campaign finance)).

544. Plaintiffs’ Motion for Leave to Amend and File Second Amended Complaint for Declaratory and Injunctive Relief, *supra* note 532, at 7 (citing *Foman v. Davis*, 371 U.S. 178, 182 (1962)).

"ongoing concrete injuries" that could be curbed once a court declared its unlawfulness.⁵⁴⁵

Lastly, undue delay would be virtually impossible to lay at plaintiffs' door. While the case had been pending for over five and one-half years, it had not yet proceeded to trial due to "unprecedented delay tactics waged the Department of Justice."⁵⁴⁶ More specifically:

Here, Plaintiffs prevailed on nearly every issue raised by multiple sets of Defendants and Intervenors for over five years—before first a federal magistrate judge, then an Article III U.S. District Court Judge, then three U.S. Court of Appeals Judges considering multiple writs of mandamus, and then the U.S. Supreme Court denying two emergency stay applications.⁵⁴⁷

In sum, it was a strong motion, and *Juliana* continued to live, at least until Judge Aiken ruled, yet one more time, on its fate.⁵⁴⁸

I. Reflections

It may well be that the Supreme Court kills the *Juliana* case without having to decide it. The case has been stalled, once again, in the District Court of Oregon.⁵⁴⁹ And for the same reason. Both courts know that the Supreme Court, now with an overwhelming Republican majority, could not only dismiss the case but also repeal its only opinion favorable to the environment in the past two decades: *Massachusetts v. Environmental Protection Agency*. Both standing to sue and climate change regulation would take a nasty hit.

Nor did it seem that President Biden would be able to address climate change, which was one of his priorities during his campaign and then in the White House. In the 50–50 balance of parties in the Senate, Democrat Joe Manchin was determined to protect his coal producing state from any more regulation, and the impasse seemed hopeless. Then, in late July, a miracle happened. For whatever reason, he decided to support a more modest bill than the President had proposed, but that included \$369 billion in energy security and climate

545. *Id.* at 10 (citing *Uzuegbunam v. Preczewski*, 141 S. Ct. 792 (2021)).

546. *Id.* at 3 n.2.

547. *Id.* at 8.

548. *Juliana v. United States*, 986 F.3d 1295 (9th Cir. 2021) (denying rehearing *en banc*).

549. See *Juliana v. United States*, 947 F.3d 1159, 1175 (9th Cir. 2020) (remanding the case back to the district court).

change, of which \$313 billion would be provided by a minimum corporate tax.⁵⁵⁰

The plan that emerges from this bill bodes to be just short of everything the *Juliana* plaintiffs could hope for: billions of federal dollars for alternative energy sources, incentives for private industry to go in the same direction, and energy conservation measures. It will not, of course, stop government support for fossil fuels immediately,⁵⁵¹ nor would this even be feasible given the domestic and international need at this time for natural gas no longer flowing from Russia.⁵⁵²

In all—given where this country has been on climate change for decades—one may recall the comment of Justice Frankfurter following the death of Chief Justice Vinson (a bitter opponent of racial integration):

“*This is the first indication I have had that there is a God.*”⁵⁵³

EPILOGUE

This is the last article in a series of four, each describing the worst environmental opinions issued by the United States over the last forty years.⁵⁵⁴ In all, they covered fourteen cases that met several requirements: (1) distortion of facts; (2) misuse and even selective non-use of applicable precedent; (3) conflict with legislative intent; (4) evident bias on the part of those Justices in the majority; and (5)

550. Emily Cochrane, Jim Tankersley & Lisa Friedman, *Manchin, in Reversal, Agrees to Quick Action on Climate and Tax Plan*, N.Y. TIMES (July 31, 2022), <https://www.nytimes.com/2022/07/27/us/politics/manchin-climate-tax-bill.html> [<https://perma.cc/87Q2-2DFN>].

551. *Id.*

552. Press Release, The White House, Joint Statement by President Biden and President von der Leyen on European Energy Security (June 27, 2022), <https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/27/joint-statement-by-president-biden-and-president-von-der-leyen-on-european-energy-security> [<https://perma.cc/FRU8-86YC>].

553. Charles J. Ogletree, Jr., *In re: Brown: The Court's Decision Was Simply Just. "Deliberate Speed" Was Simply Not*, B.C. MAG. (2004) [<https://perma.cc/WL38-NT7D>].

554. See Oliver A. Houck, *Arbitrary and Capricious: The Dark Canon of the United States Supreme Court in Environmental Law*, 33 GEO. ENV'T L. REV. 51 (2020) (analyzing the environmental law decisions by the Supreme Court); Oliver A. Houck, *Human Rights and Wrongs: The Dark Canon of the Supreme Court in Environmental Law*, 39 UCLA J. ENV'T L. & POL'Y 175 (2021) (discussing three notable environmental law cases decided by the Supreme Court); Oliver A. Houck, *This Land Is Your Land: The Dark Canon of the United States Supreme Court in Natural Resources Law*, 62 NAT. RES. J. 1 (2022) (reviewing four more environmental law Supreme Court cases).

significant negative impact on both the law and the resources at issue. And, at times, all five.

Unfortunately, this pattern has not ended. Indeed, it has been aggravated by the addition of yet another Republican Justice whose early opinions are as intransigent as those that came before. At this point, the odds against environmental issues getting full and fair treatment have gone from five-to-four, to six-to-three. More particularly, since this series of articles was written, the Court decided *Bronvich v. Democratic National Committee*.⁵⁵⁵ It has also agreed to review (and therefore weaken or else certiorari would not have been granted), its recent rulings in both *Rapanos v. United States*⁵⁵⁶ and *West Virginia v. Environmental Protection Agency* (which had allowed the Administration, after further review, to proceed with limits on carbon emissions necessary to reduce climate change).⁵⁵⁷

It is hard not to believe that the now-unstoppable Supreme Court majority is acting out an aggressive social and economic agenda last seen almost a century ago. And that adventure did last long. The only remedy today may be exposure, based on facts, well cited and fully described. Telling the truth to power. If these articles serve this purpose, even in part, they were worth it.

555. 141 S. Ct. 2321, 2530 (2021) (further abridging voting rights of Native Americans).

556. 547 U.S. 715 (2006) (affirming the reach of the Clean Water Act); see *Supreme Court Takes WOTUS Case* E&E NEWS (Jan. 24, 2022, 10:12 AM), <https://www.eenews.net/articles/supreme-court-takes-wotus-case> [<https://perma.cc/M4H6-72L2>] (analyzing the effect of the Supreme Court's reliance on *Rapanos*).

557. See Alex Thomas, *Supreme Court agrees to review EPA's authority in West-Virginia-led challenge*, METRO NEWS (Oct. 29, 2021, 10:56 PM), <https://wvmetronews.com/2021/10/29/us-supreme-court-agrees-to-review-epas-authority-in-west-virginia-led-challenge> (explaining the importance of this case for climate change policy).