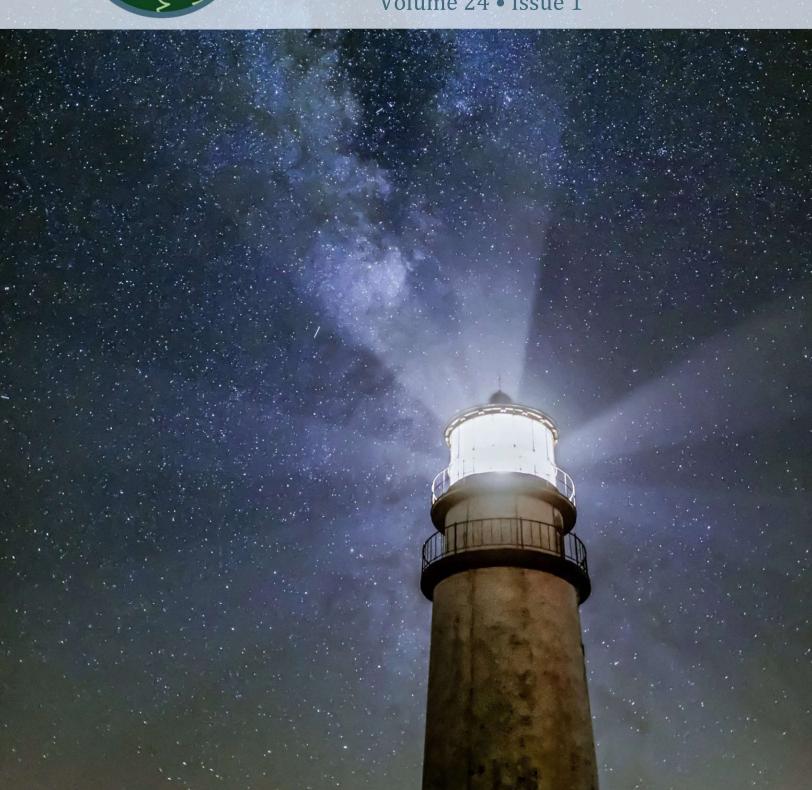


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FAIRLY HAZY: FILLING LAIDLAW'S FAIR TRACEABILITY GAP ON POLLUTION CITIZEN-SUIT STANDING

By: Kyle Glynn*

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Introduction

The early-to-mid 20th century saw an increasing deterioration in the quality of the nation's environment, and by implication an increased public perception of the need for action to protect the environment. 1 This public perception led to an advent of new environmental regulatory legislation, including the dominant modern pollution-control statutes: the Clean Water Act (CWA)² and the Clean Air Act (CAA).³

But this advent of new environmental concern also led to a new era of private environmental litigation. 4 Such was the case in Sierra Club v. Morton⁵ in 1972, where the environmental organization plaintiffs sought to enjoin a construction project in a national forest.⁶ After a majority of the Supreme Court found no Article III standing, ⁷ Justice Blackmun cautioned in dissent:

The case poses—if only we choose to acknowledge and reach them-significant aspects of a wide, growing, and disturbing problem, that is, the Nation's and the world's deteriorating environment with its resulting ecological disturbances. Must our law be so rigid and our procedural concepts so inflexible that we render ourselves helpless when the existing methods and the traditional concepts do not quite fit and do not prove to be entirely adequate for new issues?8

Almost 50 years following Justice Blackmun's caution, the question remains as to whether our laws and procedures have adapted to new and ever-growing environmental problems.

Brigham Daniels et al., The Making of the Clean Air Act, 71 HASTINGS L. J. 901, 911-12 (2020) (discussing a 1971 poll which found that, among other things, "[79%] of respondents" ranked "air and water pollution as [a very important] issue" similar to crime or unemployment, that "[77%] of the public favored closing down any factory which 'continually violates laws regulating pollution,'" and that "88% of the public similarly favored heavy fines against companies who continually violate pollution control laws.").

³³ U.S.C. §§ 1251-1387 (2018).

⁴² U.S.C. §§ 7401–7671q (2018).

Barry Boyer & Errol Meidinger, Privatizing Regulatory Enforcement: A Preliminary Assessment of Citizen Suits Under Federal Environmental Laws, 34 BUFF. L. REV. 833, 835-36 (1985); David E. Adelman & Robert L. Glicksman, Reevaluating Environmental Citizen Suits in Theory and Practice, 91 U. Colo. L. Rev. 385, 395-96 (2020) (discussing the "significant numbers" of environmental citizen suits that began to be filed in the 1980s).

^{5. 405} U.S. 727 (1972). 6. *Id.* 728–30.

^{7.} *Id.* 741.

^{8.} Id. 755-56 (Blackmun, J., dissenting).

In considering this question, this Article analyzes how the federal courts have approached Article III standing in private citizen suits brought under the CWA and CAA, namely the requirement that a plaintiff's injury be "fairly traceable" to the respective defendant. Part I provides a brief overview of the pollution control statutes and their citizen-suit provisions. Part II explores the lack of Supreme Court guidance on Article III standing, namely the traceability element in the pollution citizen suit context. Part III outlines how lower federal courts have filled in the gaps left by the Supreme Court's limited guidance on traceability. Part IV analyzes whether the lower court approaches are consistent with both the requirements of Article III standing and its functions. Lastly, Part V explores the practical implications of the lower courts' approaches to citizen suit standing in this context.

I. THE POLLUTION CONTROL STATUTES AND THEIR CITIZEN SUIT PROVISIONS

The 1970s wrought sweeping environmental legislation.¹¹ Out of this environmental revolution arose the nation's two primary pollution control statutes: the CWA and CAA. Both statutes included "an unprecedented innovation": the citizen suit provision.¹² These provisions allow for private enforcement actions against polluting violators of the Acts, and their inception stemmed from a belief that "neither the federal government nor the

^{9.} Article III standing requires a plaintiff to demonstrate that he or she "suffered an 'injury in fact," that the injury is "fairly . . . trace[able] to the challenged action of the defendant, and not . . . th[e] result [of] the independent action of some third party not before the court," and that the injury can be redressed by the court ruling in his or her favor. Lujan v. Defenders of Wildlife, 504 U.S. 555, 560–61 (1992) (alterations in original).

^{10.} This Essay will not address Article III standing issues as to other citizen suit provisions, such as those brought under the Endangered Species Act, because Article III traceability presents unique challenges in the context of citizen suits brought under the pollution control statutes. Traceability might be more easily apparent in citizen suits under the Endangered Species Act (for example, whether a specific defendant improperly harmed an endangered species that the plaintiff was observing) and similar statutes. But in a pollution context where the injury-causing substances are dispersed by a defendant into expansive water bodies and into the (endless) expanse of the atmosphere, mixing with similar pollutants released by other parties, traceability as to a specific defendant or defendants can be far less apparent. See Shi-Ling Hsu, The Identifiability Bias in Environmental Law, 35 FlA. ST. U. L. REV. 433, 469 (2008) ("[I]t is very often impossible for victims of pollution or other environmental or ecological insult to identify their perpetrators. Air and water pollution usually have many emitters").

^{11.} E. Donald Elliott et al., *Toward a Theory of Statutory Evolution: The Federalization of Environmental Law*, 1 J.L., ECON., & ORG. 313, 317 (1985) ("An extraordinary outburst of lawmaking relating to pollution and the environment occurred at the national level during the 1960s and 1970s as a dozen major federal pollution statutes were enacted.").

^{12.} Ruckelshaus v. Sierra Club, 463 U.S. 680, 693 (1983) (discussing the CAA's citizen suit provision); see also Boyer & Meidinger, supra note 4, at 844–47 (providing a brief historical overview of the citizen-suit provisions of the CWA and CAA).

states had done an effective job of enforcing antipollution laws."¹³ Congress intended that "citizen suits[,] or at least the threat of them[,]" act as a backup to compensate for lackluster agency nonenforcement.¹⁴ Subpart A of this Section will outline the major provisions of the CWA, including its citizen suit provision. Subpart B of this Section will do likewise for the CAA.

A. The CWA

The legislation that formed the foundations of the modern CWA was enacted in 1972¹⁵ aimed at "restor[ing] and maintain[ing] the chemical, physical, and biological integrity of the Nation's waters." ¹⁶ The CWA broadly prohibits the "discharge of any pollutant." ¹⁷ "[D]ischarge of a pollutant" includes "any addition of any pollutant to navigable waters from any point source." ¹⁸ Certain levels of discharges may be allowed, however, if a party has first obtained a permit setting forth certain limitations. ¹⁹ Failure to obtain the appropriate permit before discharging pollutants into jurisdictional waters or to abide by the conditions violates the Act. ²⁰ The Environmental Protection Agency (EPA) is charged with enforcing the Acts, including by assessing civil penalties. ²¹

The CWA brings private citizens into the enforcement process. It empowers them to "commence a civil action . . . against any person . . . who is alleged to be in violation of" the statute, such as "an effluent standard or limitation" contained in a permit. ²² Citizens may only bring such an action if they first notify the EPA (or Army Corps of Engineers for actions respecting dredge and fill permits) and "any alleged violators" of their intent to sue. ²³

^{13.} *Id.*; *see also* Adelman & Glicksman, *supra* note 4, at 394 ("[Citizen-suit] provisions were novel for their breadth and because they empowered citizens to file enforcement suits directly against private or public entities for alleged statutory deficiencies or regulatory violations. Congress believed that citizen enforcement actions by third parties would supplement or prod agency enforcement by 'shaming [an agency] or by forcing it to intervene.'").

^{14.} Roger A. Greenbaum & Anne S. Peterson, *The CAA Amendments of 1990: Citizen Suits and How They Work*, 2 FORDHAM ENV'T L. REP. 79, 80–81 (1991); *see also* Boyer & Meidinger, *supra* note 4, at 844 (describing the CWA's and CAA's citizen suit provisions as the "most frequently used").

^{15.} William L. Andreen, *The Evolution of Water Pollution Control in the United States: State, Local, and Federal Efforts, 1789-1972: Part II,* 22 STAN. ENVT'L L.J. 215, 260–286 (2003) (discussing congressional proceedings giving rise to the CWA).

^{16. 33} U.S.C. § 1251(a)(1).

^{17.} Id. § 1311(a).

^{18.} *Id.* § 1362(12).

^{19.} There are two permit types available to a party seeking to discharge pollutants into jurisdictional waters: a National Pollutant Discharge Elimination System permit under § 1342 or a permit for "dredged or fill material" under § 1344. *Id.* at § 1311(a).

^{20.} Id. § 1311(a); id. at § 1342(h); id. at § 1342(s).

^{21.} *Id.* § 1319.

^{22.} *Id.* § 1365(a).

^{23.} Id. § 1365(b)(1)(A)-(B).

And they may seek either (a) an injunction or (b) civil penalties.²⁴ If a plaintiff is successful in seeking civil fines, the penalties are not paid to the private party but instead to the U.S. Treasury.²⁵ Ultimately, a court "may award costs of litigation to any prevailing party" such as attorney fees.²⁶ The possibility of such costs being assessed, in addition to the notice requirement, was in part meant to deter frivolous litigation by overzealous plaintiffs.²⁷

B. The CAA

The CAA preceded the CWA and pioneered the original citizen suit provision.²⁸ The primary means of controlling air pollution under the CAA is the setting of National Ambient Air Quality Standards (NAAQS) by the federal government,²⁹ which are then implemented by the states.³⁰ The CAA also: regulates the emissions of toxic pollutants;³¹ imposes additional limitations on emitting sources in areas that do not satisfy the NAAQS;³² and imposes other limitations to preserve compliance with the NAAQS in areas where they are satisfied.³³ A facility's obligations can vary across programs and are usually included in a single permit, known as a Title V permit.³⁴ Violating "any requirement of such a permit" is unlawful under the CAA.³⁵

Under the CAA's citizen suit provision, citizens "may commence a civil action... against any person... who is alleged to have violated" the statute.³⁶ The provision and its requirements are largely analogous to those respecting the CWA's citizen suit provision. For instance, a successful plaintiff in a private citizen suit can obtain relief in the form of civil fines payable to the

^{24.} *Id.*; *But see* Michael S. Greve, *The Private Enforcement of Environmental Law*, 65 TUL. L. REV. 339, 343 (1990) (quoting "Judges . . . seem to be more reluctant to impose civil fines in private environmental enforcement actions than in comparable cases brought by the government.").

^{25. 33} U.S.C. § 1319(d); see also Friends of the Earth v. Laidlaw Envt'l Servs. (TOC), Inc., 528 U.S. 167, 175 (2000) (quoting "The Act authorizes district courts in citizen-suit proceedings the enter injunctions and to assess civil penalties, which are payable to the United States Treasury.").

^{26. 33} U.S.C. § 1365(d).

^{27.} Stephen Fotis, Note, *Private Enforcement of the CAA and the CWA*, 35 AM. U. L. REV. 127, 147 (1985) (quoting "[A] citizen guilty of harassment faces the prospect of not only bearing his or her own litigation costs, but the defendant's costs as well."); *cf. infra* notes 39–40 and accompanying text.

^{28.} Boyer & Meidinger, *supra* note 4, at 844 ("The first private enforcement provision, section 304 of the CAA of 1970, was passed a few months after the first Earth Day was organized....").

^{29. 42} U.S.C. § 7409(a).

^{30. 33} U.S.C. § 7410(a).

³¹ Id. § 7412.

^{32.} Id. § 7502.

^{33.} *Id.* § 7471.

^{34.} Id. § 7661c(a).

^{35.} *Id.* § 7661a(a).

^{36.} Id. § 7604(a).

U.S. Treasury.³⁷ Furthermore, Congress included a fee-shifting provision³⁸ intended to deter frivolous citizen suits.³⁹

II. CITIZEN SUIT STANDING AGAINST PRIVATE INDUSTRIAL FACILITIES: THE SUPREME COURT'S TRACEABILITY GAP IN LAIDLAW

Plaintiffs bringing civil actions in federal court under the pollution statutes' citizen suit provisions face several procedural hurdles; Article III standing is perhaps the largest hurdle. 40 As a constitutional requirement, Article III standing requires a plaintiff to demonstrate that they "suffered an 'injury in fact'"; that the injury is "fairly . . . trace[able] to the challenged action of the defendant, and not . . . [the] result [of] the independent action of some third party not before the court"; and that the injury can be redressed by the court ruling in the plaintiffs favor. 41 Furthermore, Article III standing is satisfied for an organizational plaintiff if any of its members have standing. 42 Although precedent stemming from environmental litigation composes much of the Supreme Court's significant standing jurisprudence, 43

^{37.} Id. § 7604(g).

^{38.} *Id.* § 7604(d).

^{39.} See S. REP.No. 91-1196 at 38 (1970) (quoting "Concern was expressed that some lawyers would use [citizen suits] to bring frivolous and harassing actions. The Committee has added a key element in providing that the courts may award costs of litigation The court could thus award costs of litigation to defendants where the litigation was obviously frivolous or harassing."); see also Ruckelshaus v. Sierra Club, 463 U.S. 680, 692–93 (1983) ("[T]he central purpose of [the CAA's citizen-suit provision] was to check the 'multiplicity of [potentially meritless] suits,' that Congress feared would follow the authorization of suits under the CAA.") (alterations in original); Greenbaum & Peterson, supra note 14, at 94–95; Fotis, supra note 27 at 147.

^{40.} See, e.g., Boyer & Meidinger, supra note 4, at 936 (quoting "Despite [a] clear indication that Congress wished to expand private enforcers' standing . . . , there has been a considerable amount of litigation over standing in the current wave of citizen suits."); Ann E. Carlson, Standing for the Environment, 45 UCLA L. REV. 931, 933 (April 1998) (noting that, while plaintiff environmental organizations were benefited by "liberalized standing rulings of the 1970s," the Supreme Court has since "threatened that access" to the federal courts "by tightening standing rules" in environmental cases); see also Lujan v. Defenders of Wildlife, 504 U.S. 555, 561 (1992) (stating that a "party invoking federal jurisdiction bears the burden of establishing" standing).

^{41.} Lujan, 504 U.S. at 560-61 (alterations in original).

^{42.} Summers v. Earth Island Inst., 555 U.S. 488, 494 (2009) (quoting "It is common ground that the respondent organizations can assert the standing of their members.").

^{43.} See Christopher Warshaw & Gregory E. Wannier, Business as Usual? Analyzing the Development of Environmental Standing Doctrine Since 1976, 5 HARV. L. & POL'Y REV. 289, 289–99 (2011) (outlining environmental standing jurisprudence of the Supreme Court).

the Court has left many questions unanswered—especially those regarding standing in citizen suits against polluters⁴⁴ and the traceability element.⁴⁵

The only case decided by the Court in the pollution-citizen-suit context is *Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc.*, ⁴⁶ which involved a citizen suit against a private facility under the CWA. ⁴⁷ In *Laidlaw*, the defendant-respondent company operated a hazardous waste incinerator facility with a NPDES permit to discharge into a river from that facility. ⁴⁸ But the facility regularly "exceeded the discharge limits set by the permit." ⁴⁹ Plaintiff environmental organizations sued the company under 33 U.S.C. § 1365(a) seeking declaratory and injunctive relief, including the assessment of civil penalties against the defendant. ⁵⁰

The Court found that the plaintiffs had Article III standing sufficient to bring a citizen suit under the CWA.⁵¹ But the traceability element was largely a non-factor in the Court's analysis. As to the injunctive relief sought by the plaintiffs, the primary issue was whether the plaintiffs' members had suffered an "injury in fact."⁵² The Court held that affidavits submitted by plaintiffs' members rose above "general averments" because the affidavits described

^{44.} Cass R. Sunstein, What's Standing After Lujan? Of Citizen Suits, 'Injuries,' and Article III, 91 MICH. L. REV. 163, 165–66 (1992) (noting that after the Supreme Court found a lack of standing under 16 U.S.C. § 1540, the Endangered Species Act's citizen-suit provision, "[t]he place of the citizen in environmental and regulatory law has . . . been drawn into sharp question."). Furthermore, the Court's only decision addressing standing in the context of a private citizen-suit against a polluter is Friends of the Earth, Inc. v. Laidlaw Envt't Servs. (TOC), Inc., 528 U.S. 167 (2000); See Warshaw & Wannier, supra note 443, at 289–99 (outlining environmental standing jurisprudence of the Supreme Court).

^{46.} See Friends of the Earth, Inc. v. Laidlaw Env't Servs. (TOC), Inc., 528 U.S. 167 (2000) (explaining that while Massachusetts v. EPA is a significant Supreme Court on standing involving the CAA is well-known for its causation analysis, it is distinct from the context of private citizen suits against polluters discussed in this essay. Massachusetts v. EPA involved state government plaintiffs, deemed by the Court to have "special solicitude in [its] standing analysis." Massachusetts v. EPA, 549 U.S. 497, 520 (2007). Non-state actors lack such special solicitude.).

^{47.} Laidlaw, 528 U.S. at 173.

^{48.} Id. at 175-76.

^{49.} Id. at 176.

^{50.} Id. at 177.

^{51.} Id. at 180-88.

^{52.} One member provided testimony that "he lived a half-mile from [defendant]'s facility" and that he stopped recreating "between 3 and 15 miles downstream from the facility" on the river "because he was concerned that the water was polluted by [defendant]'s discharges." Friends of the Earth, Inc. v. Laidlaw Env't Servs. (TOC), Inc., 528 U.S. 167, 181-182 (2000). Two other members who lived within two miles from the defendant's facility testified as to similar injuries. *Id.* at 182. A fourth member who "lived [twenty] miles" from the area claimed that she stopped recreating on the river near where she lived out of "concerns about illegal discharges." *Id.* A fifth member, who lived close to the facility, claimed that she was injured due to a lower economic value of her home compared to other farther away homes, and "she believed the pollutant discharges accounted for some of the discrepancy." *Id.* at 182–83. A sixth member, who "canoed approximately [forty] miles downstream of the [defendant]'s facility," claimed that he stopped doing so "because he was concerned that the water contained harmful pollutants." *Id.* at 183.

how defendant's discharges "directly affected" the plaintiffs' members interests and adequately established standing.⁵³ Besides the Court's usage of that "directly affected" language, no other analysis significantly respected the traceability element of standing.⁵⁴

Similarly, as to whether the organizational plaintiffs had standing to seek civil penalties, the primary issue was the redressability element.⁵⁵ Citing the legislative history of the CWA, the Court discussed how Congress intended for "civil penalties [to] deter future violations."⁵⁶ Finding that said deterrent function sufficed for redressability, the Court again engaged in no explicit analysis of the traceability element.⁵⁷

Notably, as indicated above, *Laidlaw* left several questions unexplored. For example, besides the lack of any traceability analysis, the majority opinion did not address the separation of powers concerns raised by Justice Kennedy's concurrence and Justice Scalia's dissent. Although Justice Kennedy considered "exaction of public fines by private litigants" to be a "[d]ifficult and fundamental question" about "the delegation of Executive power," he declined to explore the issue because it was not raised "in the petition for certiorari . . . with particularity." Justice Scalia went slightly further, recognizing that Article II of the U.S. Constitution "commits . . . the President to 'take care that the Laws be faithfully executed." Scalia described how plaintiffs invoking environmental citizen suits function as "self-appointed mini-EPA[s]." According to Scalia, allowing private citizens to engage in such actions "entirely deprive[s] [elected officials] of their discretion to decide that a given violation should not be the object of a suit at all, or that the enforcement decision should be postponed."

III. FILLING LAIDLAW'S TRACEABILITY GAP: THE INFERIOR COURTS' POWELL DUFFRYN-EXXONMOBIL FRAMEWORK

Given the lack of Supreme Court guidance on the traceability element of standing in citizen suits against polluters, both before and after *Laidlaw*, lower federal courts are left to fill in the gaps. Subpart A of this section will discuss how federal circuit courts have approached analyzing traceability in CWA citizen suits like *Laidlaw*. Subpart B of this section will then outline

^{53.} Friends of the Earth, Inc. v. Laidlaw Env't Servs. (TOC), Inc., 528 U.S. 167, 183-84 (2000).

^{54.} See id. at 182-85 (excluding the traceability element from the discussion of causation).

^{55.} Id. at 185.

^{56.} Id.

^{57.} See id. at 185–88 (excluding the traceability element from the discussion of redressability).

^{58.} Friends of the Earth Inc. v. Laidlaw Env't Serv. (TOC), Inc., 528 U.S. 167, 197 (2000) (Kennedy, J., concurring)).

^{59.} *Id.* at 209-10 (Scalia, J., dissenting).

^{60.} *Id*.

^{61.} Id. at 210.

the recent extension of the traceability standard for water pollution citizen suits to air pollution citizen suits.

A. Water Pollution Citizen Suits and the Powell Duffryn Traceability Standard

In *Public Interest Research Group of New Jersey, Inc. v. Powell Duffryn Terminals Inc.*, ⁶² a Third Circuit decision that predated *Laidlaw*, the defendant, corporation Powell Duffryn Terminals (PDT), was a NPDES permit holder with a facility located adjacent to a navigable waterway—the Kill Van Kull. ⁶³ As indicated by PDT's monitoring reports, PDT "consistently and uninterruptedly dumped pollutants into the Kill Van Kull in concentrations greater than that allowed by [the] permit."⁶⁴ As a result, plaintiff environmental groups filed a citizen suit under the CWA alleging a total of 386 violations.⁶⁵ The court found that the plaintiffs' members had suffered sufficiently concrete interests for Article III standing purposes.⁶⁶

However, the Third Circuit adopted a new standard for CWA cases to assess whether "there [was] a 'substantial likelihood' that defendant's conduct caused [the] harm." To prove "substantial likelihood," the court seemingly held *ipse dixit* that a CWA citizen suitor must satisfy three elements: (1) the defendant "discharged some pollutant in concentrations greater than allowed by its permit"; (2) the discharge was "into a waterway in which the plaintiffs have an interest that is or may be adversely affected by the pollutant"; and (3) that the type of said "pollutant causes or contributes to the kinds of injuries alleged." Because the plaintiffs alleged aesthetic injuries, and the oil and grease discharged by PDT was a type of pollutant

^{62.} Pub. Int. Rsch. Grp. of N.J. v. Powell Duffryn Terminals Inc., 913 F.2d 64, 64 (3d Cir. 1990).

^{63.} Id. at 68 (noting that the defendant "operat[ed] a bulk storage facility" by the Kill Van Kull, where it "use[d] large tanks . . . to store various liquids" such as "petroleum products and industrial chemicals"). The Kill Van Kull "is a tidal strait" separating a portion of New York City and New Jersey. ARMY Kull CORPS Kill Van Channel, U.S. ENG'RS, https://www.nan.usace.army.mil/Portals/37/docs/harbor/Harbor%20Program%20Images/KVK3.pdf (last visited January 17, 2021). In addition to "oil spills" and pollution attributable to "chemical processing facilities" and "heavy ocean traffic," the Kill Van Kull received "60 million gallons of treated sewage" daily at the time Powell Duffryn was decided. Powell Duffryn, 913 F.2d at 89 (Aldisert, J., concurring); see also Melissa Checker, Staten Island's Toxic Stew, GOTHAM GAZETTE: ENVIRONMENT (May 26, 2009), https://www.gothamgazette.com/environment/227-staten-islands-toxic-stew (discussing the history of environmental troubles and attempted remedial efforts on the Kill Van Kull, including more recent troubles such as how "[s]ome experts estimate that over 300 oil spills occur in the kull every year.").

^{64.} Powell Duffryn, 913 F.2d at 69.

^{65.} Id

^{66.} *Id.* at 71 (holding that the plaintiffs' members suffered "injur[ies] to their aesthetic and recreational interests" on the Kill Van Kull).

^{67.} *Id.* at 72 (citing Duke Power Co. v. Carolina Env't Study Grp., Inc., 438 U.S. 59, 75 n.20 (1978)).

^{68.} Id.

that could cause aesthetic injuries, the court found that traceability was established under this new standard.⁶⁹ The court's primary rationale for adopting this standard was that the traceability element could be satisfied without "scientific certainty" or satisfying "tort-like causation."⁷⁰

Concurring only out of "a belief that somehow the Supreme Court might be inclined to relax its stringent requirements of standing in environmental cases," Judge Aldisert discussed a point largely unaddressed by the majority: that the river was already "one of the most industrialized waterways in the United States." Thus, while the pollutants present in the river were almost certainly traceable to some actor, "there [was] very shaky proof that the stated injuries were traceable to this polluter"—PDT. The Each of the plaintiff's members only "complained of pollution in general" on the expansive industrialized waterway, rather than specifically linking any of their injuries to PDT's pollution. The pollution of the plaintiff's pollution.

The Third Circuit's *Powell Duffryn* type-centric "fairly traceable" standard has been adopted by other circuits in the water pollution citizen suit

69. Specifically, in applying its new traceability test, the court explained:

This will require more than showing a mere exceedance of a permit limit. Thus if a plaintiff has alleged some harm, that the waterway is unable to support aquatic life for example, but failed to show that defendant's effluent contains pollutants that harm aquatic life, then plaintiffs would lack standing. In this case, several affiants stated that the water had an oily or greasy sheen they found offensive. PDT's permit contained limits on the oil and grease PDT could discharge in its effluent. . . . PDT's reports to the EPA indicate that PDT has discharged oil and grease in excess of these limits. Thus the aesthetic injury suffered by the plaintiffs may fairly be traced to PDT's effluent. *Id.* at 72–73.

The Supreme Court subsequently denied certiorari review of *Powell Duffryn*. Powell Duffryn Terminals, Inc. v. Pub. Int. Rsch. Grp. of N.J., Inc., 498 U.S. 1109, No. 90-867 (1991).

- 70. Powell Duffryn, 913 F.2d at 73 n.10.
- 71. *Id.* at 84–875 (Aldisert, J., concurring).
- 72. *Id.* at 87; *see also* Kill Van Kull Channel *supra* note 633 (discussing the vast scale of other polluting activity on the Kill Van Kull besides PDT's discharges, alone).
- 73. *Id.* at 88. One of plaintiff's members had stated that he "ha[d] no personal claim" when asked if he "ha[d] been . . . adversely affected by [Powell Duffryn]'s discharge." *Id.* at 87–88. Another member only testified as to a "generalized assertion" that "any discharge" into the river "adversely affects [him]." *Id.* at 88 (emphasis added). A third member stated that her recreational use of the river was impaired because of "a smell" and "garbage floating" in the river. *Id.* But the evidence showed that Powell Duffryn's discharges "d[id] not cause the smell" and there was no "evidence that it dumped garbage in the water." *Id.*

context: namely, the Fourth, ⁷⁴ Fifth, ⁷⁵ and Ninth Circuits. ⁷⁶ The Tenth Circuit has also indicated approval of *Powell Duffryn's* traceability standard. ⁷⁷ "[N]either [the Third Circuit] nor others have [since] concluded that subsequent Supreme Court decisions" to *Powell Duffryn* "require something different" to satisfy Article III traceability in water pollution citizen suits. ⁷⁸

B. The Extension of Powell Duffryn to Air Pollution Citizen Suits in ExxonMobil

Despite the practical differences between water pollution and air pollution, the Fifth Circuit expanded *Powell Duffryn* to the CAA context in 2020's *Environment Texas Citizen Lobby, Inc. v. ExxonMobil Corporation.*⁷⁹ Plaintiff environmental organizations sought civil penalties under the CAA against the defendant ExxonMobil for alleged violations at one of its facilities, "the largest petroleum and petrochemical complex in the nation."⁸⁰ In total, plaintiffs alleged that there were "16,386 days of violations"

^{74.} See Nat. Res. Def. Council, Inc. v. Watkins, 954 F.2d 974, 980 (4th Cir. 1992) (adopting the "fairly traceable" standard pre-*Laidlaw*); Friends of the Earth, Inc. v. Gaston Copper Recycling Corp., 204 F.3d 149, 161 (4th Cir. 2000) (adopting the "fairly traceable" standard post-*Laidlaw*).

^{75.} See Save Our Cmty. v. EPA, 971 F.2d 1155, 1161 (5th Cir. 1992) (citing Powell Duffryn and Watkins with approval in a pre-Laidlaw, CWA citizen suit); Sierra Club, Lone Star Chapter v. Cedar Point Oil Co., 73 F.3d 546, 557–58 (5th Cir. 1996) (applying Powell Duffryn's traceability test to a pre-Laidlaw, CWA citizen suit); But see id. at 557 (conceding that "an overly broad application" of Powell Duffryn "may be problematic"). The Fifth Circuit reaffirmed Powell Duffryn's vitality post-Laidlaw. See Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp., 968 F.3d 357, 368 n.4 (5th Cir. 2020) (reasoning that, like Powell Duffryn, "Laidlaw . . . reiterates that the 'fairly traceable' requirement does not require tort-like causation with its proximate cause requirement."). This assertion that Laidlaw "reiterate[d]" a principle about the causation element is odd, however, given that Laidlaw contains no substantial traceability analysis, even if the conclusion might be implicit in Laidlaw's facts; See supra notes 51–57 and accompanying text.

^{76.} See Nat. Res. Def. Council v. Sw. Marine, Inc., 236 F.3d 985, 994–95 (9th Cir. 2000) (adopting the "fairly traceable" standard pre-*Laidlaw*).

^{77.} See Bufford v. Williams, 42 Fed. Appx. 279, 284 n.3 (10th Cir. 2002) (affirming summary judgment in a CWA citizen suit because plaintiffs failed on the merits of their claim but conceding that "it may not be necessary to link a specific discharge to a specific injury in order to meet standing requirements." (citing Powell Duffryn Terminals, Inc. v. Pub. Int. Rsch. Grp. of N.J., Inc., 498 U.S. 1109 (1991)).

^{78.} ExxonMobil Corp., 968 F.3d at 368 n.4 (discussing whether Laidlaw is at odds with Powell Duffryn).

^{79.} Env't Tex. Citizen Lobby Inc. v. ExxonMobil Corp., 968 F.3d 357 (5th Cir. 2020). The Second Circuit has applied Powell Duffryn in an air pollution context, but that application was distinct for two reasons: (1) it did not involve a private citizen suit, but instead a common law nuisance action and (2) because the suit was brought by plaintiff states, the standing analysis involved the "special solicitude" of state standing. See Connecticut v. Am. Elec. Power Co., 582 F.3d 309, 345–47 (2d Cir. 2009) (applying Powell Duffryn's traceability standard in a public nuisance action brought by eight states against defendant corporations, alleging that their air emissions contributed to global warming) (citing Massachusetts v. EPA, 549 U.S. 497 (2007)), rev'd 564 U.S. 410 (2011) (where the Court was equally divided 4-4 and thus affirmed on the standing question by default).

^{80.} ExxonMobil Corp., 968 F.3d at 362.

stemming from "nearly 4,000 emissions events" and "spanning 24 different pollutants." The case was fully tried at the district court level before reaching the Fifth Circuit on the issue of Article III standing. 82

In a departure from both Supreme Court standing precedent, such as *Laidlaw*, and the other federal circuits' standing precedent, the court first held that the plaintiffs needed to establish Article III standing for each individual day of violation alleged. ⁸³ Then, in analyzing whether the plaintiffs demonstrated that their injuries ⁸⁴ were "fairly traceable" to each of the facility's alleged violations, the court applied *Powell Duffryn's* waterpollution standard. ⁸⁵ The court held that plaintiffs could satisfy said requirement by providing "evidence that the defendant's violations were of a type that 'causes or contributes to the kinds of injuries alleged by the plaintiffs." The court used examples to illustrate how this standard applies in the air pollution context, such as how "seeing flares" is a type of pollution that could cause one of the types of injury alleged—observational. ⁸⁷

Recognizing that the Fifth Circuit itself had recognized *Powell Duffryn's* traceability standard as "incongruous with . . . Article III standing requirements" (albeit, when it was adopted by the court), Judge Oldham's dissent criticized the "mess" of *Powell Duffryn's* traceability framework.⁸⁸ Oldham first pointed out the practical differences between *Powell Duffryn's* water pollution standard (pollution confined to a discrete waterway) and air

Assume that a citizen moved from Florida to a Baytown neighborhood near the Exxon complex in 2005. That citizen would not have standing to assert violations that occurred in 2004. So [CAA] plaintiffs cannot seek penalties for a particular violation if they would lack standing to sue for that violation in a separate suit

^{81.} *Id.* at 363. Under the CAA's citizen-suit provision, a plaintiff may seek a civil penalty "for each day of [a] violation." *Id.* at 365 (quoting 42 U.S.C. § 7413(e)(2)).

^{82.} *Id.* at 363–64. This was the second time the case reached the Fifth Circuit.

^{83.} ExxonMobil Corp., 968 F.3d at 365–67 ("Admittedly, no court appears to have found standing for some CAA violations but not others, and that gives us some pause. Numerous cases have instead recognized standing in environmental citizen suits without separate analyses for each violation. . . . But . . . we cannot say that Plaintiffs' proving standing for some violations necessarily means they prove standing for the rest."). The court rationalized this holding with the following example:

Id. at 365–66. The court later stated, however, that the plaintiffs were not required to link "their member's injuries and specific incidents on particular days." *Id.* at 369.

^{84.} There were allegations that plaintiffs' members, who lived in the vicinity of the facility, were injured by "regularly [seeing] flares, smoke and haze coming from the complex; smell[ing] chemical odors; suffered . . . respiratory problems; fear[ing] for their health; refrain[ing] from outdoor activities; or mov[ing] away." *Id.* at 368.

^{85.} Id. at 368-69.

^{86.} Id.

^{87.} *Id.* at 370. The court also held that, in addition to satisfying this *Powell Duffryn* pollutant-type approach, a plaintiff must also demonstrate presence in a "geographic nexus" to pollution attributable to the violations, except where the plaintiff might be so close that "their proximity speaks for itself." *Id.*

^{88.} *Id.* at 375 (Oldham, J., dissenting in part) (quoting Sierra Club, Lone Star Chapter v. Cedar Point Oil Co., 73 F.3d 546, 558 n.24 (5th Cir. 1996)).

pollution (pollution released into an expanse).⁸⁹ Second, Oldham's dissent posed the example of "a hypothetical plaintiff Bob" who lived near a polluting facility and whose Article III injury was asthma.⁹⁰ Judge Oldham then contrasted *Powell Duffryn's* "inherently indeterminate," pollutant-type-focused traceability standard to what one might expect under Article III's requirements.⁹¹ Seemingly contrary to Article III, Bob could have standing to "recover" CAA penalties that occurred while he was outside the country, simply because his type of injury (asthma) could be caused by the facility's type(s) of emitted pollutants.⁹²

The Fifth Circuit's analysis produced a starkly different outcome on remand. Rather than arguing traceability as to the original 16,386 days of violations, the *ExxonMobil* plaintiffs argued to the district court that they establish traceability "as to 9,803 days of violations." ⁹³ The plaintiffs voluntarily excluded "any violations involving the release of one pound or less of a pollutant." ⁹⁴ On the other hand, ExxonMobil argued that traceability was established for only 40 days of violations. ⁹⁵ The district court ultimately found that traceability was established for 3,651 days of violations, less than a quarter of the days of violations initially alleged. ⁹⁶ Notably, in reaching this conclusion, the district court's analysis focused heavily on evidence adduced at the initial trial. ⁹⁷

Alas, when "[t]his long-pending CAA suit" again reached the Fifth Circuit in 2022 after remand, the court retreated from its causation-per-

^{89.} ExxonMobil Corp., 968 F.3d at 378 (Oldham, J., dissenting in part) ("Whatever sense [Powell Duffryn] might make in water-pollution cases, it makes little or none in air-pollution cases.").

^{90.} *Id*.

^{91.} Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp., 968 F.3d 357, 378 (5th Cir. 2020), Judge Oldham also posed the following example, which is further illustrative as to how *Powell Duffryn*'s focus on pollutant/injury type operates:

[[]Powell Duffryn] says that the plaintiff need only prove that the relevant pollutant "causes or contributes to the kinds of injuries alleged by the plaintiffs." That eliminates traceability altogether. Think about it. Would we ever say: my house burned down; arsonists burn down houses; therefore, an arsonist burned down my house? Of course not. My house could have burned down because the wiring was faulty, I left the stove on, my dog tipped over a candle, a bolt of lightning struck the roof, a litterbug's cigarette started a wildfire, or myriad other potential causes.

Id. at 375 (citations omitted).

^{92.} Id.

^{93.} Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp., 524 F. Supp. 547, 555 (S.D. Tex. 2021).

^{94.} *Id*.

^{95.} Id.

^{96.} *Id*.

^{97.} See id. at 555-77.

violation innovation. 98 The majority recognized that its prior innovation could not "be reconciled with *Laidlaw*," 99 despite the majority's earlier willingness to craft the concededly new rule. 100 The majority refused to retreat, however, from its extension of *Powell Duffryn* to the skies: the CAA. 101 Given the possibility of en banc rehearing, whether the causation-per-violation innovation will be revived—and whether *Powell Duffryn*'s clean air extension will survive—remains to be seen. 102

IV. EVALUATING POWELL DUFFRYN—EXXONMOBIL'S "FAIRLY TRACEABLE" GAP-FILLING

This Section evaluates both whether *Powell Duffryn–ExxonMobil* is a constitutionally permissible construction of Article III standing's traceability element and whether it serves or detracts from oft-cited functions of Article III standing. Subsection A argues that *Powell Duffryn–ExxonMobil's* relaxed traceability standard—the type-of-pollutant/type-of-harm approach for environmental citizen suits—is incompatible with the constitutional minimum to satisfy Article III traceability. Subsection B argues that despite the constitutional incompatibility, the adequate-stake and separation-of-powers functions are enhanced, rather than defeated, by *Powell Duffryn–ExxonMobil's* relaxation of the traceability element. Subsection B cautions, however, that said enhancements would be defeated by courts employing *ExxonMobil's* standing-per-violation rule.

^{98.} Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp., 2022 U.S. App. LEXIS 24584, at *3 (5th Cir. Aug. 30, 2022) (hereinafter "Unpublished Exxon Opinion"). In an odd about-face, the same panel characterized the causation-per-violation innovation as "Exxon's position" rather than its prior holding, *id.* at 11 (noting this "position" was "unconvincing"), and reasoned that said "position [wa]s an outlier"; *id.* at *13. Judge Oldham, in a dissent largely mirroring his former, disagreed that Exxon pulled the so-called argument out of thin air. *See id.* *27 ("[We] explained that in the context of the CAA, we must do a separate standing inquiry for each violation asserted as part of that claim.' 968 F.3d at 365. That is, plaintiffs must show—for *each violation*, not just each claim—an injury in fact that is fairly traceable to the violation and that is likely to be redressed by a favorable judicial decision.").

⁹⁹ Id at *12

^{100.} See supra text accompanying note 83 (citing ExxonMobil Corp., 968 F.3d at 368-69).

^{101.} Unpublished Exxon Opinion, at *13 ("We are bound by our prior articulation of the test for traceability, and we stand by it.").

^{102.} This latest iteration of ExxonMobil Corp. was decided by the Fifth Circuit during the editing process for this Essay, and the full court has not yet decided on whether the case will be reheard en banc—which has ExxonMobil has recently requested. See Juan Carlos Rodriguez, Exxon Wants En Banc Review of \$14M Air Pollution Fine, LAW360 (Oct. 14, 2022), https://www.law360.com/articles/1540057/exxonwants-en-banc-review-of-14m-air-pollution-fine. Of course, given the case's repeated trips to the court and its novel standing issues, an en banc rehearing would not be surprising.

A. Powell Duffryn-ExxonMobil Does Not Pass Constitutional Muster

Judge Aldisert in Powell Duffryn and Judge Oldham in ExxonMobil both cautioned that relaxing the traceability element of standing to a type-ofpollutant/type-of-harm approach, without regard for some element of but-for causation, might be constitutionally impermissible. Further, in adopting Powell Duffryn's traceability standard, the Fifth Circuit itself recognized that it "may produce results incongruous with our usual understanding of Article III standing requirements." ¹⁰³ As to CWA citizen suits, specifically, the Fifth Circuit stated that "it may not be an appropriate standard in other CWA cases," such as where the waterway at issue is "so large" and suggests a more attenuated causal connection. 104 And Judge Oldham's dissenting opinion that the connection would be inherently more attenuated in any air-pollution citizen suit bears consideration. 105 But are these concerns about the constitutional threshold of Powell Duffryn-ExxonMobil, as determined by Supreme Court jurisprudence, warranted? Despite "the precise nature of the causation requirement [being] quite obscure[,]"106 this article argues that such constitutional concerns are merited.

Because substantial speculation is inherent in its type-of-pollutant/type-of-harm approach, *Powell Duffryn–ExxonMobil's* traceability framework is incongruous with traditional notions of what Article III standing requires. The Supreme Court has consistently stated that, to satisfy the fair traceability element and thus an "irreducible constitutional minimum of standing," a plaintiff must show that their harm is not the result of some third party's action "not before the court." Thus, in such cases where the link between

^{103.} ExxonMobil Corp., 968 F.3d at 375 (Oldham, J., dissenting in part) (quoting Sierra Club, Lone Star Chapter v. Cedar Point Oil Co., 73 F.3d 546, 558 n.24 (5th Cir. 1996)).

^{104.} Sierra Club, Lone Star Chapter v. Cedar Point Oil Co., 73 F.3d 546, 558 n.24 (5th Cir. 1996) ("[S]ome 'waterways' covered by the CWA may be so large that plaintiffs should rightfully demonstrate a more specific geographic or other causative nexus in order to satisfy the 'fairly traceable' element of standing.").

^{105.} ExxonMobil Corp., 968 F.3d at 378 (Oldham, J., dissenting in part) ("Whatever sense [Powell Duffryn] might make in water-pollution cases, it makes little or none in air-pollution cases.").

^{106.} Standing and the Privatization of Public Law, supra note 45, at 1463–64.

^{107.} Lujan v. Defs. of Wildlife, 504 U.S. 555, 560–61 (1992) (quoting Simon v. E. Ky. Welfare Rights Org., 426 U.S. 26, 41–42 (1976)); see, e.g., Bennett v. Spear, 520 U.S. 154, 167 (1997) (explaining that the "fairly traceable" standard is not enough if the action is a result of another's action); Steel Co. v. Citizens for a Better Envt., 523 U.S. 83, 106 n.7 (1998) ("[T]he causation requirement asks whether the injury is 'fairly ... trace[able] to the challenged action of the defendant, and not ... th[e] resul[t] [of] the independent action of some third party not before the court."" (quoting Simon, 426 U.S. at 41–42)); Clapper v. Amnesty Int'l USA, 568 U.S. 398, 414 n.5 (2013) ("[P]laintiffs bear the burden of pleading and proving concrete facts showing that the defendant's actual action has caused the substantial risk of harm. Plaintiffs cannot rely on speculation about 'the unfettered choices made by independent actors not before the court."" (quoting Lujan, 504 U.S. at 562)).

the plaintiff's harm and defendant's action is too speculative, the Supreme Court has found a lack of traceability. 108

But by focusing only on the type of injury and whether a specific type of pollutant could cause that injury, the Powell Duffryn-ExxonMobil framework makes no attempt to link an injury to the specific defendant(s) joined in a lawsuit, or any specific party. Take the facts of *Powell Duffryn*, for example: although the Court held that there was a "substantial likelihood" that PDT's pollution discharges caused the plaintiffs' harms, ¹⁰⁹ that holding can hardly be true given the sheer volume of daily pollutant discharges on the Kill Van Kull by an indeterminate number of actors who came and went.¹¹⁰ And as a slight variation on Judge Oldham's hypothetical, "Bob" may have standing to sue a polluting facility for CAA penalties in one country for an injury suffered in another. Bob has standing so long as he ordinarily lives near the defendant facility (satisfying the nexus requirement) and said facility emits a type of pollutant that causes or contributes to the type of injury suffered by Bob (ex. some pollutant that *can* cause asthma). 111 Thus, Powell Duffryn-ExxonMobil theoretically fails to account for whether the violations complained of by plaintiffs are actually "fairly traceable" to the specific defendant hailed into court, rather than some actor left out of the litigation entirely.

B. Squaring Powell Duffryn–ExxonMobil with Article III Standing Functions

Even if the *Powell Duffryn–ExxonMobil* traceability framework is incongruous with traditional notions of what is constitutionally required by

^{108.} See What's Standing After Lujan?, supra note 44, at 194 (supporting that injuries must be fairly traceable and not purely speculative).

^{109.} Pub. Interest Res. Grp. of N.J., Inc. v. Powell Duffryn Terminals Inc., 913 F.2d 64, 72–73 (3d Cir. 1990).

^{110.} See supra note 63 (citing Pub. Int. Rsch. Grp. of N.J. v. Powell Duffryn Terminals Inc.).

^{111.} Cf. Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp., 968 F.3d 357, 378 (5th Cir. 2020) (Oldham, J., dissenting in part) (comparing Judge Oldham's arsonist hypothetical which is similarly illustrative on this flaw in the *Powell Duffryn–ExxonMobil* framework); see supra note 89 (showing Oldham's critique of the Powell Duffryn framework).

Admittedly, in a case like <code>ExxonMobil</code>, it might be more likely that Bob's injury could be traced to a defendant who operates one of the largest pollutant-emitting facilities in the country under <code>Powell Duffryn-ExxonMobil</code>'s traceability standard. However, relying on federal judges to draw the line between cases like <code>ExxonMobil</code> (one significantly larger polluter in the area) and cases like <code>Powell Duffryn</code> (an indeterminate amount of polluters) could exacerbate inconsistencies in applications of the traceability requirement; See id. at 378 (Oldham, J., dissenting) ("<code>Powell Duffryn</code> and its progeny . . . cannot generate predictable results"). Instead, especially for organizational plaintiffs, the burden of providing clearer support for traceability should lie with plaintiffs; See George Wyeth et al., The Impact of Citizen Environmental Science in the United States, 49 ENV't L. Rep. News & Analysis 10237, 10237 (2019) ("An increasingly sophisticated public, rapid changes in monitoring technology, the ability to process large volumes of data, and social media are increasing the capacity for members of the public and advocacy groups to gather, interpret, and exchange environmental data.").

Article III, should that incongruity be cause for concern? This subsection argues that the incongruity should not be concerning. First, Article III standing is only a threshold matter to ensure that the plaintiff has an adequate stake in the outcome—and *Powell Duffryn–ExxonMobil's* relaxed traceability standard does not hinder that goal. Second, *Powell Duffryn–ExxonMobil's* relaxed traceability standard might enhance separation of powers, rather than detract from it.

1. The Adequate Personal Stake Function

An oft-cited function of standing is to provide a threshold determination that a party bringing a lawsuit in the federal courts has an adequate stake in the outcome. ¹¹² *Powell Duffryn–ExxonMobil's* relaxation of the traceability requirement for citizen suits under the CWA and CAA does not hinder this function.

Powell Duffryn–ExxonMobil's emphasis on plaintiffs having some geographic nexus to the violating discharges or emissions prevents those asserting undifferentiated, public-value-interest grievances from accessing the courts. Even if a plaintiff's injury might not be fairly traceable to a specific defendant's discharge/emission in violation of the CWA or CAA, "persons who live in an area or pursue recreational opportunities there can reasonably be considered aggrieved by a violation of that environmental law involving their environment." This consideration should carry additional weight given the uncertain potential of irreversible environmental harms. As a practical example, even if the floating pollutive substances observed on the Kill Van Kull (causing the observational and recreational injuries) were substantially more traceable to a facility besides PDT, said environmental pollution was still likely. Thus, given this level of personal interest ensured by a geographic nexus, plaintiffs successfully invoking *Powell Duffryn–ExxonMobil* still have some interest separate from the public at large.

^{112.} See, e.g., Baker v. Carr, 369 U.S. 186, 204 (1962) (describing the requirement that plaintiffs have "such a personal stake in the outcome of a controversy as to assure that concrete adverseness [that can] sharpen[] the presentation of issues" as "the gist of . . . standing."); Heather Elliott, The Functions of Standing, 61 STAN. L. REV. 459, 469 (2008) ("A dispute that satisfies Article III thus has at least two sides, each of which has a stake in winning, and the doctrine of standing [purportedly] ensures that the plaintiff has such a stake.").

^{113.} Daniel A. Farber, A Place-Based Theory of Standing, 55 UCLA L. REV. 1505, 1551 (2008).

^{114.} See Jonathan Remy Nash, Standing and the Precautionary Principle, 108 COLUM. L. REV. 494, 511 (2008) (proposing the precautionary principle into the standing doctrine).

^{115.} Cf. Farber, supra note 110113, at 1551 ("[P]eople who have a meaningful relation to that body of water—whether it be a fisherman, a canoeist, a zoologist, or a logger—must be able to speak for the values which the river represents and which are threatened with destruction." (quoting Sierra Club v. Morton, 405 U.S. 727, 743 (1972) (Douglas, J., dissenting)).

However, ExxonMobil's holding as to air pollution goes a step further than Powell Duffryn as to water pollution (and farther than any citizen-suit standing jurisprudence): ExxonMobil's holding requires traceability to each individual violation alleged. This approach risks keeping litigants out of federal court, despite having an adequate personal stake in the outcome. Notably, the district court on remand in ExxonMobil had the benefit of evidence being fully developed at a prior trial before having to apply the Fifth Circuit's new standing test. But, for a court without the benefit of a fully developed record, the Fifth Circuit's per-violation rule risks converting Article III standing from a threshold question of assessing personal stake¹¹⁶ into an analysis that "threaten[s] . . . considerable discovery, factfinding, and, worst of all, judicial speculation."117 Without considerable discovery and factfinding, a citizen suit plaintiff would likely be hard-pressed to establish Article III standing for every single violation alleged—despite potentially having an apparent, individualized interest in seeing all violations remedied. And without such discovery and factfinding, a federal judge would lack the information necessary to accurately rule on the issue of standing per each violation. To avoid hindering any enhancement of standing's personal stake function from *Powell Duffryn–ExxonMobil's* type-of-pollutant/type-of-harm approach, other federal courts should refrain from adopting the per-violation rule.

2. The Separation-of-Powers Function

One of the primary functions of the Article III standing doctrine is to preserve separation of powers. As to pollution citizen suits, specifically, separation of powers concerns purportedly arise by empowering private citizens to act as a pseudo private attorney general. Pro example, in *Laidlaw*, both Justices Kennedy and Scalia expressed concern about congressional authorizations allowing private citizens to exact public fines from private parties, given the role of the executive branch in enforcing the law under Article II of the Constitution. 120

^{116.} See e.g., United States v. Bearden, 328 F.3d 1011, 1013 (8th Cir. 2003) (stating that "Article III standing is a threshold question in every federal court case").

^{117.} Standing and the Privatization of Public Law, supra note 45, at 1464.

^{118.} See generally Antonin Scalia, The Doctrine of Standing as an Essential Element of the Separation of Powers, 17 SUFFOLK U. L. REV. 881 (1983) (arguing that "the judicial doctrine of standing is a crucial and inseparable element of" separation of powers).

^{119.} See Greve, supra note 24, at 341–92 (arguing that, by passing environmental citizen-suit provisions, Congress intruded into "law enforcement" by "creat[ing] what amounts to an environmentalist enforcement cartel.").

^{120.} Friends of the Earth, Inc. v. Laidlaw Envt'l Servs. (TOC), Inc., 528 U.S. 167, 197 (2000) (Kennedy, J., concurring) ("Difficult and fundamental questions are raised when we ask whether exactions

Relaxing the traceability standard for environmental citizen suits, however, would seem to respect separation of powers more so than a more stringent traceability standard. First, the CWA and CAA's citizen-suit provisions are unlikely to usurp any executive power under Article II. At least when the citizen-suit provisions are used against private defendants, "the executive is not even a party" to the action. ¹²¹ In addition, the Take Care Clause of Article II can be viewed as "a duty" to enforce the law, "not a license." ¹²² If the Executive declines to enforce the law or is unable to do so, there should not be any significant separation of powers concerns by allowing private citizens to use the judicial process in a congressionally sanctioned scheme (and Executive sanctioned, given that the Executive signed the citizen suit provisions into law).

In addition, relaxing the traceability requirement for citizen suitors against industrial facilities indicates a respect for Congress by the judiciary. By lowering the Article III bar to CWA and CAA citizen suits, Congress's legislated environmental mandates are more likely to be respected by the executive branch. Having citizen suits as a supplement to federal enforcement prevents underenforcement of Congress's mandates "at particular facilities" when the executive succumbs to "agency capture' problems." 124

But again, *ExxonMobil's* standing-per-violation invention might frustrate any gains to the separation-of-powers function from the type-of-pollutant/type-of-harm approach. A standing-per-violation rule risks both underenforcement and total non-enforcement of the legislative mandates in the CWA and CAA. This concern extends not only to violations that might be considered more minor¹²⁵ (making it less likely that the Executive will

- 121. What's Standing After Lujan?, supra note 44, at 231–32.
- 122. Standing and the Privatization of Public Law, supra note 45, at 1471.
- 123. Cf. id. (discussing, in the context of when a citizen suit is used against the executive, "a [judicial] decision is necessary in order to vindicate congressional directives.").

of public fines by private litigants, and the delegation of Executive power which might be inferable from the authorization, are permissible in view of the responsibilities committed to the Executive by Article II of the Constitution of the United States."); *id.* at 209 (Scalia, J., dissenting) ("[T]he [Clean Water] Act does not provide a mechanism for individual relief in any traditional sense, but turns over to private citizens the function of enforcing the law."); *see also* U.S. CONST. Art. II § 3 (stating that the President "shall take Care that the Laws be faithfully executed.").

^{124.} Sarah L. Stafford, *Private Policing of Environmental Performance: Does It Further Public Goals?*, 39 B.C. ENVT'L AFF. L. REV. 73, 78 (2012); *see also* Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n, 449 F.2d 1109, 1111 (D.C. Cir. 1971) (stating that the "duty" of the judiciary in "litigation seeking judicial assistance in protecting our natural environment" is to ensure "that important legislative purposes, heralded in the halls of Congress, are not lost or misdirected in the vast hallways of the federal bureaucracy.").

^{125.} It bears recognizing that despite smaller violations seeming more "minor," perhaps such as those violations alleged in *ExxonMobil* where the emissions involved "the release of one pound or less of a pollutant," repeated so-called minor emissions can have a cumulative impact on the environment that

expend enforcement resources). ¹²⁶ The underenforcement/non-enforcement concern similarly exists for violations that might not be considered minor, but nevertheless disregarded under the per-violation approach. ¹²⁷ On remand in *ExxonMobil*, for example, the district court held traceability was not satisfied as to more than 6,000 CAA violations (those emissions releasing a pound or more of a pollutant). ¹²⁸ Where citizen-suit plaintiffs have an adequate personal stake in the health of their surrounding environment, such as the residents living near the emitting facility in *ExxonMobil*, the judiciary should respect Congress's intent that those citizen-suit plaintiffs enforce Congress's legislative mandates in court. Otherwise, the per-violation rule's disregard of congressional intent would defeat the separation of powers gained from *Powell Duffryn–ExxonMobil's* relaxed type-of-pollutant/type-of-harm traceability approach.

V. PRACTICAL IMPLICATIONS FOR FUTURE ENVIRONMENTAL ENFORCEMENT

Absent *Powell Duffryn–ExxonMobil's* implications for Article III standing in environmental citizen suits against polluters, practical considerations are also implicated. In Subsection A, this article argues that relaxation of the traceability standard to *Powell Duffryn–ExxonMobil's* type-of-pollutant/type-of-harm approach enhances the deterrent function of citizen suits. In Subsection B, this article discusses how the federal circuits' relaxed traceability standard might affect standing determinations in the growing realm of climate change litigation.

the pollution control statutes were intended to prevent. *Cf.* Deborah Behles, *Examining the Air We Breathe: EPA Should Evaluate Cumulative Impacts When It Promulgates National Ambient Air Quality Standards*, 20 PACE ENVT'L L. REV. 200, 201 (2010) (arguing that "[c]onsideration of cumulative impacts" in forming NAAQS would be "consistent with the [Clean Air] Act's statutory mandate.").

126. Maxwell L. Stearns, From Lujan to Laidlaw: A Preliminary Model of Environmental Standing, 11 DUKE ENVT'L L. & POL'Y F. 321, 354–55 (2001) ("[T]he federal agency, which has a general mandate to enforce the federal environmental statutes, is subject to significant political pressures and resource constraints. As a result, the agency is motivated to pursue the most severe violations first, and to leave the minor violations for later, if at all.").

127. See Corey Moffat, Establishing Causation in Private Party Climate Change Suits: Correcting the Mistakes of Washington Environmental Council v. Bellon, 44 ENVT'L L. 959, 966 (2014) ("In promulgating the foundational environmental statutes, Congress recognized that government enforcement alone would be insufficient to ensure that the goals of the statutes were met. Given the constant flow of environmental law violations and limited governmental resources, it is unreasonable to assume that state and federal regulatory authorities could engage in the inspections and enforcement measures necessary to ensure adequate compliance. Accordingly, Congress included citizen suit provisions as a means to ensure that 'if the Federal, State, and local agencies fail to exercise their enforcement responsibility, the public is provided the right to seek vigorous enforcement action.'" (footnote omitted)).

128. See Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp. 524 F. Supp. 3d 547, 555-57 (S.D. Tex. 2021) (detailing the district courts findings as to traceability of CAA violations).9397

A. The Deterrent Function of Citizen Suits

The threat of a private citizen suit, including environmental citizen suits, is intended to serve a deterrent function. As indicated by the legislative history to the CWA and CAA, Congress intended environmental citizen suits penalties to have such an effect and prevent environmental harms before they occur. ¹²⁹ In *Laidlaw*, the Supreme Court went as far as to hold that the possibility of such deterrence attributable to civil penalties could satisfy the redressability element of Article III standing. ¹³⁰

Assuming that CWA and CAA citizen suits have a deterrent effect on private dischargers and emitters, deterrence is likely enhanced by *Powell Duffryn–ExxonMobil's* type-of-pollutant/type-of-harm approach to traceability. For example, in water pollution citizen suits where "a waterway is being polluted by multiple dischargers," defendants tend to argue for lack of standing because "plaintiffs have not been uniquely harmed" by the defendant's discharges. ¹³¹ Traditional traceability requirements could thus be a strong defense even if the dischargers are egregious violators. *Powell Duffryn*'s type-of-pollutant/type-of-harm approach signals to dischargers or emitters that they cannot engage in tactical violations of the Acts first, and then later take advantage of Article III traceability to avoid liability.

One may argue that relaxing the traceability requirement can cause overdeterrence, presumably stemming from increased citizen-suit litigation. But the attorney fee provisions of the CWA and CAA function (as they were intended to function) as a counter-deterrent against frivolous litigation. ¹³²

^{129.} See Jeannette L. Austin, The Rise of Citizen-Suit Enforcement in Environmental Law: Reconciling Private and Public Attorneys General, 81 NW. U. L. REV. 220, 237 (1987) ("[O]ne of the primary purposes of [civil] penalties, according to the legislative history of the CWA, is to remove the economic benefit of noncompliance.") (citing H.R. REP. NO. 294, 95th Cong., 1st Sess. 70, reprinted in 1977 U.S. CODE CONG. & ADMIN. NEWS 1148); see also Daniels et al., supra note 1, at 929 (discussing how the Senate drafters of the CAA's citizen-suit provision intended for it to incentivize industrial actors into compliance with the Act's provisions).

^{130.} See Friends of the Earth, Inc. v. Laidlaw Envt'l Servs. (TOC), Inc., 528 U.S. 167, 185–88 ("[A]ll civil penalties have some deterrent effect. More specifically, Congress has found that civil penalties in CWA cases do more than promote immediate compliance by limiting the defendant's economic incentive to delay its attainment of permit limits; they also deter future violations. . . . To the extent that [civil fines] encourage defendants to discontinue current violations and deter them from committing future ones, they afford redress to citizen plaintiffs who are injured or threatened with injury as a consequence of ongoing unlawful conduct." (citations and internal quotations omitted)).

^{131.} Boyer & Meidinger, supra note 4, at 936-37.

^{132.} See supra notes 26-27 and accompanying text; supra note 38-39 and accompanying text. (explaining further how the CWA and CAA both contain provisions specifically designed to minimize frivolous lawsuits).

Thus, if a private industrial facility complies with the Acts, overdeterrence should not be a concern.¹³³

An approach like *ExxonMobil's* standing-per-violation caveat—albeit seemingly abandoned by the Fifth Circuit for the time being—would prevent citizens from having Article III standing to challenge a kitchen-sink of CWA or CAA violations in federal court. Even if less of a causative nexus is necessary under the type-of-pollutant/type-of-harm approach to establish Article III traceability, attempting to do so would be cumbersome. The *ExxonMobil* plaintiffs themselves seemed to recognize this reality on remand by conceding a lack of traceability as to almost half of the violations that they initially alleged. 134

However, other courts should refrain from adopting *ExxonMobil's* standing-per-violation approach because it is incompatible with the deterrent function of citizen suits for largely the same reasons as being incompatible with the functions of standing. Requiring citizen-suit plaintiffs to engage in cumbersome fact-finding simply to satisfy the threshold matter of Article III standing would disincentivize citizen-suits, even where the plaintiffs have a readily apparent personal stake. ¹³⁵ Furthermore, the per-violation approach incentivizes private industrial facilities to employ tactical emissions methods aimed at forcing potential plaintiffs to engage in such intensive fact-finding before being able to bring suit. For those reasons, the per-violation approach does not simply prevent overdeterrence from relaxing the Article III traceability analysis—it promotes underdeterrence.

B. Air Pollution and Private Climate Change Litigation

Environmental litigation is increasingly centered around ongoing and impending climate change stemming from emissions of greenhouse gases (GHGs) and other air pollutants. ¹³⁶ Citizen-plaintiffs typically face significant standing hurdles in climate change-related actions. ¹³⁷ Often, federal courts "have not been . . . willing to find causation," despite usually

^{133.} This contention is further supported by the presence of so-called permit shields in the CWA and CAA, which bar any citizen-suit against an industrial facility so long as said facility is in compliance with all the conditions of its permits. See 33 U.S.C. § 1342(k); 42 U.S.C. § 7661c(f). Thus, given reporting requirements on private facilities that monitor whether they are actually in compliance with the Acts (which should indicate whether a citizen suit may have merit), a facility should be reassured that a court will be able to ascertain whether a certain citizen suit is frivolous for purposes of assessing litigation costs.

^{134.} Env't. Tex. Citizen Lobby, Inc. v. ExxonMobil Corp., 524 F. Supp. 3d 547, 555 (S.D. Tex. 2021).

^{135.} Supra text accompanying notes 78-81.

^{136.} See generally Niran Somasundaram, State Court Solutions: Finding Standing for Private Climate Change Plaintiffs in the Wake of Environmental Council v. Bellon, 42 ECOLOGY L.Q. 491 (2015).

^{137.} See id. at 501 (explaining how climate change related claims struggle to gain standing because of issues stemming from causation and redressability of the injuries recognized).

finding an adequate Article III injury.¹³⁸ Much of the climate change-related citizen litigation has been to force government action on climate change; "[r]elatively few individual climate change plaintiffs have sued private actors."¹³⁹

Where private plaintiffs bring climate change-related lawsuits against private facilities, plaintiffs have been limited to common law claims rather than invoking the CAA's citizen-suit provision. ¹⁴⁰ The CAA was not designed to address the problems of GHGs and climate change. ¹⁴¹ Due to that shortcoming and the lack of federal regulation on GHGs, the CAA's citizen-suit provision in 42 U.S.C. § 7604(a) does not currently provide a private cause of action against private contributors to climate change. There have been several proposals, however, to bring GHGs contributing to climate change within the CAA's gambit. ¹⁴² Expanding the CAA's coverage to GHGs would theoretically provide a private cause of action against industrial violators under § 7604(a). ¹⁴³

If the CAA is ultimately amended—or regulatory rules are successfully promulgated—to directly address GHGs, *ExxonMobil* could frustrate the availability of § 7604(a) citizen suits enforcing any new GHG standard against private industrial facilities. Under the *Powell Duffryn–ExxonMobil* type-of-pollutant/type-of-harm approach to Article III traceability, standing would likely not be a significant hurdle for plaintiffs. ¹⁴⁴ But given that any

^{138.} See id. (explaining that courts have been willing to recognize injuries suffered from climate change to satisfy the first prong for standing).

^{139.} Margaret Rosso Grossman, Climate Change and the Individual, 66 Am. J. COMP. L. 345, 375 (2018).

^{140.} See id. Climate change-related suits under the CAA's citizen suit provision have been to force government action on climate change, rather than being used against private facilities contributing to climate change.

^{141.} See David A. Grossman, Warming Up to a Not-So-Radical Idea: Tort-Based Climate Change Litigation, 28 COLUM. J. ENVT'L L. 1, 36-37 (2003) (demonstrating that the CAA is primarily concerned with making sure the air that people breathe is healthy and that climate change is an issue outside the scope of the statute).

^{142.} See, e.g., Howard M. Crystal et al., Returning to CAA Fundamentals: A Renewed Call to Regulate Greenhouse Gases Under the National Ambient Air Quality Standards (NAAQS) Program, 31 GEO. ENVT'L L. REV. 233 (2019) (arguing that NAAQS be formulated for greenhouse gases, which would cause § 7604(a) to provide a private cause of action against private facilities who violate the NAAQS); Holly Doremus & W. Michael Hanemann, Of Babies and Bathwater: Why the CAA's Cooperative Federalism Framework is Useful for Addressing Global Warming, 50 ARIZ. L. REV. 799 (arguing that states include measures in their state implementation plans of NAAQS aimed at addressing greenhouse gas emissions).

^{143.} See Doremus & Hanemann, supra note 139142 at 833 (explaining how the broad citizen suit provision in the CAA would allow for citizens to enforce state implementation plans when the EPA fails to).

^{144.} It would be difficult for a defendant to dispute that GHG is a type of pollutant that might ordinarily cause the plaintiff's type of harm (climate change-related). See, e.g., U.S. ENVT'L PROT. AGENCY, Climate Change Indicators: Greenhouse Gases, https://www.epa.gov/climate-indicators/greenhouse-gases (last visited Apr. 4, 2021) ("Greenhouse gases from human activities are the most significant driver of observed climate change since the mid-20th century.").

extension of the CAA to GHGs would likely lead to significantly more § 7604(a) litigation, federal courts may be more inclined to adopt *ExxonMobil's* restrictive standing-per-violation rule to temper a flood of climate change litigation.

CONCLUSION

Despite the CAA and CWA remaining the nation's primary pollution control statutes since their original enactment in the 1970s, the federal circuit court's *Powell Duffryn* water-pollution framework—and the recent extension of *Powell Duffryn* to air-pollution suits in *ExxonMobil*—signal an evolution of the Article III standing doctrine. Perhaps these courts are heeding Justice Blackmun's dissenting caution from *Sierra Club*, but time will tell whether the flexibility of the *Powell Duffryn* standard will be hindered by other courts adopting and restrictively applying *ExxonMobil's* per-violation requirement. The Supreme Court itself should intervene and resolve its traceability gap in *Laidlaw*.

SIGNIFICANT HARM, CULPABLE CONDUCT, AND THE CRIMINAL ENFORCEMENT OF ENVIRONMENTAL LAW IN NEW ENGLAND

Dr. Joshua Ozymy & Dr. Melissa Jarrell Ozymy*

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INTRODUCTION

Charles Arcangelo, owner of Chuck & Eddie's Used Auto Parts in New Haven, Connecticut, likes to spread holiday cheer at Christmas with a big "Season's Greetings" sign, which passing motorists can view from the freeway. Criminal investigators from the U.S. Environmental Protection Agency (EPA) and the U.S. Federal Bureau of Investigation (FBI) tell a slightly different story. The Arcangelo brothers owned five junkyards, four scrap dealer businesses, and a restaurant in Connecticut. On June 24, 1988, the brothers and a series of co-defendants were arrested. A 15-count Racketeer Influenced and Corrupt Organizations Act (RICO) indictment was unsealed. The indictment included the following charges: "racketeering, illegal disposal of hazardous waste without a permit, failure to notify officials

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^{1.} Jessica Lerner, Chuck & Eddie's Helps Spread Holiday Cheer in New Haven, New Haven Reg. (Dec. 7, 2017), https://www.nhregister.com/news/article/Chuck-Eddie-s-helps-spread-holiday-cheer-in-12414291.php.

^{2.} U.S. ENV'T PROT. AGENCY, SUMMARY OF CRIMINAL PROSECUTIONS RESULTING FROM ENVIRONMENTAL INVESTIGATIONS 85 (Dec. 1989) (discussing State v. Charles Arcangelo, United States District Court, Docket No. N-88-43TFGD (D. Conn. 1989)).

Id

of the release of a hazardous substance [among other charges]."⁴ An 18 month FBI investigation, along with state police and EPA criminal investigators, found the Arcangelos were running a chop shop,⁵ where they dismantled stolen cars and sold the parts across the state.⁶ "On April 13, 1989, Charles Arcangelo was sentenced to serve [144 months] incarceration . . . placed on [60 months] probation, pay a \$200,000 fine . . . a \$100 special assessment, and ordered to forfeit \$300,000." ⁷ The next day "James Arcangelo was sentenced to serve [84 months] incarceration, placed on [60 months] probation, share . . . restitution . . . [with] his brother, and . . . pay a \$100 special assessment."⁸

The Arcangelo Brothers prosecution is an example of how environmental law enforcement can work with traditional law enforcement to pursue serious crimes. This case also shows how criminal investigations and prosecutions have functioned historically in New England. Environmental crimes in the region range from dumping toxic waste to emitting harmful air emissions, exposing people to dangerous chemicals, or explosions at industrial facilities. Criminal enforcement tools can be strategically applied to punish offenders and deter future offenses. For example, in cases when the individual's and companies' behavior is more than an accident or an environmental violation but rather a crime involving significant harm and culpable conduct, such criminal enforcement tools would be effective.

Despite the importance of environmental criminal enforcement, we know little about the repercussions for serious environmental crimes, particularly

^{4.} See id. at 84–85 (stating that the Arcangelo brothers were charged under the following statues: the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 (1976); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 (1980); Racketeer Influenced and Corrupt Organizations Act (RICO), 18 U.S.C. § 1962 (1970); Organized Crime Control Act, P.L. 91-452 § 901(a) (1970)).

^{5.} A chop shop is a body shop that dismantles and parts out stolen cars. See Chop Shop, MERRIAM-WEBSTER, https://www.merriam-webster.com/dictionary/chop%20shop (last visited Nov. 1, 2022) (defining chop shop as "a place where stolen automobiles are stripped of salable parts").

^{6.} Wire and Staff Reps., *Insurance Briefs*, J. COMMERCE ONLINE (Apr. 16, 1989), https://www.joc.com/insurancee-brieefs 19890416.html.

^{7.} See U.S. ENV'T PROT. AGENCY, SUMMARY OF CRIMINAL PROSECUTIONS RESULTING FROM ENVIRONMENTAL INVESTIGATIONS, *supra* note 2 at 87 (discussing United States v Arcangelo, No. N-88-43TFGD (D. Conn. June 23, 1988).

^{8.} *Id*.

^{9.} An Overview of Our Practices, U.S. DEP'T OF JUSTICE: ENV'T & NAT. RESOURCES DIV. (May 14, 2015), https://www.justice.gov/enrd/overview-our-practice.

^{10.} Memorandum from Earl E. Devaney, Dir. Off. Off. Crim. Enf't, to All EPA Employees Working in Support of Crim. Enf't. Program, The Exercise of Investigative Discretion, U.S. Env't Prot. Agency (Jan. 12, 1994).

^{11.} See e.g., Raymond Paternoster, How much Do We Really Know About Criminal Deterrence?, 100 J. CRIM. L. & CRIMINOLOGY, 765, 766–67 (2010) (discussing the deterrence of environmental crimes).

in New England. 12 We address this gap in knowledge by examining all environmental crime prosecutions stemming from the EPA's criminal investigations adjudicated in New England from 1983 to 2019. With 37 years of data, we are able to show historical trends in environmental crimes. The data also shows patterns of charging and sentencing, and draw out the broader themes that emerge over time. We begin by discussing the evolution of federal environmental criminal enforcement, followed by our data collection strategy, analysis, and conclusions.

I. THE DEVELOPMENT OF CRIMINAL ENFORCEMENT

The Rivers and Harbors and Lacey Acts, passed in 1899–1900, were the first federal environmental laws to include misdemeanor penalties. These laws penalized illegal discharges or the alteration of the navigable waters of the United States and the unpermitted interstate wildlife trade.¹³ Later in the decade, the Department of Justice's (DOJ) Public Lands Division was formed in 1909 to oversee these areas of environmental law. 14 By 1982 the Environmental Crimes Section (ECS) was founded to focus resources and professional expertise on prosecuting environmental crimes. The ECS became its own unit in 1987 within DOJ's Environment and Natural Resources Division (ENRD). 15 DOJ-ECS currently employs some 43 prosecutors and a dozen support staff.¹⁶

Felony provisions are common in federal environmental statutes today. However, this was not the case before 1984. In 1984, Congress passed the Resource Conservation and Recovery Act's (RCRA) Hazardous and Solid Waste Amendments. Three years later, Congress passed the Clean Water Act

^{12.} There are few studies that examine the sentencing and punishment of environmental offenders, particularly in New England. This leads some researchers to question how much we know about the value of criminal enforcement tools and deterrence. Joshua Ozymy & Melissa L. Jarrell, EPA's Criminal Prosecution and Punishment of Environmental Crimes, ENV'T L. REP. 10452, (2020); Michael J. Lynch, The Sentencing/Punishment of Federal Environmental/Green Offender, 38 DEVIANT BEHAV. 991, 992 (2016); Paternoster, supra note 11, at 765-68.

^{13.} Rivers and Harbors Act, 33 U.S.C. § 403 (1899); The Lacey Act, 16 U.S.C § 3371 (1900).

^{14.} History, U.S. DEP'T OF JUSTICE: ENV'T & NAT. RESOURCES DIV. (2019), https://www.justice.gov/enrd/history; GLENN CURTIS ET AL., ENRD PUBLIC LANDS AND NATIONAL TREASURES: THE FIRST 100 YEARS OF ENVIRONMENTAL & NATURAL RESOURCES DIVISION 1909-2009 3 (David Shilton ET AL. eds. 2009).

^{15.} Historical Development of Environmental Criminal Law, U.S. DEP'T OF JUSTICE: ENV'T & NAT. RESOURCES DIV. (May 13, 2015), https://www.justice.gov/enrd/about-division/historicaldevelopment-environmental-criminal-law.

^{16.} See Environmental Crimes Section, U.S. DEP'T OF JUSTICE: ENV'T & NAT. RESOURCES DIV. (July 2, 2021), https://www.justice.gov/enrd/environmental-crimes-section (providing these numbers as of 2015).

(CWA) and the three years later the Clean Air Act (CAA). ¹⁷ These changes followed guidelines in the U.S. Sentencing Commission that recommended stiffer punishments for federal crimes that extended to environmental crimes. ¹⁸ Before the federal statutes included enhanced penalties for knowing violations, prosecuting corporate officers and other high-level officials for significant environmental crimes was difficult. ¹⁹

The EPA developed criminal investigative tools in the 1980s with the founding of the Office of Enforcement in 1981, now called the Office of Enforcement and Compliance Assurance (OECA). ²⁰ Criminal investigators were hired the following year and were deputized as Special Deputy U.S. Marshalls from 1984 until 1988 when Congress granted them full law enforcement powers. ²¹ Today the EPA's Criminal Investigation Division (EPA–CID) employs roughly 145 criminal investigators, also called special agents or 1811s, to investigate environmental crimes across the United States. ²² The Office of Criminal Enforcement, Forensics and Training (OECFT) was organized in 1995 to supply investigative and forensic support for criminal cases and house the EPA–CID. ²³ Criminal investigators are typically alerted to potential environmental crimes from official documents, former employees, and civil inspectors. ²⁴ Investigators build evidence and

^{17.} Clean Water Act, 33 U.S.C. §§ 1251, 1972 (1972); 42 U.S.C. § 7413(1); Clean Air Act, 42 U.S.C. § 7401 (1963); 33 U.S.C. § 1319(c)(1)–(2); Criminal Provisions of Water Pollution, U.S. ENV'T PROT. AGENCY: ENF'T, https://www.epa.gov/enforcement/criminal-provisions-water-pollution; Criminal Provisions of the Resource Conservation and Recovery Act (RCRA), U.S. ENV'T PROT. AGENCY: ENF'T, https://www.epa.gov/enforcement/criminal-provisions-resource-conservation-and-recovery-act-rcra; 42 U.S.C. § 6928(d)(2)(A); Criminal Provisions of the Clean Air Act, U.S. ENV'T PROT. AGENCY: ENF'T, https://www.epa.gov/enforcement/criminal-provisions-clean-air-act.

^{18.} David T. Barton, Corporate Officer Liability Under RCRA: Stringent but not Strict, 4 BRIGHAM YOUNG U. L. REV. 1547, 1547–48 (1991); Richard J. Lazarus, Assimilating Environmental Protection into Legal Rules and the Problem with Environmental Crime, 27 LOY. L. REV. 867, 883 (1994).

^{19.} See e.g. Michael R. Pendleton, Beyond the Threshold: The Criminalization of Logging, 10 Soc'y & NAT. RES. 181, 192 (1997) (discussing a global trend of stiffering criminal penalties for environmental harm).

^{20.} U.S. ENV'T PROT. AGENCY, EPA POLICY GUIDANCE FOR FY1980/1981 35 (1979).

^{21.} Memorandum from John Peter Suarez, Assistant Administrator, Management Review of the Office of Criminal Enforcement to All-OCEFT (Dec. 15, 2003), https://www.epa.gov/sites/production/files/documents/oceft-review03.pdf.

^{22.} Criminal investigators are also referred to as special agents or 1811s. The number of investigative staff employed by EPA–CID tends to vary, based on whether this includes active special agents or also support and management staff. U.S. Env't Prot Agency, Crim. Enf't Program, America's Environmental Crime Fighters, https://www.epa.gov/sites/production/files/documents/oceftbrochure.pdf, Public Employees for Environmental Responsibility (PEER), EPA CID Agent Count, tbl. 1, in Freedom of Information Act Requests (2019), https://www.peer.org/wp-content/uploads/2019/11/11_21_19-Federal Pollution_EPA_CID_Agent_Count.pdf.

^{23.} Criminal Enforcement, U.S. ENV'T PROT. AGENCY: ENF'T, https://www.epa.gov/enforcement/criminal-enforcement (last visited Sep. 23, 2022).

^{24.} See e.g., Joel A. Mintz, Treading Water: A Preliminary Assessment of EPA Enforcement During the Bush II Administration, 34 ENV T. L. REP. 10912, 10924 (2004) (mentioning that criminal investigators are typically alerted to potential environmental crimes from official documents, former employees, and civil inspectors that notice and report the problems).

then typically approach prosecutors in the ECS or the U.S. Attorney's Office to file an information [a charging document] in District Court or convene a grand jury to pursue a case to prosecution.²⁵

The major goals of using criminal enforcement tools are to sufficiently punish environmental crimes and deter future offenses, so that the costs of offending outweigh the benefits of illegal activity. ²⁶ For deterrence to be effective, the probability of being caught must be sufficiently high and the punishment for the crime must be adequately certain and stiff.²⁷ The number of criminal investigators employed by the EPA-CID is relatively small and by some estimates less than 2,600 federal environmental crime prosecutions may have taken place since 1983. 28 Cases are not properly prosecuted because deterrence in criminal enforcement is not adequate. There is little evidence of prosecutions in New England.²⁹ We work to provide a better overview of criminal enforcement efforts in the analysis that follows.³⁰

^{25.} JOEL A. MINTZ, ENFORCEMENT AT THE EPA: HIGH STAKES AND HARD CHOICES, (University of Texas Press Austin 2012); Joel A. Mintz, Some Thoughts on the Interdisciplinary Aspects of Environmental Enforcement, 36 ENV'T L. REP. 10495, 10497 (2006).

^{26.} See Suarez, supra note 21 (memorandum at ii) ("To the extent any single pattern dominates, it is the law enforcement orientation of the Immediate Office, CID, and (to a lesser extent) LCRMD [Legal Counsel and Resources Management Division].").

^{27.} Gary Becker, Crime and Punishment: An Economic Approach, 76 J. Pol. Econ. 169, 204-05 (1968); Richard A. Posner, An Economic Theory of the Criminal Law, 85 COLUM. L. REV. 6, 1195, 1195 (1985).

Joshua Ozymy et al., Persistence or Partisanship: Exploring the Relationship between Presidential Administrations and Criminal Enforcement by the U.S. Environmental Protection Agency, 1983-2019, 81 Pub. Admin. Rev. 49, 49, 53 (2021).

^{29.} The cost of criminal prosecution is high, and the nature of most violations result in the vast majority of environmental offenses being handled through a civil process. Jeremy Firestone, Agency Governance and Enforcement: The Influence of Mission on Environmental Decisionmaking, 21 J. POL'Y ANALYIS & MGMT., 409, 410-12 (2002); Evan J. Ringquist & Craig E. Emmert, Judicial Policymaking in Published and Unpublished Decisions: The Case of Environmental Civil Litigation, 52 Pol. RSCH. Q. 12, 12–13 (1999) (mentioning the low deterrence value of environmental prosecution).

^{30.} Key studies on the criminal sanctioning of environmental offenders are somewhat limited and do not consider regional analysis of these efforts historically. Important examples of empirical studies on sanctioning include: Kathleen F. Brickey, Charging Practices in Hazardous Waste Crime Prosecutions, 62 OHIO ST. L. J. 1077, 1077 (2001); David M. Uhlmann, Prosecutorial Discretion and Environmental Crime, 38 HARV. ENV'T L. REV. 159, 159 (2014); Joshua Ozymy & Melissa Jarrell, Why Do Regulatory Agencies Punish? The Impact of Political Principals, Agency Culture, and Transaction Costs in Predicting Environmental Criminal Prosecution Outcomes in the United States, 33 REV. POL'Y RSCH. 71, 71–73 (2016); Mathew J. Griefe, et al., Corporate Environmental Crime and Environmental Justice, 28 CRIM. JUST. POL'Y REV. 327, 327 (2017); Matthew J. Griefe & Michael O. Maume, Do Companies Pay the Price for Environmental Crimes? Consequences of Criminal Penalties on Corporate Offenders, 73 CRIM. L. & SOC. CHANGE 337, 337 (2019).

II. DATA

Data for the analysis was drawn from the EPA's Summary of Criminal Prosecutions Database.³¹ The Database contains case summaries of all EPA-CID criminal investigations and related prosecutions occurring from 1983present. We selected all EPA cases from fiscal years (FY) 1983 to 2019 to gather 2,588 total cases in our data. We then selected all cases occurring in New England.³² We cataloged a total of 138 prosecutions occurring in these states over this time period.³³ We coded the following variables in our dataset: case summary, docket number, state, EPA fiscal year, major federal environmental statutes used, number of defendants, whether there was at least one company as a defendant in a case, the presence of nonenvironmental charges (such as false statements, obstruction, and conspiracy), and penalties. We aggregated penalties across each case for all individuals and companies in the prosecution. We measure probation in total months, incarceration in total months, and community service in total hours. Monetary penalties are measured in nominal dollars and include: fines, fees, assessments, restitution, or any other monetary penalty. Data is taken directly from the prosecution summaries.³⁴ If the EPA made any errors in imputing the data or left out cases, this information is unknown to us because the defense, prosecutors, or other key actors in the case are responsible, but this does not affect our central goals in the article.

We used content analysis to code the case summaries. Our method was straightforward. We coded cases for four weeks through FY 2015 with two coders coding independently. Once we understood the data and our intercoder reliability exceeded 90 percent, we were confident we comprehended the patterns in the data sufficiently to proceed with analysis.³⁵ Each coder analyzed the data independently, with the lead author reviewing data for discrepancies, and then meeting to find consensus. Our total inter-coder ability was roughly 95 percent for the analysis.³⁶

^{31.} Summary of Criminal Prosecutions Database, U.S. ENV'T PROT. AGENCY: COMPLIANCE, https://cfpub.epa.gov/compliance/criminal_prosecution/index.cfm (last visited Sept. 22, 2022) [hereinafter Criminal Prosecution Database].

^{32.} For purposes of this article New England is defined as: Connecticut, Massachusetts, New Hampshire, Rhode Island, Vermont, Maine.

^{33·} *Id*.

^{34.} *Id*.

^{35.} See generally Cliodha O'Connor & Helene Joffe, Intercoder Reliability in Qualitative Research: Debates and Practical Guidelines, 19 INT'L J. QUALITATIVE METHODS 1, 2 (2020) (defining intercoder reliability as "a numerical measure of the agreement between different coders regarding how the same data should be coded," and stating that intercoder reliability is "appropriate when categorizing data at a nominal level").

^{36.} Edwin B. Parker, *Review: Content Analysis for the Social Sciences and Humanities by Ole R. Holsti*, 2 Am. Socio. Rev. 356, 357 (1969); EARL R. BABBIE, THE PRACTICE OF SOCIAL RESEARCH, 323–28 (Cengage Learning, 14th ed. 2014).

III. RESULTS

In Figure 1, we traced the total number of annual criminal prosecutions adjudicated in New England by the EPA's FY 1983-2019. We found that few prosecutions were completed in the early 1980s as the criminal enforcement regime at the DOJ-ECS and the EPA-CID developed. Eleven prosecutions were adjudicated in the 1980s, followed by 27 in the 1990s, 48 in 2000-09, and 52 in 2010-19. A grand total of 138 prosecutions were completed in this time period with an average number of prosecutions of about 3.7.

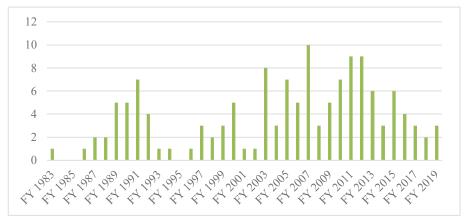


Figure 1. Total Annual Environmental Crime Prosecutions in New England by EPA Fiscal Year, 1983–2019.³⁷

In Figure 2 we breakdown the data from Figure 1 into total prosecutions occurring by state for FY 1983-2019. A total of 45 prosecutions were completed in Connecticut during these 37 years. Thirty-three prosecutions were adjudicated in Massachusetts, 27 in New Hampshire, 19 in Rhode Island, and nine in Vermont. Maine had the lowest number of completed prosecutions at five total prosecutions since 1983.

^{37.} See Criminal Prosecution Database, supra note 31 (collecting all cases in New England from 1983-2019).

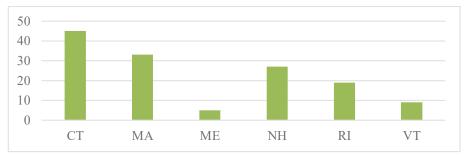


Figure 2. Total Annual Environmental Crime Prosecutions in New England by U.S. State, 1983–2019.³⁸

In Table 1 we examine charging patterns across all six states in our data, 1983-2019. Defendants are often charged under multiple statutes, but we wanted to record the total number of prosecutions where major federal environmental statutes were used to evaluate the broader patterns in the data. For example, in Connecticut there were 15 prosecutions where at least one defendant was charged under the CWA. In Massachusetts, in 14 cases at least one defendant was charged under the CWA, none in Maine, six in New Hampshire, two in Rhode Island, and one in Vermont. In a total of 38 prosecutions, at least one defendant was charged under the CWA. Similarly out of 16 prosecutions, at least one defendant was charged under the CAA. Out of 23 prosecutions, at least one defendant was charged under RCRA. Out of six prosecutions, at least one defendant was charged under the Toxic Substances Control Act (TSCA). Out of six prosecutions, at least one defendant was charged under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). In 24 prosecutions at least one defendant was charged under state-level environmental statutes. State-level charges were brought in 14 cases in New Hampshire. These numbers suggest a robust amount of collaboration between state and federal environmental law enforcement agencies for this number of cases to show up in the EPA's database. This finding implies the EPA-CID cooperated with state environmental agencies as part of a taskforce or during the investigation.

^{38.} See id. (collecting number of criminal prosecutions under the EPA from 1983-2019 and sorting by state).

State	CWA	CAA	RCRA	TSCA	FIFRA	State	
CT	15	10	9	3	1	1	
MA	14	1	3	0	2	3	
ME	0	1	2	0	0	0	
NH	6	0	2	1	0	14	
RI	2	3	4	2	2	5	
VT	1	1	3	0	1	1	

Table 1. Charging Patterns in Environmental Crime Prosecutions in New England, 1983–2019.³⁹

In quite a few prosecutions, defendants were charged with criminal offenses exclusively or along with environmental charges. We catalog some of the more prevalent criminal charges in our data in Figure 3. Here, we show the most frequent cases where at least one defendant was charged with a nonenvironmental crime. The most common offense was giving false statements to investigators or false information on official documents. In 33 prosecutions, or about 24 percent of all cases, at least one defendant was charged with false statements. In roughly nine percent of cases, or a total of 12 prosecutions, defendants were charged with conspiracy. In nine percent of cases at least one defendant was charged with fraud, and in two cases charged with racketeering.

^{39.} See id. (collecting number of criminal prosecutions under the EPA from 1983-2019 and sorting by statute violated).

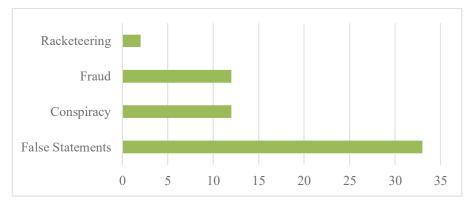


Figure 3. Common Criminal Charges in Environmental Crime Prosecutions in New England, 1983–2019.⁴⁰

In Figure 4, we aggregated penalties assessed to all individuals and companies in our data, 1983–2019. We show total aggregate monetary penalties, total probation and incarceration in months, and total hours of community service. In the upper-left quadrant, we show that across all individual defendants in our data, total monetary penalties assessed at sentencing exceeded \$11.6 million. For companies, total monetary penalties exceeded \$107 million. Individual defendants were cumulatively assessed in our estimates some 3,689 months of probation, while companies were sentenced to a grand total of 1,585 months of probation. Cumulatively, defendants were assessed some 1,536 months of incarceration in our data and 5,160 hours of community service.

⁴⁰ See id. (collecting number of criminal prosecutions under the EPA from 1983-2019 and sorting criminal charges).

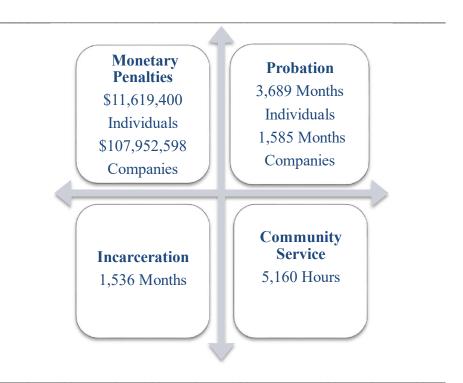


Figure 4. Total Penalties Assessed in Environmental Crime Prosecutions in New England, 1983–2019.41

We provide context to Figure 2 by demonstrating the impact of large penalty cases on aggregate punishment outcomes. In Table 2 we provide some examples of the larger monetary penalties assessed to companies in environmental crime prosecutions in New England. Northeast Utilities was prosecuted in Connecticut for improper monitoring of water discharged into the Housatonic River and Long Island Sound between 1994 and 1996 at their Millstone Nuclear Power Station in Waterford. 42 The company was charged with violations of the CWA for illegally discharging hydrazine. The company was also charged under the Atomic Energy Act for falsifying documents related to the qualifications of workers at the Nuclear Power Plant.⁴³ Northeast Utilities and Northwest Nuclear Energy Company were

^{41.} See id. (collecting number of criminal prosecutions under the EPA from 1983-2019 and sorting penalties assessed).

^{42.} Daniel P. Jones, NU Admits to Lies, Violations, HARTFORD COURANT: CONN. (Sept. 28, 1999), https://www.courant.com/news/connecticut/hc-xpm-1999-09-28-9909280109-story.html.

^{43.} Atomic Energy Act, 33 U.S.C. § 1252 (1954).

"sentenced to 36 months of probation, ordered to pay a special fee of \$1,800, and . . . \$10 million in fines and penalties." 44

Year	Company	State
1999	Northeast Utilities	Connecticut
2005	Bouchard Transportation Company	Massachusetts
2007	Hamilton Sundstrand Corporation	Connecticut
2010	Southern Union Company	Rhode Island
2017	Power Plant Management Services	Massachusetts

Table 2. Large Monetary Penalties Assessed to Companies in Environmental Crime Prosecutions in New England.⁴⁵

Bouchard Transportation Company was prosecuted in Massachusetts for a barge collision that released 98,000 gallons of heating oil into Buzzards Bay killing hundreds of migratory birds. ⁴⁶ Franklin Robert Hill was the mate [second-in-command] of the tug Evening Tide that was pulling the barge B-120 from Philadelphia to Massachusetts. Hill's negligent actions caused the oil spill. ⁴⁷ The company was charged for violations of the CWA for the illegal discharge and violations of the Migratory Bird Treaty Act. ⁴⁸ On November 18, 2004, the company pled guilty and was sentenced to 36 months of probation, a \$175 special assessment, and \$10 million in federal fines; Hill

^{44.} See Criminal Prosecution Database, supra note 31 (quoting United States v. Ne. Utilities, Docket No. 3:99CR211 (D. Conn. Sept. 27, 1999)); Mark Graffins, Northeast Pleads Guilty to U.S. Nuclear Violations; Record Fine, REUTERS (Sept. 28, 1999), http://www.hartford-hwp.com/archives/45/170.html.

^{45.} See Criminal Prosecution Database, supra note 31 (discussing United States v. Ne. Util., 3:99CR211(RNC) (D. Conn. Sept. 27, 1999); United States v. Bouchard Transp. Co., Inc., 1:04CR100087-MBB (D. Mass. 2005); United States v. Hamilton Sundstrand Corp., 3:07CR23 (D. Conn. Feb. 8, 2007); United States v. S. Union Co., 630 F.3d 17 (1st Cir. 2010); United States v. Power Plant Mgmt. Serv., 3:16-CR-30021-MGM (D. Mass. filed Mar. 23, 2017)).

^{46.} Transportation Company Fined \$10 million for Buzzards Bay Oil Spill, U.S. ENV'T PROT. AGENCY: ARCHIVE: NEWSROOM ARCHIVE (Dec. 1, 2004), https://www.epa.gov/archive/epapages/newsroom_archive/newsreleases/c89d633ed7027429852570350 04efcea.html.

^{47.} Bouchard Transportation Fined \$10 Million, MARITIME EXEC. (Apr. 1, 2004), https://www.maritime-executive.com/article/2004-04-01bouchard-transportation-fined-10-mill.

^{48.} Criminal Prosecution Database, supra note 31 (discussing United States v. Bouchard Transp. Co., Inc., 1:04CR100087-MBB (D. Mass. filed Nov. 18, 2004)); Migratory Bird Treaty Act, 16 U.S.C. § 703. Bouchard was charged with one count of violation under this act.

was sentenced on September 21, 2005 to five months of incarceration. 49 Hamilton Sundstrand Corporation was prosecuted for knowingly discharging unanalyzed processed wastewater into the Farmington River at their Windsor Locks, Connecticut facility.⁵⁰ The company was charged with violations of the CWA.⁵¹ The company was sentenced on May 17, 2007 to 60 months of probation, a \$1 million federal fine, and \$11 million in restitution.⁵²

Southern Union Company was prosecuted for illegally storing liquid mercury without a permit at a site off Tidewater Street in Pawtucket, Rhode Island.⁵³ The company was charged under RCRA and sentenced on October 7, 2009 to 24 months of probation and a \$6 million fine.⁵⁴ Power Plant Management Services, LLC was prosecuted for tampering with air pollution monitoring devices.⁵⁵ Between 2009 and 2011 the company tampered with air pollution control devices and submitted false statements.⁵⁶ The company was charged under both the CAA and the Federal Power Act, making it the first criminal charges under these statutes. On March 23, 2017, the company was sentenced to pay \$2.75 million in criminal fines, to make a community service payment of \$750,000, and pay over \$3 million in civil penalties and disgorgements—for a total penalty exceeding \$7 million.⁵⁷

Table 3 provides context for the incarceration penalties in Figure 4 by providing examples of large incarceration sentences assessed to defendants.

^{49.} The company had a track record of numerous environmental violations over time. Ken Schachter, Barge Operator Bouchard Transportation Files for Chapter 11, NEWSDAY: Bus. (Apr. 5, 2021), https://www.newsday.com/business/bouchard-long-island-barge-tug-chapter-11-petroleum-ntsb-1.49927269.

^{50.} See Criminal Prosecution Database, supra note 31 (discussing United States v. Hamilton Sundstrand Corp., 3:07CR23 (D. Conn. filed Feb. 8, 2007)).

^{51.} Hamilton Sundstrand to Pay \$12 Million for Illegal Dumping, MANUFACTURING.NET: OPERATIONS (Feb. 8, 2007), https://www.manufacturing.net/operations/news/13060769/hamiltonsundstrand-to-pay-12-million-for-illegal-dumping.

^{52.} Env't News Serv., Aerospace Company Fined \$12 Million for Illegal Discharge, WATER & WASTE DIGEST (Feb. 12, 2007), https://www.wwdmag.com/aerospace-company-fined-12-millionillegal-discharge.

^{53.} See Criminal Prosecution Database, supra note 31 (discussing United States v. S. Union Co., 630 F.3d 17 (D. R.I. 2010)).

^{54.} On appeal the company's fine was reduced to \$0 and they were ordered to make a \$500,000 community service payment. United States v. S. Union Co., 630 F.3d 17 (D. R.I. 2010). The company was fined \$6 million and ordered to pay \$12 million in community service payments. Press Release, U.S. Dep't of Just.: Off. Pub. Affairs, Southern Union Company is Penalized \$18 Million for Illegal Storing Mercury at Rhode Island Site (Oct. 2, 2009), https://www.justice.gov/opa/pr/southern-union-companypenalized-18-million-illegally-storing-mercury-rhode-island-site.

^{55.} See Criminal Prosecution Database, supra note 31 (discussing Power Plant Management Services, LLC., D. Massachusetts 3:16-CR-30021-MGMm, 2017).

^{56.} Id.

^{57.} Press Release, U.S. Dep't of Justice: U.S. Attorney's Office, Dist. of Mass., Former Berkshire Power Manager Sentenced for Conspiring to Tamper with Air Pollution Monitors (May 31, 2017), https://www.justice.gov/usao-ma/pr/former-berkshire-power-manager-sentenced-conspiring-tamper-airpollution-monitors.

Charles Arcangelo was prosecuted in Connecticut, along with his brother James Arcangelo and numerous co-defendants, for RICO violations related to illegal storage and disposal of hazardous wastes and a series of other crimes. We estimate some 564 months of incarceration, the most punitive sentenced assessed to defendants in the data for the Arcangelo case. Employees of Advanced Fluorinated Products, LLC, including Alfredo Vega Salazar, were prosecuted for the unlawful importation and sale of chlorofluorocarbon gases (CFCs) used as refrigerants and solvents. The company avoided approximately \$24.5 million in federal excise and income taxes by perpetuating the conspiracy. We estimate individual defendants were cumulatively sentenced to 188 months of incarceration for the crime.

Year	Primary Defendant	State
1989	Charles Arcangelo	Connecticut
2003	Alfredo Vega Salazar	Connecticut
2003	Douglas E. Castle	Connecticut
2005	Louis L. Vinagro, Jr.	Rhode Island
2011	Albania Deleon	Massachusetts

Table 3. Large Incarceration Sentences Assessed to Defendants in Environmental Crime Prosecutions in New England.⁶¹

Douglas E. Castle was prosecuted in connection with the previously mentioned prosecution of Advanced Fluorinated Products. He was also prosecuted in connection with the case for wire fraud charges stemming from the creation of a fraudulent internet bank in Grenada.⁶² He was sentenced on

^{58.} U.S. ENV'T PROT. AGENCY, *supra* note 2, at 87 (discussing United States v Arcangelo, No. N-88-43TFGD (D. Conn. June 23, 1988)).

^{59.} Id. at 86-87.

^{60.} See Criminal Prosecution Database, supra note 31 (summarizing Alfredo Vega Salazar, D. Connecticut 3:01CR174CJD, 2003; United States v. Advanced Fluorinated Products, Inc., No. 3:01CR174CJD (D. Conn. filed July 8, 2002)).

⁶¹ See id. (discussing United States v. Arcangelo, No. N-88-43TFGD (D. Conn. filed June 23, 1988); United States v. Advanced Fluorinated Products, Inc., No. 3:01CR174CJD (D. Conn. filed July 8, 2002); United States v. Vinagro, P1/2002-3891A (D. R.I. filed Dec. 18, 2002); United States v. Deleon, 07-837-MBB (D. Mass. filed Mar. 12, 2008)).

^{62.} Castle was prosecuted again in a later case and was sentenced to 50 months incarceration. Press Release, U.S. Dep't of Justice: U.S. Attorney's Office, Dist. of N.Y., Recidivist Fraudster Douglas E. Castle Sentenced to More than Four years in Prison for Defrauding Investors (Dec. 18, 2018), https://www.justice.gov/usao-sdny/pr/recidivist-fraudster-douglas-e-castle-sentenced-more-four-years-prison-defrauding.

June 25, 2003, to 34 months of incarceration, 36 months of probation, and ordered to pay \$1.2 million in restitution. 63 Louis L. Vinagro, Jr. was prosecuted for operating New England Ecological Development in Johnston, Rhode Island without proper environmental permits. 64 On September 19, 2003, the defendant was sentenced to 24 months of incarceration, 36 months of incarceration on a second count to be served concurrently, and \$1,368 in fines. 65 Albania Deleon was prosecuted for crimes related to her company, Environmental Compliance Training, in Methuen, Massachusetts. From 2001 to 2006, Deleon and her employees issued thousands of fraudulent training certificates to individuals that allowed them to engage in asbestos remediation without attending the course. Deleon was charged with false statements, mail fraud, conspiracy, and hiring undocumented immigrants.⁶⁶ On March 23, 2009, prior to sentencing Deleon fled to Santo Domingo, Dominican Republic. She was arrested and extradited to the United States on October 30, 2010, and sentenced on September 13, 2011 to: 87 months of incarceration, 36 months of probation, and ordered to pay over \$1.2 million

We conclude the analysis by offering a typology of environmental crimes occurring in New England, 1983–2019. In Figure 5, we organize each prosecution by what is, in our best judgment, the central crime in each case. We try to focus on developing common themes across prosecutions to show the dominant or primary themes that emerge from the data. By exploring the data in this manner, we hope to bring order and illustrate the most common themes in environmental crime prosecutions we see over 37 years in New England. Our analysis leads us to conclude that the vast majority of these prosecutions relate to four dominant themes: water pollution, hazardous waste, air pollution, and state-level crimes. We discuss these themes below and provide extensive cases to illustrate examples of these categories in the typology, as well as cases that did not fit into the Figure.

in restitution to the U.S. Internal Revenue Service, and \$369,015 to AIM

Mutual Insurance Company.⁶⁷

^{63.} See Criminal Prosecution Database, supra note 31 (United States v. Advanced Fluorinated Products, Inc., No. 3:01CR174CJD (D. Conn.)).

^{64.} See id. (summarizing United States v. Vinagro, P1/2002-3891A (D. R.I.)).

^{65.} Vinagro Jr. had a colorful past with the EPA and Rhode Island politics. John Hill, *Passages: Johnston Pig Farmer and Recycler Louis Vinagro Jr. has Died*, PROVIDENCE J.: NEWS (Mar. 9, 2018), providencejournal.com/story/news/2018/03/09/passages-johnston-pig-farmer-and-recycler-louis-vinagro-jr-has-died/13216114007.

^{66.} See Criminal Prosecution Database, supra note 31 (summarizing United States v. Deleon, 07-837-MBB (D. Mass, filed Mar. 12, 2008)).

^{67.} See id. (collecting individual prosecutions in New England and sorting them typologically).

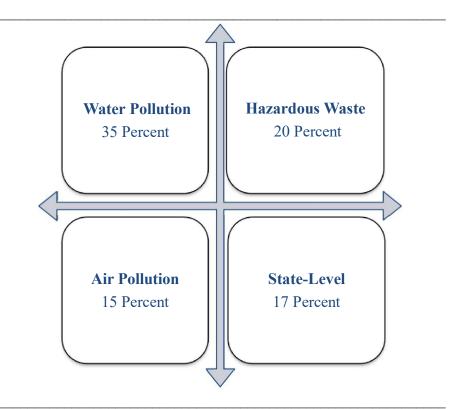


Figure 5. Typology of Environmental Crimes Prosecuted in New England. 68

Water pollution crimes are the most common environmental crimes that we found in the data. Forty-eight cases, or over a third of all the cases analyzed, centered on water pollution crimes. Water pollution crimes arise from illegal discharges into the waters of the United States and result in CWA violations. Other CWA violations include but are not limited to: illegal discharges from ships, issuing false statements on official documents, tampering with monitoring controls, and illegal alterations of waterways. We provide case examples with the prosecution of Borjohn Optical Technology, William McCarthy, Exxon Mobil, OMI Corporation, and Marathon Development Corporation.

Borjohn Optical Technology was a metal plating company located in Burlington, Massachusetts.⁶⁹ The company and its owner John Borowski were prosecuted for discharging toxic wastewater into a public sewer system,

^{68.} Tim Smart, *The Crackdown on Crime in the Suites*, BLOOMBERG: NEWS (Apr. 22, 1991), https://www.bloomberg.com/news/articles/1991-04-21/the-crackdown-on-crime-in-the-suites.

^{69.} United States. v. Borowski, 977 F.2d 27, 29 (1st. Cir. 1992).

violating pretreatment standards, and placing employees in imminent danger of death or serious bodily injury under the CWA.⁷⁰ Borjohn was sentenced on November 7, 1990, to a \$50,000 fine, \$400 special assessment, and to pay restitution to the health insurance companies of two previous employees in the amount of \$15,513.80.⁷¹ Borowski was sentenced to pay a \$400,000 fine, a \$100 special assessment, 26 months of incarceration, and 24 months of probation.⁷²

William McCarthy was prosecuted for fabricating water quality testing on numerous occasions while employed as the Senior Chemist for the City of Lawrence, Massachusetts's drinking water filtration plant. 73 McCarthy pled guilty to making false statements and was sentenced on August 15, 2000, to six months of home confinement, 18 months of probation, and \$15,300 in fees and assessments. 74 Exxon Mobil was prosecuted for negligently releasing 2,500 gallons of kerosene and 12,700 gallons of diesel fuel into the Mystic River near their Everett, Massachusetts terminal. 75 The company was charged under the CWA and sentenced on April 30, 2009 to 36 months of probation, and ordered to pay: \$179,509 to the Oil Spill Liability Trust Fund, \$359,018 in federal fines, and \$5.6 million in special projects. ⁷⁶ The crew operating a vessel owned by OMI Corporation was using a bypass hose to discharge oily waste into the ocean, bypassing their pollution controls, and then making false entries in the ship's Oil Record Book. 77 In September 2001, while docked in Carteret, New Jersey, a member of the crew went to the local police department to report the crime.⁷⁸ The company was prosecuted under the Act to Prevent Pollution from Ships (APPS) with failure to maintain their Oil Record Book.⁷⁹ The company was ordered on August 6, 2004 to serve 36 months of probation and pay a \$4.2 million fine. 80 In the case, \$2.1 million was set aside for a bounty paid to the

^{70.} See Criminal Prosecution Database, supra note 31 (referencing CR89-256-WD (D. Mass. 1991); showing the stiff penalty against the Borowski stemming from a knowingly endangering his employees).

^{71.} *Id*.

^{72.} See id. (summarizing Borjohn Optical Technology, D. Massachusetts CR89-256-WD, 1991).

^{73.} See id. (summarizing William J, McCarthy, D Massachusetts 99-10097-RCL, 2000).

^{75.} See id. (summarizing Exxon Mobil D. Massachusetts 1:08 CR 10404-001 PBS, 2009).

^{76.} Press Release, U.S. Dep't of Justice, Tanker Firm Sentanced for Concealing Dumping of Waste Oil (Aug. 6, 2004), https://www.justice.gov/archive/opa/pr/2004/August/04 enrd 546.htm.

^{77.} OMI to Pay \$4.2M for Waste Oil Dumping, MAR. Rep. & Eng' G News: THE 2004 PROPULSION ANNUAL, 14 (Sept. 2004), https://magazines.marinelink.com/nwm/MaritimeReporter/200409/.

^{78.} Id.

^{80.} See Criminal Prosecution Database, supra note 31 (referencing United States v. OMI Corp. (2006) (2:04-cr-00060-KSH)); Act to Prevent Pollution from Ships 33 U.S.C. §§ 2101-2108 (1984).

whistleblower. ⁸¹ Marathon Development Corporation was prosecuted for illegally filling in a wetland to build an access road for a mall and cinema at a 117 site in Seekonk, Massachusetts—without a proper permit from the Army Corp of Engineers. ⁸² The company and its senior vice president, Terrence Geoghegan, were prosecuted under the CWA. ⁸³ Marathon was sentenced on May 31, 1988 to pay a \$100,000 fine. ⁸⁴ Geoghegan was sentenced to serve six months of incarceration (which was suspended), 12 months of probation, and ordered to pay a \$10,000 fine. ⁸⁵

In 28 prosecutions, or 20 percent, the primary crime was related to hazardous waste. Ref. These crimes typically involved illegal storage, transport, and/or disposal crimes prosecuted under RCRA. There crimes involved failure to notify charges under CERCLA or the illegal disposal of polychlorinated biphenyls under TSCA. Reflections below, we provide case examples detailing the prosecutions of Robert E. Derecktor, International Paper Company, Pollution Solutions of Vermont, and Donna M. Howe.

Robert E. Derecktor and his company, Robert E. Derecktor of Rhode Island, Inc., operated a shipyard for building and repairing vessels in Coddington Grove in Middletown, Rhode Island. Transformers from the shipyard were found illegally buried and leaking PCBs on a farm in Portsmouth owned by Derecktor. On December 29, 1986, the company was sentenced to pay a \$600,000 fine for violating the CWA, CAA, and CERCLA. Derecktor was sentenced to 60 months of probation and a \$75,000 fine. International Paper Company, located in Portland, Maine, was prosecuted for illegally storing and burning hazardous waste at the

^{81.} United States v. Marathon Development Corp., 867 F.2d 96, 97 (1989).

^{82.} See Criminal Prosecution Database, supra note 31 (searching for "Marathon Development Corporation" under Defendants).

^{83.} Developing wetlands typically requires what is known as a 404 permit from the Army Corp. Prosecutors can charge offenders under the CWA for the offense., *Permit Program under CWA Section 404*, U.S. Env't Prot. Agency: CWA 404 (Sept. 18, 4:49:00 PM) https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404.

^{84.} Criminal Prosecution Database, supra note 31.

^{85.} *Id*.

^{86.} Id.

^{87.} Id.

^{88.} Derecktor of Rhode Island, Shipbuilding History: Index to U.S. Shipbuilders & Boatbuilders (Sept. 30, 2020), http://shipbuildinghistory.com/shipyards/small/derecktorri.htm.

^{89.} The manufacture of equipment containing PCBs was banned in most commercial applications by 1978 under the TSCA. The use of PCBs in power transformers was almost ubiquitous and prohibitively expensive to replace and were allowed to remain if inspected quarterly and with other conditions. Being ubiquitous and expensive to dispose of there were strong financial incentives for the illegal disposal. KEVIN MCCARTHY, OFFICE OF LEGIS. RSCH., 2000-R-1104, ELEC. TRANSFORMERS AND PCBs (2000), https://www.cga.ct.gov/2000/rpt/2000-R-1104.htm.

^{90.} Id.

^{91.} See Criminal Prosecution Database, supra note 31 (discussing the prosecution of Robert E. Derecktor, D. R.I. 86-022).

^{92.} Id.

company's Androscoggin Mill without a permit and making false statements.⁹³ On March 7, 1991, the company was prosecuted under RCRA and sentenced to pay \$2.2 million in fines and a \$1,000 assessment. 94 Pollution Solutions of Vermont was prosecuted for illegal export of hazardous waste, illegal storage of hazardous waste, and false statements. 95 The company was charged with illegal transport under RCRA and sentenced on October 3, 1996, to 18 months of probation and ordered to pay a \$60,000 fine. 96 Pollution Solutions of Canada was sentenced to pay a \$60,200 fine. 97 Donna Howe, the office manager at Central Metal Finishing in Windham, New Hampshire, admitted to inspectors falsifying hazardous waste storage logs. 98 She originally lied to inspectors from the New Hampshire Department of Environmental Services (NHDES) during an inspection on December 10. 2012.⁹⁹ She was prosecuted for making false statements under RCRA and sentenced on December 20, 2012, to 12 months of probation and to pay a \$1,000 fine.100

In 15 percent of cases, or 21 total prosecutions, we found air pollution crime to be the central theme in the cases. 101 These crimes often related to one or more violations of the CAA: such as illegally selling, importing, or exporting restricted CFCs, issues related to asbestos such as illegal abatement, disposal, failure to train or protect workers, illegally certifying workers that were to perform asbestos removal, tampering with monitoring devices, falsifying reports, or unpermitted emissions at stationary sources. 102 Below we provide examples illustrating the prosecution of Bridgeport Wrecking Company, George Haras, Melvin Weintraub, and Syntac Coated Products.

^{93.} See id. (discussing the prosecution of Int'l Paper Co., D. Me. 91-00051-B).

^{94.} *Id*.

^{95.} See id. (discussing the prosecution of Pollution Solutions of Vt., D. Vt. 95 CR 121).

^{96.} Id.

^{97.} Id.

^{98.} See id. (discussing the prosecution of Donna M. Howe, D. N.H. 12-CR-95-01-SM).

^{99.} Id

^{100.} Id.

^{101.} Id.

^{102.} The majority of air pollution cases focus on asbestos issues. Asbestos is regulated as a hazardous air pollutant (HAP) and regulated under Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP). These air toxics provisions of the CAA give EPA and DOJ prosecutors broad range to punish a variety of crimes related to asbestos in order to protect the public from exposure to air toxics regulated under these provisions. The broad public knowledge of asbestos dangers, physical evidence, and broad reach of the statutes likely explain why so many cases are prosecuted here. Nat'l Emissions Standards for Hazardous Air Pollutants, 40 C.F.R. §§ 61.140-61.157 (2022); The Clean Air Act, 42 U.S.C. §§ 1857-18571 (1967); Overview of the Asbestos National Emissions Standards for Hazardous Air Pollutions (NESHAP), U.S. ENV'T PROT. AGENCY: ASBESTOS, (Feb. 9, 2022), https://www.epa.gov/asbestos/overview-asbestos-national-emission-standards-hazardous-air-pollutantsneshap.

Bridgeport Wrecking Company was contracted to demolish the Knudsen Dairy in North Haven, Connecticut. 103 The company and its president, Thomas Capozziello, were prosecuted for releasing asbestos during the demolition and failing to notify authorities of the release, as well as improper abatement of asbestos under the CAA. 104 On March 16, 1990, the company was sentenced to pay a \$40,000 fine on all three counts. 105 The company's fine runs concurrently to Capozziello's sentence to pay a \$10,000 fine, serve 36 months of probation, 12 months of incarceration (all but three months suspended), and pay a \$25 special assessment. 106 George Haras was prosecuted for illegally selling the refrigerant R-409A to more than 60 customers who thought it was R-12.107 The former is not designed for air conditioners and caused approximately \$300,000 in damage. 108 Haras and Environmental Technologies were prosecuted for mail fraud. ¹⁰⁹ On March 22, 2000, Haras was sentenced to 18 months of incarceration, 36 months of probation, and to pay restitution in the amount of \$278,963. 110 The company was sentenced to 36 months of probation and to pay fines totaling \$176,013.111

Melvin Weintraub was prosecuted for using untrained workers to illegally remove asbestos from an old YMCA building that was being converted to apartments in New Haven, Connecticut. Weintraub and his co-defendants submitted false statements that the asbestos was legally disposed of when in fact they dumped it in garbage bags around town. On May 11, 2000, Weintraub was convicted under the CAA for asbestos violations and sentenced to 12 months of incarceration, ordered to pay \$6,534 in restitution, and a \$250,000 fine. On Bruce, owner of Environmental Training and Consulting in Vernon and Wallingford, Connecticut, was prosecuted for fraudulently selling asbestos training certificates without requiring individuals to undertake the training. On the Pay an \$800 fine.

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103 See Criminal Prosecution Database, supra note 31 (discussing the prosecution of Bridgeport Wrecking Co., D. Conn. N-89-12-WWE).
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¹⁰⁴ *Id*.

^{105.} Id.

^{106.} See id. (referencing Bridgeport Wrecking Company, D. Connecticut N-89-12-WWE, 1990).

¹⁰⁷ See id. (discussing the prosecution of George Haras, D. Mass. 99M0483RBC).

¹⁰⁸ *Id*.

¹⁰⁹ Id.

¹¹⁰ *Id*.

^{109.} See id. (referencing George Haras a.k.a. George Harlambos, D. Massachusetts 99M0483RBC, 2000).

^{112.} See id. (referencing N-97-4-58 (D. Conn. 2010)).

^{113.} See id. (referencing Melvin Weintraub, D. Connecticut N-97-4-58, 2000).

¹¹⁴ *Id*

¹¹⁵ See id. (referencing 309-CR00218-HBF (D. Conn. 2010)).

^{116.} See id. (referencing John V. Bruce, D. Connecticut 309-CR00218-HBF, 2010).

and the Criminal Enforcement of Environmental Law in New England

Syntac Coated Products, located in Hartford, Connecticut, was prosecuted for using catalytic oxidizers to control its air emissions that were not functioning properly. ¹¹⁷ Syntac Coated Products did not report the dysfunctional monitoring devices to regulators as required under the CAA. ¹¹⁸ On January 19, 2017, the company was ordered to pay a \$200,000 fine and make a \$200,000 community service payment. ¹¹⁹

While water, air, and hazardous waste crimes dominated our data, representing approximately 70 percent of the prosecutions in New England since 1983, 24 cases, or 17 percent of the prosecutions, focused on violations of state environmental laws. ¹²⁰ These cases represent a range of environmental crimes prosecuted at the state level. The examples below include Stephen Carberry, Lake Regions Water Services Company, Segundo Apuango, Mark Whippie, and Robert Edward Brown.

Stephen Carberry was prosecuted in Rhode Island for storing reclaimed mercury when employed at the New England Gas Company in Pawtucket. 121 At least ten pounds of mercury were spilled when individuals broke into the facility on October 18, 2004. However, the company had no record of how much was being illegally stored. 122 The defendant was charged with state environmental violations and sentenced on February 6, 2007 to 24 months of probation and ordered to pay \$2,150 in state fines. 123 Lakes Region Water Services Company, a private water utility in Moultonborough, New Hampshire, was prosecuted for bringing a well online for the town of Tamworth, knowing the level of uranium exceeded permitted limits. 124 The company pled guilty to violating the New Hampshire Safe Drinking Water Act and was sentenced on September 8, 2009, to 36 months of probation and ordered to pay a \$100,000 fine. 125 Segundo Apuango was prosecuted for altering an asbestos training certificate submitted to the New Hampshire Department of Environmental Services. 126 He was charged with falsifying a document under the New Hampshire Asbestos Management and Control statute and was sentenced on January 12, 2011, to 105 days incarceration. 127

^{117.} See id. (referencing 3:17CR10 (D. Conn. 2017)).

¹¹⁸ Id.

^{119.} See id. (referencing Syntac Coated Products, LLC, D. Connecticut 3:17CR10, 2017).

¹²⁰ Id.

^{121.} Arriaga v. New England Gas Company, Clean Harbors Environmental Services, Jason Smith & Stephen Carberry, C.A. No. 06-45T, at 2 (D. R.I. 2007); see also Criminal Prosecution Database, supra note 31 (summarizing the criminal prosecution of Stephen Carberry).

^{122.} Criminal Prosecution Database, supra note 31.

^{123.} See id. (showing that Carberry was also sentenced to 100 days incarceration due to an unrelated probation violation).

^{124.} Rainville v. Lakes Region Water Co., 37 A.3d 403, 404 (N.H. 2012).

^{125.} Criminal Prosecution Database, supra note 31.

^{126.} See id. (referencing 217-2020-CR-01110 (D. N.H. 2011)).

^{127.} *Id*.

Mark Whippie was prosecuted for taking drums of hazardous waste from his employer, the Timken Company's Keen, New Hampshire facility, in order to heat his barn. He was prosecuted under state environmental statues and sentenced on December 23, 2014, to pay a \$4,000 fine. Probert Edward Brown was prosecuted in Vermont. Brown operated a salvage yard in Moretown, Vermont, and in December 2008, instructed employees to crush containers of hazardous materials in a mobile car crusher. An inspection of the facility in November 2008 revealed he was illegally storing hazardous waste. Brown was charged with violating state environmental statutes and was sentenced on November 8, 2012, to 12 months of incarceration (suspended), 24 months of probation, and \$11,644 in fines.

The remaining 17 cases in our data, or 12 percent of total prosecutions, defy the four-part categorization in Figure 5. ¹³⁴ In most cases, we had difficulty determining the primary crime from the case summary data with enough precision to classify the crime accordingly, or it did not fit any of these categories. In some instances, the primary crime was not environmental, but rather charges of fraud or false statements. ¹³⁵ Some primary crimes involved pesticides or lead-based paint violations that collectively were not enough to generate a separate category in Figure 5. ¹³⁶ These cases include the prosecutions of Ronald Charles Schonager, Sandra Rose Sattler, Josimar Ferreira, and Paul Ricco.

Ronald Charles Schonager was prosecuted for defrauding Connecticut school districts including Eaton, Manchester, and Bristol. ¹³⁷ The defendant provided mold remediation using "Microbe Shield," a product that was not registered with the EPA—though defendants claimed as such. ¹³⁸ Schonager was charged with mail and wire fraud and sentenced on July 31, 2009 to six months of home confinement, 60 months of probation, and 100 hours of community service. ¹³⁹ Sandra Sattler was a supervisor for Carabetta Management Company in Meridian, Connecticut. ¹⁴⁰ Sattler managed thousands of residential rental properties. ¹⁴¹ In 2003, Sattler admitted that she and her employees failed to provide lead-based disclosure statements to

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128. Id.
129. Id.
130. Id.
131. Id.
131. Id.
132. Id.
133. Id.
134. Id.
135. Id.
136. Id.
137. See id. (discussing Richard Charles Schongar, Connecticut 3:04M229 / 3:06-CR-00014).
138. Id.
139. Id.
140. See id. (discussing Sandra Rose Sattler 3:09CR278JGM (D. Conn. 2010)).
141. Id.
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tenants at the Parkside and Oakland Gardens apartment complexes and falsified tenant signatures on forms submitted to the U.S. Department of Housing and Urban Development. Sattler was charged under the TSCA and was sentenced on March 4, 2010, to pay a \$2,500 fine. 143

Josimar Ferreira, owner of TVP Pest Control, Inc., was prosecuted for applying Malathion (a pesticide) in residences located around Everett, Massachusetts. ¹⁴⁴ Malathion is dangerous when used indoors and not approved by EPA for that purpose. ¹⁴⁵ The defendant was charged with violating FIFRA for using a registered pesticide in an off-label manner and making false statements. ¹⁴⁶ He was sentenced on November 30, 2011 to 24 months of probation and a \$3,000 fine. ¹⁴⁷ Paul Ricco was a Massachusetts state pesticide manufacturing facility investigator. ¹⁴⁸ From March 2010 to May 2012, Ricco submitted 15 false reports of inspections never performed to the EPA. ¹⁴⁹ On March 4, 2015, Ricco was sentenced to serve 24 months of probation and pay a \$1,500 special assessment. ¹⁵⁰

CONCLUSION

Our analysis of environmental crime investigations and prosecutions in New England over 37 years shows a few clear themes. The first is that prosecutions were dominated by water pollution crimes, making up some 35 percent of total prosecutions. Adding air pollution and hazardous waste represents 70 percent of all prosecutions. The majority of these crimes can be categorized around: illegal discharges; asbestos crimes; and unpermitted storage, transport, or disposal of hazardous waste. The work of investigators and prosecutors over almost four decades centers around these core areas.

Our second finding is that a majority of cases end up centering on state-level offenses. Seventeen percent of all prosecutions are charged under state environmental statutes. This finding shows a significant amount of cooperation between state and federal agencies over time. The majority of these prosecutions occurred in New Hampshire. We found that about 58 percent of state prosecutions occurred in the state. We find few state-level prosecutions resulting from EPA-CID investigations in other states.

¹⁴² *Id*.

¹⁴³ *Id*.

¹⁴⁴ See id. (discussing Josimar Ferreira, D. Massachusetts 10-CR-10245, 2012).

^{145.} Id.

¹⁴⁶ Id.

^{147.} Id.

^{148.} See id. (discussing Paul J. Ricco, Massachusetts 14-CR-30040-MGM).

^{149.} *Id*.

^{150.} Id.

Specifically, we found one case in Connecticut, three in Massachusetts, five in Rhode Island, and one in Vermont.

Our third finding is that prosecution for environmental crimes is decidedly rare. There are certainly many state prosecutions that were undertaken independently of EPA—CID that fall outside the boundaries of our data. There may also be federal prosecutions EPA failed to include in their database. These issues aside, we found less than one prosecution annually, in all states but Connecticut. For example, in Maine, there is only one prosecution roughly every 7.4 years; in Vermont, there is only one prosecution every 4.1 years. If there is a deterrent value in federal environmental crime prosecutions this value may be decidedly low.

Our fourth finding is that while penalties may seem very high they are modest. Deducting the top monetary penalties levied against companies in Table 3 roughly halves the cumulative monetary penalties against companies. About 60 percent of incarcerations assessed to all defendants at sentencing is explained in the cases discussed in Table 4. Particularly, the prosecution of Charles Arcangelo makes up about a third of total prison time assessed to all defendants in our data. On this note, large penalty assessments against specific corporations or prison terms assessed to specific defendants on the whole are very infrequent in New England.

Per our findings, the EPA–CID focuses prosecutorial resources on cases of significant harm and/or culpable conduct. We do not suspect they expend limited resources on lesser offenses that could be handled through civiljudicial actions or other administrative remedies as a matter of organizational choice or patterned organizational behavior. The greatest weakness is that investigators and prosecutors must make choices about what to pursue under resource constraints. The prosecutors' choices sometimes result in complex investigations and prosecutions of corporations. However, these prosecutions oftentimes come from accidents, patterned behaviors, or the chance that they are alerted to potential crimes. Greater resources would come with enhanced criminal investigators and prosecutors. EPA–CID currently employs only 150 criminal investigators for the entire country. ¹⁵¹ Raising these to the statutory minimum of 200 special agents would be a good start towards added policing resources, but it is still rather small given the broad and complex mandate they face. ¹⁵²

With limited resources, we suggest community policing of large industrial facilities—particularly near environmental justice communities—may assist criminal investigators locate environmental crimes. One pattern was the small number of cases affecting large stationary sources of pollution.

^{151.} PEER, supra note 22.

^{152.} See Pollution Prosecution Act § 202(a)(5), 42 U.S.C. § 4321 (1990) (setting the statutory minimum at 200 investigative staff).

This pattern was true for water and hazardous waste pollution, but particularly for air pollution. The regulatory environment for industrial manufacturers is so complex, it is not surprising that we find few overall cases policing companies for unpermitted emissions, inoperative monitoring equipment, or false statements. In cases across environmental media, large facilities have numerous permits for various pieces of equipment which are permitted at different times. So investigations are not typically random and policing is very difficult. We suggest the EPA's Office of Environmental Justice consider providing additional small grants to help communities measure pollution—particularly those living near stationary sources of pollution—to offset a lack of criminal investigative staff.¹⁵³

Expanding criminal policing and prosecution of serious environmental offenses in New England requires a reconceptualization of white-collar crimes as serious crimes. Environmental crimes cause significant damage in society, but the public often fails to perceive them as damaging as street crime. This perception can change through greater media attention to environmental crimes and enhanced salience attached to state and federal law enforcement efforts. Without this perception change, the reach of what law enforcement can achieve will be limited. Thus there will be little reason for policymakers to appropriate funds for environmental crime enforcement, relative to other needs now and in the future. 154

^{153.} OFF. CRIM. ENF'T, FORENSICS & TRAINING, U.S. ENV'T PROT. AGENCY, PUB. No. 310-K-11-001, CRIMINAL ENFORCEMENT PROGRAM 6 (Oct. 2011), https://19january2017snapshot.epa.gov/sites/production/files/documents/oceft-overview-2011.pdf. (resulting in 35 cases being opened, with six referred for successful prosecution in the first decade of the program's existence; this process could be expanded).

^{154.} Melissa L. Jarrell, Environmental Crime and Injustice: Media Coverage of a Landmark Environmental Crime Case, 6 Sw. J. of CRIM. JUST. 25, 27 (2009).

MONITORING TRANSMISSION PLANNING IN THE NEW AGE OF ENERGY: CHALLENGES AND SOLUTIONS FOR AN INDEPENDENT TRANSMISSION MONITOR

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INTRODUCTION

We all take energy and electricity for granted. We turn our light switches on, and rarely do we think how it gets there. However, the question of "how it gets there" is becoming increasingly complex for transmission planning. And the more complex it becomes, the more it may cost everyone.

Since 2000, transmission infrastructure spending quadrupled. On an intuitive level this spending makes sense. Traditionally, the U.S. built and

^{1.} U.S. ENERGY INFO. ADMIN., *Utilities continue to increase spending on the electric transmission system* (Mar. 26, 2021), https://www.eia.gov/todayinenergy/detail.php?id=47316.

designed generation and transmission investments in a linear framework.² Electricity generators direct energy in one direction.³ However, now our world is more complicated: devices, batteries, distributed generation, distribution networks, and their assorted transmission systems complicate the once relatively simple public service.⁴ In addition, new demands confront the grid as these new tools require constant communication for an efficient, low-cost, reliable, and zero-carbon energy system.⁵ As a result, electricity transmission evolved from a linear framework into a more complex circular framework.⁶ These circular energy flows require new transmission infrastructure for reliability.⁷

However, merely having more infrastructure doesn't necessarily mean it must cost more. Perhaps more transmission means more people benefit? While this is true, accounting for benefits has already become increasingly complex. Before, transmission planning focused on cost and reliability to customers. Now, transmission assets must deal with a myriad of possibly conflicting goals. As an example, transmission must now fulfill state reliability goals as well as state decarbonization goals. Yet, the costs for all these transmission needs must be distributed to ratepayers. As a result, policymakers' answers to the age-old questions of "who pays" and "how much" have changed drastically from 50 years ago.

I. BACKGROUND: FERC'S RULEMAKING PROPOSED AN INDEPENDENT TRANSMISSION MONITOR

In response to these developments, the Federal Energy Regulatory Commission (FERC) proposed a sweeping Advance Notice of Proposed

^{2.} James McBride & Anshu Siripurapu, *How Does the U.S. Power Grid Work?*, Council on Foreign Relations (July 5, 2022) https://www.cfr.org/backgrounder/how-does-us-power-grid-work#chapter-title-0-6.

^{3.} *Id*.

^{4.} See generally U.S. ENERGY INFO. ADMIN., How Electricity is Delivered to Consumers (Aug. 11, 2022), https://www.eia.gov/energyexplained/electricity/delivery-to-consumers.php (demonstrating how energy distribution has become more complex).

^{5.} See McBride, supra at note 2 (demonstrating the need for two-way communication between devices while the grid continues to develop).

^{6.} See generally id. (demonstrating the development of communication in the electrical grid).

^{7.} See generally U.S. ENERGY INFO. ADMIN., How Electricity is Delivered to Consumers (Aug. 11, 2022), https://www.eia.gov/energyexplained/electricity/delivery-to-consumers.php (demonstrating how more energy infrastructure is needed).

^{8.} See generally U.S. ENERGY INFO. ADMIN., Electricity Generation, Capacity, and Sales in the United States (July 15, 2022) https://www.eia.gov/energyexplained/electricity/electricity-in-the-us-generation-capacity-and-sales.php (demonstrating how complex measuring the financial benefits of new technologies).

^{9.} See Jonathan A. Lesser & Leonardo R. Giacchino, FUNDAMENTALS OF ENERGY REGULATION 593 (3rd ed. 2019) (showing that in some cases intermittent generation can increase resiliency insecurity because they require expensive generators to back them up).

Rulemaking (ANOPR). 10 FERC wanted stakeholder input on three main topics. 11 The first topic was of cost-allocation metrics for the participantfunded interconnection process. 12 The second was on cost allocation efficiency in the local and regional transmission infrastructure planning process. 13 Finally, the third topic concerned infrastructure planning transparency.¹⁴ For this third topic, FERC wanted input on how to increase state participation in the planning process. 15 FERC also wanted input on the establishment of an Independent Transmission Monitor (ITM). ¹⁶ This article discusses the ITM proposal.

First, this article will briefly identify FERC's ANOPR and the ITM concept as introduced by FERC. Then, this article will delve into a framework to analyze the scope of the ITM. This article identifies the two poles of an ITM as a Passive ITM and an Active ITM. Then, the article analyzes the legal authorities governing an ITM. Specifically, it addresses two relevant legal challenges. The first challenge discussed by commenters is the sub-delegation doctrine.¹⁷ The second challenge—the major questions doctrine—was not addressed by commenters; however, it is increasingly relevant in administrative law. Then, the article will identify a congressional solution to these legal quandaries; the Connecting Hard-to-reach Areas with Renewably Generated Energy (CHARGE) Act.

A. FERC's Open-Ended Rulemaking Set the Stage for Stakeholder Input

FERC desired an open-ended ITM proposal to catch a wide variety of stakeholder input. 18 FERC sought input on the role of an ITM, as well as FERC's legal jurisdiction for establishing the ITM. 19 Many stakeholders

^{10.} Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon., 86 Fed. Reg. 40, 266, 40,267 (July 27, 2021) [Advance Notice of Proposed Rulemaking (ANOPR)].

^{11.} *Id*.

^{12.} *Id.* 13. *Id.* at 40,271.

^{14.} Id. at 40,267.

^{15.} Id. at 40,294.

Id. at 40,291.

^{17.} See generally N.Y. Indep. Sys. Operator, Inc., Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon., at 53 (Oct. 12, 2021) (demonstrating that a commenter is discussing the sub-delegation doctrine).

^{18.} Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon., 86 Fed. Reg. at 40,274 (Advance Notice of Proposed Rulemaking).

^{19.} Id. at 40,291.

questioned how to answer such a broad topic;²⁰ however, despite stakeholder uncertainties, FERC received many comments answering both questions.²¹

On the role of the ITM, FERC wanted to know: should the ITM oversee local transmission spending or just regional transmission spending?²² Should the ITM be used solely in Independent System Operator or Regional Transmission Organizations (ISO/RTO) regions, solely in non-ISO/RTO regions, or in both?²³ What should the ITM do with cost analyses when it oversees transmission planning?²⁴ Should the ITM evaluate project cost estimates immediately before construction to compare those to preconstruction cost estimates? 25 Should the ITM oversee and evaluate transmission planning process inputs?²⁶ Should the ITM oversee disparities between localized transmission costs and regionalized transmission costs to ensure the process of regionalization is efficient?²⁷ Can the ITM be used to oversee other transmission benefits like assessing the impact of non-wire alternatives, ²⁸ and should the ITM evaluate whether transmission planning regions are effectively considering non-wire alternatives?²⁹ What should the scope of the ITM's transparency role be?³⁰ For example, will the ITM's monitoring adequately evaluate alternative transmission projects to improve

^{20.} N. Va. Elec. Coop., Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021); Pub. Sys., Initial Comments Pub. Sys. on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021); Nat'l Ass'n Regul. Util. Comm'r, Motion to Intervene & Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021); Mont. Pub. Service Comm'n, Reply Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021); Newsun Energy, Reply Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 30, 2021); Vt. Elec. Power Co., Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021).

^{21.} E.g. Pub. Int. Orgs., Comments on ANOPR Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon, at 72, 113-14, 116 (Oct. 12, 2021) (demonstrating a comment answering one of the questions); cf. Dominion Energy Serv., Inc., Comments on ANOPR Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon., at 28 (Oct. 12, 2021) (demonstrating an additional comment that provided an answer); N.Y. Trans. Owners, Comments on ANOPR Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon., at 26-27 (Oct. 12, 2021).

^{22.} ANOPR, supra note 18, at 40,293.

^{23.} *Id.* at 40,293.

^{24.} *Id*.

^{25.} *Id*.

^{26.} Id. at 40,291.

^{27.} *Id.* at 40,292.

^{28.} *Id.*; *See* U.S. DEP'T OF ENERGY, GRID ENHANCING TECH.: A CASE STUDY ON RATEPAYER IMPACT III, 75 (2022), https://www.energy.gov/sites/default/files/2022-04/Grid%20Enhancing%20Technologies%20%20A%20Case%20Study%20on%20Ratepayer%20Impac t%20-%20February%202022%20CLEAN%20as%20of%20032322.pdf (non-wire alternatives include so-called Grid Enhancing Technologies (GETs) such as ambient air ratings, dynamic line ratings (DLR), and other digital monitoring techniques).

^{29.} ANOPR, *supra* note 18, at 40,292.

^{30.} Id. at 40,293.

regional transmission processes?³¹ And would the institution of an ITM trample or impede the oversight responsibilities given to state public utility commissions and state agencies?³² Below are some general observations on how stakeholders answered FERC.

Around 200 institutional commenters submitted comments on the ANOPR. ³³ Half mentioned the ITM. ³⁴ Of these 100 commenters, some ignored the role of an ITM after informing FERC of its limited legal jurisdiction and concluded that establishing an ITM exceeds FERC's authority. ³⁵ Other commenters took a stab at addressing just a few of FERC's questions. ³⁶ A few commenters took a more holistic view and addressed many of FERC's ITM questions. ³⁷ From the range of responses, commenters seemed to advocate either for a limited role or a more expansive role for the ITM. ³⁸ While commenters took a freewheeling approach when responding to FERC, their responses reflected a certain role they envisioned for the ITM. Broadly, this could be referred to as either a *Passive ITM* or an *Active ITM*.

1. A Passive ITM Would Merely Monitor the Planning Process

The Passive ITM would be limited to a monitoring function. If it appeared in the stakeholder process, the Passive ITM would be on equal footing as any other participating party. The Passive ITM would provide comments on infrastructure projects and give feedback to state participants upon request. The Passive ITM would identify excessive costs in the planning process and recommend structural improvements to contain costs. The Passive ITM would also advise regional stakeholders on best practices the Passive ITM observed in other regions. It would improve stakeholder participation by helping non-technical parties, like nonprofits, broaden the scope of interests heard during the infrastructure planning process. Like any

^{31.} *Id*.

^{32.} Id. at 40,292.

^{33.} See generally FERC, ELIBRARY, Docket Search, Docket Number: RM21-12, NOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (July 15, 2021 – present).

^{34.} *Id*.

^{35.} *Id*.

^{36.} Id.

^{37.} Mass. Mun. Wholesale Elec. Co., N.H. Elec. Coop., Inc., Conn. Mun. Elec. Energy Coop., and Vt. Pub. Supply Auth., Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021).

^{38.} Newsun Energy, Reply Comments on ANOP of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 30, 2021); Elec. Trans. Competition Coal., Reply Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 30, 2021); Maura Healey, Reply Comments of Mass. Att'y Gen. on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 30, 2021); New England States Comm. on Elec., Reply Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 30, 2021).

other party, the *Passive ITM* could file grievances and complaints to FERC using Federal Power Act (FPA) § 206 filings if they perceive practices resulting in unjust and unreasonable rates.

2. An Active ITM Would Directly Change the Planning Process

By contrast, the *Active ITM* would have the additional duty to directly intervene in the transmission planning process. The *Active ITM* would review cost modeling and inputs in transmission planning. It would ask transmission owners for independent cost estimates. Then the *Active ITM* would compare project cost estimates with actual costs incurred. It would also insert non-wire alternatives when needed in the planning process. The *Active ITM* would take a more active role in engaging state participation and the broader public in the transmission planning process. While a *Passive ITM* may merely advise on best practices in other regions (which may indirectly encourage more interregional transmission), an *Active ITM* might mandate interregional planning. An *Active ITM*, if embedded into an ISO/RTO's internal market monitor, may use its information-gathering capabilities from the energy and capacity markets to evaluate transmission projects more efficiently.

II. THE ITM'S LEGAL HURDLES: FERC'S AUTHORITY AND TWO ISSUES

Establishing either a *Passive* or *Active ITM* would be subject to FERC's statutory authority under the FPA.³⁹ Establishing either ITM would also be subject to case law and legal precedents governing agency action. Stakeholders brought up a variety of legal objections and support for their positions, including:

 FERC's statutory authority to create an ITM under the FPA and whether FERC had substantial evidence as required under the FPA to remedy unjust practices;⁴⁰

^{39. 16} U.S.C. §§ 824d-824e.

^{40.} See, Elec. Consumers Res. Council, Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021) (arguing § 206 of the FPA warrants an ITM); See also Elec. Trans. Competition Coal. Reply, supra note 38 (arguing there is authority for an ITM); Indep. Mkt. Monitor for PJM, Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 1, 2021); Healey, supra note 38 (arguing there is authority for an ITM); and New England States Comm. on Elec., Reply Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 31, 2021) (same); But see N.J. Bd. of Pub. Util., Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021) (arguing that there is support for an ITM but there is some debate about the scope of § 205 of the FPA); Dominion Energy Services, Inc., Reply Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 30, 2021) (arguing for general support of an ITM but questions the scope of § 206 and 219 of the

- Whether the sub-delegation doctrine prevented FERC from establishing an ITM;⁴¹
- Whether the ITM itself was unjust and unreasonable;⁴²
- That the ITM doesn't have authority to decide what are just and reasonable rates;⁴³
- That an ITM would intrude on transmission owners' statutory ability to file their own rates;⁴⁴
- That an ITM would unlawfully second-guess state regulated siting and planning processes;⁴⁵
- That an ITM is inconsistent with FERC's requirement for independent transmission planning;⁴⁶

FPA while arguing there is no substantial evidence). See, WIRES, Reply Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 30, 2021) (arguing there is no substantial evidence); See also N.Y. Indep. Sys. Operator, Inc., Comments, supra note 17 (discussing the need for substantial evidence); Edison Elec. Inst., Reply Comment on Proposed Rule for Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 30, 2021) (discussing the need for substantial evidence and that there was no substantial evidence); See New England States Reply Comments Reply, supra note 38 (commenting that historically FERC's decision making must be supported by substantial evidence); But see Ctr. for Biological Diversity, Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 8, 2021) (arguing there was substantial evidence).

- 41. See WIRES, Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021) (arguing sub-delegation applies and an ITM is illegal); See also Exelon Corp., Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021) (arguing sub-delegation applies and an ITM is illegal); See also N.Y. Indep. Sys. Operator, Inc., Comments on ANOPR of Build. for the Future Through Elec. Reg. Trans. Planning & Cost Alloc. & Gen. Intercon. (Nov. 30, 2021) (arguing sub-delegation applies and an ITM is illegal); See also Dominion Reply, supra note 40 (arguing sub-delegation applies and an ITM is illegal); Cf. Cal. Pub. Util. Comm'n, Reply Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 30, 2021) (arguing sub-delegation doctrine does not apply and therefore an ITM is legal); Cf. New England States Reply Comments, supra note 38 (arguing sub-delegation doctrine does not apply therefore an ITM is legal).
- 42. WIRES Comments, *supra* note 41; Edison Elec. Inst., Initial Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021).
- 43. LS Power, Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 11, 2021); National Grid, Initial Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021).
- 44. Exelon Comments, *supra* note 41; Indicated PJM Trans. Owners, Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (July 15, 2021); Dominion Reply, *supra* note 40; *But see* N.E. States Comments Reply, *supra* note 38 (arguing that retaining § 205 filing rights were not at issue).
- 45. Midcontinent Indep. Sys. Operator, Inc., Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 11, 2021); Se. Reg'l Trans. Plan. Process, Reply Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 30, 2021); Dominion Reply; S. Co. Servs., Inc., Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021).
 - 46. Midcontinent Indep. Sys. Operator Comments, *supra* note 45.

- That the ITM impermissibly flips the assumption that transmission owner costs are prudent under the FPA;⁴⁷ and
- That the ITM violates broad utility discretion over the provision of their services or impermissibly interferes with a utility's corporate affairs. 48

One commenter even objected to the ANOPR process itself, claiming that any future decision on an ITM based off the ANOPR would violate the Administrative Procedures Act.⁴⁹

Most stakeholder discussion revolved around only a few of these objections. The majority of the discussion addressed whether FERC had statutory authority to establish an ITM, focusing on FERC's delegated authority under §§ 205 and 206. There was also robust discussion on the sub-delegation doctrine and its merits. This article will analyze FERC's statutory authority under the FPA. This article will also discuss two major objections to FERC's authority: first, one that commenters debated, the sub-delegation doctrine; and second, one that commenters did not address, the major questions doctrine. While no commenters brought up the major questions doctrine, it is an increasingly used judicial tool to block agency action. As conservative courts narrowly interpret statutory authority, major question analysis will become increasingly relevant to assess the legality of sweeping agency action. In this case, the legality of an ITM office turns on the scope of power granted to it; in other words, whether it would be an *Active* or *Passive ITM*.

^{47.} Nat'l Grid Comments, supra note 43.

^{48.} See Id. (arguing an ITM violates broad utility discretion over provisioning of their services); See also Cali. Indep. Sys. Operator Corp., Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021) (arguing it intrudes into corporate affairs); But see Cali. Pub. Util. Comm'n Reply, supra note 41 (arguing an ITM would not intrude into corporate affairs).

^{49.} N.Y. Indep. Sys. Operator, Inc., Comments, supra note 41.

^{50.} Elec. Consumers Res. Couns., Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021); Elec. Trans. Competition Coal. Reply, *supra* note 38; Indep. Mkt. Monitor for PJM Comments, *supra* at 40; N.J. Bd. of Public Util. Comments, *supra* note 40; Healey, *supra* note 38; New England States Reply Comments, *supra* note 38; Dominion Energy Servs., Inc. Reply, *supra* note 38.

^{51.} WIRES, *supra* note 41; Exelon Corp. Comments, *supra* 41; N.Y. Indep. Sys. Operator, Inc., Comment, *supra* note 17; PJM's July 15 Comment, *supra* note 44; Dominion Energy Servs., Inc. Reply, *supra* note 38.

^{52.} See e.g, Ala. Ass'n of Realtors v. Dep't of Health & Hum. Servs., 141 S. Ct. 2485, 2489 (analyzing COVID eviction moratoriums under major question doctrine); Health Freedom Def. Fund, Inc. v. Biden, No: 8:21-cv-1693-KKM-AEP, 2022 U.S. Dist. LEXIS 71206, *33 (using major questions doctrine to analyze the scope of CDC's authority for mask mandates).

A. FERC's Statutory Authority under the FPA

The FPA established FERC's powers.⁵³ FERC uses §§ 205 and 206 of the FPA to justify regulation of electric utilities in the public service.⁵⁴ Section 205 states "all rules and regulations affecting or pertaining to [rates for transmission of electric energy] shall be just and reasonable."55 What does this mean? Section 206(a) suggests FERC's determinations of what constitutes just and reasonable are broad in scope:

Whenever the Commission, after a hearing held upon its own motion or upon complaint, shall find that any rate, charge, or classification, demanded, observed, charged, or collected by any public utility for any transmission or sale subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order. ⁵⁶ (emphasis added).

FERC's jurisdiction "[extends] to rates, terms[,] and conditions" of "all facilities" of transmission, not "merely [for] transactions for such transmission service."57 Indeed, "the business of transmitting . . . electric energy for ultimate distribution to the public is affected with a public interest."58

1. The FPA § 206 Grants FERC Authority to Create an ITM

Commenters in the ANOPR debated the scope of FERC's authority under §§ 205 and 206 to identify unjust and unreasonable practices that would allow FERC to set just and reasonable rates. 59 Commenters who argued FERC was within its authority to create an ITM asserted the current

^{53. 16} U.S.C. § 824d (a)–(d).

^{54. 16} U.S.C. § 824d (a)–(b); 16 U.S.C. § 824e (a).

^{55. 16} U.S.C. § 824d (a). 56. 16 U.S.C. § 824e (a).

^{57.} PJM 's Nov. 1 Comments, supra note 40.

^{58. 16} U.S.C. § 824 (a).

^{59.} Elec. Consumers Res. Couns., supra note 50; Elec. Trans. Competition Coal., Reply, supra note 38; Indep. PJM's Nov. 1 Comments, supra note 40; N.J. Bd. of Public Util., Comments, supra note 40; Healey, supra note 38; New England States Reply, supra note 38; Dominion Energy Servs., Inc., Reply, supra note 38.

regime was unjust and unreasonable. ⁶⁰ FERC's duty to identify unjust "practices" could encompass an allegedly biased transmission planning process that favors RTOs and *transmission operators*. ⁶¹ RTOs, as "associations of private corporations," serve the interests of their members, the transmission owners, and require independent monitoring for cost-effective transmission planning in the public's interest. ⁶² This applies even if FERC previously determined existing transmission planning processes were just and reasonable. ⁶³

On the other hand, opponents of an ITM argued the scope of § 206 is narrow in several respects.⁶⁴ For one, they argued unjust and unreasonable practices don't encompass general process critiques.⁶⁵ For example, merely stating in conclusory terms that the interconnection process is unfair because it costs too much for renewable generators is by itself insufficient.⁶⁶ A specific finding of unjust or discriminatory behavior is a condition precedent for § 206 remedies,⁶⁷ and general criticisms are not sufficient. They also argued that transmission planning is not analogous to the types of monitoring

^{60.} New England States Reply, *supra* note 38 (arguing information and resource asymmetry exist in regional planning and formula rate updates); Harvard Elec. Law Initiative, Comments on the Proposed Rule of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021) (arguing that the burden of proof for proving imprudent costs is insurmountable and that very few instances of proven imprudent costs indicated weaknesses in the transmission planning process); *see also Id.* (citing Cal. Public Util. Comm'n, Brief on Exceptions of the Cal. Public Util. Comm'n under ER16-2320 (Oct. 31, 2018)). *See also* Certain Trans. Dependent Util., Initial Comments on ANOPR of Build. for the Future Through Elec. Reg. Trans. Planning & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021) (raising broad concerns that an ITM may be required because in the aggregate, the ANOPR considers many systemic reforms. Further suggesting that due to other changes proposed by the ANOPR on cost allocation and interconnection, the ITM will be needed to monitor these changes to maintain just and reasonable rates():

^{61.} New England States Reply, supra note 38.

^{62.} Ctr. for Biological Diversity, Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 8, 2021) (citing Michael H. Dworkin & Rachel Aslin Goldwasser, Ensuring Consideration of the Pub. Interest in the Governance and Accountability of Reg'l Trans. Orgs, 28 ENERGY L. J. 543, 550 (2007) (RTOs are "regional monopolies that [FERC] must vigorously regulate, not regional extensions of the Commission itself.")); See also Ari Peskoe, Util. Trans. Syndicate, 42 ENERGY L. J. 1, 33 (2021) (arguing that "[i]n a complicated transmission planning process, an Investor Owned Utilities (IOU)s might use its informational advantages and position as the dominant local transmission owner and developer to block projects that harm its interests or to advance projects that benefit it financially but harm others").

^{63.} New England States Reply, *supra* note 38.

^{64.} See Cal. ISO Comments, supra note 48 (arguing that mere "increased transmission development and costs" don't warrant the creation of ITMs).

^{65.} *Id*

^{66.} Dominion Energy Servs., Inc. Reply, *supra* note 38 (citing Trans. Access Pol'y Study Grp. v. FERC, 225 F.3d 667, 688 (D.C. Cir. 2000) (citing Wis. Gas Co. v. FERC, 770 F.2d 1144, 1158 (D.C. Cir. 1985))); Emera Maine v. FERC, 854 F.3d 9, 27 (stating "A bare conclusion that an existing rate is 'unjust and unreasonable' is nothing more than 'a talismanic phrase that does not advance reasoned decision making." (citing TransCanada Power Mktg. Ltd. v. FERC, 811 F.3d 1, 12-13 (D.C. Cir 2015)).

^{67.} Dominion Energy Servs., Inc. Reply, *supra* note 38 (citing Emera Maine v. FERC, 854 F.3d 9, 25 (D.C. Cir. 2017) (citing Fed. Power Comm'n v. Sierra Pac. Power Co., 350 U.S. at 353 (1956)).

done in energy and capacity markets.⁶⁸ Therefore, while Internal Market Monitors (IMMs) may be a valid use of § 206 remedies, a similar monitoring mechanism for transmission would be unwarranted.⁶⁹ And because previous orders have established a process for maintaining just and reasonable rates, § 206 remedies are not needed in any case.⁷⁰ Previous orders required that FERC approve Open Access Transmission Tariffs (OATTs), RTO/ISOs, and market rates.⁷¹ By approving them, FERC found that these are just and reasonable. Therefore, if FERC now finds the present processes insufficient, FERC should directly adapt OATTs, RTO/ISOs, or market rates until they are just and reasonable.⁷²

In this case, the proponents of the ITM accurately state the scope of FERC's authority. FERC would probably have the authority to create ITMs or embed them in existing market monitors in RTO regions. FERC's jurisdiction "[extends] to rates, terms[,] and conditions" of "all [transmission] facilities" so the scope of the FPA is broader than mere policing of energy market transactions. ⁷³ Likewise, the scope of FERC's administrative remedies is quite broad as well. Courts found that FERC "must have considerable latitude in developing a methodology responsive to its regulatory challenge" ⁷⁴ To ensure this, "[FERC] has relatively broader authority" over electricity transmission as opposed to sales. ⁷⁵ Therefore, FERC would have the authority to adapt an unjust transmission planning process if needed.

However, ITM proponents also accurately state FERC's authority for another reason. Transparency and market power mitigation measures have

^{68.} Contra Jonathan A. Lesser & Leonardo R. Giacchino, Fundamentals of Energy Regulation 489 (3rd ed. 2019) (exemplifying by implication how FERC's traditional evaluations of horizontal and vertical market power in looking at market manipulation or concentration could extend to an ITM as a transmission monitor would look at inputs and transmission planning which are fundamentally different than the transactional processes used to monitor markets. While competitive bids are used for some transmission projects, transmission planning is a stakeholder driven process distinguished from a traditional market, therefore the rules that govern market monitoring do not apply in transmission "markets.").

^{69.} Id.

^{70.} Edison Elec. Inst. Initial Comments, supra note 42.

^{71.} See id. (arguing that Order 890 and 1000 built a sufficient transparency framework).

^{72.} See Ari Peskoe, Is the Utility Transmission Syndicate Forever?, 42 ENERGY L. J. 1, 11 (showing FERC required all IOUs to file OATTs that contain specified terms and conditions, therefore it can do so again).

^{73.} PJM's Nov. 1 Comment, *supra* note 40; New England States Comm. on Elec., *supra* note 38 (citing S.C. Pub. Serv. Auth. v. Fed. Energy Regul. Comm'n, 762 F.3d 41, 56 (D.C. Cir. 2014) (affirming in connection with finding Order No. 1000 lawful as "[t]he authority and obligation that Congress vested in the Commission to remedy certain practices is broadly stated.")).

^{74.} Am. Pub. Gas Ass'n v. Fed. Power Comm'n, 567 F.2d 1016, 1037 (D.C. Cir. 1977).

^{75.} S.C. Pub. Serv. Auth. v. FERC, 762 F.3d 41, 63 (D.C. Cir. 2014).

traditionally been upheld as consistent with § 206 authority. ⁷⁶ For example, FERC requires market monitoring to fulfill its role maintaining just and reasonable rates in the energy and capacity markets. FERC could extend this role to the transmission planning space to mitigate practices that unjustly increase the cost of transmission.

The legal rationale for this authority lies in FERC's "continuous" responsibility to maintain just rates. ⁷⁷ FERC's establishing just and reasonable rates once does not prevent the agency from implementing improved measures later. ⁷⁸ Even if FERC has the statutory authority to "on [its] own initiative" adapt OATTs this does not prevent FERC from taking further corrective measures, like enforcing market monitors. ⁷⁹

2. Is there "Substantial Evidence" Deserving § 206 Remedies?

Many stakeholders raised a secondary issue. ⁸⁰ Assuming FERC has statutory authority to create an ITM, does current evidence reveal unjust or unreasonable rates that require an ITM remedy? FERC has a statutory duty to fact-find with "substantial evidence" for findings to be considered conclusive. ⁸¹ FERC cannot claim mere conclusory statements to justify its actions. ⁸² While courts have held that FERC can use theoretical evidence, ⁸³ courts require "reasonable economic propositions" undergirding FERC's decisions. ⁸⁴ Courts will vacate the Commission's orders if the "allocation of costs [is] either unreasonable or inadequately explained." ⁸⁵

Harvard Electricity Law Initiative collected a series of around 20 stakeholder statements describing weaknesses in the current planning processes due to lack of oversight. Problems included escalating transmission

^{76.} See Healey, supra note 40 ("The Commission has long exercised its statutory authority to, for example, approve the establishment of independent market monitors, require market monitoring, approve market power mitigation measures and market monitoring plans, and require RTOs/ISOs to publish data about their operations.").

^{77.} U.S. Gov't Accountability Off. GAO-03-726R, Elec. Mkts: FERC's Role in Protecting Consumers (2003).

^{78.} Pub. Serv. Elec. & Gas Co. v. FERC, 989 F.3d 10, 13 (D.C. Cir. 2021).

^{79.} Elec. Trans. Competition Coal., *supra* note 38 (arguing that internal market monitors could carry these functions).

^{80.} N.Y. Indep. Sys. Operator, Inc. Comments, *supra* note 17 (explaining that the Commission can only create an ITM if it is necessary and beneficial); New England States Comm. on Elec., *supra* note 38 (showing that the Commission must first demonstrate that agreements are unjust and unreasonable without ITMs).

^{81. 16} U.S.C. § 825(1).

^{82.} TransCanada Power Mktg. Ltd. v. FERC, 811 F.3d 1, 12–13 (D.C. Cir. 2015).

^{83.} See S.C. Pub. Serv. Auth. v. FERC, 762 F.3d 41, 70 (D.C. Cir. 2014) (showing the examples of theoretical evidence relied on by the Commission).

^{84.} See N.Y. Indep. Sys. Operator, Inc., Comments, supra note 17 (citing S.C. Pub. Serv. Auth. v. FERC, 762 F.3d 41, 70 (D.C. Cir. 2014)).

^{85.} Old Dominion Elec. Coop. v. FERC, 898 F.3d 1254, 1260 (D.C. Cir. 2018).

costs and an overall reduction in cost containment by pushing infrastructure investments into local unmonitored projects. ⁸⁶ In this case, many of the Harvard stakeholder comments would satisfy court requirements because they are not conclusory and based in reasonable economic propositions. ⁸⁷

B. The First ITM Legal Hurdle: the Sub-delegation Doctrine

The sub-delegation doctrine is "the general proposition that when Congress has specifically vested an agency with the authority to administer a statute, it may not shift that responsibility to a private actor." This "private actor" language would encompass a non-profit or third-party ITM. 89 "The relevant inquiry in any delegation challenge is 'whether Congress intended to permit the delegatee to delegate the authority conferred by Congress." Proponents of the ITM argued the doctrine was not applicable to the ITM because the case law and the substance of the ANOPR are distinguished. It is the D.C. Circuit, the California Public Utility Commission said "a federal agency may turn to an outside entity for advice and policy recommendations, provided the agency makes the final decisions" Case law identified sub-delegation as an issue when the Washington D.C. Control Board sub-delegated governance powers to a private Board of Trustees. However, FERC would not be a mere "rubber stamp" of the ITM. The ITM advisory role distinguishes it from the sub-delegation in the D.C.

^{86.} Harvard Elec. L. Initiative, Reply Comment on ANOPR Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 30, 2021) (citing Pa. Pub. Util. Comm'n, Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021) (recommending that FERC require local transmission planners with the majority of PJM transmission spending authority, to contain costs and effectively evaluate alternatives)); See Am. Mun. Power, Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct 12, 2021) (showing PJM transmission infrastructure costs have increased in local projects "without a demonstration of need or cost effectiveness"); See also Union of Concerned Scientists, Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021) (showing that individual projects over time may be more uneconomic than a single, efficient project).

^{87.} Harvard Elec. L. Initiative, *supra* note 86.

^{88.} New England States Comm. on Elec., *supra* note 38 (citing Perot v. FEC, 97 F.3d 553, 559 (D.C. Cir. 1996)).

^{89.} See Perot v. FEC, 97 F.3d 553, 555 (D.C. Cir. 1996) (disallowing delegation to the Commission on Presidential Debates, a private, non-profit corporation); See also Nat'l Park & Conservation Ass'n v. Stanton, 54 F. Supp. 2d 7, 18 (D.D.C. 1999) (showing that even an advisory committee created by Congress can be unlawfully delegated authority).

^{90.} PJM Trans. Owners Comments, *supra* note 44 (citing Nat'l Park & Conservation Ass'n v. Stanton, 54 F. Supp. 2d 7, 18 (D.D.C. 1999)).

^{91.} Harvard Elec. L. Initiative, supra note 86.

^{92.} Cal. Pub. Util. Comm'n, *supra* note 41 (citing U.S. Telecom Ass'n v. FCC, 359 F.3d 554, 565 (D.C. Cir. 2004)).

^{93.} Shook v. D.C. Fin. Resp. & Mgmt. Assistance Auth., 132 F.3d 775, 777–78 (D.C. Cir. 1998).

Control Board case.⁹⁴ The New England States Committee on Electricity (NESCOE) expands on this concept by saying that the ITM as proposed does not shift FERC's statutory authority; the ITM merely allows FERC another means to ensure its statutory authority that rates are just and reasonable.⁹⁵ In addition, similar complaints were given about IMMs during previous FERC rulemakings. FERC reiterated that mere detection of market power abuse to rectify unjust rates is separate from actually remedying the unjust rates, so sub-delegation is not an issue.⁹⁶

This analysis demonstrates FERC would probably not violate the sub-delegation doctrine if FERC established a *Passive ITM*. However, if FERC were to adopt an *Active ITM*, it may be vulnerable to attack. While FERC may have broad authority to remedy unjust rates, courts may be skeptical of what they perceive as FERC impermissibly shifting its authority to determine and remedy unjust rates in transmission service. Courts may object if FERC presents no evidence that Congress intended to delegate this authority to another body.

C. The Second ITM Legal Hurdle: the Major Questions Doctrine

Courts are likely to view the major questions doctrine in a similar light to the sub-delegation doctrine: it depends on the scope of the ITM. The major questions doctrine is an exception to *Chevron* deference. The exception to *Chevron* states that, in the absence of clear congressional intent, courts do not need to defer to an agency's reasonable interpretation of its statutory authority when that authority impacts issues of "deep economic and political significance" The assumption of this doctrine is that Congress would answer major questions of deep significance and not delegate them to agencies. 99

Currently, courts are debating the definition of "deep economic and political significance." However, recent cases outline the contours of major questions analysis. Courts begin by looking at the plain language of the

^{94.} See Cal. Pub. Util. Comm'n, supra note 41 (distinguishing between delegation of an agency's powers and the reliance on an entity with an advisory role).

^{95.} New England States Comm. on Elec., *supra* note 38.

^{96.} Id

^{97.} See Chevron, 467 U.S. 837, 842–43 (1984) (discussing the so-called Chevron two-step analysis); but see King v. Burwell, 576 U.S. 473, 474 (2015) (saying that Chevron doesn't apply in certain circumstances).

^{98.} Food & Drug Admin. v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 159 (2000) (citing Stephen Breyer, *Judicial Review of Questions of Law and Policy*, 38 ADMIN. L. REV. 363, 370 (1986)). ("A court may also ask whether the legal question is an important one. Congress is more likely to have focused upon, and answered, major questions, while leaving interstitial matters to answer themselves in the course of the statute's daily administration.").

^{99.} Id.

statute. ¹⁰⁰ They also look at the scope of an agency's claimed authority and the length of time the agency asserted its claimed authority, as well as the age of the statute. ¹⁰¹ If the statute was enacted long ago, courts are unlikely to assume Congress hid profound new powers only recently discovered today. ¹⁰² If the agency has regulated the disputed activity for a long time, the courts will probably agree that Congress intended the agency to regulate this area in a similar manner today. ¹⁰³ Courts also look to associated congressional activity in the disputed area. ¹⁰⁴ If Congress repeatedly rejected attempts to grant an agency certain authority, the agency likely doesn't have that authority now. ¹⁰⁵ Finally, if the area is traditionally one that states regulate, the courts are unlikely to find that a federal agency now has jurisdiction. ¹⁰⁶

While "deep economic and political significance" is ambiguous, courts are narrowing in on qualifying criteria. *King v. Burwell* defined the criteria as "tax credits . . . involving billions of dollars in spending each year and affecting the price of health insurance for millions of people." ¹⁰⁷ FDA v.

^{100.} Id. at 132.

^{101.} See Mass. Bldg. Trades Council v. U.S. Dep't of Labor (In re MCP No. 165), 21 F.4th 357, 373 (6th Cir. 2021) (showing the "scope or degree" of agency power is one consideration in the major questions doctrine); See also Health Freedom Def. Fund, supra note 52, at 32–33 (noting that the major questions analysis analyzed the PHSA, a statute enacted in 1944. (42 U.S.C.S. § 264(a))); See also Food & Drug Admin. v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 159 (2000) (noting that the FDA "has now asserted jurisdiction to regulate an industry constituting a significant portion of the American economy" after not claiming this power since its inception (emphasis added)).

^{102.} Food & Drug Admin. v. Brown, *supra* note 99, at 125; *FDA History*, U.S. FOOD & DRUG ADMIN. (June 29, 2018), https://www.fda.gov/about-fda/fda-history (showing the FDA was conceived in 1906); Util. Air Regul. Grp. v. EPA, 573 U.S. 302, 324 (noting that "[EPA's permitting regulation] would bring about an enormous and transformative expansion in EPA's regulatory authority without clear congressional authorization" from a "long-extant statute", the Clean Air Act.); Health Freedom Def. Fund, Inc. v. Biden, No. 8:21-CV-1693-KKM-AEP, F.Supp.3d at 32–33 (M.D. Fla. Apr. 18, 2022) (noting that the major questions analyzed the PHSA, a statute enacted in 1944. (42 U.S.C.S. § 264(a))); (noting that the major questions analysis analyzed the PHSA, a statute enacted in 1944. (42 U.S.C.S. § 264(a)); Ala. Ass'n of Realtors v. Dep't of Health & Hum. Servs., 141 S. Ct. 2485, 2489 (noting that noting that Congress must speak clearly when authorizing an agency to act in situations involving "vast economic power and political significance").

^{103.} See Mass. Bldg. Trades Council, 21 F.4th 372–373 (noting OSHA workplace ETS on disease prevention has been used since 1970); But see Health Freedom Def. Fund, Inc. v. Biden, No. 8:21-CV-1693-KKM-AEP, F. Supp. 3d at 33 (M.D. Fla. Apr. 18, 2022) (noting that "this provision has 'rarely been invoked—and never before to justify' a mandate that travelers on every form of commercialized travel wear masks" (citing Ala. Ass'n of Realtors v. Dep't of Health & Hum. Servs., 141 S. Ct. 2485, 2487 (2021))).

^{105.} W.Va. v. EPA, 142 S.Ct. 2587, 2595 (2022).

^{105.} See Food & Drug Admin., 529 U.S. at 159–60 ("Congress..._squarely rejected proposals to give the FDA jurisdiction over tobacco, and repeatedly acted to preclude any agency from exercising significant policymaking authority in the area.").

^{106.} Ala. Ass'n of Realtors, 141 S. Ct. at 2489 (discussing landlord-tenant relationship); Health Freedom Def. Fund, Inc. v. Biden, No: 8:21-cv-1693-KKM-AEP, F.Supp. 3d at 33 (M.D. Fla. Apr. 18, 2022) (discussing public health); *contra* Mass. Bldg. Trades Council 21 F.4th at 374 (discussing occupational health).

^{107.} King v. Burwell, 576 U.S. 473, 485 (2015).

Brown elaborated by including "hardly ordinary" regulations covering a "significant portion of the American economy." ¹⁰⁸ In 2021, the COVID eviction moratorium was considered a major question because it impacted up to "80% of the country, including between 6–17 million tenants," and up to \$50 billion in financial impacts. ¹⁰⁹ The use of civil and criminal penalties to enforce these provisions may also play into this "significance" analysis, though courts have explicitly added this to a major questions analysis. ¹¹⁰

To analyze the ITM proposal using the major questions doctrine, it is necessary to identify that the FPA is a long extant statute. ¹¹¹ There is a consensus among stakeholders that the ANOPR is significant because of the scope of future infrastructure spending. ¹¹² Even proponents of the ITM expect this to be the case; indeed, the scope of spending is one argument many use to advocate the need for closer scrutiny on infrastructure spending. ¹¹³ The ITM clearly dwarfs the \$50 billion price tag in the COVID eviction moratorium case. The ITM's participation therein would impact far more than 6–17 million people. ¹¹⁴ Therefore, the scope of the ITM would most certainly fall under significant political or economic questions that courts would expect Congress to address in statutes.

If establishing an ITM would be significant enough to be considered a major question, then how will courts address an ITM? This depends on two factors: 1) the scope of an ITM's authority and 2) if it would trample longheld state-governed issues. In this case, if there was an *Active ITM* with authority to directly change the planning criteria in the infrastructure planning process, this kind of authority would violate the major questions doctrine. The *Active ITM* would directly impact significant areas of the economy that Congress would have specifically spoken to. Courts would also object because Congress directly addressed the method of identifying unjust rates in the FPA. Therefore, if an ITM were to take an active role in policing transmission planning, it would probably violate major questions reserved for clear congressional mandates. To avoid major questions, an ITM

^{108.} Food & Drug Admin., 529 U.S. at 159.

^{109.} King v. Burwell, 576 U.S. at 485; Ala. Ass'n of Realtors, 141 S. Ct. at 2489.

^{110.} Health Freedom Def. Fund, Inc. v. Biden, No: 8:21-cv-1693-KKM-AEP, F.Supp. 3d at 33 (M.D. Fla. Apr. 18, 2022); Ala. Ass'n of Realtors, 141 S. Ct. at 2489.

^{111.} See JEFFREY S. DENNIS ET AL., U.S. DEP'T OF ENERGY, LBNL-1006675 FEDERAL/STATE JURISDICTIONAL SPLIT: IMPLICATIONS FOR EMERGING ELECTRICITY TECHNOLOGIES VI (2016), https://www.energy.gov/sites/prod/files/2017/01/f34/Federal%20State%20Jurisdictional%20Split-Implications%20for%20Emerging%20Electricity%20Technologies.pdf, (showing that the bright line federal-state divide in the Federal Power Act is subject to blurring with new technologies and new applications of those technologies).

^{114.} Dominion Reply, supra note 55; WIRES Comment, supra note 54.

^{115.} New England States Reply, *supra* note 38; Healey Reply, *supra* note 38.

^{114.} See Ala. Ass'n of Realtors v. Dep't of Health & Hum. Servs., 141 S. Ct. 2485, 2487 (2021) (citing cost of COVID-19); See EIA, supra note 1 (citing cost of electrical transmissions).

^{115. 16} U.S.C. § 824(b).

would have to play a passive role. Establishing an information gathering or advisory service is clearly within the realm of FERC's duty to maintain just and reasonable rates.

Courts would also find fault with an ITM because it would violate longstanding state-regulated areas. The FPA is federalist in structure, drawing bright lines between federal and state jurisdictions. 116 The FPA's declaration of policy defines FERC jurisdiction as "extend[ing] only to those matters which are not subject to regulation by the States."117 In addition, states have historically been given control of infrastructure siting authority under the Natural Gas Act. 118 Some stakeholders in vertically-integrated states identified the federalism conflicts an ITM would pose with state-led and state-overseen Integrated Resource Plans (IRP). 119 While some states ceded transmission planning and dispatch authority to RTO/ISOs, and thus became subject to FERC oversight, other states did not. 120 Although the RTO/ISO public utilities would fall directly under FERC regulation, and could be subject to ITM monitoring, states that refused to cede authority to RTO/ISOs could be unlawfully impacted by a proactive ITM. For example, an Active ITM might indirectly affect state siting policies that are already approved by a state-led IRP process. Courts would likely find this encroachment to be an overreach not intended by the drafters of the FPA.

In a case that may be a harbinger of analysis to come, the mask mandate considered in *Health Freedom Defense Fund v. Biden* increased the scope of the major questions doctrine. The Court defined "significance" in part by evaluating whether a rule is a "major rule" under the Congressional Review Act or whether a rule is an "economically significant regulatory action." In turn, the court defined an "economically significant regulatory action" as: an annual effect of \$100 million on the economy, a major increase in consumer prices, or significant adverse effects on the economy. This may

^{116.} Ark. Elec. Co-Op v. Ark. Pub. Ser. Comm'n, 461 U.S. 375, 392–393 (1983).

^{117. 16} U.S.C. § 824(a).

^{118.} Miso Transmission Owners v. FERC, 819 F.3d 329, 336 (7th Cir. 2016).

^{119.} SERTP Sponsors, Reply Comments on ANOPR of Build. for the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Nov. 30, 2021); Nat'l Ass'n of Regul. Util. Comm'rs, Motion to Intervene and Comments on ANOPR of Build. For the Future Through Elec. Reg'l Trans. Plan. & Cost Alloc. & Gen. Intercon. (Oct. 12, 2021).

^{120.} Michael H. Dworkin & Rachel Aslin Goldwasser, *Ensuring Consideration of the Public Interest in the Governance and Accountability of Regional Transmission Organizations*, 28 ENERGY L.J. 543, 588 (2007).

^{121.} See Sophie Reardon, Justice Department Appeals Mask Ruling After CDC Says Mandate "remains necessary for the public health," CBS News (April 21, 2022, 8:03 AM), https://www.cbsnews.com/news/mask-mandate-cdc-justice-department-appeal/ (stating that the Biden Administration is currently appealing the case).

^{122.} *Id*

^{123.} Health Freedom Def. Fund, Inc. v. Biden, No: 8:21-cv-1693-KKM-AEP, 2022 U.S. Dist. LEXIS 71206 at *33 (Fla. Cir. Ct. Apr. 18, 2022) (public health).

apply to an ITM. Many stakeholders worry that the participation of any ITM might slow the transmission planning process.¹²⁴ If transmission projects are delayed then the overall cost of transmission would increase, resulting in increased prices for ratepayers.¹²⁵ Therefore, if the scope of the major questions doctrine encompasses even a mere increase in consumer prices, it would be harder for FERC to legally justify adjusting the transmission planning process.

The major questions doctrine would probably limit an ITM to a passive role in transmission planning. The major questions doctrine would also limit the ITM's role to one akin to other stakeholders, as a transparency monitor. Finally, the major questions doctrine would limit the ITM's application to RTO/ISO regions—not to vertically integrated states—because of FERC's explicit statutory federalism limits and its probable intrusion into areas traditionally regulated by states.

D. The CHARGE Act Contains a Congressional Solution that Would Dodge the Legal Pitfalls of a FERC Rulemaking

The discussion above assumes Congress will remain silent while courts interpret FERC's authorities under the FPA. However, recent action in Congress indicates it may decide to wade into the energy transmission debate. ¹²⁶ Senator Markey proposed legislation called the CHARGE Act of 2022 (the Bill). ¹²⁷ The Bill requires FERC to promulgate certain rules and requires certain policies be incorporated into those rules. ¹²⁸ For example, the Bill includes factors such as: interregional planning considerations; access to neighboring region resources; accomplishing state renewable energy and decarbonization goals; enhancing the ability of renewables to connect into the grid; and the integration of grid-enhancing technologies (GETs). ¹²⁹ The Bill establishes a national Office of Transmission appointed by the FERC chair. ¹³⁰ This office would review transmission plans in regional and interregional planning, review GET deployments and other innovations, and

^{124.} N.Y. Indep. Sys. Operator, Inc. Comments, supra note 41; Dominion Reply, supra note 40.

^{125.} Dominion Reply, supra note 40.

^{126.} CHARGE Act, S.3879, 117th Cong. (2022).

^{127.} Id.

^{128.} *Id*.

^{129.} See id. § 4(a)(1)(F) (rulemaking requiring FERC to take certain factors into consideration); Id. § 4 (a)(2) ("requir[ing] that regional and interregional cost methodologies allocate costs on the basis of multiple benefits[.]"); Id. § 4(a)(7) ("prioritiz[ing] interregional cost-benefit considerations over regional cost-benefit considerations" and "prevent[ing] transmission providers from using cost-allocation methodologies that—(A) discourage distributed generation, energy efficiency, demand response, or storage if more economic than transmission; (B) are constrained by consideration only of benefits that are easy to allocate[.]").

^{130.} Id. § 9(a)-(b).

provide oversight of interregional transmission planning processes.¹³¹ The Bill also mandates FERC to require that transmission planning regions create an ITM to "monitor the planning and operation of transmission facilities in [each] transmission planning region." These *CHARGE Act-ITMs* would review transmission planning regions for inefficiencies and practices leading to unjust and unreasonable rates. In addition, they would review the costs of transmission facilities, including identifying inefficiencies among local, regional, and interregional planning. The Bill also establishes an RTO/ISO Advisory Committee. This Committee would oversee RTO/ISO governance and recommend improvements. The Committee would also establish stakeholder best practices and recommend transparency improvements for non-RTO regions.

These congressionally defined institutions provide benefits that would not exist through the current ANOPR-defined ITMs. The Bill would give direction to FERC and define Congress's intent on transmission planning. ¹³⁸ Because Congress would directly speak to these significant economic and political issues, FERC rulemakings subject to the Bill would not violate the major questions doctrine. In addition, the Bill would not violate the subdelegation doctrine. The presumption of invalid sub-delegations of agency authority would not apply because the FERC chair would appoint the director of the Office of Transmission. ¹³⁹

These three institutions—the national Office of Transmission, the CHARGE Act-ITMs, and the RTO/ISO Advisory Committee—seem to divide the Active—Passive ITM activities among themselves. In the Bill, the ITMs and the Advisory Committee contain the Passive ITM's duties. The CHARGE Act-ITMs seem limited to: reviewing the transmission planning process; analyzing project costs; and identifying non-wire, interregional, or other alternatives that current transmission processes ignore. This seems to be a more technical analysis and review process. However, the Advisory Committee appears to provide a non-technical path for nonprofits and other

^{131.} Id. § 9(c).

^{132.} Id. § 11(a)(1)(A).

^{133.} Id. § 11(b)(1)-(5).

^{134.} Id. § 11(b)(3).

^{135.} *Id.* § 12(a).

^{136.} Id. § 12(a)(1).

^{137.} Id. § 12(a)(2)-(3).

^{138.} Id. § 12(a)(2)(B).

^{139.} See U.S. Telecom Ass'n v. FCC, 359 F.3d 554, 565 (D.C. Cir. 2004) (showing the distinction between an agency subordinate and an outside party).

^{140.} S.3879 § 11(b); id. § 12(b).

non-traditional stakeholders to gain access to and influence an infrastructure planning process that may be weighed against them. 141

While the ITM and Advisory Committee in the Bill encompass the duties of a *Passive ITM*, the Office of Transmission seems to take on some duties of an *Active ITM* role. Notably, the Bill does not give the Office of Transmission the explicit power to modify the infrastructure planning process. However, because the ITM is contained within FERC, the Office of Transmission would undoubtedly coordinate with FERC when the Commission seeks to modify tariffs or respond to unjust rates. The Bill could also enable a full-time inquiry into the transmission process instead of an ad hoc one. In practice, this process could be used to police transmission planning as much as an *Active ITM* might.

CONCLUSION

This article outlined the debates surrounding the transmission planning process; in particular, the role of an *Active* or *Passive ITM*. In addition, this article discussed some of the legal challenges an ITM might face, as well as one pending solution to those legal challenges through congressional action. Following the ANOPR issued in 2021, FERC issued a Notice of Proposed Rulemaking in April 2022. ¹⁴² The 2022 Notice made no mention of an ITM, suggesting a transmission monitor is on the backburner for now. ¹⁴³ Despite this, the legal and policy debates mentioned in this article—as well as the *Active–Passive* Framework of infrastructure monitoring—will remain relevant.

^{141.} See id. § 12(b) (showing that RTO/ISO and transmission representation on the committee is at least 3 out of 15 stakeholders, a relatively small portion of the committee).

^{142.} ANOPR, *supra* note 10, at 26,605.

^{143.} Id.

PRIDE IN OUR COMMUNITIES: THE LEGAL INTERSECTION OF THE LGBTQ AND ENVIRONMENTAL JUSTICE MOVEMENTS

Beckett McGowan*

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PRECIS

The bright colors of the rainbow pride flag have rallied the LGBTQ community¹ for the past 40 years, to defend and celebrate civil rights.² In 2017, the city of Philadelphia's Office of LGBT Affairs unraveled a new pride flag that added two colors to the rainbow: black and brown.³ The black and brown stripes symbolized "a renewed dedication to unity and inclusion in the LGBT[Q] community."⁴ The Philly Pride Flag signals that unity and inclusion belong at the forefront of LGBTQ advocacy.

The LGBTQ community is not a unified political movement. Lesbians, gay men, bisexuals, and transgender people existed as separate social movements for decades.⁵ These communities came crashing together during the 1980s AIDS epidemic. LGBTQ identities came together to care for the sick.⁶ In the process, they forged a community of sexual and gender minorities.⁷ Through unity, the LGBTQ community has achieved major

In this article, LGBTQ refers to the diverse community of sexual and gender minorities, including lesbian, gay, bisexual, transgender, queer, intersex, pansexual, two-spirit, asexual, and other identities. The LGBTQ acronym has evolved over the years to encompass the diverse expressions of human gender and sexuality. Originally, the LGBTQ community adopted the acronym LGBT and GLBT in the 1990s to replace the term "gay," which was used to describe the greater LGBTQ community since the 1940s. Emily Zak, LGBTTQQIIAA+: How we got here from Gay, Ms. MAG. (Oct. 1, 2013), https://msmagazine.com/2013/10/01/lgbpttqqiiaa-how-we-got-here-from-gay/. The LGBT acronym has grown further to be more inclusive, and has created multiple variants such as LGBT+, LGBTQIA, and others. Id. As of 2022, LGBTQ is one of the more common inclusive versions of the acronym, and has been adopted by several LGBTQ organizations, such as GLAAD and the Human Rights Campaign. GLAAD Media Reference Guide, 11th ed., GLAAD, https://www.glaad.org/reference/terms (last visited Sept. 30, 2022); HRC Staff, HRC Officially Adopts Use of "LGBTQ" to Reflect Diversity of Own Community, HUM. RTS. CAMPAIGN (June 3, 2016), https://www.hrc.org/news/hrc-officially-adopts-useof-lgbtq-to-reflect-diversity-of-own-community. This article similarly adopts the LGBTO version of the acronym to acknowledge other sexual and gender identities outside of the eponymous lesbian, gay, bisexual, transgender, and queer identities. However, as an editorial note, the acronym LGBT is occasionally referenced in this article as well to refer to LGBTQ-affiliated organizations and other studies about the LGBTQ community. Finally, this article acknowledges that LGBTQ is not the definitive term for this community and that this acronym is subject to debate within the community itself. See, e.g., Erin Blakemore, From LGBT to LGBTQIA+: The Evolving Recognition of Identity, NAT'L GEOGRAPHIC (Oct. https://www.nationalgeographic.com/history/article/from-lgbt-to-lgbtqia-the-evolvingrecognition-of-identity?loggedin=true (noting that there are critics of the term LGBTQ and that "the words people use to describe gender expression and sexual identity will continue to evolve").

^{2.} Curtis M. Wong, *The History and Meaning of the Rainbow Pride Flag*, HUFFPOST (Jun. 7, 2018), https://www.huffpost.com/entry/rainbow-pride-flag-history_n_5b193aafe4b0599bc6e124a0.

^{3.} Ben Deane, *The Philly Pride flag, explained,* THE PHILA. INQUIRER, (Jun 12, 2021) https://www.inquirer.com/philly-tips/philadelphia-pride-flag-20210612.html.

^{4.} Amber Hikes, *More Color, More Pride*, CITY OF PHILA. OFFICE OF LGBT AFFAIRS (Jun 8, 2017), https://www.phila.gov/posts/office-of-diversity-equity-and-inclusion/2017-06-08-more-color-more-pride/.

^{5.} Jami K. Taylor et al., The Remarkable Rise of Transgender Rights, 28 (2018) (explaining that there were "deep divisions between gay men and lesbian women because of misogyny in the gay rights movement. . . . Gender divisions also extended to the trans community during this era").

^{6.} *Id.* at 29 ("[L]esbian and gay activists also interacted with transgender people who were also affected by the disease").

^{7.} *Id*.

political and legal milestones. Each milestone—from decriminalizing sodomy ⁸ to legalizing same-sex marriage ⁹ to protecting employment rights ¹⁰—has significantly changed the lives of LGBTQ Americans.

While the LGBTQ community has achieved major victories together—vast inequities remain. These inequities exist within the LGBTQ population itself. Forty-two percent of the LGBTQ population in the United States also belongs to racial and ethnic minority groups. ¹¹ People of color within the LGBTQ community face multiple forms of oppression including: racism, sexism, and homophobia. ¹² Further still, people of color in the LGBTQ community face higher rates of food insecurity and economic insecurity than white LGBTQ people. ¹³ Addressing the issues faced by people of color and/or low-income members of the LGBTQ community will move the LGBTQ Movement towards the inclusive ideal of the Philly Pride Flag.

In a similar vein, the Environmental Justice (EJ) Movement seeks to remedy the "disproportionately high and adverse human health or environmental effects . . . on minority populations and low-income populations." The issue of inclusion within the LGBTQ Movement and EJ's focus on remedying adverse health and environmental effects both seek to aid people of color and/or low-income people. Therefore, building a more inclusive LGBTQ community will require uniting the LGBTQ Movement with the EJ Movement. The purpose of this article is to explore how intersectional issues can be addressed with our present framework of environmental and civil rights laws, to encourage greater participation in the EJ Movement.

This article will explore EJ themes through a queer lens. Section II provides background on the overlap between the LGBTQ and EJ communities. Section III analyzes statutory language in civil rights and environmental statutes commonly utilized by EJ advocates. Section IV raises policy arguments for LGBTQ protections in the EJ context. Section V offers recommendations and potential solutions to include sex and gender protections in environmental and civil rights statutes. The article concludes

 $^{8. \}hspace{0.5cm} \textit{See generally} \hspace{0.1cm} \textit{Lawrence v. Texas, 539 U.S. 558 (2003) (ruling criminal punishments for same-sex sodomy were unconstitutional).}$

^{9.} See generally Obergefell v. Hodges, 576 U.S. 644 (2015) (ruling that same-sex marriage was constitutional).

^{10.} See generally Bostock v. Clayton Cnty., 140 S. Ct. 1731 (2020) (ruling that employment discrimination based on sex is unconstitutional).

^{11.} THE WILLIAMS INST., LGBT DEMOGRAPHIC DATA INTERACTIVE (2019), https://williamsinstitute.law.ucla.edu/visualization/lgbt-stats/?topic=LGBT#density, (last visited Dec. 5, 2021).

^{12.} Cheryl A. Parks et al, *Race/Ethnicity and Sexual Orientation: Intersecting Identities*, 10 CULTURAL DIVERSITY & ETHNIC MINORITY PSYCH. 241, 252 (2004).

^{13.} SOON KYU CHOI ET AL, BLACK LGBT ADULTS IN THE US, WILLIAMS INST., Jan. 2021.

^{14.} Exec. Order No. 12,898, 32 C.F.R. § 651.17 (Feb. 11, 1994).

that statutory language for EJ advocacy provides limited legal tools to the LGBTQ members of EJ communities.

I. BACKGROUND

A. The History of the LGBTQ and EJ Movements

The Stonewall Riot in 1969 has been described by many as the beginning of the modern LGBTQ Movement. ¹⁵ After Stonewall, the LGBTQ community shifted from support network organizations, like the Mattachine Society and the Daughters of Bilitis, to more political-focused organizations. ¹⁶ The new wave of LGBTQ organizations took inspiration from the Civil Rights Movement and the Feminist Movement. ¹⁷ These organizations expanded LGBTQ rights and improved public opinion for LGBTQ individuals. ¹⁸ The 1980s shaped the LGBTQ organizations into the more unified LGBTQ coalition—when lesbian, gay, and transgender groups came together to combat the AIDS epidemic. ¹⁹ Since then, the community has weathered numerous social and political battles. The LGBTQ community won strategic victories towards decriminalizing sodomy, ²⁰ legalizing samesex marriage, ²¹ and gaining employment discrimination protections. ²²

The EJ Movement laid down its roots in the early 1980s. The Movement began with the citizen protests over the PCBs (polychlorinated biphenyls) landfill in Warren County, NC.²³ Reverend Benjamin Chavis of the United Church of Christ Commission for Racial Justice coined the term "environmental racism."²⁴ This term describes the disproportionate impact that the predominantly Black and low-income residents of Warren County

^{15.} TAYLOR ET AL., *supra* note 5, at 45 (stating that Stonewall "is generally thought of as the birth of the modern gay rights movement").

^{16.} See Bonnie J. Morris, History of Lesbian, Gay, Bisexual, and Transgender Social Movements, AM. PSYCH. ASS'N, https://www.apa.org/pi/lgbt/resources/history (explaining that LGBTQ political organizations arose during the gay liberation movement in the 1970s).

^{17.} Id.

^{18.} *Id*.

^{19.} See TAYLOR, supra note 5, at 31 (explaining that lesbians, gays, and transgender people came together to help the "infected individuals [who] were dying in ever-larger numbers [while] there was no response by the government").

^{20.} See generally Lawrence v. Texas, 539 U.S. 558 (2003) (declaring criminal punishment for same-sex sodomy unconstitutional).

^{21.} See generally Obergefell v. Hodges, 576 U.S. 644 (2015) (declaring same-sex marriage constitutionally protected).

^{22.} See generally Bostock v. Clayton Cnty., 140 S. Ct. 1731 (2020) (declaring employment discrimination based on sex unconstitutional).

 $^{23.\;\;}$ Clifford Villa et al., Environmental Justice Law, Policy, & Regulation 4 (3d ed. 2020).

^{24.} Id.

faced from the environmental toxins.²⁵ After Warren County, communities of color and low-income communities began to challenge the placement of environmental burdens in their neighborhoods.²⁶

In 1994, the federal government answered calls made by EJ grassroots organizations to address environmental justice issues.²⁷ President Clinton issued Executive Order 12898 (E.O. 12898) along with an accompanying Memorandum on Environmental Justice.²⁸ E.O. 12898 directed federal agencies to incorporate environmental justice into their operations.²⁹ Additionally, E.O. 12898 directed agencies to allow public participation during environmental decisions.³⁰

The definition of EJ used by federal agencies as part of their directive under E.O. 12898 has evolved over the years. E.O. 12898 defined EJ as "disproportionately high and adverse human health or environmental effects ... on minority populations and low-income populations in the United States and its territories and possessions."³¹ The Environmental Protection Agency (EPA), a significant actor in the federal government's EJ mission, has its own definition for EJ. In the early 1990s, the EPA included "people of color and low-income populations" in the agency definition of "EJ community."³² In 1998, the EPA revised its definition of EJ to encompass "all communities and persons across [the] Nation."³³ The EPA defines EJ as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."³⁴ This EJ definition—without an emphasis on overburdened minority and low-income communities—is still utilized by the agency today.³⁵

EJ activists have criticized the EPA's EJ definition for ignoring the central issue of environmental racism.³⁶ One criticism is that the EPA's EJ mission is diluted because EJ concepts are "applied to all communities

^{25.} Id.

^{26.} Id

^{27.} See Meredith J. Bowers, *The Executive's Response to Env't. Injustice: Executive Order 12898*, 1 ENV'T LAW. 645, 649–650 (1995) (stating that the E.O.'s "purpose is to achieve environmental justice and to promote nondiscrimination in federal programs").

^{28.} Id. at 649.

^{29.} Id. at 650.

³⁰ Id at 651

^{31.} Exec. Order No. 12,898, 32 C.F.R. § 651.17 (Feb. 11, 1994).

^{32.} Ryan Holifield, *The Elusive Environmental Justice Area: Three Waves of Policy in the U.S. Environmental Protection Agency*, 5 ENV'T JUSTICE 293, 294 (2012).

^{33.} Id. at 297.

^{34.} VILLA ET AL., supra note 23, at 18.

^{35.} Environmental Justice, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/environmentaljustice.

^{36.} Holifield, supra note 32, at 295.

regardless of race, ethnicity, or income status."³⁷ The EPA has mitigated some issues with its EJ definition by focusing on the "disproportionate adverse effect" component of the E.O. 12898 guideline.³⁸ However, a possible silver lining to the EPA definition is that it has opened the door towards a more intersectional view of environmental justice.³⁹

B. Sociological Composition of the LGBTQ and EJ Communities

The LGBTQ community is a coalition of different gender and sexual identities that intersects with different racial and socio-economic groups. Forty percent of the LGBTQ population are people of color. 40 The LGBTQ community also extends across a range of socio-economic backgrounds, with roughly 22 percent of LGBTQ people in the United States living in poverty. 41 This sub-section and the following sub-section will explore intersections between different communities of color and the LGBTQ community. The intention is to show that LGBTQ studies fail to consider environmental racism and environmental justice—despite the studies' focus on race and socio-economic status.

Roughly 12 percent of LGBTQ people, an estimated 1,210,000 adults, identify as Black. ⁴² Black LGBTQ people face different challenges than Black *non-LGBTQ* adults. ⁴³ Compared to Black *non-LGBTQ* individuals, Black LGBTQ people face a higher rate of everyday discrimination. ⁴⁴ Black LGBTQ people have greater economic insecurity, with higher likelihoods of being unemployed and living in low-income households than Black *non-LGBTQ* adults. ⁴⁵

Latinx individuals make up an estimated 20 percent of the LGBTQ adult community. 46 Latinx LGBTQ individuals face higher rates of unemployment and food insecurity than Latinx *non-LGBTQ* adults. 47 Latinx LGBTQ individuals "have a higher prevalence of asthma, diabetes, heart attack,

^{37.} *Id*.

^{38.} Id. at 296.

^{38.} See, e.g., Stephanie A. Malin & Stacia S. Ryder, Developing Deeply Intersectional Environmental Justice Scholarship, 4 ENV'T SOCIO. 1, 3 (2018) (stating that critical environmental justice incorporates other power structures such as heteropatriarchy into environmental justice).

^{40.} CHOI ET AL., supra note 13, at 3.

^{41.} M.V. LEE BADGETT ET AL, LGBT POVERTY IN THE UNITED STATES, 3, 7 (UCLA Williams Institute, 2019).

^{42.} CHOI ET AL., *supra* note 13, at 3.

^{43.} *Id.* at 4. A number of the studies cited in this article sampled adult populations. This article, in contrast, focuses on the LGBTQ community at large—thus uses the phrase "individuals" instead.

^{44.} Id. at 5.

^{45.} Id. at 4.

^{46.} SOON KYU CHOI ET AL., LATINX LGBT ADULTS IN THE US: LGBT WELL-BEING AT THE INTERSECTION OF RACE 3 (UCLA Williams Institute, 2021).

^{47.} *Id.* at 5.

cancer, and high blood pressure, and high cholesterol than [non-LGBTQ] adults." Additionally, Latinx LGBTQ individuals are more likely to lack insurance than Latinx non-LGBTQ adults. 49

Asian American and Pacific Islander (AAPI) individuals account for approximately three percent (or 685,000 adults) of the LGBTQ population in the United States. ⁵⁰ AAPI LGBTQ individuals experience economic insecurity at higher rates than AAPI *non-LGBTQ* individuals. ⁵¹ AAPI LGBTQ individuals face ten percent unemployment, as opposed to six percent for AAPI *non-LGBTQ* individuals. ⁵² Additionally, AAPI LGBTQ individuals are more likely than AAPI *non-LGBTQ* individuals to live in low-income housing. ⁵³

Indigenous people account for roughly two percent of the LGBTQ Community, which is an estimated 285,000 adults. ⁵⁴ More than half of Indigenous adults live in low-income households. ⁵⁵ Indigenous LGBTQ adults are slightly more likely to be in low-income housing than Indigenous *non-LGBTQ* adults. ⁵⁶ Additionally, Indigenous LGBTQ adults, alongside Indigenous *non-LGBTQ* adults, have higher rates of serious health conditions like asthma and cancer compared to non-Indigenous and *non-LGBTQ* adults. ⁵⁷ Studies also indicated that Indigenous LGBTQ adults experienced discrimination and victimization. ⁵⁸

C. Economic Composition of LGBTQ and EJ Communities

LGBTQ individuals are at higher risk than *non-LGBTQ* individuals for economic insecurity.⁵⁹ Across the United States, LGBTQ people face higher

^{48.} Id. at 24.

^{49.} Id. at 25.

⁵⁰. Soon Kyu Choi et al., AAPI LGBT adults in the US: LGBT Well-being at the Intersection of Race 3 (UCLA Williams Institute, 2021).

^{51.} Id. at 5.

^{52.} *Id*.

^{53.} *Id*.

^{54.} See Bianca D.M. WILSON ET AL., AMERICAN INDIAN AND ALASKAN NATIVE LGBT ADULTS IN THE US 3 (UCLA Williams Institute 2021) (explaining demographics of "American Indian and Alaskan Native" individuals who identify as LGBTQ. The article does not include demographics of individuals who identify as Two-Spirit and non-LGBTQ.).

^{55.} *Id*.

^{56.} See id. at 5 (stating that 54% of LGBTQ and 52% of non-LGBTQ Indigenous adults live in low-income households).

^{57.} See id. at 6 (stating that "Compared to non-LGBT[Q] adults, [Indigenous]-multiracial adults have a higher prevalence of serious health conditions Among [Indigenous]-only adults, LGBT[Q] adults have a higher prevalence of asthma.").

^{58.} *Id.* at 7 (stating that "81% of [Indigenous] adults reported having experienced everyday forms of discrimination in the prior year . . . 57% reported experiencing physical or sexual assault at some point as an adult, and 81% reported experiencing verbal assault or abuse.").

^{59.} BADGETT ET AL., supra note 41, at 2.

poverty rates than their heterosexual counterparts. ⁶⁰ Additionally, transgender people experienced higher rates of poverty than most cisgender people. ⁶¹ In another study, 20–40 percent of homeless youth identified as LGBTQ, which included a disproportionate amount of Black and Indigenous youth. ⁶² LGBTQ people of color face greater poverty rates than *non-LGBTQ* people of color, white LGBTQ people, and white *non-LGBTQ* people. ⁶³

Historically, part of the economic insecurity for LGBTQ people was related to employment discrimination.⁶⁴ LGBTQ people were banned from certain employment areas, such as teaching and federal jobs.⁶⁵ Additionally, LGBTQ people were at higher risk of being denied employment or promotions.⁶⁶ In 2020, the United States Supreme Court finally held that Title VII of the Civil Rights Act of 1964 protected LGBTQ people from sex discrimination at work.⁶⁷

The demographic research on the LGBTQ community raises issues such as lower healthcare access, food insecurity, and economic insecurity. Something that is missing from these studies is data that directly confronts issues of environmental racism and other environmental justice issues faced by LGBTQ people of color. Higher rates of economic insecurity and low-income housing rates for LGBTQ people of color are particularly concerning. This raises the issue that there are LGBTQ people who are disproportionately impacted by environmental racism, as well as homophobia and/or transphobia.

II. ANALYSIS

EJ activists rely on a toolkit of different environmental statutes to aid communities that are disproportionately impacted by environmental burdens and hazards. Commonly used statutes in EJ include: the Clean Air Act; the Clean Water Act; the National Environmental Policy Act; and the Comprehensive Environmental Response, Compensation, and Liability Act;

^{60.} Id. at 7.

^{61.} See id. at 5 (noting that transgender people have higher poverty rates than: cis-gay and cis-straight men; cis-lesbian and cis-straight women; and cis-bisexual men). Cisgender refers to individuals whose gender identity aligns with their sex assigned at birth. See Glossary of Terms, HUM. RTS. CAMPAIGN, https://www.hrc.org/resources/glossary-of-terms.

^{62.} See Homelessness & Housing, YOUTH.GOV, https://youth.gov/youth-topics/lgbtq-youth/homelessness#_ftn (Last visited Dec. 4, 2020, 2:20 PM) (explaining that four top causes of homelessness for these individuals are family rejection, abuse, aging out of foster care, and financial or emotional neglect).

^{63.} BADGETT ET AL., *supra* note 41, at 6; *supra* p. 6–7, Sociological Composition of the LGBTQ and EJ Communities.

^{64.} M.V. Lee Badgett et al, LGBT Economics, 35 J. ECON. PERSPECTIVES 141, 158 (2021).

^{65.} *Id*.

^{66.} *Id.* at 159.

^{67.} Id. at 158-59.

to name a few. These statutes help EJ advocates combat issues, such as air and water pollution, as well as siting for polluting facilities, which disproportionately impact low-income communities and/or communities of color.⁶⁸ EJ activists utilize civil rights statutes, such as the Civil Rights Act of 1964 to combat discrimination. This article will explore each of these statutes, in turn, to find potential avenues for an intersectional approach to environmental justice.

A. The Clean Air Act

The Clean Air Act's (CAA's) mandate is "to improve, strengthen, and accelerate programs for the prevention and abatement of air pollution." The CAA's intent is to mitigate public health issues connected to urbanization and industrialization. Subsection (a) of the CAA grants funding to air pollution control programs. In doing so, the agencies must give "due consideration to (1) the population [and] (2) the extent of the actual or potential air pollution problem." These funds can be requested by state governors, state air pollution control agencies, or municipalities. Notably, the language of the statute does not directly address any specific class of people to protect.

The CAA's funding provision presents an opportunity for LGBTQ advocates working on EJ projects. In areas that are disproportionately affected by air quality issues, advocates can petition the governing bodies. In so doing, under the CAA, advocates for the affected community may request that the municipality or state apply for CAA funding or direct programming. Advocates should emphasize the impacted communities' character as both an EJ community and LGBTQ community. These communities' character places them at greater risk of both environmental hazards and healthcare disparities—which the CAA remedy should address.

For example, environmental hazards and healthcare disparities can create and exasperate respiratory conditions like asthma.⁷⁴ In a study of asthma rates among same-sex couples, people of color experienced higher rates of

^{68.} See Frank P. Grad, Treatise on Environmental Law, Ch. 9 § 9.10(1)(a) (explaining that "[s]tudies have shown that low-income, minority communities bear a disproportionate burden of environmental hazards, such as air, water or soil pollution, landfills, incinerators, and other polluting facilities")

^{69.} Clean Air Act, 42 U.S.C. § 7401 (1963).

^{70.} Id.

^{71.} *Id*.

^{72.} Id. § 7405 (internal punctuation marks omitted).

^{73.} *Id*.

^{74.} See VILLA ET AL., supra note 23 at 177 (explaining that "a large body of compelling evidence demonstrates that particulate matter is associated with early and unnecessary deaths, aggravation of heart and lung diseases, reduction in the ability to breath normally, and increases in respiratory illnesses").

asthma than white people.⁷⁵ Additionally, the study found that same-sex couples faced greater rates of asthma than opposite-sex couples.⁷⁶ Emphasizing these heightened health risks should factor into the cumulative risk assessment used by the EPA when making decisions under the CAA.⁷⁷ The cumulative risk assessment is beneficial for addressing EJ concerns since the EPA may consider the compounded risks that arise in intersectional communities.⁷⁸

In practice, the EPA should evaluate the respiratory issues that the combined LGBTQ and EJ community face in cumulative risk assessments.⁷⁹ Therefore, LGBTQ advocates should work with agencies to take an intersectional approach to address respiratory illnesses and other diseases exacerbated by air pollution.

B. The Clean Water Act

The Clean Water Act's (CWA's) mandate is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The EPA encourages public participation in programs and regulations developed through the CWA. The public participation guidelines under the CWA are developed and regulated by the EPA administrator and the states. EPA

Water quality issues are critical in communities that depend on water sources for economic and cultural use. ⁸³ The CWA provides several means for advocates to address these water quality issues. One focus under the CWA is point-source pollution discharge into navigable waters. ⁸⁴ This section of the CWA is focused on stopping polluters rather than remedying impacted communities. ⁸⁵ Therefore, actions taken by LGBTQ advocates working with EJ communities would emphasize holding polluters accountable following the usual environmental modus operandi for water pollution cases.

^{75.} John Blosnich et al., Asthma Disparities and Within-Group Differences in a National, Probability Sample of Same-Sex Partnered Adults, Am. J. Public Health (Sept. 2013).

^{76.} Id.

^{77.} Sarah Alves & Joan Tilghman, EPA Authority to Consider Cumulative Effects and Cumulative Risk Assessments in Decision Making under the Clean Air Act, 28 J. ENV'T. L. & LITIG. 151, 154 (2013).

^{79.} See Blosnich, supra note 75 (explaining how factors such as minority stress and stigma against combined factors of LGBT and racial discrimination may increase rates of asthma).

^{80.} Clean Water Act, 33 U.S.C. § 1251(a).

^{81.} Id. § 1251(e).

^{82.} *Id*.

^{83.} VILLA ET AL., supra note 23, at 174 (citing Richard J. Lazarus & Stephanie Tai, Integrating Env't. Justice into EPA Permitting Authority, 26 ECOLOGY L. Q. 617, 631–649 (1999)).

^{84.} Summary of the Clean Water Act, U.S. ENV'T. PROT. AGENCY, https://www.epa.gov/laws-regulations/summary-clean-water-act.

^{85.} See id. (explaining that the Clean Water Act "establishes the basic structure for regulating discharges of pollutants into the waters of the United States").

Since the CWA is designed to assist state and local action, ⁸⁶ LGBTQ advocates would have to take a state-by-state approach for EJ projects. ⁸⁷ This localized approach should be taken by local or state LGBTQ organizations since they can focus on the state standards impacting their communities. While a specialized intersectional approach may not be an option under the CWA, the statute remains an important tool in an LGBTQ advocate's legal toolkit. Water quality issues arising in LGBTQ communities can have serious health and economic impacts on the community. Therefore, LGBTQ advocates must be ready to use legal tools under the CWA to aid their communities.

C. The National Environmental Policy Act

The National Environmental Policy Act (NEPA) declares "a national policy which will encourage productive and enjoyable harmony between [humans] and [their] environment." Under NEPA, the federal government must consider the environment while making major decisions. ⁸⁹ NEPA in effect, has two roles. The first role establishes a substantive policy. The second role creates procedural rules.

NEPA § 101(a) states that the federal government must coordinate with other branches of government and organizations

to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.⁹⁰

Section 101 further states that "each person should enjoy a healthful environment and that each person has a responsibility to contribute to the

^{86.} See 2 Treatise on Environmental Law § 3.03(1)(a) (2021) (stating "[c]ongress provided for an elaborate procedure to delegate the responsibility for the establishment of standards to the states subject to federal approval").

^{87.} See, e.g., City of Albuquerque v. Browner, 97 F.3d 415, 425 (10th Cir. 1996) (stating "states have the primary role under § 303 of the CWA (33 U.S.C. § 1313), in establishing water quality standards. EPA's sole function, in this respect, is to review those standards for approval." (quoting Natural Resources Defense Council v. EPA, 16 F.3d 1395, 1399, 1401 (4th Cir. 1993))).

^{88.} National Environmental Policy Act of 1969 § 101, 42 U.S.C. § 4332.

^{89.} See id. (explaining that decision-making should "include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment").

^{90.} Id.

preservation and enhancement of the environment." Section 101 directs officials to use "all practicable means," which is a flexible form of discretion. However, there is a circuit split regarding substantive rights in § 101 cases. Some circuits have held that there are substantive rights that can be enforced by non-governmental organizations. Here are substantive rights that can be that there are not separate substantial rights guaranteed under § 101.

NEPA's substantive rights are accessible to LGBTQ advocates depending on their location within the grand scheme of the circuit courts. For example, advocates in the Eighth Circuit Court of Appeals can seek judicial review for § 101 cases. However, the Fourth Circuit and Tenth Circuits do not permit judicial review for cases under § 101. Advocates in states like Arkansas, Nebraska, North Dakota, and South Dakota can enjoin agency decisions that are arbitrary and capricious. However, advocates in states like Virginia, North Carolina, Colorado, Utah, etc. cannot enjoin agency decisions that are arbitrary and capricious under § 101 alone. While substantive NEPA relief may be state specific, advocates have other remedies for procedural relief under NEPA.

NEPA's second role creates procedural rules. Under § 102, federal agencies must perform an environmental assessment while enacting a "major federal action significantly affecting the quality of the human environment." ⁹⁷ During this process, agencies are directed to take "a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making." ⁹⁸ With the information from the environmental assessment, agencies are directed to complete a detailed environmental impact statement (EIS). These EIS reports must include discussions of alternatives and cost-benefit analysis. ⁹⁹ Judicial review for § 102 will approve EIS reports that are made "fully and in good-faith."

^{91.} Id.

^{92.} Calvert Cliffs' Coordinating Com., Inc. v. United States Atomic Energy Com., 449 F.2d 1109 (D.C. App. 1971).

^{93.} See generally Overton Park v. Volpe, 401 U.S. 402 (1971) (reversing a Sixth Circuit affirmation of summary judgment against Petitioners who were private citizens and national conservation organizations).

^{94.} See generally Env't. Def. Fund, Inc. v. Corps of Engineers of U.S. Army, 470 F.2d 289 (8th Cir. 1972) (reversing finding by United States District Court, Eastern District of Arkansas by affirming that NEPA does create substantive rights).

^{95.} *Id.* at 301.

^{96.} *Id.* at n.15 (citing N.C. Conservation Council v. Froehlke, 340 F. Supp. 222 (M.D. N.C. 1972) and Nat'l Helium Corp. v. Morton, 455 F.2d 650 (1971)).

^{97.} National Environmental Policy Act of 1969 § 102, 42 U.S.C. § 4332.

^{98.} Id.

⁹⁹ *Ia*

^{100.} Calvert Cliffs' Coordinating Com., Inc. v. United States Atomic Energy Com., $449 \, \text{F.2d} \, 1109 \, (\text{D.C. App. } 1971)$.

NEPA's environmental assessment mandate has been a critical tool for EJ work. ¹⁰¹ Federal agencies are required to include an EJ analysis in the EIS. ¹⁰² Courts review EJ analyses using the arbitrary-and-capricious standard. ¹⁰³ The agency is given deference for its "choice among reasonable analytical methodologies." ¹⁰⁴ Several federal agencies have increased public participation for their EJ analyses. ¹⁰⁵

The EIS requirement under § 102 gives LGBTQ advocates the ability to participate in the decision-making process and challenge agency actions that negatively impact their communities. First, LGBTQ advocates can work with agency officials to address the community's concerns in the EIS. This involvement can inform the agency about the prominence of the LGBTQ community in the affected area, as well as longstanding health concerns. This information could be included as part of an interdisciplinary approach from both a medical and sociological approach. Second, when agencies fail to consider the LGBTQ community in an area impacted by a proposed "major federal action," LGBTQ advocates can take legal action against the federal agency. In a NEPA case, LGBTQ advocates can argue that the agency's actions were arbitrary and capricious because it did not consider LGBTQrelated matters in the community. Advocates could further argue that LGBTO members of the community have higher risks of health impacts. 106 Those same health risks are higher for LGBTQ people of color. ¹⁰⁷ Therefore, LGBTQ advocates could argue that the health of LGBTQ people of color must be accounted for in the environmental assessment made by federal agencies.

One potential challenge to this litigation strategy is the agency's discretion on analytical methodologies. The decision to consider LGBTQ health impacts would be one such methodology in the EIS report. The first argument that LGBTQ advocates could make is that these health impacts are significant attributes that should be brought up in an environmental assessment. If agencies fail to consider these health impacts, then the agency's EIS would subsequently fail under an arbitrary-and-capricious analysis. Alternatively, this approach could be used in predominantly LGBTQ neighborhoods to establish a precedent. Hypothetically, if a federal agency considered funding a highway next to a predominantly LGBTQ and

^{101.} Rachael E. Salcido, Reviving the Env't Justice Agenda, 91 CHI.-KENT L. REV. 115, 127 (2016).

^{102.} Sierra Club v. Fed. Energy Regul. Comm'n, 867 F.3d 1357, 1368 (D.C. Cir. 2017).

^{103.} Cmtys. Against Runway Expansion, Inc. v. FAA, 355 F.3d 678, 689 (D.C. Cir. 2004).

^{104.} Id.

^{105.} See Salcido, supra note 101, at n.64 (listing eleven agencies including the Dep't of Agriculture, Dep't of Commerce, Dep't of Energy, Dep't Health and Human Services, etc.).

^{106.} John Blosnich et al., *Health Inequalities Among Sexual Minority Adults*, AM. J. PREV. MED. 337–349 (Apr. 2014); *see generally* Blosnich et al., *supra* note 75.

^{107.} Blosnich et al., supra note 105.

minority neighborhood, the agency would have to consider the highway's impact on air and noise pollution in the neighborhood. In that situation, the higher rates of health risks for LGBTQ individuals would factor heavily into the agency's decision process. ¹⁰⁸ If the agency failed to fully consider the health impacts to the LGBTQ neighborhood, advocates would have a strong case that the decision was arbitrary and capricious.

In those situations, failing to address health issues would impact a large portion of that neighborhood. Since the adverse health impacts disproportionately affect the population, an agency's failure to consider these issues would be arbitrary and capricious. After setting that intersectional precedent, other LGBTQ advocates could rely on that decision and try to expand LGBTQ-specific health considerations to other EJ situations. This precedent would help intersectional LGBTQ/EJ communities, even under a more conservative environmental assessment.

Lastly, LGBTQ advocates could work with agencies to establish regulations that expand interdisciplinary research into environmental assessments. Under this interdisciplinary approach, agencies would incorporate gender studies and LGBTQ-specialized health in their assessments. Thus, LGBTQ advocates could ensure that LGBTQ people of color are considered in environmental assessments at the outset, rather than waiting for their day in court.

D. The Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) is designed to "provide for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and the cleanup of inactive hazardous waste disposal sites." ¹⁰⁹ Further, the purpose of CERCLA is to make the individuals responsible for causing hazardous problems be the ones who "bear the costs and responsibility for remedying the harmful conditions they created." ¹¹⁰ CERCLA encourages polluting parties to settle by precluding other claims against them. ¹¹¹ The purpose of CERCLA's settlement process is to reduce

^{108.} See generally Blosnich et al., supra note 75.

^{109.} Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 (1980).

^{110.} CAROLINE N. BROUN & JAMES T. O'REILLY, 1 RCRA AND SUPERFUND: A PRACTICAL GUIDE, 3d § 9:1 (2021) (quoting Lockheed Martin Corp. v. United States, 35 F.Supp. 3d 92 (D.D.C. 2014) (internal quotation marks omitted).

^{111.} Id.

the time and cost of litigation and to expedite clean-up. Notably, CERCLA is not designed to protect a particular class of individuals.

Superfund and Brownfield sites under CERCLA have been used to remedy EJ issues. Superfund sites are contaminated sites—such as manufacturing plants, landfills, and mining facilities—that are targeted for clean-up under CERCLA.¹¹³ Brownfields, on the other hand, are properties that are redeveloped after addressing hazardous substances located on the property.¹¹⁴ The purpose of Brownfields is "to empower states, tribes, [and] communities . . . to prevent, assess, safely clean up, and sustainably reuse" the sites.¹¹⁵ Overall, CERCLA is designed to prevent polluters from escaping liability.

CERCLA becomes a critical intersectional EJ tool in situations where LGBTQ individuals live in polluted or contaminated areas. For LGBTQ advocates working on EJ projects, CERCLA works the same regardless of the impacted area's demographics. CERCLA claims would focus on the site itself and the level of hazardous contamination. CERCLA has a citizen suit provision that gives individuals—which includes LGBTQ and EJ advocates—the ability to bring a claim against government officials for failing to perform under CERCLA. Despite not providing specialized remedies, CERCLA's citizen suit provision remains a critical tool for LGBTQ advocates.

E. The Civil Rights Act of 1964

The Civil Rights Act of 1964 is divided into several titles, each addressing different topics. The most pertinent title of the Civil Rights Act for LGBTQ and EJ intersectionality is Title VII. Title VII of the Civil Rights Act protects individuals against employment discrimination. ¹¹⁸ Title VII states that:

[I]t shall be an unlawful employment practice for an employer to ... discriminate against any individual with respect to [their] compensation, terms, conditions, or privileges of employment,

^{112.} *Id*.

^{113.} What is Superfund?, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/superfund/what-superfund (last visited Dec. 5, 2021).

^{114.} Overview of EPA's Brownfields Program, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/brownfields/overview-epas-brownfields-program (last visited Dec. 5, 2021).

^{115.} *Id*.

^{116.} See generally 42 U.S.C. § 9601 (explaining that CERCLA standards focus of the site itself and the level of contamination).

^{117.} See 61C AM JUR 2D POLLUTION CONTROL § 1344 (stating that, under CERCLA, persons may commence civil action on their own behalf or the behalf of others).

^{118.} Civil Rights Act of 1964, 42 U.S.C. § 2000e (1964).

because of such individual's race, color, religion, sex, or national origin.¹¹⁹

The Supreme Court interpreted the word *sex* in Title VII in *Bostock v. Clayton County*. The Court held that "[s]ex plays a necessary and undisguisable role" in discriminating against homosexual or transgender individuals. ¹²⁰ Using a textualist approach, the Court focused on the language "because of such individual's . . . sex." ¹²¹ The Court interpreted "because of" to imply a *but for* test for causation. ¹²² Further, the Court interpreted *sex* to mean the "biological distinctions between male and female." ¹²³ The "distinction between male and female" definition was based on the common use of *sex* in 1964 when the Civil Rights Act was enacted. ¹²⁴ Altogether, the Court interpreted this segment to mean that "it is impossible to discriminate against a person for being homosexual or transgender without discriminating against that individual based on sex." ¹²⁵

In statutory interpretation, the *in pari materia* canon compels judges to construe terms within the same act or code in a similar light. Therefore, terms used in Title VII would apply similarly to other sections of the Act. Title VII, however, is the only title within the Civil Rights Act to explicitly mention *sex*. Following this canon, the *Bostock* interpretation would be limited to Title VII of the Civil Rights Act. Conversely, LGBTQ advocates may not necessarily invoke the remaining titles for the sake of LGBTQ intersectional issues. ¹²⁷ Importantly, *Bostock* has been interpreted as a persuasive authority in lower circuits on issues ranging from Title IX to the interpretation of the Affordable Care Act. ¹²⁸ Ultimately, the Civil Rights Act contains many vital tools for EJ work. ¹²⁹ Yet, only one such tool is equipped for LGBTQ and EJ intersectionality claims.

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119. Id. § 2000e-2 (emphasis added).
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^{120.} Bostock v. Clayton Cnty., 140 S. Ct. 1731, 1737 (2020).

^{121.} Id. at 1753; 42 U.S.C. § 2000e-2.

^{122.} Bostock, 140 S. Ct. at 1739.

^{123.} *Id*.

^{124.} Id.

^{125.} Id. at 1741.

^{126.} See Linda Jellum, The Legislative Process, Statutory Interpretation, and Administrative Agencies 257 (Carolina Academic Press, 2020) (referencing Rhyne v. K-Mart Corp., 594 S.E.2d 1, 20 (N.C. 1994)).

^{127.} See, e.g., Foster v. Michigan, 573 F. App'x 377 (6th Cir. 2014) (holding that gender discrimination is not covered under Title VI of the Civil Rights Act because Title VI applies to discrimination based on race, color, and national origin).

^{128.} Becca Damante, *One Year Later: The Impact of Bostock v. Clayton County*, CONST. ACCOUNTABILITY CTR., (Jun. 14, 2021), https://www.theusconstitution.org/blog/one-year-later-the-impact-of-bostock-v-clayton-county/.

^{129.} See generally Tony Lopresti, Realizing the Promise of Environmental Civil Rights: The Renewed Effort to Enforce Title VI of the Civil Rights Act of 1964, 65 ADMIN. L. REV. 757, 757 (stating

Title VII has potential to become an intersectional EJ tool. In EJ, the term "environment" is defined as the place "where one lives, works, plays, and goes to school." EJ includes a wide range of issues, including public health and worker safety. Therefore, Title VII can be used in situations where people of color and LGBTQ individuals are discriminated against in the workplace.

A hypothetical situation for a Title VII case could involve a plaintiff who is a transgender person of color. This plaintiff was frequently harassed by their employer, who was motivated by racial prejudice. The employer discovered the plaintiff was transgender while looking through the plaintiff's employment records. The employer, acting on racial and transgender prejudices, then violated the plaintiff's privacy by outing the plaintiff to other employees to remove the plaintiff from the workplace. As a result of the workplace harassment, the plaintiff was forced to quit their job.

Using Title VII, the plaintiff could make multiple claims of action in an employment discrimination case. The plaintiff could claim that there was both gender and racial discrimination. The plaintiff could bring evidence of the employer's racially discriminatory actions prior to and after the employer discovered that the plaintiff was transgender. The plaintiff could then show that the harassment worsened because their transgender identity was exposed when their privacy was violated. Since *Bostock* guarantees employment discrimination protections for gender identity, the plaintiff would have a persuasive argument for sex discrimination. Therefore, the plaintiff could make a persuasive argument for employment discrimination against their former employer.

F. The Fair Housing Act of 1968

The Fair Housing Act (FHA) is a comprehensive housing statute that was included in Title VIII of the Civil Rights Act of 1968.¹³³ The purpose of the statute is to provide individuals with fair housing across the United States.¹³⁴

[&]quot;[n]o legal tool has inspired such high hopes—and such deep disappointment—as Title VI of the Civil Rights Act of 1964").

^{130.} Robert R. Kuehn, A Taxonomy of Environmental Justice, 20 ENV'T. L. REP., 10681, 10681 (2000).

^{131.} Id.

^{132.} See e.g., NAT'L CTR. FOR TRANSGENDER EQUAL., Employment Issues, https://transequality.org/issues/employment (last visited Dec. 5, 2021) (explaining that three out of four transgender people have experienced some form of workplace harassment, and transgender people of color experience workplace harassment at higher rates).

^{133.} Fair Housing Act, 42 U.S.C. § 3601.

^{134.} Id.

Section 804 of the FHA prohibits discrimination against renters based on "race, color, religion, sex, familial status, or national origin." ¹³⁵ These prohibitions cover discrimination in offers, rejections, terms and conditions, advertisements, representation, etc. ¹³⁶ However, the FHA contains several exemptions for § 804. For example, private individual owners are exempt from § 804 if they own less than three single-family homes. ¹³⁷ Additionally, owners may discriminate against renters if they reside in a dwelling with less than four separate units or rooms, if the owner resides in the building. ¹³⁸

Similarly, in § 805, the FHA prohibits discrimination in real estate transactions due to "race, color, religion, sex, familial status, or national origin." While § 805 is not subject to specific exemptions, it is limited by § 807's overarching exemptions. Section 807 provides an exemption for religious institutions and religiously-affiliated non-profit organizations. This exemption permits religiously-affiliated owners from discriminating in the rental, sale, or occupation of their buildings and residences.

The FHA is a crucial tool for LGBTQ and EJ advocates since the FHA addresses discrimination against race, color, sex, familial status, and national origin. This tool offers protection in a number of situations. For example, the FHA would protect LGBTQ minority renters as well as LGBTQ minority couples seeking to buy a home. In the event that the property or dwelling owners were discriminatory, the renters and/or buyers may file a complaint to the Department of Housing and Urban Development (HUD). 143

HUD accounts for sexual orientation and gender identity as part of sex discrimination under the FHA. This directive was given to HUD's Office of Fair Housing and Equal Opportunity by E.O. 13988, which was signed by President Biden in February 2021.¹⁴⁴ This E.O. expanded the application of *Bostock's* definition for sex discrimination to other areas under the federal government's purview.¹⁴⁵ The purpose of E.O. 13988 was to address the issue where "same-sex couples and transgender persons in communities across the country experience demonstrably less favorable treatment than

^{135.} Id. § 3604(a).

^{136.} Id. § 3604(a)-(f).

^{137.} See Id. § 3604(2)(b)(1) (explaining the FHA exemptions and limitations, such as prohibiting such owners from using real estate brokers or discriminatory advertising).

^{138.} Id. § 3604(2)(b)(2).

^{139.} Id. § 3605(a).

^{140.} See generally id. § 3607(a) (listing exemptions that apply to the FHA in its entirety).

^{141.} Id.

^{142.} *Id*.

^{143.} See id. § 3609 (explaining the administration and enforcement of the FHA); see generally id. § 3608 (codifying the administration authority and responsibility of the HUD).

^{144.} Exec. Order No. 13988, 86 Fed. Reg. 7023 (Feb. 11, 2021).

^{145.} See id.; see generally Bostock v. Clayton Cnty., 140 S. Ct. 1731 (2020) (defining sex discrimination as including both gender identity as well as sexual orientation).

their straight and cisgender counterparts when seeking rental housing."¹⁴⁶ Additionally, the E.O. sought to ensure the mission of the FHA by expanding HUD's duties to LGBTQ individuals.¹⁴⁷

E.O. 13988 brings significant federal protections to the LGBTQ community, especially LGBTQ-members of EJ communities. However, the E.O. bears the same Achilles Heel as other executive orders. Namely that it's effects can be diluted or erased by a future sitting President. The LGBTQ community itself has felt the effects when an executive order is overturned by the next sitting President. For instance, the transgender community felt the political whiplash of executive orders regarding transgender military service. Transgender soldiers were permitted to serve openly in the armed services during the Obama Administration. That policy was replaced during the Trump Administration with a comprehensive ban on transgender service members. The tide changed again once President Biden took office. The tide changed an executive order which granted transgender troops the ability to serve in the armed forces once again.

E.O. 13988 remains in effect. However, it is unknown at this moment whether LGBTQ housing discrimination rights will ebb and flow like transgender military service rights did—shifting each time the keys to the White House are exchanged between a Republican and a Democratic tenant.

Under the FHA and E.O. 13988, there are legal avenues for both race and sex discrimination protections. These protections are particularly relevant in situations where an individual may be denied housing in areas free from environmental burdens. Which would lead these individuals to acquire housing located near environmental burdens—like in EJ communities. Intersectional identities may be directly in the crosshairs of discriminatory housing practices. For example, a combination of their race and gender/sexual identity may result in the individual finding housing closest to environmental hazards like factories or highways. While making a complaint to HUD, the individual can make claims of both racial and sex discrimination.

^{146.} Exec. Order No. 13988, 86 Fed. Reg. 7023 (Jan. 20, 2021).

^{147.} Id.

^{148.} What is an Executive Order, AM. BAR ASSOC., https://www.americanbar.org/groups/public_education/publications/teaching-legal-docs/what-is-an-executive-order-/ (last visited on Jan. 23, 2022).

^{149.} Hallie Jackson & Courtney Kube, *Trump's Controversial Transgender Military Policy Goes into Effect*, NBC NEWS https://www.nbcnews.com/feature/nbc-out/trump-s-controversial-transgender-military-policy-goes-effect-n993826. (Apr. 12, 2019).

^{150.} Id.

^{151.} Biden Overturns Trump Transgender Military Ban, BBC NEWS, https://www.bbc.com/news/world-us-canada-55799913 (Jan 25, 2021).

^{152.} Id.

With those claims, the individual has several possible avenues while seeking a remedy, since a sex discrimination complaint may succeed where a race discrimination complaint may not. Such a situation could arise if a housing complex primarily rents to Black and Latinx individuals but denies renting the property to an LGBTQ couple. The owner, for example, may reject the LGBTQ couple's application and/or conduct a poor showing of the apartment facilities. The couple's only alternative may be to rent a dwelling closer to an environmental burden, like a factory. The owner may be able to show that they have rented spaces to minority individuals and families in the past. Thus, the owner would argue there was no discrimination. However, the couple can argue that there is still sex discrimination because no LGBTQ individuals or couples could rent the dwelling located further from the factory.

III. POLICY ARGUMENT

Other disciplines have begun exploring the intersectional dynamics within the LGBTQ community. Medical studies have found that overlapping minority stress places LGBTQ people of color at higher risk for disease and illness. ¹⁵⁴ Sociology research has collected data exploring demographic trends and policy coverage. ¹⁵⁵ These areas of research and scholarly discussion are still developing, and the legal field has yet to catch up.

Thankfully, there are opportunities for a legal approach addressing EJ issues with the help of LGBTQ advocacy. The definition of environmental justice, as defined by the EPA, appears to invite intersectional approaches. The EPA defines EJ as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental law, regulations, and policies." ¹⁵⁶ The words "all people" could serve as an invitation for other marginalized groups to support the EJ Movement.

The language "all people" in the EPA's definition has a complicated history. The words were originally intended to water down the EPA's EJ mandate. The Bush Administration was criticized by EJ advocates for

^{153.} See, e.g., Zack Ford, Housing Discrimination Against Transgender People is Even Worse than We Thought, https://archive.thinkprogress.org/trans-housing-discrimination-study-889129c40c1b/ (Apr. 3, 2017) (explaining that transgender individuals were "1) more likely to be quoted a higher rental price; 2) less likely to be offered a financial incentive to rent the apartment; 3) shown fewer areas than the control (i.e. such as storage area, laundry facilities, etc.); and 4) less likely to be asked their name upon meeting the housing provider face to face.").

^{154.} Blosnich et al., *supra*, note 75; *see* Blosnich et al., *supra* note 105 (explaining "[t]he minority stress model posits that negative experiences (e.g., stigma) projected onto minority groups negatively influences their health by causing elevated distress").

^{155.} Cheryl A. Parks et al., supra note 12; Choi et al., supra note 13.

^{156.} Villa et al., supra note 23 at 18.

attempting to remove race from environmental considerations.¹⁵⁷ The Obama Administration recommitted to the goals of E.O. 12898 by staffing the EPA with administrators like Lisa P. Jackson. ¹⁵⁸ Further, the EPA developed several plans, including Plan EJ 2014 and Plan EJ 2020. ¹⁵⁹

With the Biden Administration's recommitment to EJ, ¹⁶⁰ the words "all people" can be used as a positive force in advancing the EJ Movement. One way "all people" can be used in a positive manner is to increase intersectional approaches. By encouraging intersectionality in EJ, all members of disproportionately impacted communities can receive the benefits, regardless of their physical or mental abilities, religion, sexuality, or gender.

The goal of advocating for LGBTQ intersectionality in EJ is not to divert resources from communities of color and/or low-income communities disproportionately impacted by environmental harms. Instead, the goal is to gain support from LGBTQ advocates and grassroots organizations. Unifying marginalized groups reflects their common battles and consolidates their resources towards fighting a seemingly indominable social evil. When different groups combine their strengths, the societal evil of environmental injustice will crumble.

IV. POTENTIAL SOLUTIONS

The current framework of environmental and civil rights laws provides some avenues for LGBTQ advocates to create intersectional solutions to EJ issues. Yet, more can be done to broaden the options available to the EJ Movement and its allies.

First and foremost, more research is needed on intersectional demographics. ¹⁶¹ Research is required under E.O. 12898's mandate "that agencies gather health data to support actions to remedy unequal pollution impact." ¹⁶² To fulfill these research needs, more studies should be conducted on the LGBTQ community, especially for its minority members. One

^{157.} Salcido, supra note 101, at 120-21.

^{158.} *Id.* at 123 (explaining that "Administrator Jackson . . . was 'committed to making environmental justice an essential part of our decision making'").

^{159.} Id. at 123, 125.

^{160.} See, e.g., What They are Saying: Biden Administration Lays Out Path to Reach Justice 40 Goal, Earns Praise from Administrative Officials, Environmental Justice Leaders, Advocates, and Congressional Leaders, WHITE HOUSE (Jul. 21, 2021) https://www.whitehouse.gov/ceq/news-updates/2021/07/21/what-they-are-saying-biden-administration-lays-out-path-to-reach-justice40-goal-earns-praise-from-administration-officials-environmental-justice-leaders-advocates-and-congressional-leaders/ (demonstrating how Biden Administration incorporates environmental justice into climate policy plan).

^{161.} See, e.g., Blosnich, supra note 75 (concluding that "[b]etter data could illuminate and make central the role of stress in asthma etiology, which could be relevant for other minority groups disproportionately affected by asthma, such as racial/ethnic minority communities").

^{162.} Salcido, supra note 101, at 127.

possible solution would be to have more inclusive questions on the U.S. census. Data from the U.S. census is used for EJ mapping tools like the EPA's EJScreen. EJScreen is a tool developed by the EPA for citizen scientists and other concerned parties to identify who is impacted by environmental hazards. EJScreen currently has built in tools such as "female population," "male population," and "married." These demographics could be updated to provide better mapping of transgender and gender-non-conforming identities. Further, demographic indicators could be mapped for same-sex couples versus opposite-sex couples. Other demographics could map sexual minority data such as indicators for lesbians, gays, bisexuals, and other sexual minority identities. With these tools integrated into EJScreen, advocates and community members could access more resources and data to aid in their missions.

Second, the LGBTQ community requires greater support from federal law and administration. Supreme Court cases like *Bostock* and *Price Waterhouse* have made federal laws like the Civil Rights Act of 1964 more inclusive for the LGBTQ community. ¹⁶⁵ Similarly, executive orders like E.O. 13988 have expanded LGBTQ rights within the FHA. ¹⁶⁶ However, on the federal level, LGBTQ rights are few and far between. Legislation, like H.R. 5—the Equality Act—would benefit the LGBTQ community, especially for members living in EJ communities. ¹⁶⁷ However, bills like H.R. 5 could go further. A comprehensive LGBTQ civil rights bill could provide much needed legal protections to the overarching LGBTQ community and its most disproportionately impacted members. A civil rights bill, like H.R. 5, may sound ambitious. With public opinion for the LGBTQ community at historic highs, a comprehensive LGBTQ civil rights bill may be possible. ¹⁶⁸

Overall, the federal government has several possible contributions towards intersectional EJ. Federal agencies like the EPA can advance greater research into environmental health risks on the LGBTO community—

^{163.} EJSCREEN, U.S. ENV'T. PROT. AGENCY (Version 2020) https://www.epa.gov/ejscreen (last visited Nov. 6, 2021); cf. COUNCIL ON ENV'T. QUALITY, CLIMATE AND ECONOMIC JUSTICE SCREENING TOOL, https://screeningtool.geoplatform.gov/en/methodology#14.35/42.35414/-83.05608 ((last visited Apr. 8, 2022) (the methodology for CEQ's new EJ screening tool does not include demographic information, such as gender or sexuality, outside of economic status).

^{164.} Id.

^{165.} Price Waterhouse v. Hopkins, 490 U.S. 228, 239 (1989); see generally Bostock v. Clayton Cnty., 140 S. Ct. 1731 (2020) (ruling that employment discrimination based on sex is unconstitutional). 166. Exec. Order No. 13988, 86 Fed. Reg. 7023 (Jan. 20, 2021).

^{167.} Equality Act, H.R. 5, 117th Cong. (2021) (stating that the bill "prohibits discrimination based on sex, sexual orientation, and gender identity in areas including public accommodations and facilities, education, federal funding, employment, housing, credit, and the jury system") (the bill passed the House on Feb. 25, 2021, and the Senate Judiciary Committee held hearings on Mar. 17, 2021) (last updated Dec. 5, 2021).

^{168.} See generally LGBT Rights, GALLUP: NEWS, https://news.gallup.com/poll/1651/gay-lesbian-rights.aspx (last visited Dec. 5, 2021).

especially for LGBTQ people of color and low-income LGBTQ people. This research can contribute towards environmental assessments and EIS reports under NEPA. Additionally, this research can contribute to legislative measures. Further, legislative actions like passing a comprehensive civil rights law for the LGBTQ community would significantly impact this intersectional field of EJ and LGBTQ advocacy.

CONCLUSION

The LGBTQ community and EJ communities share many similarities. In some regards, these two communities are one and the same. There is a large percentage of people of color and/or low-income people within the LGBTQ community. Those LGBTQ individuals are among the same "disproportionately impacted populations" that the EJ Movement seeks to protect from environmental hazards. LGBTQ advocates have opportunities to mount an intersectional legal strategy to address these environmental hazards.

The current EJ legal toolkit is comprised of statutes such as: the CAA, CWA, NEPA, CERCLA, Title VII, FHA, as well as their respective common law rulings. Section 102 of NEPA and Title VII of the Civil Rights Act have potential for LGBTQ EJ legal claims. Other statutes, like the CAA and NEPA, grant LGBTQ advocates the ability to engage in public participation for governmental actions. Overall, this legal framework gives LGBTQ advocates an opportunity to aid the EJ Movement.

These laws give the LGBTQ community a way to assist people of color and/or low-income members who are also members of an EJ community. Uniting the forces of these two movements would empower a group who may be marginalized within either community by itself. The political needs of an EJ community or LGBTQ community at large have sometimes come at the expense of LGBTQ people of color and/or low-income individuals. An intersectional coalition would combine the resources and networks of both communities.

Empowering LGBTQ people of color and/or low-income people embodies the spirit of the Philly Pride Flag. The Philly Pride Flag symbolizes that each person should have pride in themselves. Pride in oneself also extends to where the pride flag is flown. Regardless of where communities raise the pride flag, each deserves to have safe water, clean air, and a livable environment. A livable environment should be a universal provision, and not guaranteed dependent on an individual's race, sexuality, gender, or incomelevel.

By uniting the forces of two separate movements, these communities can receive greater support towards combating environmental hazards. This

mission would emphasize that all members of the LGBTQ community are valued. The goal of this intersectional approach is to give EJ communities the support to improve the health and environmental quality for all people—regardless of their gender or sexual orientation.