Prosecuting Individuals for Crimes Under the U.S. Clean Water Act

Dr. Joshua Ozymy & Dr. Melissa Jarrell Ozymy

When individuals commit water pollution crimes that involve significant harm or culpable conduct, they may be criminally prosecuted to punish offenders and deter future offenses. Despite the importance of criminal prosecution for enforcing the U.S. Clean Water Act, little is known about the types of water pollution crimes committed and sentencing trends. We undertake content analysis of 2,728 criminal prosecutions resulting from U.S. EPA criminal investigations from 1983-2021 and select all prosecutions of individuals for Clean Water Act crimes for analysis. Our findings show that 359 prosecutions were adjudicated, which resulted in 909 years of probation, 241 years of incarceration, and over $15 million in monetary penalties. Thematic analysis shows that seventy-four percent of prosecutions focused on illegal or unpermitted discharges of pollution, seventeen percent false reporting, eight percent illegal alteration or obstruction of waterways or wetlands, and one percent tampering with a monitoring device or method. We conclude with suggestions to increase budgetary support to enhance the efforts of federal environmental law enforcement agencies to police and prosecute water pollution crimes.

INTRODUCTION

An investigation by the U.S. Food and Drug Administration (FDA) found that a significant number of dairy products were contaminated with the carcinogenic pesticide heptachlor.[1] Investigators from FDA and the U.S. Environmental Protection Agency (EPA) traced the dairy contamination back to fuel producers that manufactured animal feed mash contaminated with aflatoxin and seed treated with pesticides, which were sold to livestock producers.[2] Jack E. White, principal officer of White Flame Fuels, and other co-defendants were charged in a 52-count indictment for conspiracy, wire fraud, racketeering, interstate sale of adulterated foods, and illegal discharge of pollutants under the U.S. Clean Water Act (CWA).[3] White was convicted of making false statements, fraud, and violations of the CWA, and was sentenced to 36 months of incarceration and a $7,500 fine.[4]

There is an ongoing debate on whether criminal enforcement is an effective method of deterring environmental crimes, such as those committed by Jack E. White.[5] Studies indicate that there are too few criminal investigators and prosecutors to police and sanction environmental criminal offenders.[6] Research also shows that large penalties may deter crime, but large penalties are rarely implemented, and thus may have little impact.[7] However, prosecutors focus on and are motivated to pursue serious crimes, and studies link crime severity to penalties in environmental crime prosecutions.[8]

The broader enforcement regime is mainly focused on compliance, rather than deterrence.[9] The goal of most enforcement actions is to ensure the regulated

---

1 Jack E. White, No. 86-20015 (W.D. Ark. Nov. 21, 1986).

2 *Id.*

3 *Id.; see generally* U.S. Clean Water Act, 33 U.S.C. §1251.

4 Jack E. White, *supra* note 1.

5 *See* Gary Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169, 183 (1968) (discussing the debate on the effectiveness of criminal enforcement in deterring environmental crimes through economic equation); *See also* Richard A. Posner, *An Economic Theory of the Criminal Law*, 85 COLUM. L. REV. 1193, 1193-1195 (1985).

6 *See* Michael J. Lynch, *The Sentencing/Punishment of Federal Environmental/Green Criminal Offenders, 2000-2013*, 38 DEVIANT BEHAV. 991, 992-93 (2017).

7 *See* Michael J. Lynch, Kimberly L. Barrett, Paul B. Stretesky & Michael Long, *The Weak Probability of Punishment for Environmental Offenses and Deterrence of Environmental Offenders: A Discussion Based on USEPA Criminal Cases, 1983-2013*, 37 DEVIANT BEHAV. 1096-99 (2016).

8 *See* David M. Uhlmann, *Prosecutorial Discretion and Environmental Crime*, 38 HARV. ENV'T L. REV. 159, 159 (2014); *See also* 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. OF POL'Y RSCH. 71, 71-3 (2016); David M. Uhlmann, *Prosecutorial Discretion and Environmental Crime Redux: Changing Trends, Aggravating Factors, and Individual Outcome Data for 2005-2014*, 8 MICH. J. ENV'T & ADMIN. L. 297, 331-335 (2019).

9 Joshua Ozymy & Melissa L. Jarrell, *Sub-Optimal Deterrence and Criminal Sanctioning under the U.S. Clean Water Act,* 24 UNIV. DENV. WATER L. REV. 159, 183 (2021).

community regains compliance, as opposed to punishment and deterrence.[10] These dual philosophies and enforcement regimes complement a broader approach to enforcing environmental laws.[11] It remains an open empirical question if criminal prosecution deters environmental crime, and little is known on whether water pollution crimes committed by individual offenders are prosecuted under the CWA.[12]

We analyzed 2,738 environmental crime prosecutions stemming from EPA criminal investigations from 1983 to 2021. Then, we selected CWA prosecutions and prosecutions of individual offenders. Our approach demonstrates how individuals were charged and sentenced for water pollution crimes, from the criminal enforcement regime institutionalized in the 1980s until present time. We begin with a brief overview of the CWA, followed by a discussion of criminal enforcement, our data and method, and then our findings.

I. OVERVIEW OF THE CWA

EPA is primarily authorized to regulate water pollution via the CWA.[13] The

---

[10] *Id* at 163.

[11] *See* Memorandum from Earl E. Devaney, Off. of Crim. Enf't Dir., U.S. Env't Prot. Agency, to All EPA Employees Working in or in Support of the Criminal Enforcement Program (Jan. 12, 1994). https://www.epa.gov/sites/production/files/documents/ exercise.pdf (demonstrating that criminal enforcement was always targeted in its approach, both for practical and philosophical, as well as political reasons). For examples of research on state and local level criminal enforcement, which is limited, see Kathleen F. Brickey, *Charging Practices in Hazardous Waste Crime Prosecutions*, 62 OHIO ST. L. J. 1077 (2001); Matthew S. Crow, Tara O'Connor Shelley & Paul B. Stretesky, *Camouflage-Collar Crime: An Examination of Wildlife Crime and Characteristics of Offenders in Florida*, 34 DEVIANT BEHAV. 635 (2013); Joshua C. Cochran, Michael J. Lynch, Elisa L. Toman & Ryan T. Shields, *Court Sentencing Patterns for Environmental Crimes: Is there a "Green" Gap in Punishment?* 34 J. QUANTITATIVE CRIMINOLOGY 37 (2018); Michael J. Lynch, *County-Level Environmental Crime Enforcement: A Case Study of Environmental/Green Crimes in Fulton County, Georgia, 1998-2014*, 40 DEVIANT BEHAV. 1090 (2019).

[12] For a broad treatment of deterrence and criminal enforcement, see Carole M. Billiet & Sandra Rousseau, *How Real is the Threat of Imprisonment for Environmental Crime?* 37 EUR. J. L. & ECON. 183 (2014); Raymond Paternoster, *How Much Do We Really Know About Criminal Deterrence?* 100 J. CRIM. L. & CRIMINOLOGY 765 (2010). For recent work analyzing environmental crime prosecutions, see Joshua Ozymy & Melissa L. Jarrell, *Illegal Discharge: Exploring the History of the Criminal Enforcement of the U.S. Clean Water Act*, 32 FORDHAM ENV'T L. REV. 195 (2021).

[13] The Federal Water Pollution Control Act of 1948 provided technical guidance to state and local governments on water pollution issues and was the first federal effort to address water pollution. For the statutory history of major amendments to the CWA, see Federal Water Pollution Control Act, Pub. L. No. 80-845, 62 Stat. 1155 (1948); Federal Water Pollution Control Act, Pub. L. No. 84-660, 70 Stat. 498 (1956); Federal Water Pollution Control Act Amendments, Pub. L. No. 87-88, 75 Stat. 203 (1961); Water Quality Act, Pub. L. No. 89-234, 79 Stat. 903 (1965); Clean Water Restoration Act, Pub. L. No. 89-753, 80 Stat. 1246 (1966); Water Quality Improvement Act, Pub. L. No. 91-224, 84 Stat. 91 (1970); Water Quality Improvement Act Amendments, Pub. L. No. 92-500, 86 Stat. 816 (1972); Clean Water Act, Pub. L. No. 95-217, 91 Stat. 1566 (1977); Municipal Wastewater Treatment Construction Grants Amendments, Pub. L. No. 97-117, 95 Stat. 1623 (1981); Water Quality Act, Pub. L. No. 100-4 101 Stat. 7 (1987); Water Resources Reform and Development Act, Pub. L. No. 113-121, 128 Stat. 1193 (2014).

major statutory provisions of the modern CWA are organized into six titles.[14] The Act allows EPA to regulate discharges into the navigable waters of the United States. EPA water regulations have the strongest effect when water pollution originates from a point source, such as wastewater treatment plants, chemical plants, oil refineries, and concentrated animal feeding operations (CAFOs).[15] Discharges from point sources are permitted through the National Pollutant Discharge Elimination System (NPDES).[16] The CWA does not authorize EPA to

---

[14] *See Summary of the Clean Water Act*, U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/laws-regulations/summary-clean-water-act (last visited Nov. 4, 2023) (Title I establishes pollution control programs; Title II outlines a program for funding publicly owned treatment works (POTWs); Title III discusses discharge permits, enforcement standards, and nonpoint source pollution; Title IV creates the NPDES, Section 404 permits, and the Biosolids Management Program; Title V outlines citizen lawsuit protections and whistleblower protections; Title VI outlines the Clean Water State Revolving Funds (CWSRF) program. Section 404 permits regulate the dredging or filling of wetlands or other activities that may obstruct or alter the navigable waters of the United States. A Section 404 Permit is issued by the Army Corp of Engineers with guidance from EPA and is required for undertaking such activities.). *See also Permit Program under CWA Section 404*, U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/cwa-404/permit-program-under-cwa-section -404 (las visited Nov. 4, 2023). *Basic Information about Biosolids*, U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/biosolids/basic-information-about-biosolids (last visited Nov. 4, 2023) (biosolids, created when organic waste is separated from liquid waste, processed, and recycled into fertilizer, are a common method of disposal with attached criticisms); William Goldfarb, Uta Krogmann & Christopher Hopkins, *Unsafe Sewage Sludge or Beneficial Biosolids?: Liability, Planning, and Management Issues Regarding the Land Application of Sewage Treatment Residuals*, 26 B.C. ENV'T AFF. L. REV. 687 (1999).

[15] *See Summary of the Clean Water Act*, *supra* note 14. *See also, Clean Water Act Section 502: General Definitions*, U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/cwa-404/clean-water-act-section-502-general-definitions (last visited Nov. 4, 2023) ("The term 'point source' means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged."); *See also National Pollution Discharge Elimination System (NPDES)*, U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/npdes (last visited Nov. 4, 2023); *Pretreatment Standards and Requirements-General and Specific Prohibitions*, U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/npdes/pretreatment-standards-and-requirements-general-and-specific-prohibitions (last visited Nov. 4, 2023).

[16] *National Pollutant Discharge Elimination System (NPDES)*, U.S. ENV'T PROT. AGENCY (2023), https://www.epa.gov/npdes (last visited Nov. 4, 2023). (The legal definition of "nonpoint source" includes any source of water pollution that does not meet the criteria for point source classification as per section 502(14) of the CWA. Controlling nonpoint sources is difficult, and the definition of "navigable waters" is centrally important to EPA's authority under the CWA.); *See* Katherine Klaus, *The Conduit Theory: Protecting Navigable Waters from Discharges to Tributary Groundwater*, 43 VT. L. REV. 871 (2019); *See also* Justin Rheingold, *Digging Deep: The Clean Water Act's Applicability to Groundwater Discharges*, 60 B.C. L. REV. 311 (2019); Joseph Manning, *Running Clean: Discharges to Groundwater Hydrologically Connected to Navigable Waters as a Means for Asserted Clean Water Act Jurisdiction*, 61 B.C. L. REV. 1 (2020); *Economic Incentives*, U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/ environmental-economics/economic-incentives (last visited Nov. 4, 2023); *Basic Information about Nonpoint Source (NPS) Pollution*, U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/nps/basic-information-about-nonpoint-source-nps-pollution (last visited Nov. 4, 2023); *319 Grant Program for States and Territories*, U.S. ENV'T PROT. AGENCY (2020), https://www.epa.gov/nps/319-grant-program-states-and-territories (last visited Nov. 4, 2023).

regulate drinking water, which is regulated under the Safe Drinking Water Act (SDWA).[17]

II. COMPLIANCE MONITORING AND ENFORCEMENT OF THE CWA

Compliance monitoring for the CWA centers on wastewater management and NPDES permits, stormwater and overflow management, the National Pretreatment Program, CAFOs, biosolids, Section 404 permits, oil spills, and spill prevention.[18] Managing noncompliance for water pollution typically centers on returning the community to compliance by applying a variety of administrative or civil enforcement mechanisms.[19] Administrative remedies include notices of violation, corrective orders, and fines, but civil judicial remedies are implemented if administrative tools fail.[20] Civil remedies can be broad and vary in application and design. Civil remedies include temporary or permanent injunctive relief, environmental monitoring or mitigation plans, and administrative orders of consent requiring a responsible party to pay for damages, undertake corrective action, or agree to a negotiated supplemental environmental project (SEP), and defendants may be required to provide remedies exceeding the requirements of compliance.[21] If EPA pursues a civil lawsuit, a defendant may be found liable and

---

[17] Safe Drinking Water Act, Pub. L. No. 93-523, 88 Stat. 1660 (1974) (The Safe Drinking Water Act authorizes EPA to designate thresholds for microorganisms, organic and inorganic chemicals, disinfectants, and other relevant substances for 170,000 public water systems in the United States.). *See* Brie D. Sherwin, *Pride and Prejudice and Administrative Zombies: How Economic Woes, Outdated Environmental Regulations, and State Exceptionalism Failed Flint, Michigan*, 88 UNIV. COLO. L. REV. 653 (2017) (demonstrating that managing water pollution versus providing safe drinking water under two Acts can be difficult); *see also Understanding the Safe Water Drinking Act,* U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/sites/production/files/2015-04/documents/epa816f04030.pdf (last visited Nov. 4, 2023).

[18] *Clean Water Act (CWA) Compliance Monitoring*, U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/compliance/clean-water-act-cwa-compliance-monitoring (last visited Nov. 4, 2023).

[19] *See Basic Information on Enforcement*, U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/enforcement/basic-information-enforcement (last visited Nov. 4, 2023) (EPA can also provide incentives for companies to create innovative ways to comply with the law, instead of applying broader regulations or enforcement strategies. Inducements became a popular compromise during the Clinton Administration and the watchword was "flexible" including performance tracks for good behavior, streamlined permitting processes, and other inducements. EPA's "Aiming for Excellence" initiative is one good example.); *See also Aiming for Excellence*, U.S. ENV'T PROT. AGENCY (1999), https://archive.epa.gov/performancetrack/web/pdf/report99.pdf (last visited Nov. 4, 2023).

[20] *Using All Appropriate Injunctive Relief Tools in Civil Enforcement Settlements*, U.S. ENV'T PROT. AGENCY (2021), https://www.epa.gov/enforcement/using-all-appropriate-injunctive-relief-tools-civil-enforcement-settlements (last visited Nov. 4, 2023).

[21] *See Guidance on Use of Penalty Policies in Administrative Litigation*, U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/enforcement/guidance-use-penalty-policies-administrative-litigation (last visited Nov. 4, 2023); *Securing Mitigation as Injunctive Relief in Certain Civil Enforcement Settlements*, U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/enforcement/securing-mitigation-injunctive-relief-certain-civil-enforcement-settlements-2nd-edition

guilty in court, but if they seek a negotiated settlement and enter into a consent decree, they can regain compliance without admitting guilt.[22]

While there were efforts in the mid-twentieth century to criminalize environmental crimes, such as the Rivers and Harbors Act and Lacey Acts, these only included misdemeanor penalties.[23] The forerunner of the modern Environment and Natural Resources Division (ENRD) of the Department of Justice (DOJ), was the Public Lands Division in 1909.[24] Within ENRD came the Environmental Crimes Section (DOJ-ECS) in 1982, which centralized resources and expertise for the prosecution of environmental crimes, becoming its own unit in 1987.[25] By 1982, EPA hired its first full-time criminal investigators, also known as Special Agents, who were given full law enforcement authority by Congress in 1988.[26] In the 1980s, there was a significant shift in criminalizing serious environmental offenses for hazardous waste, water, and air pollution crimes.[27] Today, EPA's Criminal Investigation Division (EPA-CID) leads environmental crime policing and receives additional resources from the Pollution Prosecution Act of 1990, which was set to allocate at least 200 criminal investigators to be hired in subsequent years.[28]

The policing and prosecution of environmental crimes is a collaborative endeavor.[29] EPA criminal investigators work with federal, state, and local law enforcement agencies and prosecutors to build cases from various sources, including civil inspections and reports, regulatory filings, former employees, and whistleblowers.[30] Taskforces often move the criminal process forward from investigation to prosecution.[31] Criminal investigators work with attorneys from

---

(last visited Nov. 4, 2023); *Supplemental Environmental Projects (SEPs)*, U.S. ENV'T PROT. AGENCY (2022), https://www.epa.gov/enforcement/supplemental-environmental-projects-seps (last visited Nov. 4, 2023).

22 *See Using All Appropriate Injunctive Relief Tools in Civil Enforcement Settlements*, U.S. ENV'T PROT. AGENCY (2021), https://www.epa.gov/enforcement/using-all-appropriate-injunctive-relief-tools-civil-enforcement-settlements (last visited Nov. 4, 2023).

23 *See* Rivers and Harbors Act, 33 U.S.C. § 401-427 (1899) (banning dredging, filling, obstructing, or altering the navigable waters of the United States without a permit); *See also* The Lacey Act, 16 U.S.C § 3371-3378 (1900) (banning the unpermitted, interstate trade in wildlife).

24 DEPARTMENT OF JUSTICE ENVIRONMENT AND NATURAL RESOURCES DIVISION, HISTORY, https://www.justice.gov/enrd/history (last visited Dec. 28, 2023).

25 U.S. DEPARTMENT OF JUSTICE ENVIRONMENTAL CRIMES SECTION, HISTORICAL DEVELOPMENT OF ENVIRONMENTAL CRIMINAL LAW, https://www.justice.gov/enrd/about-division/historical-development-environmental-criminal-law (last visited Dec. 28, 2023).

26 Memorandum from EPA on Management Review of the Office of Criminal Enforcement, Forensics and Training 5-7 (2003), https://www.epa.gov/sites/ production/files/documents/oceft-review03.pdf (last visited Dec. 28, 2023).

27 *Supra* note 25.

28 The Pollution Prosecution Act of 1990, Pub. L. No. 101-593, § 4321, 104 Stat 2954 (1990)

29 Joel A. Mintz, *Some Thoughts on the Interdisciplinary Aspects of Environmental Enforcement,* 36 ENV'T L. REP. 10495, 10495 (2006).

30 *Id.* at 10496.

31 *Id.* at 10497.

DOJ-ECS or the United States Attorney's Office to file criminal information and convene grand juries.[32] Statutory penalties for criminal violations of the CWA may be applied on a per day basis, can increase for multiple violations, and focus on negligent and knowing violations of law.[33] Such penalties can be applied by the following criminal provisions of the CWA: direct discharges to the waters of the United States; discharge to a publicly owned treatment work (POTW) violating pretreatment standards or causing a POTW to violate its permit; knowing endangerment; failure to report a discharge of oily or hazardous substances; false statements; tampering with a monitoring device or method; violations of the Marine Protection, Research, and Sanctuaries (MPRSA) or Ocean Dumping Act; violations of the Act to Prevent Pollution from Ships (APPS); and violations of the Rivers and Harbors Act.[34]

III. DATA AND METHOD

The exclusive data source for our study is EPA's Summary of Criminal Prosecutions Database.[35] We gathered data from the database by searching by fiscal year (FY). We gathered information on all prosecutions, beginning with the initial data in 1983 through April 30, 2022. A total of 2,728 prosecutions were analyzed and selected for analysis. We selected all prosecutions under the CWA, and then further selected all cases of individuals that were prosecuted for environmental crimes. Our search yielded 359 prosecutions for analysis. When

---

[32] *Id.*

[33] *See generally* EPA, CRIMINAL PROVISIONS OF WATER POLLUTION https://www.epa.gov/enforcement/criminal-provisions-water-pollution#endangerment (last visited Dec. 28, 2023).

[34] *See generally* Marine Protection, Research, and Sanctuaries Act, 16 U.S.C.§ 1431 (1972) (prohibits the unpermitted transportation of materials from the United States for purposes of ocean dumping and prohibits dumping materials that would "unreasonably degrade or endanger human health or the marine environment"); EPA, EPA HISTORY: MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT (OCEAN DUMPING ACT) https://www.epa.gov/history/epa-history-marine-protection-research-and-sanctuaries-act-ocean-dumping-act (last visited Dec. 28, 2023); Act to Prevent Pollution from Ships 33 U.S.C. § 1905 (1973) (implementing provisions of the International Convention for the Prevention of Pollution from Ships (MARPOL), to help minimize ocean dumping, specifically oil, oily water, sewage, garbage, and noxious liquids); EPA, MARPOL ANNEX VI AND THE ACT TO PREVENT POLLUTION FROM SHIPS (APPS) https://www.epa.gov/ enforcement/marpol-annex-vi-and-act-prevent-pollution-ships-apps (last visited Dec. 28, 2023); Rivers and Harbors Appropriation Act, 33 U.S.C. § 403 (1899) (section 10 of the Rivers and Harbors Appropriation Act banned the construction of any bridge, dam, or other such structure or excavating, filling, or dredging without a permit, beginning the process for requiring permits from the Army Corp of Engineers and violations later policed by EPA); EPA, SECTION 10 OF THE RIVERS AND HARBORS APPROPRIATE ACT OF 1899 https://www.epa.gov/cwa-404/section-10-rivers-and-harbors-appropriation-act-1899 (last visited Dec. 28, 2023).

[35] EPA, SUMMARY OF CRIMINAL PROSECUTIONS DATABASE https://www.epa.gov/enforcement/summary-criminal-prosecutions (last visited Dec. 28, 2023) All data for the analysis comes exclusively from the database. Using web or other legal resources cannot be used in exactly the same manner for all cases and therefore cannot be used to have reliable and consistent measures for our variables.

analyzing each case summary, we coded the following variables from each case: an identifier for fiscal year and state of the crime, docket number assigned in the summary, brief narrative summary of the case, whether a company was a named defendant in the case, number of named defendants in the case, and all penalties assessed at sentencing, including total probation and prison time in months and monetary penalties, such as fines, assessments, community service fees, and restitution.

Our analytical method used content analysis to code the data. We used two coders to code data independently of one another. We first undertook a pilot for four weeks to better uncover patterns and to understand the data. Once we were confident in our approach, we sought consensus between coding discrepancies, most of which came from complex sentencing data. Our inter-coder reliability for the dataset was roughly ninety-five percent.[36]

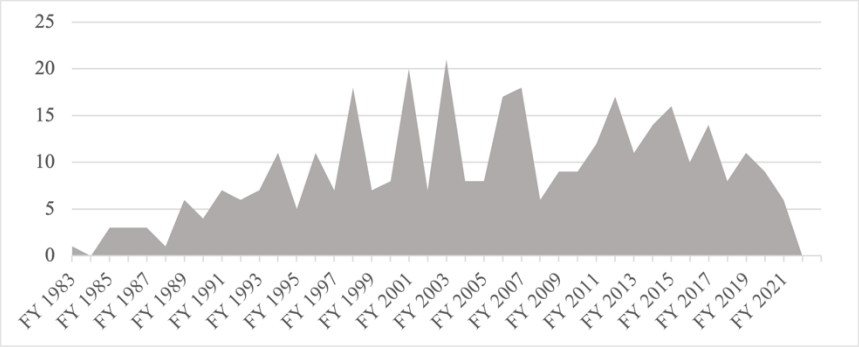
IV. FINDINGS

We organized the following analysis into three sections. The first section provides a broad overview of prosecutions and sentencing patterns for individuals convicted of CWA crimes since 1983. The second section explores large penalty cases for probation, monetary penalties, and incarceration to provide context for the broader patterns uncovered in the first section. In the final section, we analyze dominant themes that emerged from the prosecutions and organize prosecutions into general patterns of historical prosecution trends.

In Figure 1, we explore patterns in individuals prosecuted for CWA crimes by fiscal year, from 1983 to 2021. We found that one prosecution was adjudicated in 1983. By 1989, prosecutions adjudicated reached six, and a total of seventeen were adjudicated throughout the decade. In the 1990s, prosecutions increased, as we found eleven adjudicated in 1994 and a decade high of eighteen in 1998. By the end of the decade some eighty-three prosecutions were adjudicated. In the 2000s, we saw another uptick to twenty prosecutions adjudicated in 2001 and twenty-one adjudicated in 2003, with 122 prosecutions adjudicated from 2000 to 2009. From 2010 to 2021, prosecutions continued to increase with a total of 137 prosecutions during this period. A grand total of 359 prosecutions were adjudicated in our analysis.

[36] For a discussion on how the agreed upon items are divided by non-agreed items, see OLE R. HOLSTI, CONTENT ANALYSIS FOR THE SOCIAL SCIENCES AND HUMANITIES 140 (1969).

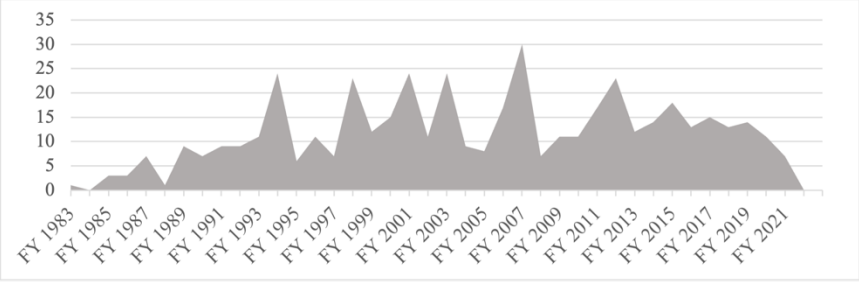
Figure 1. Total Prosecutions of Individuals under the CWA by Fiscal Year



Source: EPA Summary of Criminal Prosecutions Database

In Figure 2, we explored the total number of defendants prosecuted in CWA prosecutions by fiscal year, from 1983 to 2021. A total of twenty-nine defendants were prosecuted in the 1980s and this increased in the following decade significantly, where 119 defendants were prosecuted. From 2000 to 2009, a total of 156 defendants were successfully prosecuted, and from 2010 to 2021 totals increased slightly to 168 defendants prosecuted. A grand total of 467 defendants were prosecuted for water pollution crimes under the CWA in our analysis.

Figure 2. Number of Individual Defendants in CWA Prosecutions by Fiscal Year

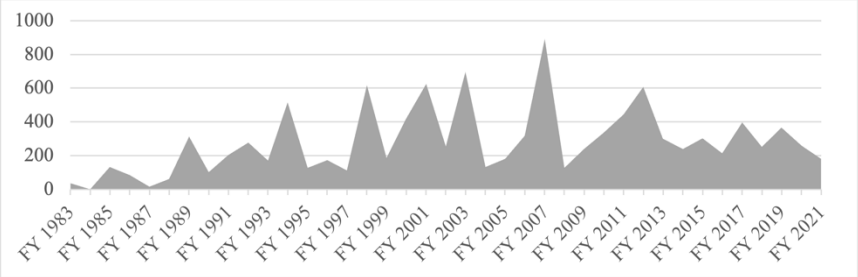


Source: EPA Summary of Criminal Prosecutions Database

In Figure 3, we analyzed total probation by months assessed at sentencing to individual defendants in CWA prosecutions from 1983 to 2021. During the 1980s, a total of 639 months of probation were assessed to defendants. This total increased substantially in the 1990s, where 516 months of probation were assessed in 1994, 618 months in 1998, and a total of 2,485 months were assessed across the decade. Probation assessed at sentencing continued to rise through the early 2000s, where 696 months were assessed in 2003, 891 months were assessed in 2007, and a total of 3,884 months were assessed during the decade. From 2010

to 2021, totals rose slightly, with 3,896 months assessed at sentencing during this period. We cataloged a grand total of 10,904 months of probation assessed to individual defendants at sentencing in our analysis.

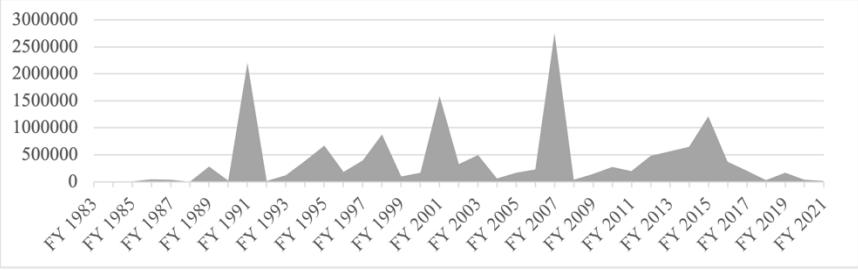
Figure 3. Total Probation Time in Months Assessed to Individuals in CWA Prosecutions by Fiscal Year.



Source: EPA Summary of Criminal Prosecutions Database

In Figure 4, we explored total monetary penalties assessed to individual defendants at sentencing by fiscal year, from 1983 to 2021. Penalties in the 1980s were slow to accrue, with about $372,750 assessed to defendants at sentencing during the decade. Penalties saw a sharp increase in the 1990s, with over $4.9 million in penalties assessed during the decade. From 2000 to 2009, over $5.9 million in monetary penalties were assessed to defendants at sentencing. From 2010 to 2021, $4.2 million in monetary penalties were assessed to defendants at sentencing. We cataloged a grand total of more than $15.5 million assessed to defendants for CWA crimes in our analysis.

Figure 4. Total Monetary Penalties Assessed to Individuals in CWA Prosecutions by Fiscal Year

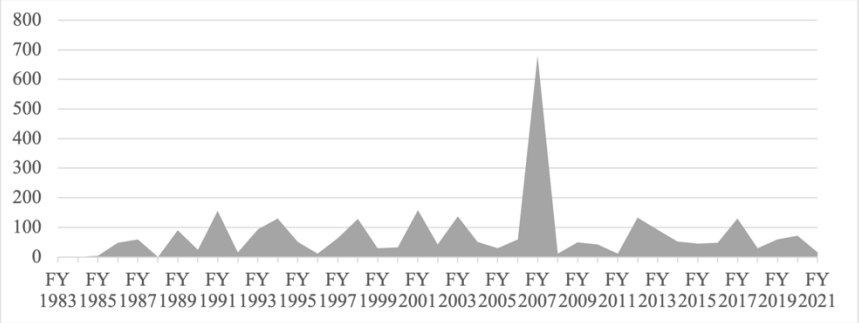


Source: EPA Summary of Criminal Prosecutions Database

In Figure 5, we analyzed total prison time assessed to defendants at sentencing, from 1983 to 2021. In the 1980s, prison time accrued over 202 months during the decade. By the 1990s, totals increased significantly to a little over 703 months by

the end of the decade. Incarceration totals continued in an upwards trajectory from 2000 to 2009, with 1,254 months of prison time assessed to defendants at sentencing during this period. From 2010 to 2021, totals decreased to 734 months of incarceration assessed at sentencing. We cataloged a grand total of 2,893 months of incarceration assessed at sentencing in our analysis.

Figure 5. Total Prison Time in Months Assessed to Individuals in CWA Prosecutions by Fiscal Year



Source: EPA Summary of Criminal Prosecutions Database

We now turn to the second part of the analysis, where we analyze the broader impact of large penalty cases on sentencing outcomes for probation, monetary penalties, and incarceration. In Table 1, we show the four largest probation totals assessed at sentencing. These four cases make up 888 months of probation, or about eight percent of overall probation totals, suggesting that probation totals are not heavily skewed by large penalty outliers in the analysis.

We provide case examples with the prosecution of David Eugene Turner, Glenn Cooper, Jacob Ojeda, and Billy R. Moore. David Eugene Turner and seven co-defendants were prosecuted for operating an illegal labor camp outside Jacksonville, Florida. There, the defendants ran a criminal enterprise where they recruited unhoused persons to work and paid them in alcohol and crack cocaine.[37] The defendants were charged with numerous violations, including false statements, conspiracy to distribute cocaine, illegal transportation of farm laborers, and violations of the CWA for piping raw sewage into a creek without a permit.[38] Glenn Cooper was prosecuted for manipulating sampling procedures sent to regulatory agencies at the St. Bernard Parish wastewater facility in Louisiana.[39] Jacob Ojeda was prosecuted for dumping thousands of gallons of

[37] David Eugene Turner, No. 3:05-CR-00159 (M.D. Fla. May 25, 2005).

[38] *Id.*

[39] *U.S. v. Cooper*, No. 99-00419, (E.D. La. Dec. 29, 1999) (defendants were charged with false statements and violations of the CWA).

restaurant grease and sludge into the sewer.[40] Billy R. Moore and his co-defendants were prosecuted for illegal dredging.[41]

Table 1. Largest Individual Probation Sentences in CWA Prosecutions

Primary Defendant	*Fiscal Year*	*Crime*	*Total Probation (Months)**
David Eugene Turner	2007	Illegal Discharge	324
Glenn Cooper	2000	False Reporting	240
Jacob Ojeda	2012	Illegal Discharge	180
Billy R. Moore	2007	Illegal Alteration of Waterways	144

Source: EPA Summary of Criminal Prosecutions Database
**Numbers are rounded*

In Table 2, we explore the four largest monetary penalties in our analysis assessed to individual defendants for CWA crimes.[42] We provide case examples with the prosecution of David Eugene Turner, Paul Tudor Jones II, Robert L. Kirk, and Herbert Zschiegner.

The first case is the previously mentioned prosecution of David Eugene Turner, which returned over $2.2 million in monetary penalties, the largest in our analysis.[43] Paul Tudor Jones II was prosecuted for violations of the CWA.[44] Robert L. Kirk was prosecuted for bypassing a filtration system and discharging wastewater into a sewer system in violation of a permit.[45] Herbert Zschiegner was

[40] *U.S. v. Perez et al*, No. SA 10-CR-00683 (W.D. Tex. Aug. 4, 2010) (defendants were charged with conspiracy, destruction of documents during a federal investigation, and violations of the CWA).

[41] *U.S. v. Moore*, No. 2:05-CR-00035 (E.D. N.C. Dec. 5, 2005) (defendants were charged with conspiracy, false statements, violations of the Rivers and Harbors Act, and violations of the CWA. The defendants were employees of the North Carolina Department of Transportation that dredged a channel without a proper permit and attempted to cover up the illegal behavior).

[42] Monetary penalties in these four cases total over $6.2 million, which equals about 40 percent of all monetary penalties, showing that these outliers have a significant bearing on total monetary penalties in our analysis.

[43] David Eugene Turner, *supra* note 37. Total monetary penalties include a series of special assessments and judgements for illegal proceeds.

[44] *U.S. v. Ellen*, No. 90-00215 (D. Md. May 23, 1990). The crime itself remains unspecified in our analysis. We felt the case summary was unclear on the actual crime. We can infer from the sentencing information that defendant Paul Tudor Jones II likely acquired 3,200 acres of land for hunting, where he engaged in the illegal hunting of migratory birds and probably filled in wetlands without a permit, but the clear language in the case study prevented us from being certain on this point. The thematic pattern in the case is irrelevant here, but we mention it as germane in Table 4.

[45] *U.S. v. Kirk*, No. 3:98-CR-00113 (E.D. Va. Apr. 9, 1998) (defendants were charged with

prosecuted for illegally discharging chemicals into wetlands and waterways.[46]

Table 2. Largest Individual Monetary Penalties in CWA Prosecutions

Primary Defendant	*Fiscal Year*	*Crime*	*Total Monetary Penalties**
David Eugene Turner	2007	Illegal Discharge	$2,254,494
Paul Tudor Jones II	1991	Unknown	$2,000,275
Robert L. Kirk	2001	Illegal Discharge	$1,300,000
Herbert Zschiegner	1995	Illegal Discharge	$650,000

Source: EPA Summary of Criminal Prosecutions Database
**Numbers are rounded*

In Table 3, we show the top four prison sentences in our analysis assessed at sentencing.[47] By far the largest prison sentence was assessed to eight defendants in the David Eugene Turner prosecution, which we estimate resulted in 626 months of incarceration at sentencing.[48] Other case examples include the prosecution of Raymond Brittain, Daniel Bello Argil, and Jack E. White.

Raymond Brittain was prosecuted for knowingly discharging sewage into a creek.[49] Daniel Bello Argil was prosecuted for mail fraud, false statements, and violations of the CAA and violated the CWA for illegally improperly removing and disposing of asbestos during the renovation of a high school.[50] Jack E. White was prosecuted for violations of the CWA, conspiracy, mail fraud, and

violations of the CWA, Robert L. Kirk was sentenced to serve 18 months incarceration and to perform 100 hours of community service and his co-defendant, James Ming Hong, was sentenced to serve 36 months incarceration and pay a $1.3 million fine).

[46] *U.S. v. Zschiegner*, No. 95-CR-00035 (D. N.J. Jan 18, 1995) (defendant was charged for CWA violations and was sentenced to 48 months incarceration, 36 months of probation, and a $650,000 fine, Herbert Zschiegner was also charged with conspiracy to manufacture and distribute methamphetamines and the sentences run concurrently).

[47] These four cases total 826 months of incarceration. This makes up about 29 percent of all incarceration assessed at sentencing in our data, showing this overall trend is significantly impacted by a few outliers.

[48] David Eugene Turner, *supra* note 37.

[49] Raymond T. Brittain, No. 89-CR-00283 (W.D. Okla. Dec. 12, 1989) (Raymond T. Brittain and his co-defendant were employees of the City of Enid, Oklahoma, with Brittain being the Superintendent of the Public Utilities Department at the time and Coble, the Water Pollution Control Plant Supervisor).

[50] Daniel Bello Argil, No. 01-CR-00090 (D. Colo. Mar. 13, 2001) (defendant was sentenced to 68 months of incarceration, 36 months of probation, a $200 special assessment fee, and $232,053 in restitution to the school district).

racketeering in conjunction with selling contaminated mash to dairy farmers.[51]

Table 3. Largest Individual Prison Sentences in CWA Prosecutions

Primary Defendant	*Fiscal Year*	*Crime*	*Total Prison (Months)**
David Eugene Turner	2007	Illegal Discharge	626
Raymond Brittain	1991	Illegal Discharge	72
Daniel Bello Argil	2003	Illegal Discharge	68
Jack E. White	1987	Illegal Discharge	60

Source: EPA Summary of Criminal Prosecutions Database
**Numbers are rounded*

Finally, we turn to a discussion of the broader themes that emerged in our analysis. Our approach was to reassess each case and use our best judgement to discern the prosecution's primary crime. While this was an imperfect method, in most cases it was simple to categorize each prosecution and organize it based on a general theme given the nature of water pollution crimes. In Table 4, we illustrate these themes, the number of prosecutions that fit each category, and the percentage of total cases represented by each theme.

The most extensive theme found in the data is the crime of illegal or unpermitted discharge. These crimes included unpermitted discharge to wetlands, storm drains, water treatment plants, and sewers, discharging from ships or other vessels into the ocean or otherwise the navigable waters of the United States. In 267 prosecutions, or seventy-four percent of prosecutions, were placed within this category of illegal or unpermitted discharges. We include case examples of the prosecutions of Robert McKiel, John Patrick Dowd, and Joe W. Hiller, Sr.

Robert McKiel, President of Astro Circuit in Lowell, Massachusetts, was prosecuted for discharging toxic metals into a tributary of the Merrimack, River.[52] John Patrick Dowd, President of Coastal Carriers Corporation of Annapolis, Maryland, was prosecuted for dumping incinerator ash from a vessel, generated by the City of Philadelphia, into the ocean.[53] Joe W. Hiller, Sr. was prosecuted for

---

[51] Jack E. White, *supra* note 1.

[52] Robert McKiel, No. 89-29-N and 89-0024-04-S (D. Mass. Jan. 31, 1989) (defendant Robert McKiel and three co-defendants were prosecuted under the CWA for illegal discharges to a point source and knowingly storing hazardous waste longer than 90 days without a permit under RCRA, McKiel was sentenced to serve 12 months of incarceration, 24 months of probation, and to pay $600 to the Crime Victims Fund).

[53] *U.S. v. Reilly et al*, No. 92-CR-00053 (D. Del. Jul. 14, 1992) (defendants were charged with

allowing raw sewage to discharge from a treatment plant to a tributary of Mountain Creek, in South Carolina.[54]

Table 4. Dominant Themes that Emerge when Individuals are Prosecuted for CWA Crimes

Theme	*Number of Prosecutions*	*Percentage of Total*
Unpermitted Discharge	267	74
False Statements or Reporting	61	17
Illegal Alteration of Waterways and Wetlands	28	8
Tampering with a Monitoring Device	2	1
Unknown*	1	
Total	359	

Percentages are rounded.
**In one case, the primary crime is unclear.*

The second most common theme we found was the crime of false statements or reporting. These crimes include making false statements to government officials, falsifying documents, providing falsified reports on official documents, or falsifying testing or lab results. In 61 prosecutions, or seventeen percent of prosecutions, we identified the primary crime in the case was false statements or reporting.[55] Case examples of prosecutions focused on false statements or reporting include the cases of Robert B. Gill, James Bragg, and John Couey.

Robert B. Gill, Vice President of Gill & Gill Environmental Services, was prosecuted for submitting falsified sampling and reports from Isle of Wight

ocean dumping and subsequently made false statements to a grand jury, and John Patrick Dowd was sentenced to serve 5 months incarceration, 5 months home detention, 36 months of probation, and to pay a $20,000 fine).

[54] Joe W. Hiller, Sr., No. 6:05-CR-00713(1) (D. S.C. Jul. 12), 2005) (defendant was charged with two counts of violating the CWA and was sentenced to 12 months of probation, to pay a $25 special assessment fee, and pay $39,750 in restitution).

[55] If any category overlaps another, it would be the crime of false statements. Often to establish intent, prosecutors show that defendants gave or made false statements to show they intended to violate the law. This tends to overlap with illegal discharges, for example, a defendant holds an NPDES permit but engages in an illegal discharge and falsifies reports in an attempt to cover up the action. Had the defendant reported the illegal discharge, it would likely be handled administratively, but the act of concealment makes it a crime. In 54 prosecutions, or 15 percent of prosecutions, at least one defendant gave false statements or falsified documents or some combination of these crimes in our analysis.

County, Virginia's wastewater treatment facility.[56] James Bragg, owner of the Oaks Subdivision sewage treatment plant in Grandview, West Virginia, violated the facility's NPDES permit on at least ten occasions and did not properly submit DMRs.[57] John Couey, the owner of Davis Research, Inc., was prosecuted for falsifying over one thousand laboratory reports undertaken for over one hundred cities, towns, and state and federal agencies in the Mississippi Delta.[58]

The third most common theme in our data was the illegal obstruction or alteration of waterways and wetlands, without a permit or in violation of a permit. These cases typically included filling in wetlands for development or some other purpose, dredging without a permit, or otherwise obstructing or altering waterways of the navigable waters of the United States. In 28 prosecutions, or eight percent of prosecutions, we felt the primary crime centered on one or more of these activities. We provide case examples with the prosecution of Ocie Mills, Lesley Gene Peterson, and Harvey Bryant Pridgen.

Ocie and Carey Mills were prosecuted for unlawfully excavating a canal, filling in wetlands, and discharging materials in the waters of the United States.[59] Lesley Gene Peterson, the District Manager for the Montana Department of Transportation, was prosecuted for illegally filling a spring with fill material during a road construction project.[60] Harvey Bryant Pridgen was prosecuted for overseeing the dumping of fifty to sixty trucks loaded with contaminated soil into a wetland.[61]

In two cases, the primary crime centered on tampering with a monitoring device or method.[62] These included the prosecutions of Frank Jordan and Melvin T. Ford. Frank Jordan, the environmental supervisor at an Ore-Ida Foods vegetable processing plant in Ontario, Oregon, was prosecuted for tampering with a

---

[56] Robert B. Gill, No. 96-CR-00123 (E.D. Va. May 30, 1996) (Robert B. Gill was charged with violations of the CWA and was sentenced to pay a $2,500 fine and make $1,815 in restitution).

[57] James Bragg, No. S:99-CR-00065 (S.D. W. Va. Mar. 31, 1999) (James Bragg was indicted on 12 counts of violating the CWA and was sentenced to six months of incarceration, six months of home confinement, and 12 months of probation).

[58] *U.S. v. Couey*, No. 4:19-CR-00059 (N.D. Miss. Apr. 23, 2019) (John Couey was prosecuted for CWA violations and was sentenced to serve 18 months of incarceration and one year of supervised release).

[59] Ocie Mills, No. 88-CR-03100 (N.D. Fla. Oct. 18, 1988) (defendants were sentenced to serve 21 months of incarceration, 12 months of probation, pay a $5,000 fine, and make a $250 special assessment).

[60] *U.S. v. Arthur et al*, No. 06-CR-00060 (D. Mont. May 2, 2006) (defendant Lesley Gene Peterson was sentenced to 12 months of probation and a $25 special assessment).

[61] *U.S. v. Pridgen*, No. 4:12-CR-00092 (E.D. N.C. Aug. 2, 2012) (defendant Harvey Bryant Pridgen was charged with the unauthorized filling of a wetlands and was sentenced to six months of incarceration, 12 months probation with six months of home confinement, a $300,000 federal fine, and to pay $11,368 to a Wetlands Restoration Fund).

[62] Paul Tudor Jones II, *supra* note 44. The prosecution of Paul Tudor Jones II was for an unspecified violation of the CWA, and is the only case we were unable to confidently categorize into a specific theme in our analysis, based on the data available in the case summary.

monitoring device and falsifying DMRs.[63] Melvin T. Ford was prosecuted for bypassing controls at the City of Tupelo, Mississippi's wastewater treatment plant.[64]

V. DISCUSSION

We analyzed 2,728 prosecutions to identify 259 cases focused on the prosecution of individuals for water pollution crimes under the CWA. Our analysis yielded a series of important insights to further our understanding of the empirical universe of water pollution prosecutions since 1983. Our first finding is that prosecutors were able to consistently prosecute about 9.2 prosecutions per year in our analysis. Secondly, prosecutors were able to obtain significant penalties at sentencing, garnering approximately 909 years of probation, 241 years of incarceration, and $15.5 million in monetary penalties. Third, prosecutors were able to secure punishments for a series of crimes involving knowing and negligent violations of water pollution laws and others involving significant harm.[65]

VI. CONCLUSION

For decades, there has not been bipartisanship support in Congress on strong environmental policies and enforcement of those policies and regulations. EPA and DOJ managed to create a structure to police and prosecute environmental crimes that evolved through the early 1990s.[66] By the middle part of that decade, any political consensus in Congress on the topic of criminal enforcement began

---

[63] *U.S. v. Jordan*, No. 91-CR-00414 (D. Or. Nov. 14, 1991) (defendant Frank Jordan pled guilty to tampering with a monitoring device and was sentenced to 60 days of house arrest, 60 months of probation, a $5,000 fine, and 100 hours of community service).

[64] Melvin T. Ford, No. 97-CR-00004 (N.D. Miss. Jan. 14, 1997) (Ford was charged with 22 counts of violating the CWA and sentenced to 12 months of incarceration, 12 months of probation, a $1,000 fine, and a $25 special assessment).

[65] Gauging overall crime severity is difficult in the analysis. If we use a measure of whether a crime resulted in criminal charges, such as false statements, conspiracy, fraud, or other criminal charges, we find that in roughly 23 percent of prosecutions, at least one or more of these contributing factors was present in the case. For other studies linking crime severity to environmental prosecution outcomes, see David M. Uhlmann, *Prosecutorial Discretion and Environmental Crime Redux: Charging Trends, Aggravating Factors, and Individual Outcome Data For 2005-2014*, 8 MICHIGAN J. OF ENV'T & ENERGY L. 312 (2019); 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 R. OF POL'Y RSRCH. 71, 71-73 (2016); Joshua Ozymy, Bryan Menard, & Melissa L. Jarrell, *Persistence or Partisanship: Exploring the Relationship between Presidential Administrations and Criminal Enforcement by the U.S. Environmental Protection Agency 1983-2019*, 81 PUB. ADMIN. R. 49 (2021).

[66] *See* Judson W. Starr, *Turbulent Times at Justice and EPA: The Origins of Environmental Criminal Prosecutions and the Work that Remain*, 59 GEO. WASH. L. R. 4 900, 900-902 (1991).

to wane.[67] Environmental enforcement has gone from doing the same with less, to doing much more with less under constant political turbulence.[68] The Trump Administration's efforts to reduce enforcement were not an anomaly, but an extreme case on the tail end of a long trend.[69] While organizational culture has allowed agencies to persist in their tasks, both Democrats and Republicans have put agencies in an impossible situation for the long haul.[70]

Staffing peaked at EPA in 1999 at 18,100 staff members and declined to 14,172 staff members slowly over time until Trump left office.[71] ENRD has faced similar levels of budgetary stagnation.[72] To create a more robust environmental enforcement regime, increased funding for EPA and DOJ is critical and funding needs to be prioritized for those individuals and communities facing the most disproportionate impact of pollution on their health.[73] Given that Black, Indigenous, and People of Color (BIPOC) communities suffer disproportional burdens from pollution, the Biden Administration has created additional funding to prioritize environmental justice in its enforcement decisions.[74] Biden's environmental justice initiative, known as Justice40, is laudable in directing resources for enforcement in marginalized communities and represents a significant financial investment in enforcement.[75] These actions represent an important first step to overcoming structural funding losses for EPA and DOJ that have been ongoing for decades, but policymakers need to continue to create and

---

[67] *See* Theodora Galactos, *The United States Department of Justice Environmental Crimes Section: A Case Study of Inter- and Intrabranch Conflict over Congressional Oversight and the Exercise of Prosecutorial Discretion,* 64 FORDHAM L. R. 589, 589-591 (1995).

[68] *See* Joel A. Mintz, *Neither the Best of Times Nor the Worst of Times: EPA Enforcement During the Clinton Administration*, 35 ENV'T L. REP. 10390, 10392 (2005); *See also* Joel A. Mintz, *Running on Fumes: The Development of New EPA Regulations in an Era of Scarcity*, 46 ENV'T L. REP. 10510, 10510-10512 (2016).

[69] *See* Joshua Ozymy & Melissa J. Ozymy, *All Dried Up: The Prosecution of Water Pollution Crimes During the Trump Administration,* 35 TUL. ENV'T L. R. 69, 69-72 (2022).

[70] *See* Joshua Ozymy & Melissa J. Ozymy, *The Green Police: Criminal Enforcement and the Prospects for Deterrence in the Era of Climate Change*, 52 ENV'T L. REP. 10526, 10526-10527 (2022).

[71] *Id.*

[72] *See* U.S. DEPARTMENT OF JUSTICE, BUDGET AND PERFORMANCE SUMMARY ENRD (VARIOUS YEARS): https://www.justice.gov/doj/budget-and-performance (last visited Dec. 28, 2023); *see also* U.S. DEPARTMENT OF JUSTICE, ENVIRONMENT AND NATURAL RESOURCES DIVISION, FY 2023 PERFORMANCE BUDGET 15 (2022) https://www.justice.gov/ jmd/page/file/1491706/download (last visited Dec. 28, 2023).

[73] *See* Press Release, EPA, Biden-Harris Administration Proposes Strongest-Ever Pollution Standards for Cars and Trucks to Accelerate Transition to a Clean Transportation Future (Apr. 12, 2023)https://www.epa.gov/newsreleases/biden-harris-administration-proposes-strongest-ever-pollution-standards-cars-and (last visited Dec. 28, 2023).

[74] Biden's new efforts to fund the agencies, particular environmental justice initiatives is laudable and is changing enforcement strategies moving forward, but this needs to be structurally funded over time in addition to increases in base spending.

[75] WHITE HOUSE, JUSTICE40: A WHOLE-OF-GOVERNMENT INITIATIVE https://www.whitehouse.gov/environmentaljustice/justice40/ (last visited Dec. 28, 2023).

enforce such efforts in the future.[76]

[76] Press Release, EPA, Statement by Administrator Regan on the President's FY 2022 Budget (Jun. 2, 2021) https://www.epa.gov/newsreleases/statement-administrator-regan-presidents-fy-2022-budget (last visited Dec. 28, 2023).