

THE PUBLIC PLASTIC NUISANCE: LIFE IN PLASTIC, NOT SO FANTASTIC

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Plastic pollution is a pervasive and growing problem. Plastic products pose significant risks to public health and the environment throughout their lifecycle—from production and consumption to disposal or recycling. In response, the Earth Island Institute, a California-based non-profit environmental group, filed a novel lawsuit in 2020. Earth Island alleges that several major plastic product producers created a public nuisance with their products in California. While Earth Island’s case is still pending, it represents the frontier of using public nuisance law to address mass harms.

Drawing on lessons from public nuisance cases against the opioids industry and fossil fuel producers, this Note comprehensively considers how public nuisance liability for plastic pollution would work in theory and in practice. Two possible framings of today’s “public plastic nuisance” are the negative effects of plastic pollution on (1) public waterways and lands and (2) the public’s access to clean air and water. Both framings are consistent with historical and traditional conceptions of public nuisance law. This Note explains how public nuisance claims based on these framings would be viable in another state facing the widespread effects of plastic pollution: New York.

In the absence of comprehensive regulation of plastic products throughout their lifecycle, public and private litigants both can and should use the “public plastic nuisance” theory. Litigation offers an avenue for holding the plastic industry accountable for pollution related to their products. Moreover, the prospect of public nuisance liability could pressure the plastic industry to change its business practices for the benefit of public health and the environment. Earth Island’s case should therefore provide a roadmap and foundation for future plastics litigation.

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Plastic Pollution on Long Island's Beaches¹

INTRODUCTION

Dirty, twisted plastic bottles and remnants of plastic bags are common sights on Long Island's beaches. Like many other beaches in the world, they are inundated with marine debris, the large majority of which is plastic waste. Volunteer beach cleanups happen regularly throughout the year. The largest cleanup efforts—such as those in Hampton Bays and Fire Island—can include hundreds of volunteers that remove thousands of pounds of plastic waste from these beaches.² But plastic waste keeps washing up onshore, and asking locals to “take the pledge to not use plastic straws” or “refuse the single-use” plastics isn't going to solve this environmental problem.³

Across the country, the Earth Island Institute, a California-based non-profit environmental group, took legal action to address rampant plastic pollution on local beaches in San Mateo County. In 2020, Earth Island filed a blockbuster complaint in state court against a host of

¹ Paul C. Focazio, *Long Island High School-ers Offer Winning “Solutions for Pollution,”* N.Y. SEA GRANT, <https://seagrant.sunysb.edu/articles/t/long-island-high-school-ers-offer-winning-solutions-for-pollution-long-island-sound-study-news> [<https://perma.cc/J3ZR-SH69>] (left image); *Our Beaches Are OverFLOATing with Trash, So Here's What We Did . . .*, SURFRIDER FOUND. (Mar. 29, 2018) [hereinafter *Our Beaches Are OverFLOATing*], <https://easternli.surfrider.org/news/our-beaches-were-overfloating-with-trash-so-heres-what-we-did> [<https://perma.cc/MR9E-LCAW>] (right image).

² *Our Beaches Are OverFLOATing*, *supra* note 1; Alexander Bakirdan & Vaidik Trivedi, *Long Island Community Members Join Forces to Eradicate Trash from Beaches*, THE OSPREY, (Apr. 3, 2019), <https://www.theosprey.info/community/long-island-community-members-join-forces-to-eradicate-trash-from-beaches> [<https://perma.cc/3KN5-JPPT>] (describing a Long Island cleanup initiative that has attracted over 1,300 volunteers and averages 4,000 pounds of trash collected each year for the past three years).

³ *Our Beaches Are OverFLOATing*, *supra* note 1 (displaying these slogans on a parade float made by a Long Island advocacy group). In fact, many of the world's largest companies have committed to reducing plastic pollution, and research suggests that existing corporate commitments will not be enough to address plastic pollution waste. Zoie Diana et al., *Voluntary Commitments Made by the World's Largest Companies Focus on Recycling and Packaging over Other Actions to Address the Plastics Crisis*, 5 ONE EARTH 1286, 1297 (2022), <https://doi.org/10.1016/j.oneear.2022.10.008> [<https://perma.cc/GE2V-H4YE>].

major plastic retailers. That initial complaint alleged a variety of state law causes of action, including products liability, false advertising, and breach of express warranty.⁴ One cause of action is new for plastics litigation: public nuisance.⁵ Earth Island asserts that plastic industry players, including companies like Crystal Geysers Water, Clorox, Coca-Cola, PepsiCo, and Nestlé, have played a crucial role in creating a public nuisance of plastic pollution in the state and in San Mateo County. The defendants' products, Earth Island claims, have not only inundated beaches and waterways along California's coast, but damaged and threatened marine wildlife and contributed to a waste management crisis.⁶ Together, Earth Island alleged, these effects invade the public's common rights to clean air, clean water, and the state's natural resources.⁷

Earth Island's case remains pending. The industry defendants raised several procedural objections, but the plaintiffs prevailed in keeping the case in California state court.⁸ In a May 2023 order, Judge Raymond Swope granted the defendants' motion to dismiss, without prejudice, Earth Island's public nuisance claim as part of his initial ruling on the merits.⁹ Earth Island amended its pleading in October 2023 to respond to the shortcomings Judge Swope identified.¹⁰ That amended complaint narrows Earth Island's causes of action to two: (1) violations

⁴ Complaint ¶¶ 161–206, *Earth Island Inst. v. Crystal Geysers Water Co.*, No. 20-CIV-01213 (Cal. Super. Ct. Cnty. of San Mateo Feb. 26, 2020) [hereinafter *Earth Island Complaint*] (reviewing causes of action).

⁵ *Id.* ¶¶ 168–78 (alleging public nuisance); see Connor Fraser, *Plastics in the Courtroom: The Evolution of Plastics Litigation*, STATE ENERGY & ENV'T IMPACT CTR.: BLOG (July 15, 2022), <https://stateimpactcenter.org/insights/plastics-in-the-courtroom-the-evolution-of-plastics-litigation> [<https://perma.cc/X29U-WADV>] (reviewing novel theories for litigating against the plastic industry).

⁶ *Earth Island Complaint*, *supra* note 4, ¶¶ 90, 110, 153–60.

⁷ *Id.* ¶¶ 169–70 (alleging injuries to the interest of the public at large).

⁸ The defendants removed the case to federal court. Judge Gilliam in the Northern District of California rejected the defendants' arguments that federal jurisdiction was proper because the plaintiff's claims either arose under federal common law or were displaced by federal common law. *Earth Island Inst. v. Crystal Geysers Water Co.*, 521 F. Supp. 3d 863, 876 (2021). On remand, the court denied defendants' motion to dismiss the case for lack of personal jurisdiction. Order Denying Specially Appearing Defendants' Motion to Quash Summons and Dismiss for Lack of Personal Jurisdiction at 1, *Earth Island Inst. v. Crystal Geysers Water Co.*, No. 20-CIV-01213 (Cal. Super. Ct. Cnty. of San Mateo June 2, 2022).

⁹ Order Sustaining Defendants' Demurrers to Plaintiff's Complaint and Granting in Part and Denying in Part Plaintiff's Request for Judicial Notice at 3, *Earth Island Inst. v. Crystal Geysers Water Co.*, No. 20-CIV-01213 (Cal. Super. Ct. Cnty. of San Mateo May 26, 2023) [hereinafter *Earth Island May 2023 Order*]; see *infra* Section III.B (discussing the order's reasoning and consequences for analogous litigation in New York).

¹⁰ See Redacted First Amended Complaint, *Earth Island Inst. v. Crystal Geysers Water Co.*, No. 20-CIV-01213 (Cal. Super. Ct. Cnty. of San Mateo Oct. 2, 2023) [hereinafter *Earth Island Amended Complaint*].

of the California Unfair Competition Law,¹¹ and (2) “nuisance.”¹² The parties will therefore continue to debate whether California public nuisance law makes the defendants liable for their contributions to plastic pollution.¹³

While public nuisance is an old tort,¹⁴ Earth Island’s application of it to plastic pollution is novel.¹⁵ It is also part of a growing contingent of cases against the plastics industry. In the past several years, citizens and environmental groups have filed a number of lawsuits against plastic producers that seek to hold those producers responsible for the effects of plastic pollution.¹⁶ Government actors have just begun to litigate against the plastic industry.¹⁷ All of these cases relied on combinations of state consumer protection statutes or products liability law—not public nuisance law.¹⁸ But Earth Island’s claims are reminiscent of how

¹¹ Earth Island Amended Complaint, *supra* note 10, ¶¶ 254–89 (outlining two causes of action); *see* CAL. BUS. & PROF. CODE §§ 17200, 17500 (West 2023) (defining “unfair competition” to mean “any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising,” including untrue or misleading statements). First, Earth Island alleges that the defendants have misrepresented to the public that their products are recyclable in California, when those products are not. Earth Island Amended Complaint, *supra* note 10, ¶ 258. As a result, the defendants allegedly violate California Environmental Marketing Claims Act (EMCA), the Federal Trade Commission’s Green Guides, and the state’s declared policy that environmental marketing claims should be substantiated. *Id.* ¶¶ 233, 259; *see infra* note 194 and accompanying text (discussing the Green Guides). Judge Swope found that Earth Island failed to sufficiently allege standing as a consumer to assert analogous claims under California’s Consumer Legal Remedies Act (CLRA). Earth Island May 2023 Order, *supra* note 9, at 2. Seemingly in response, Earth Island nixed that cause of action in its amended complaint.

¹² Earth Island Amended Complaint, *supra* note 10, ¶¶ 254–89 (outlining two causes of action); *see* CAL. BUS. & PROF. CODE §§ 17200, 17500 (West 2023) (defining “unfair competition” to mean “any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising,” including untrue or misleading statements).

¹³ *See* Case Management Order #7, Earth Island Inst. v. Crystal Geyser Water Co., No. 20-CIV-01213 (Cal. Super. Ct. Cnty. of San Mateo Sept. 28, 2023) (outlining upcoming dates and setting oral argument on defendants’ demurrer for April 2024).

¹⁴ *See infra* Section II.A.

¹⁵ *See infra* Section II.B.

¹⁶ *See* Fraser, *supra* note 5 (describing litigation trends in cases against the plastics industry).

¹⁷ *See* Complaint ¶¶ 21–24, Connecticut v. Reynolds Consumer Prods. Inc., No. HHD-CV22-6159769-S (Conn. Super. Ct. June 13, 2022) (alleging that Reynold’s sales of “Hefty” brand “Recycling” trash bags in the state violate the Connecticut Unfair Trade Practices Act); Attorney General Bonta Announces Investigation into Fossil Fuel and Petrochemical Industries for Role in Causing Global Plastics Pollution Crisis, STATE OF CAL. DEP’T OF JUST. (Apr. 28, 2022), <https://oag.ca.gov/news/press-releases/attorney-general-bonta-announces-investigation-fossil-fuel-and-petrochemical> [<https://perma.cc/43HS-JDZ5>].

¹⁸ *See, e.g.,* Smith v. Keurig Green Mountain, Inc., No. 18-cv-06690-HSG, 2020 WL 5630051, at *1 (N.D. Cal. Sept. 21, 2020) (consumer protection and unfair competition). Earth Island’s initial complaint also included failure to warn, design defect, negligence, and separate statutory claims under California’s Consumer Legal Remedies Act (CLRA). Earth Island Complaint, *supra* note 4, ¶¶ 161–226.

plaintiffs have used public nuisance theories to argue that industry players are liable for mass harms related to tobacco, lead paint, firearms, and, most recently, prescription opioids and fossil fuels.¹⁹ Even if *Earth Island's* case is ultimately unsuccessful, it represents a new avenue for plastics litigation and a model that other plaintiffs (in California or additional states) can emulate and refine. To that end, this Note is the first piece of scholarship to comprehensively consider the “public plastic nuisance” litigation theory in light of recent developments in public nuisance law.²⁰

Why take plastic pollution seriously as a public nuisance? As this Note will argue, the negative effects of plastic pollution—particularly on waterways and lands held in public trust and on the public’s access to clean air and water—are consistent with historical and traditional conceptions of injuries to public rights in public nuisance law. Courts could principally apply public nuisance law to hold plastic industry defendants liable for their harms in those areas without inviting unrestrained litigation over any and all societal problems. There are also significant benefits to pursuing a public nuisance theory. The remedies available in public nuisance cases (abatement and damages) could holistically address the domestic harms related to plastic pollution. In the absence of comprehensive regulation of plastic products throughout their lifecycle,²¹ public nuisance could function as a regulatory “gap-filler” to pressure the plastic industry to change its business practices. The

¹⁹ See, e.g., *Camden Cnty. Bd. of Chosen Freeholders v. Beretta Corp.*, 273 F.3d 536, 541 (3d Cir. 2001) (no public nuisance liability for handgun manufacturers because of intervening actions of third parties); *Rhode Island v. Lead Indus. Ass’n*, 951 A.2d 428, 435 (R.I. 2008) (no liability for lead pigment manufacturers). *But see* *County of Santa Clara v. Atl. Richfield Co.*, 40 Cal. Rptr. 3d 313, 320 (Cal. Ct. App. 2006) (allowing plaintiffs to pursue representative nuisance action on behalf of the public); see also Section II.B.1 (discussing prior uses of public nuisance litigation theories).

²⁰ While some authors have addressed a public nuisance theory for plastic pollution in prior scholarship, they have only briefly mentioned it and could not discuss the May 2023 decision or subsequent updates in *Earth Island*. See SARAH J. MORATH, *OUR PLASTIC PROBLEM AND HOW TO SOLVE IT* 105–06 (2022) (discussing *Earth Island* and causation in the plastics context compared to the causation analysis for fossil fuel public nuisance claims); Douglas A. Henderson, Matthew J. Blaschke, Kristen R. Fournier & Karl R. Heisler, *INSIGHT: Is Plastics Litigation the Next Public Nuisance?*, BLOOMBERG LAW (Apr. 23, 2020, 4:00 AM), https://www.bloomberglaw.com/bloomberglawnews/environment-and-energy/X78JQB1K000000?bna_news_filter=environment-and-energy#jcite [<https://perma.cc/MPP6-89GP>] (arguing briefly against the application of public nuisance to plastic pollution); Joan F. Chu, *Underserved Communities Trashed by Plastic: Slowing the Proliferation of Petroleum-Based Products Through Stewardship Laws and Enhanced Back-End Regulatory Solutions*, 22 SUSTAINABLE DEV. L. & POL’Y 20, 27–28 (2021) (mentioning *Earth Island* and a public nuisance cause of action); Mary Ellen Ternes, *Plastics: Global Outlook for Multinational Environmental Lawyers*, 35 NAT. RES. & ENV’T 36, 38 (2020) (same).

²¹ See *infra* Section I.C.

possibility of public nuisance liability could itself motivate plastic industry defendants to cooperate in addressing plastic pollution or accept new regulations. Litigation is therefore one especially effective tool in a “multimodal” approach²² to this complex problem. Public nuisance law can and should be leveraged to hold the plastic industry accountable for plastic pollution.

Moreover, New York is a natural next forum in which plaintiffs should develop a litigation theory for plastic pollution. Like California, New York has a large market for plastic products and serves as a place of business for many plastic industry players.²³ Plastic pollution is prevalent and a serious problem in New York, just as it is in California.²⁴ New York’s public nuisance law is similar to California’s and favorable for a “plastic public nuisance” claim.²⁵ And strategic litigation in multiple states—especially the significant markets of California and New York—would most affect the behavior of plastic industry defendants.²⁶ As this Note demonstrates, there is a credible basis for suing plastic producers under New York law.²⁷ It is therefore worthwhile to pursue “plastic public nuisance” cases in New York as a complement to *Earth Island* (if it remains viable) or future cases in California.

This Note proceeds in three Parts. Part I provides important background on the plastics industry, reviews evidence of plastic’s harmful effects, and summarizes regulatory action to date. Part II describes the doctrine of public nuisance, including its history and the debates about its application to actors who allegedly contributed to mass harms. It then discusses the potential benefits of establishing the public nuisance

²² See *infra* notes 282–83 (discussing Morath’s “multimodal approaches” to addressing plastic pollution).

²³ MINDEROO FOUND., PLASTICS WASTE MAKERS INDEX: TOP 100 POLYMER PRODUCERS 12 (2023), <https://www.minderoo.org/plastic-waste-makers-index> [<https://perma.cc/5LU6-Q6BS>] (noting Dow Chemical as the third largest contributor to single-use plastic waste); GREENPEACE, BRANDED VOL. II: IDENTIFYING THE WORLD’S TOP CORPORATE PLASTIC PRODUCERS 22–23 (2020), <https://www.breakfreefromplastic.org/wp-content/uploads/2020/07/branded-2019.pdf> [<https://perma.cc/AVT8-T9BR>] (naming Coca-Cola, Nestle, and PepsiCo as the top brands represented in post-consumer plastic waste); see, e.g., *Our Locations*, NESTLÉ, <https://www.nestlejobs.com/locations> [<http://perma.cc/B8QZ-KYYZ>] (listing 16 locations in New York); *About PepsiCo*, PEPSICO, <https://www.pepsico.com/who-we-are/about-pepsico> [<https://perma.cc/9LG7-3TWG>] (identifying corporate headquarters in Purchase, NY); *Liberty Locations*, LIBERTY COKE, <https://www.libertycoke.com/liberty-locations> [<https://perma.cc/R8MN-ZJFF>] (listing five locations in New York for a Coca-Cola bottling company).

²⁴ See, e.g., *supra* notes 1–3 (discussing plastic pollution on Long Island’s beaches); *Earth Island Complaint*, *supra* note 4, ¶¶ 76–77 (relating *Earth Island*’s claims to plastic pollution on Pacifica and Half Moon Bay beaches in San Mateo County).

²⁵ See *infra* Section III.A.

²⁶ See *infra* note 141 and accompanying text.

²⁷ See *infra* Part III.

liability of major players in the plastics industry. Part III analyzes public nuisance law in both California and New York State as the basis for a case study of future “public plastic nuisance” claims in New York. Part III then examines how future plaintiffs could satisfy the elements of a public nuisance in New York for two “framings” of plastic pollution: (1) inundation or obstruction and (2) discharges and emissions. The Note concludes by considering the role of public nuisance litigation within a broader framework for addressing plastic pollution and by flagging areas for future research.

I

THE PROBLEM OF PLASTIC POLLUTION

Structuring a public nuisance claim against the plastic industry requires an understanding of the lifecycle of plastic products and their widespread attendant harms. An awareness of the variety of players in the plastic industry is critical for determining potentially culpable defendants. Future plaintiffs would also not bring these claims in a vacuum. Although regulatory efforts are limited, governments at all levels have begun to regulate certain types of plastic products and the processes connected to their production or disposal. This Part discusses these fundamental issues with an eye towards prospective litigation.

A. *Overview of the Plastics Industry*

From their humble beginnings as late-nineteenth-century chemical innovations, plastics have evolved into a massive consumer industry and global environmental crisis.²⁸ “Plastics” is an umbrella term for a group of materials, either synthetic or naturally occurring, that may be shaped when soft and then retain that given shape after they harden.²⁹ Man-made plastics are synthetic polymers—long chains of identical, repeating molecular units called monomers—derived from petroleum, natural gas, or coal.³⁰ Because synthetic plastic resins generally possess desirable qualities such as durability, flexibility, and heat resistance, they have been incorporated into essentially every consumer product imaginable, from traditional bottles and bags to medical implants, computer

²⁸ See MORATH, *supra* note 20, at 13 (describing the first patented types of plastic resins).

²⁹ *Science of Plastics*, SCI. HIST. INST., <https://www.sciencehistory.org/science-of-plastics> [<https://perma.cc/W2VQ-73DU>].

³⁰ *History and Future of Plastics*, SCI. HIST. INST., <https://www.sciencehistory.org/the-history-and-future-of-plastics> [<https://perma.cc/VU53-FGSH>]; CTR. INT’L ENV’T L., FUELING PLASTICS: FOSSILS, PLASTICS & PETROCHEMICAL FEEDSTOCKS 1 (2017), <https://www.ciel.org/wp-content/uploads/2017/09/Fueling-Plastics-Fossils-Plastics-Petrochemical-Feedstocks.pdf> [<https://perma.cc/ERQ9-7FAM>].

parts, furniture, and clothing.³¹ Annual global manufacturing of plastics swelled from 2 million metric tons in 1950 to 380 million metric tons by 2015.³² Today, plastics manufacturers—in partnership with large fossil fuel producers—continue to invest in petrochemical facilities, and relatively cheap natural gas supplies have driven a boom in “virgin” (new, unrecycled) plastic products.³³

Recycling of course permits the reuse of some plastics. Recovered waste or scrap plastic products can be reprocessed into similar or, more often, lower quality plastic products.³⁴ But all recycling methods consume electricity and water, and some generate harmful air pollutants from chemical reactions.³⁵ Moreover, the recycling system in the United States—and around the world—is staggeringly dysfunctional. Approximately 79% of the 8.3 billion metric tons of virgin plastic produced globally has accumulated in landfills or the natural environment, with 12% being incinerated and only about 9% being recycled.³⁶ The estimated recycling rate in the United States in 2021 was between 5% or

³¹ JOHN HOCEVAR, GREENPEACE, CIRCULAR CLAIMS FALL FLAT: COMPREHENSIVE U.S. SURVEY OF PLASTICS RECYCLABILITY 3 (Ivy Schlegel & Perry Wheeler eds., 2020), <https://www.greenpeace.org/usa/research/report-circular-claims-fall-flat> [<https://perma.cc/PEQ7-JRMM>] (displaying common types and uses of plastic resin, including bottles, toys, and bags); MORATH, *supra* note 20, at 14 (describing applications of thermosetting plastics in furniture, tech, and medicine); see Rebecca Altman, *How Bad Are Plastics, Really?*, ATLANTIC (Jan. 3, 2022), <https://www.theatlantic.com/science/archive/2022/01/plastic-history-climate-change/621033> [<https://perma.cc/GVW4-XQXN>] (reviewing how manufacturers designed and marketed disposable plastics with the intention of replacing paper and glass items in grocery stores).

³² MORATH, *supra* note 20, at 20.

³³ *Id.* at 20 (noting that fourteen percent of oil and eight percent of gas is used to manufacture petrochemicals); Arlene Karidis, *How are Petrochemical Companies Doing in Shifting from Virgin Plastic?*, WASTE360 (Sept. 22, 2022), <https://www.waste360.com/plastics/how-are-petrochemical-companies-doing-shifting-virgin-plastic> [<https://perma.cc/VW38-WQM2>] (noting that cheap gas is causing an increase in virgin plastic production); Roland Geyer, Jenna R. Jambeck & Kara Lavender Law, *Production, Use, and Fate of All Plastics Ever Made*, SCI. ADVANCES, July 2017, at 1, <https://www.science.org/doi/epdf/10.1126/sciadv.1700782> [<https://perma.cc/Q9AZ-AHNT>] (estimating that 12 billion metric tons of plastic waste will have ended up in landfills or the natural environment by 2050).

³⁴ Adrian Merrington, *Recycling of Plastics*, in APPLIED PLASTICS ENGINEERING HANDBOOK 167, 169 (Myer Kutz ed., 2d ed. 2017), <https://doi.org/10.1016/B978-0-323-39040-8.00009-2> [<https://perma.cc/BVX5-UBXT>]; MORATH, *supra* note 20, at 15.

³⁵ MORATH, *supra* note 20, at 29. Many dispute that “chemical recycling” qualifies as “recycling” because it relies on incinerating plastic products for fuel and is thus just another form of fossil fuel energy. See, e.g., Tessa Wardle, “Chemical Recycling”: A Summer of Disillusionment, NRDC (Dec. 21, 2021), <https://www.nrdc.org/experts/veena-singla/chemical-recycling-summer-disillusionment> [<https://perma.cc/H8CF-AW7L>].

³⁶ Geyer et al., *supra* note 33, at 1; see also UNEP, THE STATE OF PLASTICS: WORLD ENVIRONMENT DAY OUTLOOK, 4–5 (2018). In contrast, the annual rate of U.S. post-consumer paper recycling increased from 21.3% in 1980 to 68.2% in 2018. BEYOND PLASTICS & LAST BEACH CLEANUP, THE REAL TRUTH ABOUT THE U.S. PLASTICS RECYCLING RATE: MAY 2022, at 5 (2022), <https://www.beyondplastics.org/press-releases/the-real-truth-about-plastics-recycling> [<https://perma.cc/V2FB-2WLP>].

6% of all plastic waste generated.³⁷ While scientists and entrepreneurs continue to develop alternatives to plastics products, they are still in their infancy.³⁸

Numerous companies are involved in the lifecycle of plastic products. Large oil and gas producers, like ExxonMobil and Dow Chemical, are the biggest sources of polymers used in manufacturing plastic products.³⁹ Plastic “converters,” like Novolex, Berry Global, and Amcor, manufacture and occasionally distribute final plastic products, such as food packaging, plastic film, and disposable plastic utensils.⁴⁰ Retailers and distributors, like PepsiCo, Unilever, and Walmart, transport and sell these products to consumers.⁴¹ The plastic industry ecosystem also extends beyond production and sale. Specialized recycling operations,⁴² private waste transporters and landfill owners (like Waste Management),

³⁷ BEYOND PLASTICS & LAST BEACH CLEANUP, *supra* note 36, at 2. International dynamics in the recycling market suggest that these figures will not meaningfully improve in the near term. See Sharon Lerner, *Waste Only: How the Plastics Industry is Fighting to Keep Polluting the World*, INTERCEPT (July 20, 2019, 7:30 AM), <https://theintercept.com/2019/07/20/plastics-industry-plastic-recycling> [<https://perma.cc/44CC-6ACR>] (noting, for example, that policies instituted by China have dramatically disturbed U.S. plastics recycling); Michael Corkery, *As Costs Skyrocket, More U.S. Cities Stop Recycling*, N.Y. TIMES (Mar. 16, 2019), <https://www.nytimes.com/2019/03/16/business/local-recycling-costs.html> [<https://perma.cc/3K4G-YD7S>] (discussing recent restrictions that Thailand and India have imposed on purchase of U.S. companies' waste and China's decision in 2018 to stop buying recyclable materials from the United States as part of its Operation National Sword).

³⁸ See, e.g., MORATH, *supra* note 20, at 160–71 (discussing bioplastics as an alternative to petroleum-based plastics); David Vetter, *This AI-Designed Enzyme Can Devour Plastic Trash in Hours: Video*, FORBES (Apr. 28, 2022), <https://www.forbes.com/sites/davidrvetter/2022/04/28/scientists-use-ai-to-make-an-enzyme-that-eats-plastic-trash-in-hours-video/?sh=6564c373da6b> [<https://perma.cc/U33X-VNAU>] (describing a newly developed enzyme capable of consuming plastics).

³⁹ MINDEROO FOUND., *supra* note 23, at 12.

⁴⁰ See ALICE MAH, PLASTIC UNLIMITED: HOW CORPORATIONS ARE FUELING THE ECOLOGICAL CRISIS AND WHAT WE CAN DO ABOUT IT 16 (2022) (describing plastics converters, which sit “[i]n the middle of the plastics value chain, sandwiched between the consumer goods giants and the plastics producers”); John Kalkowski, *2019 Top 25 Converters: Scaling the Peaks*, FLEXIBLE PACKAGING (July 8, 2019), <https://www.packagingstrategies.com/articles/101707-top-25-converters-scaling-the-peaks> [<https://perma.cc/9PTR-L42B>] (reviewing the operations of large U.S. converters).

⁴¹ See, e.g., *Greenpeace, Inc. v. Walmart Inc.*, No. 21-cv-00754-MMC, 2021 WL 4267536, at *1 (N.D. Cal. Sept. 20, 2021) (describing Walmart's operations involving plastic products); GREENPEACE, *supra* note 23, at 22–23 (gathering survey data on the most common brands represented in post-consumer plastic waste). Companies are also engaged at multiple steps in the process. For example, Coca-Cola invests in and partners with local bottling operations around the world, and then it sells bottled beverages to consumer-facing retailers or directly to consumers. See, e.g., Class Action Complaint ¶ 22, *Swartz v. Coca-Cola Co.*, No. 3:21-cv-04644-JD (N.D. Cal. June 16, 2021); *The Coca-Cola System*, COCA-COLA, <https://www.coca-colacompany.com/about-us/coca-cola-system> [<https://perma.cc/58C8-NKWW>] (explaining Coca-Cola's system of investing in and setting up third-party bottling facilities).

⁴² See Wardle, *supra* note 35 (discussing Agilyx, a company that runs a chemical recycling plant); Complaint ¶¶ 17, 47–50, *Last Beach CleanUp v. TerraCycle, Inc.*, No. RG21090702

and local governments also handle plastic products after consumers utilize them.⁴³ Moreover, industry players of all types conduct lobbying and target marketing to consumers regarding the benefits and environmental consequences of their products.⁴⁴ These campaigns predominantly focus on the personal responsibility of consumers to mitigate plastic pollution.⁴⁵ While the plastic industry has aggressively fought regulatory measures such as bans on plastic bags or taxes on certain types of plastic packaging, they have also promoted their investments in “green” alternatives and touted their transitions to new, more readily recyclable plastic products.⁴⁶ This approach has translated into record levels of plastic production and waste, record-low levels of recycling, and record-breaking profits for plastic producers.⁴⁷

B. Harms Traceable to Plastic Products

Plastic has been found everywhere around the world. Scientists have identified plastic debris on remote islands⁴⁸ and at the bottom of the Mariana Trench in the Pacific Ocean.⁴⁹ They have found plastic

(Cal. Super. Ct., Cnty. of Alameda Mar. 4, 2021) (describing the operations of TerraCycle, Inc., a private company that partners with brands to process “hard-to-recycle” products).

⁴³ Corkery, *supra* note 37. Companies like Waste Management are often involved in collecting and hauling waste, recycling, and running landfills. *Id.*

⁴⁴ See Lerner, *supra* note 37 (describing industry lobbying against legislation imposing plastic bag bans and fees, as well as producers’ campaigns to project a sustainable image); see also CTR. INT’L ENV’T L., FUELING PLASTICS: PLASTIC INDUSTRY AWARENESS OF THE OCEAN PLASTICS PROBLEM 1, 6 (2017), <https://www.ciel.org/reports/fuelingplastics/fueling-plastics-plastic-industry-awareness-of-the-ocean-plastics-problem-2> [<https://perma.cc/L98L-GZZV>]; Laura Sullivan, *How Big Oil Misled the Public Into Believing Plastic Would Be Recycled*, NPR (Sept. 11, 2020, 5:00 AM), <https://www.npr.org/2020/09/11/897692090/how-big-oil-misled-the-public-into-believing-plastic-would-be-recycled> [<https://perma.cc/674K-ZM3P>].

⁴⁵ Corkery, *supra* note 37; see, e.g., Finis Dunaway, *The ‘Crying Indian’ Ad That Fooled the Environmental Movement*, CHI. TRIBUNE (Nov. 21, 2017), <https://www.chicagotribune.com/opinion/commentary/ct-perspec-indian-crying-environment-ads-pollution-1123-20171113-story.html> [<https://perma.cc/JDP9-R33R>] (describing a 1971 anti-litter ad where a Native American actor tears up as he sees a driver toss a bag of trash on the ground).

⁴⁶ See Fraser, *supra* note 5 (discussing industry litigation over bans and taxes applicable to certain plastic products); MAH, *supra* note 40, at 46–70 (documenting the focus of petrochemical and plastics corporations on the “circular economy,” which refers to reducing plastic waste by promoting the recycling, reuse, and recovery of plastic products).

⁴⁷ See Somini Sengupta, *Guess What? More Plastic Trash*, N.Y. TIMES (Feb. 7, 2023), <https://www.nytimes.com/2023/02/07/climate/plastic-waste-recycling.html> [<https://perma.cc/LP7T-3K4Z>]; *supra* note 37 and accompanying text (recycling estimates).

⁴⁸ See J.L. Lavers, L. Dicks, M.R. Dicks & A. Finger, *Significant Plastic Accumulation on the Cocos (Keeling) Islands, Australia*, NATURE: SCI. REPS., May 2019, <https://doi.org/10.1038/s41598-019-43375-4> [<https://perma.cc/X273-VF8T>] (presenting evidence of significant quantities of plastic on the remote Cocos island group, located 2,100 km off the coast of Australia).

⁴⁹ See Sane Chiba, Hideaki Sato, Ruth Fletcher, Takayuki Yogi, Makino Kayo, Shin Miyagi, Moritaka Ogido & Katsunoi Fujikura, *Human Footprint in the Abyss: 30 Year Records*

particles in the air,⁵⁰ in freshwater,⁵¹ in soil,⁵² and even in human blood and placentas.⁵³ Plastic pollution is ubiquitous in the most literal sense. Much of plastic pollution is also visible to the human eye: plastic products such as bags or bottles, or their fragments, form what scientists term *macroplastics*.⁵⁴ But plastic fragments less than five millimeters in size, *microplastics*, are the most insidious category of plastic pollution; they include both tiny fragments from larger plastic products and plastic pieces designed to be small, such as micro-beads in cosmetics.⁵⁵

Risks of harm to humans and the environment arise not only from the accumulation and breakdown of plastic products but from each stage in the product lifecycle. The extraction and transport of fossil feedstocks for plastics entails the release of toxic chemicals and greenhouse gases.⁵⁶ The refining and production of plastic resins generates

of Deep-Sea Plastic Debris, 96 MARINE POL'Y 204 (2018) (finding significant proportions of plastic debris in deep areas in the ocean).

⁵⁰ See Steve Allen, Deonie Allen, Vernon R. Phoenix, Gaël Le Roux, Pilar Duránte Jiméneez, Anaëlle Simonneau, Stéphane Binet & Didier Galop, *Atmospheric Transport and Deposition of Microplastics in a Remote Mountain Catchment*, 12 NATURE GEOSCIENCE 339 (2019).

⁵¹ Martin Wagner, Christian Scherer, Diana Alvarez-Muñoz, Nicole Brennholt, Xavier Bourrain, Sebastian Buchinger, Elke Fries, Cécile Grosbois, Jörg Klasmeyer, Teresa Marti, Sara Rodriguez-Mozaz, Ralph Urbatzka, A. Dick Vethaak, Margrethe Winther-Nielsen & Georg Reifferscheid, *Microplastics in Freshwater Ecosystems: What We Know and What We Need to Know*, ENV'T SCIS. EUR., 2014, at 3, <https://enveurope.springeropen.com/articles/10.1186/s12302-014-0012-7> [<https://perma.cc/FXJ7-X4T2>].

⁵² SUSANNA GIONGRA, INST. EUR. ENV'T POL'Y, PLASTIC POLLUTION IN SOIL (2018), https://www.isqaper-is.eu/phocadownload/Briefing_paper_Plastic_pollution_in_soil_v2.pdf [<https://perma.cc/453X-VYRT>].

⁵³ Heather A. Leslie, Martin J. M. van Velzen, Sicco H. Brandsma, Dick Vethaak, Juan J. Garcia-Vallejo & Marja H. Lamoree, *Discovery and Quantification of Plastic Particle Pollution in Human Blood*, 163 ENV'T INT'L (May 2022), <https://doi.org/10.1016/j.envint.2022.107199> [<https://perma.cc/4T94-V7M4>]; Antonio Ragusa, Alessandro Svelato, Criselda Santacrose, Piera Catalano, Valentina Notarstefano, Oliana Carevali, Fabrizio Papa, Mauro Ciro Antonio Rongioletti, Federico Baiocco, Simonetta Draghi, Elisabetta D'Amore, Denise Rinaldo, Maria Matta & Elisabetta Giorgini, *Plasticenta: First Evidence of Microplastics in Human Placenta*, ENV'T INT'L (Dec. 2020), <https://doi.org/10.1016/j.envint.2020.106274> [<https://perma.cc/6SL9-YU9Q>].

⁵⁴ MORATH, *supra* note 20, at 23; Isabelle Cortes, *'Time Bomb?': Race to Identify Health Effects of Microplastics*, PHYS.ORG (June 21, 2023), <https://phys.org/news/2023-06-health-effects-microplastics.html> [<https://perma.cc/R4P2-JMHY>] (reviewing recent research on the detrimental health effects of "insidious" microplastics).

⁵⁵ MORATH, *supra* note 20, at 23–24; see also *infra* Section I.C (discussing federal ban on microbeads in cosmetic products).

⁵⁶ See, e.g., DAVID AZOULAY, PRISCILLA VILLA, YVETTE ARELLANO, MIRIAM GORDON, DOUN MOON, KATHRYN MILLER & KRISTEN THOMPSON, PLASTIC & HEALTH: THE HIDDEN COSTS OF A PLASTIC PLANET 1, 36 (2019); UNITED NATIONS ENV'T PROGRAMME, FROM POLLUTION TO SOLUTION: A GLOBAL ASSESSMENT OF MARINE LITTER AND PLASTIC POLLUTION 15 (2021) (noting that the greenhouse gas emissions associated with the production, use, and disposal of conventional fossil fuel-based plastics is forecasted to grow to nineteen percent of the global carbon budget).

harmful emissions and can result in the dumping of plastics into water bodies from petrochemical plant discharges.⁵⁷ The global transport of plastic waste and maritime uses of plastic products generate intentional and accidental dumping of plastics into our oceans, which results in environmental disasters like the Great Pacific Garbage Patch (GPGP) and harms aquatic wildlife and ecosystems.⁵⁸ The incineration and “chemical recycling” of plastic products generates further emissions of chemicals that contribute to smog, asthma, and heart disease.⁵⁹ The production and recycling of plastics is therefore an important climate issue due to their significant carbon emissions.⁶⁰ Finally, the fragmentation of plastic products subject to heat and aquatic exposure releases more plastic particles.⁶¹ Those particles can carry toxic compounds—linked to cancer, hormone and reproductive system disruptions, and immune system problems⁶²—directly into wildlife, our water supplies, and our bodies, where they remain for hundreds of years.⁶³

⁵⁷ See AZOULAY ET AL., *supra* note 56, at 2; *see, e.g.*, San Antonio Bay Estuarine Waterkeeper v. Formosa Plastics Corp., No. 6:17-CV-0047, 2019 WL 2716544, at *1, *17 (S.D. Tex. June 27, 2019), *rev'd and remanded on other grounds*, 852 F. Appx. 816 (5th Cir. 2021) (finding that Formosa Plastics had continually violated the Clean Water Act and Texas regulations by discharging plastic pellets and foam into waters near their plant).

⁵⁸ MORATH, *supra* note 20, at 24–27 (tracing plastic pollution to plastic waste barges, the fishing industry, and the cruise industry); *id.* at 40–44 (reviewing negative consequences of ocean plastic pollution for wildlife); *The Great Pacific Garbage Patch*, OCEAN CLEANUP, <https://theoceancleanup.com/great-pacific-garbage-patch> [<https://perma.cc/U26B-7PFG>] (describing the GPGP, which is the “largest of the five offshore plastic accumulation zones in the world’s oceans” and contains more than 1.8 trillion pieces of plastic—covering an area approximately twice the size of Texas).

⁵⁹ MORATH, *supra* note 20, at 29, 49.

⁶⁰ In the United States, the extraction and production of plastics produces at least 9.5 to 10.5 million metric tons of carbon dioxide equivalents per year. CTR. FOR INT’L ENV. L., PLASTIC & CLIMATE: THE HIDDEN COSTS OF A PLASTIC PLANET, 4 (2019), <https://www.ciel.org/wp-content/uploads/2019/05/Plastic-and-Climate-FINAL-2019.pdf> [<https://perma.cc/G2AH-8GE9>].

⁶¹ AZOULAY ET AL., *supra* note 56, at 2 (discussing the fragmentation process and “cascading exposure” to additives due to continually increasing surface area on plastic particles).

⁶² See MORATH, *supra* note 20, at 48–49 (summarizing research on major chemical additives in plastic: BPA (reduced fertility), phthalates (hormone disruption), and PCB (cancers, compromised immune systems, reproductive problems)). Because scientists are still studying the health effects of pervasive and long-lived exposure to plastic, there is some uncertainty about all of these harms, however. AZOULAY ET AL., *supra* note 56, at 2–3; *see also infra* note 284 and accompanying text (flagging possible public nuisance claims based on pervasive microplastics).

⁶³ See, e.g., Andrey Ethan Rubin & Ines Zucker, *Interactions of Microplastics and Organic Compounds in Aquatic Environments: A Case Study of Augmented Joint Toxicity*, CHEMOSPHERE (Feb. 2022), <https://doi.org/10.1016/j.chemosphere.2021.133212> [<https://perma.cc/TL77-YKZK>] (finding that microplastics can act as a vector to increase human health risk from attendant toxic chemicals); MORATH, *supra* note 20, at 36 (discussing the potential of

The effects of plastic pollution are also inequitably distributed. Like petroleum and natural gas facilities, petrochemical plants processing raw plastics materials, incineration operations, and landfills are all disproportionately sited in low-income and minority communities; their negative health and environmental effects fall disproportionately on those groups.⁶⁴ As Sections III.B.1 and III.B.2 discuss, communities disproportionately burdened by the negative effects of plastics pollution may have the strongest claims against industry players conveying plastic products into their communities.

C. Regulatory Responses

Domestic regulation of plastic products throughout their lifecycle is limited and nascent. Existing regulations set minimum pollution controls on the production and transport of plastic products and include some localized bans on the sale and disposal of specific plastic products. With one narrow exception, discussed below, there are no generally applicable limits on the production, sale, and consumption of plastics or requirements for their disposal, all of which could reduce their harmful effects on humans and the environment. Without new legislation or regulation, there exists a regulatory “gap” the public nuisance law could fill.

At the highest level, international efforts are underway to address global plastic pollution, particularly plastic debris in the world’s oceans and the international transport of plastic waste.⁶⁵ These plastic-specific

plastic fragments to persist for hundreds of years in the natural environment); *see supra* notes 50–52 (describing where microplastics have been found in the natural environment).

⁶⁴ *See* MORATH, *supra* note 20, at 49–50 (discussing unequal distribution of petrochemical production in the United States); Chu, *supra* note 20, at 24 (discussing the disproportionate siting of waste management facilities near low-income areas and communities of color); Ihab Mikati, Adam F. Benson, Thomas J. Luben, Jason D. Sacks & Jennifer Richmond-Bryant, *Disparities in Distribution of Particulate Matter Emission Sources by Race and Poverty Status*, 108 AM. J. PUB. HEALTH 480, 480 (2018) (finding that communities located in close proximity to refineries—including plastic production facilities—are disproportionately non-white and exposed to significantly more harmful air pollution than white communities).

⁶⁵ Stéphane Mandard, *Groundbreaking Plastic Pollution Treaty Moves Closer After Paris Talks, Despite Fractured Reactions*, LE MONDE (June 3, 2023), https://www.lemonde.fr/en/environment/article/2023/06/03/groundbreaking-plastic-pollution-treaty-moves-closer-after-paris-talks-despite-fractured-reactions_6028979_114.html [https://perma.cc/BU8Y-GWT8] (reviewing most recent negotiations, which culminated in the attending nations sending a mandate to the Intergovernmental Negotiating Committee of the UN Environmental Assembly to prepare a first draft of a treaty for the next round of negotiations in November 2023); Jennifer McDermott, *Negotiators Take First Steps Toward Plastic Pollution Treaty*, ASSOCIATED PRESS (Dec. 2, 2022), <https://apnews.com/article/business-united-nations-pollution-climate-and-environment-government-politics-f999c940c7d198433991a3b14f8450ef> [https://perma.cc/E4UW-X34Y] (describing the first round of negotiations and country’s positions). *But see* Lisa Song, *United Nations Seems*

efforts could complement efforts to reduce greenhouse gas emissions, of which plastic production and disposal is one source.⁶⁶ This Note focuses, in contrast, on domestic, state, and local avenues in the United States. Here, states and localities have taken the lead in imposing controls or outright bans on certain plastic products—plastic bags and Styrofoam containers are two examples—and generally prevailed in any legal challenges to those laws.⁶⁷ Several states, including New York, California, Maine, and Oregon, have passed or are also actively considering legislation that would impose stewardship requirements on producers and distributors of plastic products.⁶⁸ Ten states and Guam also manage deposit return systems where consumers can collect a nominal fee for each plastic product returned for recycling.⁶⁹ But these regulations are localized or product-specific.

Federal regulation of plastic pollution has been limited in scope, with one exception. The Microbeads-Free Waters Act of 2015 banned the production and distribution of all consumer products containing plastic micro-beads, one type of plastic product.⁷⁰ Otherwise, federal agencies have generally relied on environmental statutes to set minimum standard for land-based sources of plastic pollution. For example, the Environmental Protection Agency (EPA) promulgates effluent

to Boost Plastic Industry Interests, Critics Say, PROPUBLICA (Sept. 19, 2023), <https://www.propublica.org/article/united-nations-seems-to-boost-plastics-industry-interests-critics-say> [<https://perma.cc/5BL8-J4H2>] (noting critiques of the treaty's development).

⁶⁶ See *supra* note 56 and accompanying text. See generally *Global Climate Agreements: Successes and Failures*, COUNCIL ON FOREIGN RELS. (Nov. 4, 2022, 12:40 PM), <https://www.cfr.org/background/paris-global-climate-change-agreements> [<https://perma.cc/N47J-LLSN>].

⁶⁷ See Fraser, *supra* note 5 (reviewing litigation challenging state and local plastic restrictions).

⁶⁸ See Winston Choi-Schagrin, *Maine Will Make Companies Pay for Recycling. Here's How It Works*, N.Y. TIMES (Aug. 5, 2021), <https://www.nytimes.com/2021/07/21/climate/maine-recycling-law-EPR.html> [<https://perma.cc/U5Q6-US7N>]. Stewardship programs could, depending on their design, require that producers of plastic products (1) pay to fund the proper recycling of their products and (2) create “producer responsibility plans” setting out minimum targets for product recovery and recycling. Marissa Heffernan, *New York Lawmakers Consider Three Packaging EPR Bills*, PLASTICS RECYCLING UPDATE (Mar. 14, 2023), <https://tinyurl.com/1219114> [<https://perma.cc/AWP3-Z6MZ>]; see also S.B. S1064, 2023–2024 (N.Y. 2023), <https://www.nysenate.gov/legislation/bills/2023/s1064> [<https://perma.cc/34VD-8DLX>]; S.B. S4246A, 2023–2024 (N.Y. 2023), <https://www.nysenate.gov/legislation/bills/2023/s1064> [<https://perma.cc/K9KQ-D3VL>].

⁶⁹ *State Beverage Container Deposit Laws*, NAT'L CONF. OF STATE LEGISLATURES (Mar. 13, 2020), <https://www.ncsl.org/environment-and-natural-resources/state-beverage-container-deposit-laws> [<https://perma.cc/5LD9-DQLZ>].

⁷⁰ Microbead-Free Waters Act of 2015, 21 U.S.C. § 331(ddd); see also NAT. RES. DEF. COUNCIL, *PLASTIC PERIL: THE WIDESPREAD AND DEVASTATING IMPACTS OF PLASTIC POLLUTION IN OUR OCEANS* 4 (2020), <https://www.nrdc.org/sites/default/files/plastic-peril-oceans-pollution-fs.pdf> [<https://perma.cc/65B5-AKE8>] (reviewing government actions taken to reduce plastic pollution, including the Microbead-Free Waters Act of 2015, which went into effect in 2019).

limitations guidelines for plants producing intermediate or final plastic products under the Clean Water Act⁷¹ and enforces general reporting and handling requirements for solid waste (that may include plastic debris) under the Resource Conservation and Recovery Act (RCRA).⁷² Plants producing plastic products are primarily subject to the Clean Air Act's requirements for facilities emitting hazardous air pollutants, and so those plants must meet stringent technology-based limits on emissions of certain toxic chemicals.⁷³ Moreover, solid waste incineration plants, including those burning plastic waste, must abide by the Clean Air Act's emission and ambient standards specific to their facility type.⁷⁴ Finally, some federal statutes address plastic waste from marine sources, including the Marine Protection Pollution, Research and Control Act of 1987, which prohibits discharges into the ocean from ships of plastic bags and packing materials, bottles, and synthetic ropes and fishing gear, for example.⁷⁵

Additional federal forms of plastic regulation face an uncertain future or focus only on the federal government's power as a consumer. Members of Congress have proposed several versions of the Break Free from Plastic Pollution Act, which would ban single-use plastics and create a national container deposit system, among other comprehensive

⁷¹ Plastic Molding and Forming Effluence Guidelines and Standards, 40 C.F.R. §§ 463.1–.37 (2022) (regulating pollutants in wastewater discharged from industrial facilities that produce consumer and industrial plastic products); Organic Chemicals, Plastics and Synthetic Fibers Effluence Guidelines, 40 C.F.R. §§ 414.10–.111 (2022) (regulating wastewater discharges from chemical facilities).

⁷² 42 U.S.C. § 6907 (directing the EPA to create guidelines for management of waste from its creation to its disposal). The EPA's guidelines apply to "solid waste," which includes plastics, and create stricter handling requirements for "hazardous waste" that poses substantial threats to human health. 42 U.S.C. § 6903; *see* 40 C.F.R. §§ 240–82.

⁷³ *See* 42 U.S.C. § 7412 (setting out requirements for major stationary sources that emit any of the listed pollutants); MORATH, *supra* note 20, at 81 (noting that the plastic, foam, fiber, and rubber industries emit pollutants deemed hazardous by the EPA, including styrene, methylene chloride, and hydrogen cyanide); *Clean Air Act Standards and Guidelines for Foam, Fiber, Plastic and Rubber Products*, U.S. ENV'T PROT. AGENCY (Mar. 7, 2023), <https://www.epa.gov/stationary-sources-air-pollution/clean-air-act-standards-and-guidelines-foam-fiber-plastic-and> [<https://perma.cc/JBE6-2PRX>] (regulating hazardous air pollutants for plastic-producing facilities).

⁷⁴ *See* 42 U.S.C. § 7429 (setting out ambient and emissions requirements for solid waste combustion facilities); U.S. ENV'T PROT. AGENCY, *CLEAN AIR ACT GUIDELINES AND STANDARDS FOR WASTE MANAGEMENT* (2022), <https://www.epa.gov/stationary-sources-air-pollution/clean-air-act-guidelines-and-standards-waste-management> [<https://perma.cc/NNL2-42NZ>].

⁷⁵ 33 U.S.C. §§ 1901–15 (implementing the MARPOL Convention, an international treaty focused on regulating garbage generated by ships); *see also* MORATH, *supra* note 20, at 62–63, 85–86 (discussing federal laws that prohibit the dumping of plastic products into the ocean or provide funding for research and monitoring of marine debris).

innovations.⁷⁶ Although the Senate held a hearing in 2022 on the problem of plastic waste, no bills have yet moved out of committee.⁷⁷ But President Biden ordered federal agencies to pursue other avenues for reducing plastic waste from their operations.⁷⁸ The Department of the Interior committed to phasing out all single-use plastic products in the National Parks System by 2032.⁷⁹ The General Service Administration (GSA) also signaled that it may reduce contracting for services that use single-use plastics.⁸⁰

Regulating plastics through the legislative process would certainly be preferable to only pursuing discrete legal challenges—as scholars have advocated.⁸¹ Continuing to support comprehensive federal reform, including the Break Free from Plastic Pollution Act, or burgeoning state efforts, such as stewardship laws, is important. But repeated inaction on comprehensive legislation, especially at the federal level,⁸² makes other viable avenues for addressing the problem of plastic pollution more attractive. Litigation is one such avenue. Pursuing strategic “public plastic nuisance” cases in multiple states could both result in remedies for existing plastic pollution and lead to more holistic regulation of plastic products in the future.⁸³

⁷⁶ S. 984, 117th Cong. (2021); H.R. 2238, 117th Cong. (2021). The Act would also, for example, amend RCRA to address plastic waste, require major beverage manufacturers to finance end-of-life management of their products, impose a national 10-cent container deposit bill, and direct the EPA to revise CAA and CWA regulations applicable to plastic products and impose a moratorium on the issuance of new permits to facilities. MORATH, *supra* note 20, at 70–71.

⁷⁷ *Examining the Impact of Plastic Use and Identifying Solutions for Reducing Plastic Waste*, U.S. COMM. ON ENV'T & PUB. WORKS (Dec. 15, 2022), <https://www.epw.senate.gov/public/index.cfm/2022/12/examining-the-impact-of-plastic-use-and-identifying-solutions-for-reducing-plastic-waste> [<https://perma.cc/8DZM-NA2P>].

⁷⁸ Exec. Order No. 14,057, 88 Fed. Reg. 236 (Dec. 13, 2021) (focusing on sustainable acquisition and procurement practices).

⁷⁹ *Order No. 3407*, U.S. DEP'T INTERIOR (June 8, 2022), <https://www.doi.gov/sites/doi.gov/files/elips/documents/so-3407.pdf> [<https://perma.cc/Q57A-MSSG>]; see also *Interior Department Announces Progress to Phase Out Single-Use Plastics Across Public Lands*, U.S. DEP'T OF INTERIOR (Sept. 28, 2023), <https://www.doi.gov/pressreleases/interior-department-announces-progress-phase-out-single-use-plastics-across-public> [<https://perma.cc/4NLL-CLAF>] (announcing that all bureaus and offices have finalized sustainable procurement plans).

⁸⁰ General Services Administration Acquisition Regulation (GSAR): Single-Use Plastics and Packaging, 87 Fed. Reg. 40,476, 40,476 (July 7, 2022) (to be codified at 48 C.F.R. pts. 523–52) (stating that the GSA “seek[s] public feedback pertaining to the use of plastic consumed in both packaging and shipping, as well as other single-use plastics for which the agency contracts” as part of informing potential future rulemaking to “establish requirements and reporting mechanisms for reducing unnecessary single-use plastic”).

⁸¹ See, e.g., Chu, *supra* note 20, at 21.

⁸² See *supra* notes 67–70 and accompanying text.

⁸³ See *infra* Section II.B.2.

II PUBLIC NUISANCE: PERIL & PROMISE

Public nuisance is a centuries-old tort. It has evolved—some say transformed⁸⁴—to support widespread litigation over the most significant crises of the past fifty years: the health consequences of tobacco products, the destruction wrought by opioids, and the contribution of the fossil fuel industry to climate change. Some judges and scholars have argued that it is a protean and capacious mechanism for courts to address legislative and regulatory problems, which fundamentally undermines the separation of powers and upends modern tort law.⁸⁵ As Professor Leslie Kendrick has argued, however, public nuisance’s “perils are easily overstated and its promise overlooked.”⁸⁶ This Part first reviews the history of public nuisance law and then wades into the debates on novel applications of public nuisance law. It concludes by arguing that, on balance, the “promise” of a public nuisance theory outweighs its potential “peril” when it comes to the problem of plastic pollution.

A. The Development of Public Nuisance Doctrine

Public nuisance is a common law cause of action for “unreasonable and substantial interference with a right common to the general public.”⁸⁷ It originates in twelfth-century England in the assize of nuisance, which developed to protect against non-trespassory interferences with property.⁸⁸ Both Henry de Bracton and William Blackstone, English jurists famous for their respective writings on the development of the common law, defined public nuisance as “nuisance because of the common and public welfare” and as “offenses against the public order and economical regimen of the state,” respectively.⁸⁹ Private nuisance, in

⁸⁴ See, e.g., Richard O. Faulk & John S. Gray, *Alchemy in the Courtroom? The Transmutation of Public Nuisance Litigation*, 2007 MICH. STATE L. REV. 941, 1015.

⁸⁵ See *infra* Section II.B.

⁸⁶ Leslie Kendrick, *The Perils and Promise of Public Nuisance*, 132 YALE L.J. 702, 702 (2023).

⁸⁷ RESTATEMENT (SECOND) OF TORTS § 821B(1) (AM. L. INST. 1979).

⁸⁸ Janet Loengard, *The Assize of Nuisance: Origins of An Action at Common Law*, 37 CAMBRIDGE L.J. 144 (1978) (narrating the historical development of the assize of nuisance, which is the common root of today’s actions for public nuisance and private nuisance); see also Kendrick, *supra* note 86, at 713.

⁸⁹ 3 HENRY DE BRACTON, BRACTON ON THE LAWS AND CUSTOMS OF ENGLAND 191 (George E. Woodbine ed., Samuel E. Thorne trans., William S. Hein & Co. 1997) (1968); 4 WILLIAM BLACKSTONE, COMMENTARIES *109 (spelling modernized); see also Kendrick, *supra* note 86, at 713 (reviewing early definitions of public nuisance); see also Thomas W. Merrill, *Public Nuisance as Risk Regulation*, 17 J.L. ECON. & POL’Y 347, 348 n.6 (2022) (citing de Bracton).

contrast, was a cause of action for infringement on individuals' use and enjoyment of land.⁹⁰

At early common law, public nuisance was a criminal action, but, as some scholars have noted, that meant that it was enforced through prosecutions by the English crown under common law—not that the alleged tortfeasor's activity was already identified as criminal by statute.⁹¹ As public nuisance developed, civil public nuisance actions seeking preliminary injunctions grew in number, and public nuisance became predominately a civil action.⁹² The earliest public nuisances involved blockages to waterways or invasions of public roads, both infringements on the property of the Crown.⁹³ The list of public nuisances then expanded to encompass a broad and diverse category of offenses under English and then American common law, from keeping diseased animals or storing explosives in a major city to loud and disturbing noises or disseminating bad odors, dust, and smoke.⁹⁴ Some evidence indicates that public nuisance included product harms as far back as English common law.⁹⁵

⁹⁰ Merrill, *supra* note 89, at 347; *see also* RESTATEMENT (SECOND) OF TORTS § 822 (AM. L. INST. 1979) (“One is subject to liability for a private nuisance if, but only if, his conduct is a legal cause of an invasion of another’s interest in the private use and enjoyment of land, and the invasion is either (a) intentional and unreasonable, or (b) unintentional and otherwise actionable under the rules controlling liability for negligent or reckless conduct, or for abnormally dangerous conditions or activities.”).

⁹¹ Kendrick, *supra* note 86, at 714; Donald G. Gifford, *Public Nuisance as a Mass Products Liability Tort*, 71 U. CIN. L. REV. 741, 794–95 (2003).

⁹² *See* J. R. Spencer, *Public Nuisance—A Critical Examination*, 48 CAMBRIDGE L.J. 55, 66 (1989) (“Although public nuisance is a crime, the usual method of repressing it ceased to be prosecution in the criminal courts and became an injunction issued in the civil courts.”). The first case to seek an injunction in chancery court for a public nuisance occurred in 1752. *Baines v. Baker* (1752) 27 Eng. Rep. 105 (action to enjoin neighbor who set up a smallpox “hospital”); Spencer, *supra* (discussing *Baines* as the “first reported case” where a plaintiff sought an injunction in a public nuisance case).

⁹³ *See* Spencer, *supra* note 92, at 58 (translating BRACTON, *supra* note 89, at 191) (discussing Bracton’s description of nuisances); *see also* RESTATEMENT (SECOND) OF TORTS § 821B cmt. a (AM. L. INST. 1979) (describing history as an action related to royal roads and property). Blackstone’s 1769 list of common nuisances included “[a]nnoyances in highways, bridges, and public rivers, by rendering the same inconvenient or dangerous to pass: either positively, by actual obstructions; or negatively, by want of reparations.” 4 BLACKSTONE, *supra* note 89, at *110 (spelling modernized).

⁹⁴ RESTATEMENT (SECOND) OF TORTS § 821B cmt. b (AM. L. INST. 1979); *see, e.g.*, *State ex rel. Detienne v. City of Vandalia*, 94 S.W. 1009, 1011 (Mo. Ct. App. 1906) (noise frightening horses); *Acme Fertilizer Co. v. State*, 72 N.E. 1037, 1038 (Ind. App. 1905) (bad odors). States also prosecuted as public nuisances conduct that was perceived as disorderly or immoral, such as drag shows or nudity. Kendrick, *supra* note 86, at 719.

⁹⁵ *See* Kendrick, *supra* note 86, at 716. In the 1660s, William Sheppard listed as “common nuisances” instances of merchants “who sell *products* unfit for human consumption,” although one could debate whether “unfit” encompasses products used as directed but still leading to adverse consequences. Spencer, *supra* note 92, at 60 (emphasis added) (citing WILLIAM SHEPPARD, *THE COURT-KEEPERS GUIDE* 45–46 (London, W.G. 5th ed. 1662)).

Pollution has significant historical roots as a type of public nuisance in the United States. For instance, courts in the early twentieth century used public nuisance theories to enjoin defendants from disposing of city waste into the Mississippi River⁹⁶ and emitting sulfur dioxide from their copper plants.⁹⁷ Contemporary cases, such as one involving a chemical plant's discharges into state waters, continue this trend.⁹⁸ Moreover, courts have relied on public nuisance theories to enjoin industry behavior since the late nineteenth century. For example, the Supreme Court drew upon the federal common law of public nuisance to enjoin a railroad strike in twenty-seven states because the strike obstructed interstate rail travel.⁹⁹ Courts have more recently approved challenges to industry practices based on public nuisance theories,¹⁰⁰ and major settlements with tobacco industry defendants in the 1990s involved the tort.¹⁰¹

Today, public nuisance in the United States generally includes conduct that significantly interferes with the public health, safety, peace, comfort, or convenience.¹⁰² Many states also define public nuisance as conduct of a "continuing nature" that produces a "permanent or long-lasting effect," a significant effect on a public right, and an effect that the alleged tortfeasor knows or has reason to know exists.¹⁰³ Finally, states have codified specific actions that constitute public nuisance in statutes or designated them as such in regulations.¹⁰⁴

⁹⁶ See *Missouri v. Illinois*, 180 U.S. 208 (1901) (allowing Missouri's suit to proceed against Illinois and the Sanitary District of Chicago over sewage canal disposing of large amount of Chicago waste into the Mississippi River).

⁹⁷ See *Georgia v. Tenn. Copper Co.*, 206 U.S. 230, 238 (1907) (enjoining sulphur dioxide emissions from copper companies because they became sulphurous acid by mixing with the air).

⁹⁸ See *Rhode Island v. Atl. Richfield Co.*, 357 F. Supp. 3d 129 (D.R.I. 2018) (allowing nuisance claims to proceed regarding chemical pollution of state waters).

⁹⁹ See *In re Debs*, 158 U.S. 564, 587 (1895) (invoking public nuisance doctrine, likening the strike's effects to a highway obstruction, and affirming the lower federal court's injunction); see also *Kendrick*, *supra* note 86, at 719 & n.85, 720.

¹⁰⁰ See, e.g., *Cnty. of Santa Clara v. Atl. Richfield Co.*, 40 Cal. Rptr. 3d 313 (Cal. Ct. App. 2006) (allowing plaintiffs to pursue representative nuisance action on behalf of the public). But see, e.g., *City of Chicago v. Am. Cyanamid Co.*, 823 N.E.2d 126 (Ill. App. Ct. 2005) (holding that lead-based paint manufacturers were not liable).

¹⁰¹ See *Kendrick*, *supra* note 86, at 705 (discussing tobacco litigation settlements); see also Nora Freeman Engstrom & Robert L. Rabin, *Pursuing Public Health Through Litigation*, 73 STAN. L. REV. 285, 304–05 (2021) (discussing tobacco litigation settlements).

¹⁰² RESTATEMENT (SECOND) OF TORTS § 821B(2)(a) (AM. L. INST. 1979).

¹⁰³ *Id.* § 821B(2)(c); see *infra* Section III.A (listing the common law definitions and elements of public nuisance in New York and California, both of which resemble the Second Restatement).

¹⁰⁴ RESTATEMENT (SECOND) OF TORTS § 821B(2)(b) (AM. L. INST. 1979); e.g., CAL. CIV. CODE § 3479 (West 2023) (defining a public nuisance as "[a]nything which is injurious to health . . . or is indecent or offensive to the senses" and obstructions of the "free passage or use,

B. *The Peril & Promise of a “Public Plastic Nuisance” Theory*

Although Earth Island’s case is the first to include a public nuisance claim against the plastic industry, its use of public nuisance law aligns with previous efforts to address mass harms through litigation. Consumer and government plaintiffs have litigated public nuisance claims—with varying levels of success—against the tobacco, lead paint, firearms, opioids, and fossil fuel industries.¹⁰⁵ These past applications of public nuisance law indicate the theoretical and practical hurdles that Earth Island will face in California (as it continues its suit) and that plaintiffs in New York would face in future litigation. However, because of the unique character of plastic pollution, public nuisance would offer significant benefits as a litigation theory: a historical grounding in tort doctrine, abatement and damages remedies, a transition regulatory regime, and a potent motivator for future government and industry action. On balance, these benefits outweigh the drawbacks and make public nuisance a worthwhile theory. Public nuisance liability not only can apply to plastic pollution—as Part III discusses in New York—but *should* apply to the plastic industry’s contributions to plastic pollution.

1. *The Peril*

Several aspects of a “plastic public nuisance” case would likely provoke strong criticisms. First, it would presumably implicate a significant portion of industry players, which would raise concerns about its far-reaching consequences and put pressure on the separation of powers. The defendants in *Earth Island* include ten of the largest food, beverage, and consumer products businesses that sell plastic products around the world and together contribute to the majority of global plastic pollution.¹⁰⁶ The avalanche of public nuisance litigation arising from the opioids crisis has similarly targeted the major players involved in the production, distribution, or sale of the products, such as Purdue Pharma,

in the customary manner” of navigable lakes, rivers, streams, or public rights of way); N.Y. MULT. DWELL. LAW § 309(1)(a) (McKinney 2023) (codifying that overcrowded housing lacking proper modes of ingress or egress constitutes a public nuisance); N.Y. JURIS. 2D CRIM. L. §§ 1799, 1800 (imposing criminal liability on those who knowingly or recklessly create nuisances that endanger the health and safety of a large number of people). Section III.A discusses statutory public nuisances in California and New York in more detail.

¹⁰⁵ See *supra* note 19 and accompanying text.

¹⁰⁶ See Earth Island Complaint, *supra* note 4, ¶¶ 28–68; see also GREENPEACE, *supra* note 40, at 23 (ranking “companies polluting the most places with the most plastics”). All the initial defendants, or their U.S. subsidiaries, do business in California. Earth Island Complaint, *supra* note 4, ¶¶ 28–68.

Johnson & Johnson, and Walgreens.¹⁰⁷ And a growing contingent of public nuisance cases related to climate change have alleged that the largest fossil fuel conglomerates (including BP, Chevron, and Exxon) had a significant role in causing the problem.¹⁰⁸ The public nuisance claims against the opioid and fossil fuel industries have drawn criticisms that permitting a court to decide such cases, which would have industry-wide consequences, usurps the authority of elected legislative bodies and therefore circumvents the separation of powers.¹⁰⁹ Courts, the U.S. Chamber of Commerce, and academics have also generally critiqued expansive applications of public nuisance against industry actors,¹¹⁰ and argued instead that historical conceptions of public nuisance should cabin the tort's application.¹¹¹

¹⁰⁷ See Jeff Overley, *Winless in Opioid Bouts, Will Pharmacies Throw in the Towel?*, LAW360 (Aug. 11, 2022, 11:15 PM), https://www.law360.com/articles/1520095?e_id=5db64573-646d-4774-ab43-33fe32a977c3&utm_source=engagement-alerts&utm_medium=email&utm_campaign=case_updates [<https://perma.cc/SV6S-UZFK>] (discussing opioid litigations against pharmacies).

¹⁰⁸ See, e.g., *Delaware ex rel. Jennings v. BP Am. Inc.*, 578 F. Supp. 3d 618 (D. Del. 2022); see also, e.g., *City of Oakland v. BP PLC*, 969 F.3d 895, 901 (9th Cir. 2020), *amended and superseded on denial of reh'g* *City of Oakland v. BP PLC*, 960 F.3d 570 (9th Cir. 2020), *cert. denied*, 141 S. Ct. 2776 (2021).

¹⁰⁹ See, e.g., Bonnie Eslinger, *Calif.'s Broad Nuisance Law Key to Walgreens Opioid Liability*, LAW360, (Aug. 11, 2022, 11:32 PM EDT) <https://www.law360.com/articles/1520046/calif-s-broad-nuisance-law-key-to-walgreens-opioid-liability> [<https://perma.cc/66ZA-UTRP>] (quoting attorney Brandon Winchester, commenting on a California federal judge's decision to hold Walgreens liable for substantially contributing to opioids crisis in San Francisco, as saying that “[t]here is a fear that courts administering this novel theory of public nuisance law may create judge-made regulations that usurp the role of legislative bodies in determining what activities a state wants to encourage or discourage”). For example, the prospective character of abatement as a judicial remedy in public nuisance cases might resemble legislation or regulation, over which the legislative or executive branches, respectively, would have authority. Kendrick, *supra* note 86, at 769.

¹¹⁰ See, e.g., Brief of the Chamber of Commerce of the United States of America et al. as Amici Curiae Supporting Appellees and Affirmance, *Delaware v. Monsanto Co.*, No. 279, 2022, 2023 WL 4139127 (Del. June 22, 2023) (arguing that the court should reject the state's “[a]ggressive” public nuisance claims against manufacturers of polychlorinated biphenyls (PCBs) because those claims represent an “[e]xpanded and [u]nwarranted [u]se of [p]ublic [n]uisance”); see also Gifford, *supra* note 91, at 837 (“If plaintiffs cannot prevail in their lawsuits against manufacturer-defendants under well-established theories of recovery, courts should not permit them to move their crusades into the utterly uncharted territory of public nuisance.”); see also Thomas W. Merrill, *Is Public Nuisance a Tort?*, 4 J. TORT L. 1, 54 (2011); Richard A. Epstein, *The Private Law Connections to Public Nuisance Law: Some Realism About Today's Intellectual Nominalism*, 17 J.L. ECON. & POL'Y 282, 313 (2022); Thomas W. Merrill, *The New Public Nuisance: Illegitimate and Dysfunctional*, 132 YALE L.J.F. 985, 985 (2023) (arguing that Leslie Kendrick's *The Perils and Promise of Public Nuisance* fails to address “legitimacy objections,” over- and under-deterrence, and runaway liability in public nuisance's novel applications).

¹¹¹ See Kendrick, *supra* note 86, at 710 (defining the three most common forms of objections to public nuisance: traditionalist, formalist, and institutional). Advocates for the traditionalist position submit that public nuisance historically only imposed liability for

Second, public nuisance claims related to products fit uneasily into tort law doctrine. In some public nuisance cases, defendants and commentators have rejected the idea that public nuisance liability could arise from legal products sold to consumers.¹¹² Scholars have echoed that point while arguing that products liability law is the proper doctrinal home for purported public nuisance claims arising out of products, as products liability developed to address widespread harms from consumer products (and imposes more formal requirements on plaintiffs).¹¹³ Moreover, some judges and academics have cautioned that a capacious definition of public nuisance that includes product harms would undermine the structure of tort law¹¹⁴ or, more starkly, that public nuisance isn't a tort at all.¹¹⁵ Future state public nuisance cases against the plastic industry would need to show both that public nuisance liability includes injuries from products and, in the case of plastic products, should extend to plastic's attendant environmental and public health harms.¹¹⁶

Third, establishing causation is a critical but difficult proposition. Results in other public nuisance cases indicate that proving actual and proximate causation will present a challenge in future litigation. Courts have decided not to impose public nuisance liability on defendants whose products contributed to harms from gun violence¹¹⁷ and

criminal conduct that took place on or caused damage to public land or water and resulted in physical injury, for which the tortfeasor had control of the injurious instrument. *Id.* at 737–38.

¹¹² See, e.g., *California v. Purdue Pharma L.P.*, No. 30-2014-00725287-CU-BT-CXC, 2021 WL 5227329, at *9–10 (Cal. Super. Ct., Orange Cnty. Nov. 1, 2021); *Oklahoma ex rel. Hunter v. Johnson & Johnson*, 499 P.3d 719, 727–29 (Okla. 2021).

¹¹³ See, e.g., *Gifford*, *supra* note 91, at 817 (arguing that a large number of injuries does not amount to an injury to a “public right” and that plaintiffs should instead bring products liability claims).

¹¹⁴ Judge Bowman memorably stated the crux of this position when he wrote that public nuisance was a “monster that would devour in one gulp the entire law of tort.” *Tioga Pub. Sch. Dist. v. U.S. Gypsum Co.*, 984 F.2d 915, 921 (8th Cir. 1993). Professor Thomas Merrill has argued that public nuisance imposes liability based on conditions beyond an actor's control, which puts it at odds with the purpose of tort law: to impose civil liability for an individual's intentional or negligent conduct. Merrill, *Is Public Nuisance a Tort?*, *supra* note 110, at 16–17.

¹¹⁵ For example, Merrill has also argued that public nuisance isn't a tort but an analogue of criminal law that public officers enforce. Merrill, *Is Public Nuisance a Tort?*, *supra* note 110, at 5. Therefore, the legislature—not any court under common law authority—is the proper institution to determine the parameters of public nuisance liability and delegate authority to bring public nuisance actions. *Id.* Under this theory, private organizations and individuals would have no authority to bring public nuisance actions in situations where the legislature has not provided that they have the authority to do so. *Id.*

¹¹⁶ See *infra* Part III.

¹¹⁷ See *Camden Cnty. Bd. of Chosen Freeholders v. Beretta, U.S.A., Corp.*, 273 F.3d 536 (3d Cir. 2001) (finding that plaintiffs failed to state public nuisance claims against handgun manufacturers because of intervening actions of third parties).

toxic lead paint,¹¹⁸ as examples, because they felt the causal connections were too attenuated (lead paint) or that the parties most responsible for the alleged harms were individual consumers themselves (firearms). Judges in California and Oklahoma agreed in decisions in 2021 that pharmaceutical companies were not proximately liable for creating public nuisances.¹¹⁹ The success of a “plastic public nuisance” claim will depend in large part on the ability of future plaintiffs to prove a close causal link between the conduct of the defendants and alleged public nuisances and resulting injuries. Judge Swope’s recent order in *Earth Island* confirms this significant hurdle. He found that Earth Island had not sufficiently pled facts to show that the defendants’ production and sale of plastic products factually and proximately caused infringements on public rights in California.¹²⁰ Causation would therefore be a major issue in a future case in New York, as Sections III.A and III.B discuss in detail.

2. *The Promise*

Despite these critiques, a “plastic public nuisance” theory aligns with existing tort law and furthers its purposes. This theory mitigates the historical and doctrinal objections mentioned above, although separation of powers concerns remain and causation would still be a hurdle in future cases. But strategic litigation involving public nuisance claims would provide an effective tool for addressing plastic pollution domestically. On balance, the potential benefits of a “public plastic nuisance” theory outweigh its potential drawbacks.

First, certain framings of the “public plastic nuisance” align with historical conceptions of public nuisance law and respect the doctrine’s structure and purposes. The earliest public nuisances involved obstructions of waterways, public lands, and emissions or discharges of toxic chemicals.¹²¹ In both California, as demonstrated by *Earth Island*, and

¹¹⁸ See *Rhode Island v. Lead Indus. Ass’n*, 951 A.2d 428 (R.I. 2008) (finding that lead pigment manufacturers were not liable).

¹¹⁹ *California v. Purdue Pharma L.P.*, No. 30-2014-00725287-CU-BT-CXC, 2021 WL 5227329, at *10 (Cal. Super. Ct., Nov. 1, 2021); *Oklahoma ex rel. Hunter v. Johnson & Johnson*, 499 P.3d 719, 727–29 (Okla. 2021). The courts in these cases found that the plaintiffs had not adequately established an “incontrovertible link” between the harms to public health caused by prescription opioids and the defendants’ conduct in promoting their products while downplaying their addictive qualities. Jan Hoffman, *The Core Legal Strategy Against Opioid Companies May Be Faltering*, N.Y. TIMES (Nov. 11, 2021), <https://www.nytimes.com/2021/11/11/health/opioids-lawsuits-public-nuisance.html> [<https://perma.cc/5HP8-J7LW>].

¹²⁰ *Earth Island* May 2023 Order, *supra* note 9, at 3 (concluding that plaintiffs failed to allege “causation” or “sufficient facts regarding third party intervention”); see also *infra* Section III.B.1.c (discussing causation in New York in light of this order).

¹²¹ See *supra* notes 92–99 and accompanying text.

in New York, as illustrated in Part III, framings of the “plastic public nuisance” can involve injuries to the public’s access to waterways or public lands or the public’s rights to clean air and water, both of which have common law analogues.¹²² Applying public nuisance to these framings of the “public plastic nuisance” would not raise concerns that public nuisance law is expanding too far from its historical roots.¹²³ In addition, relating defendants’ interferences with those rights to the simultaneous violation of existing regulations—as possible in New York—reinforces that such conduct is unreasonable, wrongful, and a violation of legal duties that exist for plastic industry defendants.¹²⁴

Second, the remedies available in public nuisance actions—abatement and damages—could holistically address the domestic harms related to plastic pollution. The prototypical remedy in public nuisance cases is abatement, a form of injunctive relief where the court orders a defendant to take corrective action to address the effects of the nuisance.¹²⁵ Abatement costs can be significant for widespread harms to the public.¹²⁶ Government plaintiffs in the opioids MDL created references plans for investments that liable manufacturers, distributors, and retailers would make in affected communities; the funds then went towards addiction treatment and prevention.¹²⁷ In the case of plastic pollution, abatement could involve funding cleanup efforts for public waters or lands,¹²⁸ increasing investments in environmentally friendly alternatives

¹²² See *infra* Sections III.B.1, III.B.2.

¹²³ See *supra* notes 111–14 and accompanying text.

¹²⁴ See *supra* Section III.B.1(b); Kendrick, *supra* note 86, at 783 (arguing that public nuisance suits help to address wrongful behavior by defendants in cases where private plaintiffs would be contributorily or comparatively negligent).

¹²⁵ 1 MARGIE SEARCY-ALFORD, A GUIDE TO TOXIC TORTS § 3.06 (2021).

¹²⁶ For example, Judge Dan Polster ordered three of the country’s largest pharmacy chains—CVS, Walgreens, and Walmart—to pay \$650.5 million to two Ohio counties after the chains were found liable in a federal jury trial in 2021. Jan Hoffman, *CVS, Walgreens and Walmart Must Pay \$650.5 Million in Ohio Opioids Case*, N.Y. TIMES (Aug. 17, 2022), <https://www.nytimes.com/2022/08/17/health/opioids-cvs-walmart-walgreens.html?referringSource=articleShare> [<https://perma.cc/Z6ZP-CJA2>].

¹²⁷ Sarah Maslin Nir, Jan Hoffman & Lola Fadulu, *Pharmaceutical Company Is Found Liable in Landmark Opioid Trial*, N.Y. TIMES (Dec. 30, 2021), <https://www.nytimes.com/2021/12/30/nyregion/teva-opioid-trial-verdict.html> [<https://perma.cc/TVA2-TCUC>].

¹²⁸ Earth Island, for example, asked the court to order that the defendants “disburse the funds and resources necessary to remediate the harm they have caused” and pay compensatory damages. Earth Island Complaint, *supra* note 4, XII ¶¶ 1–2.

to plastic products,¹²⁹ or changing production processes.¹³⁰ Courts can also award damages when defendants are liable for creating a public nuisance.¹³¹ In other public nuisance cases, courts awarded damages to government plaintiffs based on their additional public health care and social service costs traceable to opioid addiction and death¹³² or their additional costs of adapting to climate change.¹³³ The increased cost of collecting and sorting plastic waste and, where possible, recycling plastic products has heavily impacted municipal budgets.¹³⁴ Damages could compensate governments for continuing to provide those services. In contrast to the narrower litigation pathways of state consumer protection law or federal environmental statutes, public nuisance provides a tool for holding many players involved in creating the “public plastic nuisance” accountable for their actions and securing their assistance in addressing an ongoing environmental crisis.¹³⁵

Third, in the absence of comprehensive regulation of plastic products,¹³⁶ the ideal response, public nuisance is the second best means for pressing the plastic industry to change its business practices. Public nuisance liability has performed a similar role as a gap filler in contexts where existing regulation proved inadequate to protect people from mass harms, most notably in the case of tobacco litigation.¹³⁷ It remains

¹²⁹ See, e.g., MORATH, *supra* note 20, at 161–71; see also Georgie Hughes, *New Biodegradable Materials Could Be the Answer to Plastic Pollution*, ENV'T J. (Sept. 27, 2022), <https://environmentjournal.online/articles/new-biodegradable-materials-could-be-the-answer-to-plastic-pollution> [<https://perma.cc/ZZ2S-5G9M>]. But see Matt Simon, *Bio-Based Plastics Aim to Capture Carbon. But at What Cost?*, WIRED (Dec. 15, 2022, 7:00 AM), <https://www.wired.com/story/bio-based-plastics-aim-to-capture-carbon-but-at-what-cost> [<https://perma.cc/MPV6-H2V4>].

¹³⁰ See *infra* note 142.

¹³¹ See *Missouri ex rel. Dresser Indus. v. Ruddy*, 592 S.W.2d 789, 793 (Mo. 1980) (first authorizing damages as a remedy for a public nuisance suit without an explicit statutory guarantee); see also Kendrick, *supra* note 86, at 723–24.

¹³² Nir et al., *supra* note 127.

¹³³ See Rachel Rothschild, *State Nuisance Law and the Climate Change Challenge to Federalism*, 27 N.Y.U. ENV'T L.J. 412, 414 (2019) (for example, responding to more frequent and aggressive storms).

¹³⁴ See Corkery, *supra* note 37 (discussing the high costs to offer recycling services). Only some plaintiffs could make this claim, such as New York municipalities that (1) do not export their waste to other areas and (2) fund waste management through taxes or fees on residents. See *12 Things New Yorkers Should Know About Their Garbage*, CITIZENS BUDGET COMM'N (May 21, 2014), <https://cbcny.org/research/12-things-new-yorkers-should-know-about-their-garbage> [<https://perma.cc/TRC4-42KB>] (describing the high cost of recycling and trash removal in New York City).

¹³⁵ See Kendrick, *supra* note 86, at 785 (“[P]ublic nuisance . . . can hold defendants accountable for past behavior and secure their assistance in abating an ongoing crisis.”).

¹³⁶ See *supra* Section I.C.

¹³⁷ See David A. Dana, *Public Nuisance Law When Politics Fails* (Nw. Univ. Sch. of L., Law & Economics Series Working Paper No. 21-03, Public Law and Legal Theory Series Working

a complementary option at the state level despite existing regulatory regimes governing air and water pollution.¹³⁸ As Professor Catherine Sharkey has argued, common law tort law can and should fill in such a “regulatory void”—particularly for areas that pose emerging and incompletely understood risk—and create incentives for industry to investigate and develop innovations to mitigate those risks.¹³⁹ Defendant cooperation is even more important when defendants may have possessed but publicly downplayed information about their products’ risks.¹⁴⁰

Finally, the threat of public nuisance liability and significant abatement costs or damages would be a powerful motivator. If a coalition of state attorneys general were to coordinate litigating public nuisance claims, for example, litigation against major plastic industry players could reach the scale necessary to influence the behavior of many major producers, distributors, and retailers.¹⁴¹ Plastic industry players may voluntarily agree to settlement agreements with environmental benefits.¹⁴² Moreover, coalition litigation would likely draw public attention to the issue of plastic pollution and could push legislators or regulators to act

Paper No. 21-14, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3852874 [<https://perma.cc/LDZ9-M9AM>].

¹³⁸ See, e.g., *Int’l Paper Co. v. Ouellette*, 479 U.S. 481, 497 (1987) (holding that the CWA limited but did not displace state law public nuisance actions against polluters in the state where their polluting sources are located).

¹³⁹ Catherine M. Sharkey, *Common Law Tort as a Transition Regulatory Regime: A New Perspective on Climate Change Litigation*, in *CLIMATE LIBERALISM* 103, 104 (Jonathan H. Adler ed., 2023); see also Merrill, *supra* note 89, at 348 (“As a form of risk regulation, the function of public nuisance is to eliminate a condition that imposes the risk of harm, either by deterring the defendant from engaging in the activity that creates the risk or by forcing the defendant to eliminate the risk.”).

¹⁴⁰ See Sharkey, *supra* note 139, at 106 (arguing for the “information-generating role of common law tort” lawsuits in helping regulators understand and address emerging risks); see *supra* notes 44–46 and accompanying text (discussing the plastic industry’s awareness of plastic products’ harms and its campaigns aimed at deflecting responsibility for plastic pollution onto individual consumers).

¹⁴¹ See, e.g., Jason Lynch, *Federalism, Separation of Powers, and the Role of State Attorneys General in Multistate Litigation*, 101 *COLUM. L. REV.* 1998, 2006 (2001) (reviewing how successful multistage coalition suits by attorneys general can “effectively impose[] the settlement terms on the defendant on a national basis” because “[i]f the corporation is forced to change its activities in several states, it is likely to do so in every state in which it operates”).

¹⁴² See, e.g., Nir et al., *supra* note 127 (describing the settlement terms in New York litigation against manufacturers, distributors, and retailers of opioids); Dieter Holger, *TerraCycle Partners Including Coca-Cola, P&G to Change Recycling Labels After Settling Lawsuit*, *WALL ST. J.* (Nov. 15, 2021, 2:46 PM), <https://www.wsj.com/articles/terracycle-partners-including-coca-cola-p-g-to-change-recycling-labels-after-settling-lawsuit-11637005586> [<https://perma.cc/2GDR-C6JL>] (describing how TerraCycle, a private recycling company, agreed to increased monitoring, relabeling of its products, and committing to not incinerate any collected recyclable waste).

on potential solutions such as extended producer responsibility statutes or more comprehensive bans.¹⁴³ When traditional regulation has not caught up, public nuisance provides a path forward.

III LITIGATION CASE STUDY: NEW YORK

Out of all recent cases filed against the plastic industry, Earth Island's suit remains the only one, in any state, to include a public nuisance claim.¹⁴⁴ Regardless of the outcome of Earth Island's case, bringing strategic litigation in states besides California would be beneficial for fully realizing the benefits of a "public plastic nuisance" theory. New York is an ideal candidate. The elements of public nuisance law in New York are similar to California and favorable for a future public nuisance claim against plastic manufacturers, distributors, and retailers. A verdict in 2021 against opioid manufacturers and distributors in New York indicates that a public nuisance case against many industry players is plausible in the State.¹⁴⁵ In addition, the market for plastic products and production of plastic waste in New York is significant, and most of the large players in the plastic industry have some presence in the State.¹⁴⁶ Some recent cases in New York involve defendants from the plastic industry, although none have involved public nuisance claims.¹⁴⁷ As this Part will demonstrate,

¹⁴³ See *supra* note 17 and accompanying text (discussing high-profile actions by the Connecticut and California attorneys general); *supra* Section I.C (outlining state legislation or proposals).

¹⁴⁴ See Fraser, *supra* note 5; see also Search, PLASTICS LITIGATION TRACKER, <https://plasticlitigationtracker.org/?keywords=nuisance> [<https://perma.cc/WW46-ZXHM>] (searching "nuisance" in "Keywords" box yields only *Earth Island* as a result).

¹⁴⁵ See Nir et al., *supra* note 127.

¹⁴⁶ Total U.S. generation of municipal solid waste in 2018 was 292.4 million tons, of which plastic waste was 12.2% or 35.7 million tons. *National Overview: Facts and Figures on Materials, Wastes and Recycling*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials> [<https://perma.cc/7MX4-LZ45>]. For comparison, New York City generates more than 14 million tons of waste each year, of which plastic waste represents approximately fourteen percent. CITY OF N.Y., PLANYC UPDATE APRIL 2011, at 136, 139 (2011), https://www.nyc.gov/html/planyc/downloads/pdf/publications/planyc_2011_planyc_full_report.pdf [<https://perma.cc/9J3Q-S7ZF>]. Based on these figures, a rough estimate of New York City's annual plastic waste is nearly 2 million tons, accounting for almost 5.5% of national annual plastic waste. Plastic industry defendants targeted in other cases have multiple places of business in New York, which is relevant for personal jurisdiction. See *supra* note 23 and accompanying text.

¹⁴⁷ See Consolidated Complaint for Violations of the Federal Securities Laws at 20–22, 52, *In re Danimer Sci., Inc. Sec. Litig.*, No. 1:21-cv-02708 (E.D.N.Y. Jan. 19, 2022) (listing defendants in consolidated federal securities lawsuits and alleging that they made false and misleading statements, including overstating the biodegradability of their core plastic alternative); *Duchimaza v. Niagara Bottling, LLC*, 619 F. Supp. 3d 395, 401 (S.D.N.Y. 2022) (dismissing New

there is a credible basis for suing plastic producers under New York law for creating a public nuisance with their products.

The following Section provides an overview of New York public nuisance law and its similarities to and distinctions from California public nuisance law. The remainder of Part III then discusses how public or private plaintiffs could construct a viable public nuisance claim under New York law for harms traceable to plastic products. It traces the initial steps for a case: (1) framing the problem of plastics in New York and identifying the parties potentially holding a public nuisance claim; (2) establishing how plastic pollution meets the required elements of a New York public nuisance claim in each framing; and (3) addressing likely counterarguments from plastic industry defendants. Throughout this analysis, Part III draws on lessons from other public nuisance cases, particularly the pleadings and decisions in *Earth Island*.

A. Comparing New York & California Law

The common law formulation of public nuisance in New York resembles the Second Restatement of Torts. A public or “common” nuisance in New York is conduct or omissions that “offend, interfere with or cause damage to the public in the exercise of rights common to all.”¹⁴⁸ New York’s common law of public nuisance generally requires three key elements to establish a claim: (1) a public or common right; (2) a substantial and unreasonable interference with, obstruction of, or offense against the public right; and (3) a causal connection between the alleged defendant and the interference, obstruction, or offense.¹⁴⁹ New York’s common law definition and elements broadly resemble California’s common law definition and elements.¹⁵⁰ While there are

York City consumer’s putative class action related to Niagara’s manufacturing, distribution, and sale of Kirkland brand water bottles labeled “100% Recyclable”).

¹⁴⁸ *Copart Indus. v. Consol. Edison Co.*, 362 N.E.2d 968, 971 (N.Y. 1977); *see also Reid ex rel. Reid v. Kawasaki Motors Corp., U.S.A.*, 592 N.Y.S.2d 496, 499 (App. Div. 1993) (“The *sine qua non* of an action for public nuisance . . . is the interference by a defendant with a public right.”).

¹⁴⁹ *Copart Indus.*, 362 N.E.2d at 971; *see also* 18C AM. JUR. 2D PLEADING & PRACTICE FORMS, NUISANCES § 71 (2023) (requiring that the jury find that the defendant’s acts are “the proximate and efficient cause of the creation of the nuisance complained of, and of the injury and damage for which a recovery is sought”); *New York v. Beretta U.S.A. Corp.*, 315 F. Supp. 2d 256, 281 (E.D.N.Y. 2004) (“Satisfaction of the causation requirement for liability in public nuisance actions requires proof that a defendant, alone or with others, created, contributed to, or maintained the alleged interference with the public right.”).

¹⁵⁰ California common law defines a public nuisance as an offense against, or an interference with, the exercise of rights common to the public, including health, safety, peace, comfort, or convenience. *See People v. Stafford Packing Co.*, 227 P. 485, 488 (Cal. 1924). California law also breaks down into the same three general elements: (1) a public right, (2) a substantial and “objectively unreasonable” interference with the public right, and (3) a

statutory conceptions of public nuisance that relate to inferences with the public right to health and safety, they are not the focus of this Note, which examines the historically grounded framings of the “public plastic nuisance” in New York.¹⁵¹ The following subsections summarize the major common law elements in New York and highlight important distinctions from California law.

1. *Public Right*

The most important element of public nuisance in New York is that the nuisance impacts a public or common right.¹⁵² The alleged defendant’s conduct must injure a right that is collective in nature and not simply generate a great number of injuries—though widespread effects indicate that a nuisance may impact a public right.¹⁵³ For instance, courts have found nuisances to injure public rights when an “aggregation of private injuries becomes so great and extensive as to constitute a public annoyance and inconvenience, and a wrong against the community, which may be properly the subject of a public prosecution.”¹⁵⁴ In addition, public nuisances may, for example, “offend public morals, interfere with use by the public of a public place or endanger or injure the property, health, safety or comfort of a considerable number of persons.”¹⁵⁵ California law similarly considers the number of people injured when evaluating whether there has been injury to a public right.¹⁵⁶

2. *Interference, Obstruction, or Offense*

New York courts have also examined a variety of factors to determine whether an interference is substantial and unreasonable:

causal connection. *See* *Citizens for Odor Nuisance Abatement v. City of San Diego*, 213 Cal. Rptr. 3d 538, 545 (Ct. App. 2017).

¹⁵¹ *See infra* Sections III.B.1–2. New York civil statutes codify several public nuisances, such as overcrowded housing or instrumentalities polluting state fish hatcheries. N.Y. MULT. DWELL. LAW § 309(1)(a) (McKinney 2006); N.Y. ENV’T CONSERV. LAW § 11-0503(2) (McKinney 2023). Criminal variations of nuisance in New York and California punish those who knowingly or recklessly create nuisances that endanger the health and safety of large groups or knowingly facilitate spaces where controlled substances are sold. *See* 35C N.Y. JURIS. 2D CRIMINAL LAW: PRINCIPLES AND OFFENSES §§ 1799, 1800 (2023); CAL. PENAL CODE § 372 (West 2023).

¹⁵² *See Copart*, 362 N.E.2d at 971.

¹⁵³ *See Hoover v. Durkee*, 622 N.Y.S.2d 348, 349 (App. Div. 1995).

¹⁵⁴ *People v. Rubenfeld*, 172 N.E. 485, 486 (N.Y. 1930) (quoting *Wesson v. Washburn Iron Co.*, 95 Mass. (13 Allen) 95, 102 (1866)).

¹⁵⁵ *Copart*, 362 N.E.2d at 971.

¹⁵⁶ CAL. CIV. CODE § 3480 (West 2023) (“A public nuisance is one which affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.”); *see Venuto v. Owens-Corning Fiberglas Corp.*, 99 Cal. Rptr. 350, 354–55 (Ct. App. 1971).

location, the nature of the act, the extent and frequency of the injury, the unlawfulness of the activity, and the effect on the enjoyment of life, health, and property.¹⁵⁷ An interference must be continuous or recurrent—not an isolated incident—in order to constitute a public nuisance.¹⁵⁸ The character of the interference and injurious impact on people must be judged by the degree of discomfort that an ordinarily reasonable person in the community would experience.¹⁵⁹ California law employs a similar test.¹⁶⁰ In addition, liability for public nuisances in New York can be strict in the sense that a nuisance per se, predicated on an illegal act, may not require the plaintiffs to prove the defendants acted intentionally or even negligently in creating the public nuisance.¹⁶¹ But the intentional creation of a public nuisance or negligent action contributing to one are both relevant for a New York court's inquiry into the character of the interference, as discussed in detail below.

Unlike California courts, New York courts do not engage in a general balancing of whether the social utility of the activity generating the interference is outweighed by the gravity of harm inflicted.¹⁶² But the lawfulness or unlawfulness of an activity is still important in New York for determining whether an interference is unreasonable and a public nuisance; this lawfulness factor appears also as a consideration under California's balancing test.¹⁶³ In New York, the operation of a

¹⁵⁷ *State v. Waterloo Stock Car Raceway, Inc.*, 409 N.Y.S.2d 40, 43 (Sup. Ct. 1978).

¹⁵⁸ *See, e.g., Metro. Life Ins. v. Moldoff*, 63 N.Y.S.2d 385, 387 (Sup. Ct. 1946), *aff'd*, 74 N.Y.S.2d 910 (App. Div. 1947); *Town of Hempstead v. S. Zara & Sons Contracting Co.*, 570 N.Y.S.2d 137, 138 (App. Div. 1991) (distinguishing emergency situation with sewer as not continuous or recurring).

¹⁵⁹ *Arthur v. Virkler*, 258 N.Y.S. 886, 890 (Sup. Ct. 1932); *Matteliano v. Skitkzi*, 925 N.Y.S.2d 276, 277 (App. Div. 2011).

¹⁶⁰ *See, e.g., People ex rel. Gallo v. Acuna*, 929 P.2d 596, 605 (Cal. 1997) (restating reasonable person test for public nuisance claims).

¹⁶¹ A nuisance per se is a nuisance based on an unlawful act, even if the defendant performed that act with due care; plaintiffs need not show that the defendant was intentional or negligent in those cases. *See State v. Fermata ASC Corp.*, 656 N.Y.S.2d 342, 345–46 (App. Div. 1997). A showing of intent may not be required. *Farrell v. Stram*, 644 N.Y.S.2d 395, 397 (App. Div. 1996) (distinguishing nuisance from trespass, which requires a showing of intent). But negligence or intent can be relevant factors in determining whether an interference is unreasonable. *See infra* Section III.B.1(b).

¹⁶² *See County of Santa Clara v. Atl. Richfield Co.*, 40 Cal. Rptr. 3d 313, 325 (Ct. App. 2006) (stating that an interference is “substantial if it causes significant harm and unreasonable if its social utility is outweighed by the gravity of the harm inflicted”). This balancing test is nearly identical to the test used in private nuisance cases. *See, e.g., Wilson v. S. Cal. Edison Co.*, 230 Cal. Rptr. 3d 595, 608–09 (Ct. App. 2018).

¹⁶³ *Ileto v. Glock*, 349 F.3d 1191, 1215 (9th Cir. 2002) (applying California law and framing the public nuisance as actions by the defendant firearm companies to “creat[e] an illegal secondary market for guns by purposefully over-saturating the legal gun market in order to

lawful business may generally *not* constitute a public nuisance.¹⁶⁴ But unlawful conduct during the operation of a lawful business or negligent maintenance of that lawful business, if either interferes with a public right, may still constitute nuisances.¹⁶⁵ Linking a public nuisance claim to unlawful, negligent, or intentional conduct is therefore crucial for establishing all the elements of a claim in New York. Courts have found, for instance, that a business failing to obtain statutorily required permits for its operation or failing to abide by the conditions of those permits engaged in “unlawful” activity constituting a public nuisance.¹⁶⁶ In some situations, evidence of an intentional failure to obtain or comply with a required permit or license contributed to the court determining that an interference was a *per se* public nuisance—not requiring a context-specific inquiry into unreasonableness.¹⁶⁷ Sections III.B.1 and III.B.2 evaluate potential avenues for connecting a New York public plastic nuisance case to specific violations of federal or state law.

3. *Causation*

New York law also requires that an alleged defendant’s actions or omissions both factually and proximately cause the creation of a public plastic nuisance and the injuries or damages alleged.¹⁶⁸ As in California, the causal chain may extend to all defendants whose

take advantage of re-sales to distributors that they know or should know will in turn sell to illegal buyers”).

¹⁶⁴ See *State v. Wright Hepburn Webster Gallery, Ltd.*, 314 N.Y.S.2d 661, 666 (Sup. Ct. 1970), *aff’d*, 323 N.Y.S.2d 389 (App. Div. 1971). Defendants in public nuisance suits involving products have often raised the defense that the actions were completely lawful, thus precluding public nuisance claims. See, e.g., *People ex rel. Spitzer v. Sturm, Ruger & Co.*, 761 N.Y.S.2d 192, 194–95 (App. Div. 2003) (dismissing nuisance claim against lawfully operated handgun companies and explaining that the legislature is better positioned to address harms from highly regulated commercial activity).

¹⁶⁵ *Wright Hepburn Webster Gallery*, 314 N.Y.S.2d at 666.

¹⁶⁶ *Driscoll v. N.Y.C. Transit Auth.*, 385 N.Y.S.2d 540, 543 (App. Div. 1976); *New York v. Shore Realty Corp.*, 759 F.2d 1032, 1051 (2d Cir. 1985) (reasoning that Shore’s continued violations of the State’s Environmental Conservation Law—not having a permit to store hazardous waste and possessing hazardous waste without authorization—constituted a *per se* nuisance); *Linzey v. American Ice Co.*, 115 N.Y.S. 767, 768–69 (App. Div. 1909), *aff’d*, 91 N.E. 1116 (N.Y. 1910) (finding that violating the conditions of one’s permit constitutes a nuisance).

¹⁶⁷ *Shore Realty Corp.*, 759 F.2d at 1051; *Delaney v. Philhern Realty Holding Corp.* 21 N.E.2d 507, 509 (N.Y. 1939).

¹⁶⁸ See *Spitzer*, 761 N.Y.S.2d at 201–02 (applying proximate causation requirements in a public nuisance case against handgun manufacturers, wholesalers, and retailers); see also 18C AM. JUR. PL. & PR. FORMS NUISANCES § 71 (2023) (pattern jury instructions).

conduct was a “substantial factor” in the creation of the public nuisance.¹⁶⁹ New York is also a comparative fault jurisdiction, where a civil jury assigns a percentage to each party (including all defendants and the plaintiffs) representing their contributions to public nuisance at issue.¹⁷⁰ While establishing a tight causal connection is key, neither New York nor California public nuisance law requires a tortfeasor’s direct control over the product or instrument of the alleged nuisance.¹⁷¹ Section III.B discusses the intricacies of causation analyses for framings of the public plastic nuisance in New York.

4. *Proper Plaintiffs and the Special Injury Requirement*

Both public and private parties may bring public nuisance suits in New York and California, although private parties face more burdensome requirements to do so. Part of the definition of public nuisance in New York is that the alleged “public nuisance is a violation against the State” and therefore “subject to abatement or prosecution by the proper governmental authority.”¹⁷² The New York Attorney General may bring an action to abate public nuisances and seek damages for harm to the public, including public property and public health, by the authority of her office.¹⁷³ Municipal corporations and counties in New York may also bring suit to abate nuisance and seek damages, but the

¹⁶⁹ RESTATEMENT (SECOND) OF TORTS § 431 & cmt. b (AM. L. INST. 1965) (reviewing legal cause); *see* *Ileto v. Glock Inc.*, 349 F.3d 1191, 1206 (9th Cir. 2003) (describing California’s substantial factor test for proximate cause); *Derdiarian v. Felix Contracting Corp.*, 414 N.E.2d 666, 670 (N.Y. 1980) (applying the substantial factor test in a New York negligence case). *But see* *City of Modesto Redevelopment Agency v. Superior Ct.*, 13 Cal. Rptr. 3d 865, 875 (Ct. App. 2004) (noting that, under California law, nuisance liability does not extend to damages suffered as a proximate result of the intervening acts of others).

¹⁷⁰ *See* N.Y. C.P.L.R. 1411 (McKinney 1975) (establishing a comparative fault regime); *Copart Indus. v. Consol. Edison Co.*, 362 N.E.2d 968, 973 (N.Y. 1977) (recognizing that the state’s comparative fault regime would prospectively apply to nuisance actions, where contributory negligence previously barred recovery, including the causes of action at issue in the case); *see also* *Nir et al.*, *supra* note 127 (reviewing jury verdict assigning ten percent fault to New York State in a public nuisance case against opioid producers).

¹⁷¹ *See In re Methyl Tertiary Butyl Ether (“MTBE”) Prods. Liab. Litig.*, 175 F. Supp. 2d 593, 628–29 (S.D.N.Y. 2001); *City of Modesto Redevelopment Agency*, 13 Cal. Rptr. 3d. at 875.

¹⁷² 532 Madison Ave. *Gourmet Foods, Inc. v. Finlandia Ctr., Inc.*, 750 N.E.2d 1097, 1104 (N.Y. 2001).

¹⁷³ *State v. Schenectady Chems., Inc.*, 479 N.Y.S.2d 1010, 1014 (App. Div. 1984) (“The Attorney-General is clearly authorized on behalf of the State to commence legal proceedings to abate a public nuisance.”); *Spitzer*, 761 N.Y.S.2d at 204 (Rosenberger, J., dissenting) (noting that the Attorney General brought the nuisance action “in parens patriae for the people of the State”).

scenarios in which they may do so are more limited than the AG.¹⁷⁴ California deputizes public officials to sue in the same way.¹⁷⁵

In New York, like in California and most states, private plaintiffs must assert a “special injury” beyond that suffered by the public at large in order to take legal action against a public nuisance.¹⁷⁶ The injury must be different in *kind* from that suffered by the public, not merely different by *degree*.¹⁷⁷ Private parties may, however, allege non-exclusive and non-direct injuries and still satisfy this requirement.¹⁷⁸ In pollution cases, a special injury may include injuries to natural resources that particularly affect a limited group’s livelihood.¹⁷⁹

B. Framing the Public Plastic Nuisance

A New York plaintiff could articulate the public nuisance from plastic pollution in several ways, as the plaintiff did in *Earth Island*.¹⁸⁰ The framings of the “public plastic nuisance” discussed in this Section

¹⁷⁴ Municipal corporations must be granted authority to abate public nuisances in statute. *See, e.g.*, N.Y.C., N.Y. Admin. Code § 7-701 (2017) (declaring a public nuisance to exist when a “flagrant violation” of laws occurs, such as infractions of the building code, zoning resolution, or health law). Or they must otherwise demonstrate that property held by the municipal corporation was injured as a result of the alleged nuisance. *City of Yonkers v. Fed. Sugar Refining Co.*, 121 N.Y.S. 494, 498 (App. Div. 1910); *see also* *City of New York v. Beretta U.S.A. Corp.*, 315 F. Supp. 2d 256, 273–74 (E.D.N.Y. 2004) (permitting the City of New York to bring public nuisance claims, under the city’s home rule authority, to manage health and safety issues).

¹⁷⁵ CAL. CIV. PROC. CODE § 731 (West 2023) (granting district attorneys, county counsels, and city attorneys concurrent right to sue on behalf of the public for any nuisance located in their jurisdiction). The state attorney general is authorized to bring public nuisance suits through a combination of constitutional and statutory provisions. *See* CAL. CONST. art. V, § 13 (“Whenever . . . any law of the State is not being adequately enforced . . . it shall be the duty of the Attorney General to prosecute any violations of law”); CAL. CIV. CODE § 3494 (West 2023) (“A public nuisance may be abated by any public body or officer authorized thereto by law.”); CAL. GOV’T CODE § 12600(b) (West 2023) (extending the Attorney General’s authority to protecting natural resources from “pollution, impairment, or destruction”); *Cal. Or. Power Co. v. Superior Ct.*, 291 P.2d 455, 463 (Cal. 1955) (“The attorney general may bring an action to abate a nuisance on behalf of the state and the people.”).

¹⁷⁶ *Baity v. Gen. Elec. Co.*, 927 N.Y.S.2d 492, 496 (App. Div. 2011); *accord* *Monks v. City of Rancho Palos Verdes*, 84 Cal. Rptr. 3d 75, 104 (Ct. App. 2008) (contrasting injury requirements in public and private nuisance cases).

¹⁷⁷ *See* 532 *Madison Ave. Gourmet Foods*, 750 N.E.2d at 1104–05; *Leo v. Gen. Elec. Co.*, 538 N.Y.S.2d 844, 846–47 (App. Div. 1989) (holding that commercial fishermen were particularly aggrieved by defendant’s discharge of PCBs into the Hudson River and could bring a public nuisance claim for monetary and injunctive relief).

¹⁷⁸ *See* *Graceland Corp. v. Consol. Laundries Corp.*, 180 N.Y.S.2d 644, 646–47 (App. Div. 1958); *Leo*, 538 N.Y.S.2d at 846–47 (allowing recovery of both indirect damage to livelihood from pollution and non-exclusive injury with harms suffered by other groups from pollution).

¹⁷⁹ *See, e.g., Leo*, 538 N.Y.S.2d at 846–47.

¹⁸⁰ Section III.B focuses on two of the most promising framings, but there may be others, especially as scientific research on plastic pollution advances. *See supra* Section I.B.

directly relate to the types of harms traceable to plastic products throughout their lifecycle.¹⁸¹ They also implicate subsets of possible defendants in the plastic industry.¹⁸² Each framing connects to a specific articulation of the public or common rights affected, the nature of the interference with that right, and the type of causal relationship a prospective plaintiff would need to prove, each of which the subsequent subsections explore. Public and some private parties, as discussed below, could sue to abate these public nuisances and potentially seek damages. Because a plaintiff would likely bring a future claim in state court in New York, with its more permissive rules for standing than federal court, this Section's analysis focuses on the merits of a public nuisance claim rather than extensively exploring the standing analysis for possible plaintiffs.¹⁸³ However, the following discussions about the parties that could bring public plastic nuisance claims in each framing touches on factors that would be relevant to determining the standing of future plaintiffs to assert those claims.

1. *Inundation or Obstruction*

The “public plastic nuisance” can first be framed as plastic waste, after it has been disposed, obstructing coasts, waterways, rights of way, or public lands in New York. Examples include the widespread presence of plastic products on beaches, as in Hampton Bays or Fire Island in New York, floating patches of plastic waste in rivers or ponds, and plastic litter on the sides of roads or in national park areas.¹⁸⁴ In *Earth Island*, the plaintiff alleged that the plastic industry defendants promoted and sold products that inundated California's coasts and waterways, as the copious pictures in the complaints demonstrate.¹⁸⁵ *Earth Island* argued that the defendants therefore caused unreasonable obstructions, interfered with the public's use and enjoyment of the state's waterways and

¹⁸¹ See *supra* Section I.B.

¹⁸² See *supra* Section I.A.

¹⁸³ See N.Y. JUR. 2D PARTIES § 13 (comparing standing in New York and federal courts). *Earth Island* argued that it had standing on multiple grounds: as an organization (by allocating more of its budget to mitigate the harms of plastic pollution in the state), property owner (whose waterways were “adversely impacted by coastal plastic pollution”), and an association on behalf of its members (who regularly accessed the California coast and waterways). *Earth Island Complaint*, *supra* note 4, ¶¶ 26, 27, 173. Judge Swope then determined that *Earth Island* had “sufficiently pled standing as a private person” for its nuisance cause of action. *Earth Island May 2023 Order*, *supra* note 9, at 3.

¹⁸⁴ See, e.g., notes 1–3 and accompanying text; *Earth Island Complaint*, *supra* note 4, ¶¶ 90, 153–60.

¹⁸⁵ See, e.g., *Earth Island Complaint*, *supra* note 4, ¶¶ 17–18.

beaches, and contributed to pervasive waste that is “indecent and offensive to the senses of the ordinary person.”¹⁸⁶

a. Public Right

Framing the public plastic nuisance as inundation or obstruction of public waterways, or as terrestrial plastic waste in a state park, would fit within the traditional heartland of public nuisance law in the United States and New York. The association between public nuisance and injuries to public lands and waterways dates back to its origins as an action against purprestures on crown property.¹⁸⁷ Conduct interfering with “use by the public of a public place” is enumerated in the classic formulation of New York public nuisance law.¹⁸⁸ Moreover, this framing would forestall some of the criticisms that have plagued opioid cases on the public right element: namely, that public nuisance applied traditionally to interferences with public property or resources, and not to harms only to public health.¹⁸⁹

b. Interference, Obstruction, or Offense

Three strands of argument support a future plaintiff’s case that the inundation and obstruction caused by plastic pollution constitutes a substantial and unreasonable interference with a public right: (1) the inundations and obstructions block public access to natural resources, (2) the defendants contributing to those interferences simultaneously violated state and/or federal regulations, and (3) the same defendants knew or reasonably should have known about the harmful effects of their plastic products.

First, the inundation of public waterways or obstruction of public lands threaten the free use of those natural resources by the public, and they offend the sense of an ordinarily reasonable person. The inundation or obstruction nuisance must be continuous or recurrent.¹⁹⁰ Plastic waste is widespread, takes years to break down, and represents a

¹⁸⁶ *Id.* ¶ 170.

¹⁸⁷ *See supra* Section II.A.

¹⁸⁸ *Copart Indus. v. Consol. Edison Co.*, 362 N.E.2d 968, 971 (N.Y. 1977) (defining a public nuisance as “conduct or omissions which offend, interfere with or cause damage to the public in the exercise of rights common to all . . . in a manner such as to offend public morals, interfere with use by the public of a public place or endanger or injure the property, health, safety, or comfort of a considerable number of persons”).

¹⁸⁹ *See, e.g., City of Huntington v. AmerisourceBergen Drug Corp.*, 609 F. Supp. 3d 408, 472 (S.D. W. Va. 2022) (“The original legal character of nuisance was a wrongful disturbance of the enjoyment of real property or of its appurtenances falling short of a forcible trespass or ouster.”).

¹⁹⁰ *See Town of Hempstead v. S. Zara & Sons Contracting Co., Inc.* 570 N.Y.S.2d 137, 138 (App. Div. 1991).

majority of the pollution found along many waterways in New York.¹⁹¹ Its recurrent presence creates an interference with public access to those waterways that is sufficiently permanent to constitute a nuisance. In *Earth Island*, the plaintiff alleged that residents and citizens in the community were “reasonably annoyed and disturbed by marine plastic pollution” in the area.¹⁹² Documentation—in the form of photos, additional cleanup efforts and inventories, and testimony—would further substantiate the prevalence and annoyance of plastic waste in a New York case.¹⁹³ Although the issues of substantiality and unreasonableness would ultimately be a question of fact in litigation,¹⁹⁴ future plaintiffs could strengthen their prima facie public nuisance case with statements from communities near coasts or public parks that express their reasonable annoyance at widespread plastic pollution.

Second, some plastic industry defendants have also violated state laws or federal regulations, and their unlawful conduct supports the thesis that their contributions to plastic pollution constitute a public nuisance.¹⁹⁵ Under New York public nuisance law, “unlawful” conduct is relevant to characterizing an interference as a public nuisance.¹⁹⁶ By

¹⁹¹ See *supra* Section I.B; Nicholas Mitch, *Plastic Pollution in the Hudson: Detailed Data from Riverkeeper Sweep 2019*, RIVERKEEPER (June 24, 2019), <https://www.riverkeeper.org/blogs/ecology/plastic-pollution-in-the-hudson-detailed-data-from-riverkeeper-sweep-2019> [<https://perma.cc/7J8N-UER8>] (finding that plastic products—beverage bottles, single-use bags, cups, plates, lids, and stirrers—constituted the vast majority of waste found at dozens of sites along the Hudson River and New York City waterfront).

¹⁹² See, e.g., *Earth Island Complaint*, *supra* note 4, ¶ 171.

¹⁹³ See, e.g., *San Antonio Bay Estuarine Waterkeeper v. Formosa Plastics Corp.*, No. 6:17-CV-0047, 2019 WL 2716544, at *4 (S.D. Tex. June 27, 2019) (discussing plaintiffs offering testimony of several individuals living near the Formosa plant alleging that the plant violated its effluent limitations under the Clean Water Act, as well as photographs, videos, and thirty containers containing 2,428 samples of plastic pellets taken from the nearby Bay).

¹⁹⁴ See *supra* notes 157–59 and accompanying text.

¹⁹⁵ This argument relies on two assumptions: (1) this type of public nuisance suit (and state public nuisance claims generally related to plastic pollution) can proceed under state, rather than federal, common law, and (2) federal laws, such as RCRA, do not impliedly preempt “public plastic nuisance” suits, whether courts treat them as state or federal common law claims. *Cf., e.g.,* Rothschild, *supra* note 133, at 416 (arguing that there is “significant legal precedent for allowing state nuisance suits concerning transboundary pollution,” “no basis for removing [those] cases to federal court,” and no federal laws that preempt nuisance suits against defendants in the fossil fuel industry); see also *Leo v. Gen. Elec. Co.*, 538 N.Y.S.2d 844, 847 (App. Div. 1989) (finding that federal environmental statutes did not preempt public nuisance claims under New York law). A full analysis of this set of issues is beyond the scope of this Note. But I assume, for the purpose of this Section, that federal law is an available, separate source of law that a New York court could examine as part of its evaluation of a future public nuisance claim.

¹⁹⁶ See *supra* notes 164–67 and accompanying text. The principles of negligence per se are relevant here. In New York, violations of general regulatory statutes and rules of administrative agencies constitutes evidence of negligence, not negligence per se. See, e.g., *Polly Esther’s S., Inc. v. Setnor Byer Bogdanoff, Inc.*, 807 N.Y.S.2d 799, 811 (Sup. Ct. 2005) (state statute); Long

asserting that the same defendants have run afoul of state or federal regulations, future plaintiffs could establish that the defendants acted in part unlawfully while contributing to the core interference with a public right.

Several regulatory violations are possible depending on the specific defendants involved in the lawsuit.¹⁹⁷ For example, a growing subset of litigation against the plastic industry has involved challenging the legality of recyclability representations on consumer plastic products, such as Keurig’s “K-cup” coffee pods or Walmart’s plastic packaging.¹⁹⁸ In its amended complaint, Earth Island links the defendants’ recyclability misrepresentations to consumers’ overconsumption of defendants’ plastic products and, as a result, accumulating plastic waste along California’s coast and in Earth Island’s backyard.¹⁹⁹ Alleging these types of parallel consumer protection claims would only be feasible for certain plastic products and certain plastic distributors and retailers, however,

v. Forest-Fehlhaber, 433 N.E.2d 115, 117 (N.Y. 1982) (state administrative rules). Violations of *relevant* federal statutes or regulations similarly are evidence of negligence that a factfinder could evaluate in a particular case. *Kollmer v. Slater Elec., Inc.*, 504 N.Y.S.2d 690, 692 (App. Div. 1986) (OSHA regulations). Therefore, I presume that violations of state and local statutes or regulations and certain relevant federal statutes or regulations (addressed below) would all be admissible in a future public nuisance case as some evidence of unlawful conduct or negligence.

¹⁹⁷ The following paragraphs present two promising variations based on existing cases, but they are not the only possibilities. Earth Island, for instance, also included products liability claims in its initial complaint. Earth Island Complaint, *supra* note 4, ¶¶ 185–206 (design defect, failure to warn).

¹⁹⁸ See Fraser, *supra* note 5. Plaintiffs—consumers, environmental groups, and states—allege that plastic distributors or retailers violated state false advertising or deceptive business practices statutes by labeling their products as “recyclable” in violation of guidance from the Federal Trade Commission, 16 C.F.R. § 260.12(a) (2012). A majority of states have adopted the FTC’s guidance into their consumer protection law, and thirteen states have statutes that explicitly reference the FTC’s guidance as the standard for the lawful use of “recyclable” labels. CONNOR J. FRASER, STATE ENERGY & ENV’T IMPACT CTR., WHAT’S IN A LABEL?: THE FTC’S “GREEN GUIDES” IN CONTEXT 4–5 (2023), <https://stateimpactcenter.org/files/Whats-in-a-Label-The-FTC-Green-Guides-Issue-Brief.pdf> [<https://perma.cc/35NW-47RZ>]. New York is one of the states that had made noncompliance with the FTC’s guidance unlawful via regulations, so asserting parallel violations of state false advertising law, such as General Business Law Section 350, for example, would be possible. See Connor J. Fraser, *Recycled Misrepresentation: Plastic Products, Consumer Protection Law & Attorneys General*, 31 N.Y.U. ENV’T L.J. (forthcoming 2023) (manuscript at 12, 34), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4346171 [<https://perma.cc/2AE5-LKTT>]. The FTC is currently reviewing its guidance and may issue revised requirements for “recyclable” labels. Guides for the Use of Environmental Marketing Claims, 87 Fed. Reg. 77,766, 77,770 (Dec. 20, 2022) (to be codified at 16 C.F.R. pt. 260).

¹⁹⁹ Earth Island Amended Complaint, *supra* note 10, ¶¶ 210–11 (alleging that “[a]s a result of Defendants’ misleading promotions, consumers purchased more of Defendants’ plastics than they otherwise would have” and that “[m]ore consumption of Defendants’ products results in more plastic pollution,” including “ocean and waterway pollution”).

as recycling rates differ by plastic type and by location.²⁰⁰ But pairing statutory violations and public nuisance claims would strengthen plaintiffs' arguments that defendants' specific conduct is unreasonable.

Another plausible avenue is regulatory violations linked to the federal environmental statutes governing the handling of plastic waste, such as the Resource Conservation and Recovery Act (RCRA). As a recent citizen suit under RCRA illustrates, if producers or distributors of plastic products release plastics onto public land, they may be liable under RCRA for “discard[ing]” “solid waste” that poses a “substantial danger” to the environment due to the plastic’s negative effects on local wildlife.²⁰¹ Earth Island so far has not pursued this route.²⁰² Asserting simultaneous and related federal causes of action and New York public nuisance claims would also strengthen future plaintiffs’ “public plastic nuisance” argument.

Third, the plastic industry knew or should have known about the adverse effects on public access to water and land due to normal consumer use of plastic products. This factor matters because negligent action is relevant to the determination that a resulting interference is unreasonable under New York law.²⁰³ Moreover, environmental groups and reporters have documented how some large organizations in the plastics industry (like those in the fossil fuel, opioids, and tobacco industries) were aware of the harmful effects related to their products, including that many plastic products are slow to breakdown, remain in the environment, and release harmful chemicals used in their production while they degrade.²⁰⁴ On these grounds, Earth Island included a separate negligence cause of action in only its initial complaint.²⁰⁵ Sub-

²⁰⁰ See GREENPEACE, CIRCULAR CLAIMS FALL FLAT AGAIN 9 (2022), <https://www.greenpeace.org/usa/reports/circular-claims-fall-flat-again> [<https://perma.cc/ZH4P-R2DB>] (presenting August 2022 data on recycling access and capacity by plastic resin and product type).

²⁰¹ See *Charleston Waterkeeper v. Frontier Logistics*, 488 F. Supp. 3d 240, 257 (D.S.C. 2020) (alleging that a plastic resin packaging company released plastic pellets during their transport onto state property adjacent to the Charleston Harbor and Cooper River, thereby violating RCRA). Although the case eventually settled, the federal district court denied the defendant’s motion to dismiss the case by reasoning that the plastic pellets were “solid waste” that had been “discarded” on land and that posed a “substantial danger” to the environment because of their additives and negative effects on local wildlife. *Id.* at 256–57.

²⁰² See, e.g., Earth Island Amended Complaint, *supra* note 10, ¶ 260 (citing only the FTC’s Green Guides as federal authority).

²⁰³ See *supra* note 165 and accompanying text.

²⁰⁴ See *supra* note 44 (providing examples of research and reporting).

²⁰⁵ Earth Island Complaint, *supra* note 4, ¶¶ 208–09. The court found that Earth Island had “not pled sufficient facts to allege a physical injury to property” stemming from defendants’ alleged negligence, and “purely economic losses”—losses unaccompanied by physical or property damage—are not recoverable in tort law. Earth Island May 2023 Order, *supra* note 9, at 3. Earth Island did not reallege its negligence cause of action in its amended complaint. See Earth Island Amended Complaint, *supra* note 10, ¶¶ 254–89.

stantiating a similar negligence claim in New York would impose an additional burden on future plaintiffs and likely require discovery. But evidence of negligent behavior on the part of defendants in a plastics public nuisance suit—similar to evidence in the opioids litigation²⁰⁶—could weigh in favor of holding plastic industry defendants liable for their actions in manufacturing, distributing, and selling plastic products that they knew (or should have known) were harmful.

c. Causation

In this framing, the basic theory of causation is that the conduct of plastic industry defendants (in producing, distribution, or selling plastic products to consumers) created a widespread problem of plastic waste inundating or obstructing public waterways or lands in New York. Moreover, the inundation or obstruction was a proximate result of the defendants' conduct. New York courts have recognized that public nuisance can be an appropriate tool to address “consequential harm from commercial activity,” including the sale of opioids.²⁰⁷ As *Earth Island* did in its case, targeting the largest businesses selling plastic consumer products—such as Coca-Cola, PepsiCo, Nestlé, or Walmart—could benefit the causation argument because future plaintiffs would be able to provide evidence that the defendants contribute to the majority of plastic waste around the world and, most likely, in New York as well.²⁰⁸ Plaintiffs can thus solidify their case that defendants' activities were a

²⁰⁶ For example, before holding several prescription opioid distributors and retailers liable for creating a public nuisance, a New York jury hearing the case viewed the defendants' internal sale conference videos, which spoofed popular movies while instructing opioid sales representatives to exceed their mandated sales quotas. Nir et al., *supra* note 127 (describing videos spoofing “Austin Powers” and “A Few Good Men” that included lines such as “You can't handle the truth . . . Quotas have to be exceeded”). As another example, Judge Dan Polster's decision denying summary judgment to prescription opioid distributors relied on the plaintiffs' detailed evidence, including internal documents, which proved that the defendants knew they had filled dubious prescriptions and failed to correct management systems that shipped suspicious orders. *In re Nat'l Prescription Opiate Litig.*, No. 1:17-MD-2804, 2021 WL 3917174, at *1–2 (N.D. Ohio Sept. 1, 2021).

²⁰⁷ *In re Opioid Litig.*, No. 400000/2017, 2018 WL 3115102, at *21 (N.Y. Sup. Ct. June 18, 2018) (citing *People v. Sturm, Ruger & Co.*, 761 N.Y.S.2d 192, 197 (Sup. Ct. 2003)).

²⁰⁸ See *supra* Section I.B. Determining which distributors and retailers are the largest transporters and sellers of plastic products in an area or state is especially critical. Compared to the opioids public nuisance cases, there are far more distributors and retailer of plastic products, ranging in size from large multi-national corporations to local businesses. Cf. Jan Hoffman, *CVS, Walgreens and Walmart Fueled Opioid Crisis, Jury Finds*, N.Y. TIMES (Nov. 23, 2021), <https://www.nytimes.com/2021/11/23/health/walmart-cvs-opioid-lawsuit-verdict.html> [<https://perma.cc/UUC9-MEUV>] (reviewing cases against a discrete number of pharmacies dispensing opioid medications).

“substantial factor” in creating the inundation or obstruction and the resulting injuries to the public’s right of access.²⁰⁹

Given the many potential defendants, a market share theory of liability may sound attractive for ensuring that plaintiffs can establish actual causation and recover.²¹⁰ But the New York Court of Appeals has limited market share liability to cases where the products at issue were fungible and identical, making the identification of the actual manufacturer impossible.²¹¹ Because one can trace *macroplastics* and *mesoplastics* to a specific brand or manufacturer, the case for market share liability would be very weak.²¹² An alternative—one that Earth Island used—is only joining the defendants whose branded plastic products are identifiably present in a location’s waste.²¹³ This strategy limits possible defendants but may benefit future plaintiffs’ causation arguments. If a future case were to deal with *microplastics*, however, then there could be a more compelling argument for market share liability because tracing the brand of plastic would be more difficult.

There is also precedent in New York for taking a more expansive view of proximate cause when public rights are threatened. In consolidated opioids cases in the Supreme Court of Suffolk County, Judge Jerry Garguilo denied the defendants’ motion to dismiss the public nuisance claims and wrote that the defendant manufacturers were plausibly in a position to “anticipate or prevent the claimed injuries” and

²⁰⁹ See *supra* notes 168–70 and accompanying text (discussing causation standard in New York).

²¹⁰ In typical products liability and public nuisance actions, a plaintiff must prove that the defendant or defendants took actions that resulted in actual injury to the plaintiff (whether that be selling a product or engaging in some activity during the product’s journey to the consumer, for products liability actions). See *Hymowitz v. Eli Lilly & Co.*, 539 N.E.2d 1069, 1073 (N.Y. 1989). New York courts (among others) have recognized a narrow exception to that rule in cases where industry defendants acted “in a parallel manner to produce an identical, generically marketed product.” *Id.* at 1075; e.g., *Sindell v. Abbott Lab’y*, 607 P.2d 924, 933 (Cal. 1980). In those limited cases, a court presumes that the defendant manufacturer is liable to the extent of its share of the relevant product market. *Hymowitz*, 539 N.E.2d at 1077.

²¹¹ *Hymowitz*, 539 N.E.2d at 1075; see also *Abbie Eliasberg Fuchs & Omar Nasar, New York Court Declines to Adopt Market Share Liability in Foil Pan Case*, JD SUPRA (Mar. 8, 2018), <https://www.jdsupra.com/legalnews/new-york-court-declines-to-adopt-market-37568> [<https://perma.cc/8TYB-SC6Q>].

²¹² See *Hamilton v. Beretta U.S.A. Corp.*, 750 N.E.2d 1055, 1068 (N.Y. 2001) (rejecting market share liability for handgun manufacturers); *S.F. v. Archer Daniels Midland Co.*, 594 F.App’x 11, 13 (2d Cir. 2014) (rejecting for manufacturers of high-fructose corn syrup); *In re New York State Silicone Breast Implant Litig.*, 631 N.Y.S.2d 491, 494 (Sup. Ct. 1995) (rejecting for makers of silicone breast implants); *Perez v. CM Packaging, Inc.*, No. 20077/2016, 2018 WL 3149898, at *3 (N.Y. Sup. Ct. Jan 29, 2018) (denying for foil pans).

²¹³ See Earth Island Amended Complaint, *supra* note 10, ¶ 251 (alleging that plastic sold by each of the defendants appeared in waste from local beach clean-ups).

could be held “potentially accountable.”²¹⁴ As part of his reasoning, Judge Garguilo stated that he doubted whether a *negligence* standard of proximate cause was even applicable because “where the welfare and safety of an entire community is at stake, the cause need not be so proximate as in individual negligence cases.”²¹⁵ It is plausible for the same standard to apply in a “public plastic nuisance” case where the public right to access natural resources is threatened.

Plaintiffs will likely confront at least two causation counterarguments. Lessons from the opioid litigation suggest effective rebuttals to the counterarguments.

First, the defendants will likely argue that consumers ultimately exercised control over recyclable plastic products and chose not to recycle them, thereby breaking the causal chain connecting the defendants to the ultimate interference with a public right. Judge Swope’s recent order in *Earth Island* suggests that this issue of third party control is likely to come up in New York. In his order, Judge Swope briefly concludes that *Earth Island* failed to plead facts sufficient to allege “causation” and address “third party intervention.”²¹⁶ He also observes that *Earth Island*’s argument the defendants’ plastic products are “not recyclable contradict[s] the express allegations of the [initial] Complaint.”²¹⁷ Although he does not go into detail on the rationales for these conclusions, the California caselaw he cites states that public nuisance liability extends only to interferences proximately and legally caused by the defendants’ conduct, not the intervening acts of others.²¹⁸ Control over the instrument of a public nuisance is not a required element under California or New York public nuisance law.²¹⁹ But the contribution of third-party actors to the alleged public plastic nuisance—by not recycling otherwise recyclable products—may influence both factual and proximate cause in New York. Future plaintiffs should be prepared to meet this challenge.

Plaintiffs can frame consumers’ interactions with plastics products in a way that parallels an argument about opioids that convinced the juries to impose liability in New York and Ohio: Consumers don’t have a

²¹⁴ *In re Opioid Litig.*, No. 400000/2017, 2018 WL 3115102, at *22 (N.Y. Sup. Ct. June 18, 2018). These consolidated cases proceeded to a jury trial on liability where the defendant opioid manufacturers or distributors either settled or were found liable by a jury. Nir et al., *supra* note 127.

²¹⁵ *In re Opioid Litig.*, 2018 WL 3115102, at *22 (quoting *City of New York v. A-1 Jewelry & Pawn, Inc.*, 247 F.R.D. 296, 347–48 (E.D.N.Y. 2007)).

²¹⁶ *Earth Island May 2023 Order*, *supra* note 9, at 3.

²¹⁷ *Id.* (citing *Earth Island Complaint*, *supra* note 4, ¶¶ 100–01).

²¹⁸ *See id.*; *see, e.g., Martinez v. Pac. Bell*, 275 Cal. Rptr. 878, 884 (Ct. App. 1990).

²¹⁹ *See supra* note 171 and accompanying text.

real choice whether to recycle plastic products or not. This mitigates this problem of consumer control. The manufacturer and distributor defendants in the New York opioid cases both pressed the argument, aligned with public nuisance critiques from judges and academics,²²⁰ that consumers were most responsible for the harms arising from opioids because they abused a legal product.²²¹ Similarly, they emphasized that the public harms were “too indirect and remote from the defendants’ conduct,” so imposing liability would “open the courthouse doors to a flood of limitless, similar theories of public nuisance.”²²² The plaintiffs’ lawyers in the Ohio trial had an effective response. They argued that an “oversupply” of prescription opioids into the counties bringing suit, combined with the pills’ addictiveness, caused a continuing crisis where patients also turned to other harmful and illegal drugs as a foreseeable result of the initial flood of pills.²²³ Judge Polster highlighted these same factors (in addition to a lack of internal controls) in another ruling.²²⁴

This logic translates to the context of plastic products. Future New York plaintiffs could assert that the defendants have supplied plastic products—particularly single-use plastics—in massive quantities across consumer categories, that consumers continue to use them (despite limited bans in states like New York), and that producers plan to continue manufacturing them in the future.²²⁵ Defendants in the plastics industry have produced, marketed, and sold their products despite evidence that the end markets for recycled plastic products are limited globally—and growing even more constrained—and nonexistent in some parts of the United States.²²⁶ The recycling rates for plastic products vary by plastic and product type, but they are low or negligible for many common plastic products.²²⁷ Judge Swope’s conclusion that Earth Island’s recycling

²²⁰ See *supra* Section II.B.

²²¹ *In re Opioid Litig.*, 2018 WL 3115102, at *22.

²²² *Id.*

²²³ Hoffman, *supra* note 126.

²²⁴ *In re Nat’l Prescription Opiate Litig.*, No. 1:17-MD-2804, 2021 WL 3917174, at *4 (N.D. Ohio Sept. 1, 2021) (denying summary judgment to industry defendants).

²²⁵ See *supra* notes 33, 47 and accompanying text.

²²⁶ See Fraser, *Recycled Misrepresentation*, *supra* note 198 (manuscript at 7–8) (reviewing global and domestic data on recycling rates for plastic products and recent dynamics creating dysfunction in recycling markets).

²²⁷ See GREENPEACE, *supra* note 200, at 9 (presenting results of a survey of U.S. recycling systems by plastic resin and product type as of August 2022). For example, plastic bottles and jugs made from PET #1 and HDPE #2 resins are reprocessed at rates of 20.9% and 10.3%, respectively, of post-consumer plastic waste containing those resins produced in the United States. But all other plastic products surveyed, containing mostly resins #3 to #7, had low or insufficient reprocessing rates of less than 5% of post-consumer plastic waste produced. *Id.* Moreover, the portion of U.S. recycling facilities accepting plastic products made from resins #3 to #7 was low or zero, while all surveyed facilities accepted bottles and jugs made from PET #1 and HDPE #2. *Id.* By volume, the most common resins in plastic products are

arguments are contradictory misses this nuance. While a limited set of plastic products produced by the defendants in *Earth Island* are still recycled into new products (e.g., bottles and jugs made with specific resin types), the majority of their products are not recycled into new plastic products in the U.S. waste management system.²²⁸ Judge Swope points only to Earth Island's allegations concerning the narrow set of actually recycled plastic products and ignores the reprocessing data showing that most types of plastic products are economically impossible to recycle.²²⁹ Instead, the majority of plastic products end up in landfills, incinerators, or the natural environment—where they obstruct and inundate public land and waterways. A consumer's choice to place a plastic product in a recycling bin thus does not matter for most plastic products. By emphasizing that U.S. consumers cannot practically recycle most plastic products in their communities,²³⁰ plaintiffs can bolster their argument that consumers lack true control and that defendants are the parties most responsible for generating a waste management crisis. Of course, this response comes with the major caveat that plastic product users do not suffer from addiction.

In fact, Earth Island responded to Judge Swope's order by reaffirming and reinforcing its causation argument in its amended complaint. Earth Island focuses on the defendants' recyclability representations—and their relationship to accumulating plastic waste—to seemingly rebut the consumer-control retort above. In addition to cataloguing defendants' specific products with “recyclable” labels, Earth Island adds both national and California-specific recycling data to support its argument that many of defendants' products are not practically recycled.²³¹

LDPE #4 (24.1% of plastic waste), PP #5 (22.8%), HDPE #2 (17.7%), and PET #1 (14.8%). U.S. ENV'T PROT. AGENCY, ADVANCING SUSTAINABLE MATERIALS MANAGEMENT: 2018 TABLES AND FIGURES 11 (2018), https://www.epa.gov/sites/default/files/2021-01/documents/2018_tables_and_figures_dec_2020_fnl_508.pdf [<https://perma.cc/M5PB-BDCC>] (presenting data on plastic waste generated by resin type, in thousand tons). The author calculated these percentages from Table 8 by dividing the “Generation” figures for each resin by “Total Plastics in MSW.” *Id.*

²²⁸ Fraser, *Recycled Misrepresentation*, *supra* note 198 (manuscript at 8–10) (summarizing the results of Greenpeace's survey, which relies on the EPA's most recent data from 2018).

²²⁹ Earth Island May 2023 Order, *supra* note 9, at 3 (citing Earth Island Complaint, *supra* note 4, ¶¶ 100, 101 (presenting the data from Greenpeace's 2020 survey and flagging the higher recycling rates for PET #1 and HDPE #2 plastic waste as compared to waste containing resins #3 to #7)).

²³⁰ See *supra* notes 198–200 and accompanying text (discussing evidence that most plastics products are not actually recycled and reviewing litigation based on misleading “recyclable” labels).

²³¹ See Earth Island Amended Complaint, *supra* note 10, ¶¶ 90–107 (identifying examples of defendants' products allegedly mis-labeled as “recyclable”); *id.* ¶ 99 (citing national recycling statistics by plastic resin type); e.g., *id.* ¶¶ 146–48, 163–65 (discussing data on

That data distinguishes among products and resin types²³² to illustrate the nuisance missing from Judge Swope's opinion. The new factual allegations also include privileged information, apparently from defendants' responses to discovery requests, related to the recyclability of their products.²³³

Moreover, Earth Island provides additional detail on its alleged link between defendants' recyclability misrepresentations and the public nuisance created by plastic pollution. It explains that (1) consumers buy more of defendants' products because they are marketed as "recyclable," (2) this trend brings more plastic products into the waste management system than otherwise would occur, and (3) more plastic products pollute bodies of water and the air because domestic recycling operations cannot economically recycle them.²³⁴ Earth Island characterizes the third step, "leakage" of plastic waste into landfills and the natural environment, as the "predictable" consequence of defendants' design and rampant marketing of plastic products, despite the dysfunctional reality of the domestic waste management system.²³⁵ While consumer's choices do play a role in the causal chain, Earth Island responds that defendants' marketing misrepresentations shape those choices and actually lead to contamination of recycling streams with incorrectly disposed, practically unrecyclable products.²³⁶ While only allegations at this stage, Earth Island's efforts to fill the causation gap that Judge Swope identified provide a template for how future plaintiffs could respond to the same counterarguments in New York.

Second, the defendants may argue that the conduct of other actors (including state or local governments themselves) later in the plastic product lifecycle are the *real* cause of the public plastic nuisance.

recycling by defendant product type in California, including statistics for specific waste sortation and material recovery facilities in the state).

²³² See, e.g., *id.* ¶ 176 (data for PET #1); *id.* ¶¶ 194–95 (data for PP #5 and PS #6 plastic); *id.* ¶ 200 (drilling down to the county-level in California for products with plastic resins #3 to #7).

²³³ See, e.g., *id.* ¶¶ 192–97 (containing redacted portions in discussion of recycling statistics for plastic resins #3 to #7); *id.* ¶ 192 nn. 191 & 192 (citing as support for redacted allegations what appears to be discovery responses from PepsiCo to Earth Island (PEP-EI-00000455 and PEP-EI-00000457), as well as a Danone internal policy document from 2019 on the "Use of PVC"). Earth Island's use of this material suggests that discovery will be important for the plaintiffs to fully specify the causal mechanisms for public nuisance claims.

²³⁴ See *id.* ¶¶ 210–17 (explaining the steps in Earth Island's alleged process and defining "leakage").

²³⁵ *Id.* ¶ 217; see also *supra* notes 217–18 and accompanying text (summarizing current dynamics in recycling markets).

²³⁶ Earth Island Amended Complaint, *supra* note 10 at ¶ 269 ("California residents may also contaminate the recycling stream by unknowingly placing the products in their recycling bins (based on Defendants' incorrect disposal information), preventing legitimately recyclable products from being recycled.").

Therefore, the defendants' conduct was neither the legal nor the proximate cause of the inundations or obstructions at issue. For example, the Oklahoma Supreme Court highlighted that multiple levels of government (or government-certified) actors were involved in regulating prescription opioids.²³⁷ Even the New York jury that held Teva, Actavis, and other opioid distributors liable also determined that New York State bore some responsibility for failing to enforce controlled substance laws and contributing to the harms from prescription opioids.²³⁸ In a plastics case, the defendants may point towards the government's failure to manage its own waste or provide for widespread recycling access, thereby contributing to an influx of plastic waste.²³⁹ That type of argument would align with Judge Swope's concern for "third party intervention."²⁴⁰ Beyond its new allegations to apparently address consumer control, discussed above, Earth Island does not tackle this regulatory-environment problem in its amended complaint.

A public nuisance claim against plastic producers could at least be distinguished from the opioids litigation in a way that mitigates this issue. The dearth of comprehensive regulation of plastic products when compared to opioids may actually advantage plaintiffs in future plastics litigation.²⁴¹ Removing the factor that government officials approved products or set quotas for their production *ex ante* could allow plaintiffs to more persuasively argue that plastic producers are to blame, or, at the very least, that their actions were a "substantial factor" in causing the public nuisance.

d. Parties

The State or individual municipalities could be proper plaintiffs in future cases. First, the key to the inundation or obstruction framing

²³⁷ Oklahoma *ex rel.* Hunter v. Johnson & Johnson, 499 P.3d 719, 728 (Okla. 2021). For example, the FDA approved prescription opioid medications; the DEA handled monitoring supply and setting quotas; states enforced their own laws and regulations in cooperation with federal authorities; and even doctors made decisions to prescribe opioids based on their own medical judgments. *Id.*

²³⁸ True Extract of the Minutes, *In re Opioid Litig.*, No. 400000/2017 (N.Y. Sup. Ct. Mar. 22, 2022) ("The Plaintiff the State of New York is 10% liable."); *see also supra* note 170 and accompanying text (explaining New York's comparative fault system for tort claims). The liability of the defendants as a group therefore decreased by New York's share of the fault. Emily Field, *NY Reaches \$523M Opioid Deal with Teva*, LAW360 (Nov. 3, 2022, 9:13 AM), <https://www.law360.com/articles/1546283/ny-reaches-523m-opioid-deal-with-teva> [<https://perma.cc/9QGF-3U2F>]. Although a subsequent trial was set to begin in 2022 to determine how much the defendants owed the state (and other county plaintiffs) for their share of fault, the parties reached a settlement agreement before that trial commenced. *Id.*

²³⁹ Corkery, *supra* note 37 and accompanying text.

²⁴⁰ Earth Island May 2023 Order, *supra* note 9, at 3.

²⁴¹ See *supra* Section I.C.

would be identifying bodies of water, streets, or lands held in public trust by the State.²⁴² In particular, the State, in its sovereign capacity, owns the land under tidal waters, boundary waters, and certain major inland lakes.²⁴³ Non-tidal waters and littoral property above the high-water line are “private property”—although the State or municipalities may own that property in their proprietary capacity.²⁴⁴ The Attorney General, on behalf of the State, would then be the proper plaintiff for a public nuisance action related to plastic waste obstruction of the waters that the State owns and holds in trust for the public.²⁴⁵ For example, the waters at Kingston Point Beach (located in Ulster county) are connected to the Hudson River and had some of the highest concentrations of plastic waste from test sites along the River.²⁴⁶ The State also could take action on plastic pollution in public trust areas of the tidewaters around Long Island, potentially in coordination with local municipalities.²⁴⁷

²⁴² See Alexandra B. Klass, *Modern Public Trust Principles: Recognizing Rights and Integrating Standards*, 82 NOTRE DAME L.REV. 699, 699 (2006) (“At its core, the public trust doctrine is the idea that there are some resources, notably tidal and navigable waters and the lands under them that are forever subject to state ownership and protection in trust for the use and benefit of the public.”); *Friends of Van Cortlandt Park v. New York*, 750 N.E.2d 1050, 1053 (N.Y. 2001) (stating that New York’s public trust doctrine extends to parkland).

²⁴³ See 1 JOSEPH RASCH & ROBERT F. DOLAN, N.Y. LAW & PRACTICE OF REAL PROPERTY § 20:34 (2d ed. 2023) (“[O]ur common law has developed such that the State owns, in its sovereign capacity, the land under tidal waters, boundary waters, the Hudson and Mohawk Rivers and certain major inland lakes, based on their sizes, character and history.”); *Langdon v. City of New York*, 93 N.Y. 129, 154 (N.Y. 1883) (stating State’s general ownership right to navigable waters).

²⁴⁴ See 1 RASCH & DOLAN, *supra* note 243, § 20:35 (“As to non-tidal waters, regardless of navigability, it is well established that, with the exception of boundary rivers, and the Hudson and Mohawk Rivers, the bed of such waters is the subject of private property, and may be owned either by the state in its proprietary capacity, or by the riparian owners”) (footnotes omitted)). The boundary between public trust property and private property along ocean coasts is usually the “mean high-water line.” *Katrina M. Wyman & Nicholas R. Williams, Migrating Boundaries*, 65 FLA. L. REV. 1957, 1958 (2013). However, other standards of delineation, such as the “vegetation” may apply. *Id.* at 1966 & n.45; see also *Dolphin Lane Assocs. Ltd. v. Town of Southampton*, 333 N.E.2d 358, 359–60 (N.Y. 1975) (stating “traditional line of vegetation” test).

²⁴⁵ See *supra* note 173 (explaining authorization of the New York Attorney General to bring public nuisance suits).

²⁴⁶ See *supra* notes 1–3 and accompanying text. The Hudson River also qualifies as a boundary water. See 1 RASCH & DOLAN, *supra* note 243, § 20:35.

²⁴⁷ See *supra* notes 1–2 (describing plastic pollution on Long Island’s beaches). Although the public trust tidewaters are typically State-owned, see *supra* note 239, tidewaters bordering and lying within the boundaries of Nassau and Suffolk counties are not State-regulated. Under New York’s Navigation Law, the State, through the Commissioner of Parks, Recreation and Historic Preservation, has jurisdiction over all “navigable waters,” all waters within the boundary of the state that are not privately owned and that are either navigable in fact or used by vessels. N.Y. NAV. LAW § 2(5) (defining “navigable in fact” as “navigable in its natural or unimproved condition, affording a channel for useful commerce of a substantial and permanent character conducted in the customary mode of trade and travel on water”);

Second, municipalities and the State, as proprietary owners of land and waters bodies, could bring public nuisance suits related to direct injuries to their property.²⁴⁸ For example, municipalities in Long Island could pursue public nuisance claims related to plastic pollution of coastal areas—above the boundary between littoral property and public trust property—to which the municipalities hold title.²⁴⁹

Private landowners may be able to clear the “special injury” hurdle to also bring a public nuisance case. They would need to assert that the inundation or obstruction of their littoral property or privately-owned bodies of water, by plastic waste, interfered with that property’s use and enjoyment.²⁵⁰ Their claim would then resemble a *private* nuisance action.²⁵¹ Earth Island incorporated that type of claim in its complaints by citing the impact of plastic waste on the waterways entering its Richmond, California property.²⁵² Judge Swope briefly credited that argument in his May 2023 order and found that Earth Island had standing as a property owner to bring its public nuisance claim.²⁵³ Based on Earth Island’s example and existing case law in New York, a future plaintiff would need to demonstrate how plastic waste uniquely obstructed their use of the waterways or coast; for example, if they relied on access to the water for subsistence fishing.²⁵⁴

id. § 30 (assigning jurisdiction); *Rottenberg v. Edwards*, 478 N.Y.S.2d 675, 677 (App. Div. 1984) (“[A]s a general rule, navigable waters are subject to the sole jurisdiction and control of the State”); *cf.* *Town of North Elba v. Grimditch*, 948 N.Y.S.2d 137, 140 (App. Div. 2012) (holding that the Navigation Law does not displace local land use laws over structures in a state’s navigable waters, unless the state, in its sovereign capacity, owns the title to the land under the navigable water). But tidewaters bordering on and laying within Nassau and Suffolk Counties, and their townships, are exempt from State jurisdiction; instead, those counties and municipalities regulate their use. N.Y. Nav. Law § 2(4); *see, e.g.*, *Murphy v. Town of Oyster Bay*, 98 N.Y.S.3d 298, 299 (App. Div. 2019); *Rottenberg*, 478 N.Y.S.2d at 678 (upholding statutory exception and authorization of counties and townships to regulate).

²⁴⁸ *See supra* notes 169–70 and accompanying text (reviewing authorizations, and their limits, for State and municipal public nuisance cases). Absent a statutory grant, municipalities must show that the alleged nuisance injured their property; therefore, a municipal corporation’s action would resemble a private nuisance suit. *See City of Yonkers v. Fed. Sugar Refining Co.*, 121 N.Y.S. 494, 498 (App. Div. 1910).

²⁴⁹ *See Brookhaven Baymen’s Ass’n v. Town of Southampton*, 163 N.Y.S.3d 77, 81 (App. Div. 2022) (discussing delineation of public section of the Nassau and Suffolk County coastlines); *supra* note 244 (discussing boundary line between public trust and private property).

²⁵⁰ *See supra* note 176–79 (discussing “special injury” requirement); *see supra* note 2–3 (explaining the moving boundary between public trust and private property in coastal areas).

²⁵¹ *See Copart Indus. v. Consol. Edison Co.*, 362 N.E.2d 968, 971 (N.Y. 1977) (defining “private nuisance” in New York). A trespass claim is also another possibility for terrestrial plastic pollution, depending on the character of the intrusion.

²⁵² Earth Island Complaint, *supra* note 4, ¶¶ 21, 26; Earth Island Amended Complaint, *supra* note 10, ¶¶ 22, 252.

²⁵³ Earth Island May 2023 Order, *supra* note 9, at 3.

²⁵⁴ *See Leo v. Gen. Elec. Co.*, 538 N.Y.S.2d 844, 847 (App. Div. 1989) (deciding, at the motion to dismiss stage, that commercial fishermen suffered “a peculiar or special harm”

Finally, the potential defendants under this framing of the public nuisance could be a diverse group of plastics manufacturers, distributors, and retailers whose businesses contribute to plastics products entering New York's public waters. Taking a cue from cases related to the opioids crisis and filed by the New York AG and Nassau and Suffolk counties, plaintiffs might include defendants from several parts of the plastics supply chain, from Exxon to Novolex to Walmart.²⁵⁵ It is also plausible to include companies involved in plastic disposal or landfill management, such as Waste Management Inc., if their operations result in the disposal of plastic products into the environment.²⁵⁶ This strategy could depend on tracking the movement of plastics waste throughout the bodies of water in the state to identify the source of pollution and last plastic industry player to be in contact with the specific plastic product. Earth Island has begun to engage in that process, according to its amended complaint.²⁵⁷ Some plastic packaging may narrow down the options (e.g., an intact Coke bottle). But more degraded plastic pieces would be more difficult to identify. This analysis may ultimately prove

from pollution of the Hudson because they relied on the river for their livelihood). This would be a high bar for private parties to clear, as they would (1) need to allege damage to a privately owned waterway connected to the accumulation of plastic waste in public waterways, and (2) the private party would need to establish that the plastic waste is harming their use of the property.

²⁵⁵ See *supra* Section I.A (discussing plastic industry players and supply chain); Sarah Maslin Nir, *Major Trial Against Opioid Suppliers Begins in New York*, N.Y. TIMES (June 29, 2021), <https://www.nytimes.com/2021/06/29/nyregion/opioids-in-new-york.html> [<https://perma.cc/73XE-QNEM>] (describing how the New York state and county lawsuits initially named parties along all stages of the opioids supply chain, such as Teva Pharmaceuticals (manufacturer), Cardinal Health (distributor), and several pharmacy chains acting as the point-of-sale to consumers (Walmart, CVS, Rite Aid, and Walgreens)).

²⁵⁶ See *Charleston Waterkeeper v. Frontier Logistics*, 488 F. Supp. 3d 240, 257 (D.S.C. 2020) (denying motion to dismiss RCRA claims by a defendant transporter of plastic pellets because the defendant spilled pellets onto state property and thereby created a substantial danger to the natural environment under RCRA); see also *supra* note 201 (discussing case). Including more defendants, particularly those located closer in the product stream to consumers, might strain future plaintiffs' causation theories, however. Because the causation standard in New York is the substantial factor test, see *supra* note 168 and accompanying text, the inclusion of smaller distributors doesn't necessarily mean that larger distributors are not liable, provided they are included in the lawsuit. If the conduct of each defendant was a substantial factor (actual cause) and a proximate cause of the obstructions or inundations, then they all could be liable—but likely lower fault shares. See *supra* note 238 and accompanying text (discussing New York system and verdict in opioids public nuisance case). A thornier issue would be blame-shifting within defendants or from defendants to third parties, which Section III.B.1.c discusses. For example, distributors could accuse waste disposal companies of being the true factual and proximate cause of plastic pollution in New York due to their mismanagement of consumer plastic waste.

²⁵⁷ See Earth Island Amended Complaint, *supra* note 10, ¶ 251 (alleging that plastic sold by each of the defendants appeared in waste from local beach clean-ups).

too complex, although it would strongly support the causation element in a New York case.

2. *Discharges & Emissions*

The “public plastic nuisance” can also be framed as the pollution of public resources with the harmful byproducts of plastic production or processing. This framing would encompass the discharge of plastic waste into public bodies of water or the toxic emissions from facilities associated with plastic production or recycling. Examples include a petrochemical plant’s release of plastic pellets through its effluent disposal system into a nearby harbor or, alternatively, the emissions from a plastics incineration facilities moving into the airspace of a nearby town.²⁵⁸ Earth Island framed one of the public right interferences in its initial complaint as the defendants contributing to a waste management crisis in the state that threatened the public’s access to clean air.²⁵⁹ This framing builds on that example to more broadly consider how plastic pollution negatively affects air and water.

a. Public Right

Framing the public nuisance as the impact of plastic pollution on the public’s access to clean air and water would have a strong basis in New York case law. For example, one court determined that the seepage of chemical wastes into the public water supply was a public nuisance as nearby residents were forced to discontinue their use of water from the area.²⁶⁰ Emissions (most often dust and smoke) from industrial operations have prompted several nuisance cases in New York, where courts have determined that nearby communities could challenge the business operators and receive injunctions that limit or stop operations, as the emissions negatively affected the health, comfort, and convenience of their residents.²⁶¹ The danger from emissions tied to plastic products

²⁵⁸ See *supra* Section I.B.

²⁵⁹ Earth Island Complaint, *supra* note 4, ¶¶ 90, 110, 153–60. Earth Island’s framing focused on how the limited recyclability of the defendants’ plastic products had necessitated that local governments use incineration and other environmentally harmful processes for managing growing plastic waste. *Id.* ¶ 110.

²⁶⁰ State v. Schenectady Chemicals, Inc., 479 N.Y.S.2d 1010, 1013–14 (App. Div. 1984).

²⁶¹ See, e.g., Coleman v. City of New York, 75 N.Y.S. 342, 345–46 (App. Div. 1902) (stating that a business may become a nuisance through the casting of dust or emissions that substantially interferes with adjacent premises); Masso v. Hanscom Realty Corp., 4 N.Y.S.2d 216 (App. Div. 1938) (affirming judgment awarding plaintiffs injunctive relief for steam and odors that wafted from the defendant’s establishment onto the neighboring premises); see also Boomer v. Atl. Cement Co., Inc., 257 N.E.2d 870, 874–75 (N.Y. 1970) (lifting a previous injunction against defendant’s operations based on the defendant agreeing to pay permanent damages to plaintiffs for private nuisance concerning dirt, smoke, and vibrations.).

would be heightened because of the scientific evidence of the toxicity of chemicals commonly added to plastic products or released during their production, disposal, or recycling.²⁶²

The development of public nuisance law in other contexts reinforces that this framing is a promising conception of the public plastic nuisance. For example, when the Oklahoma Supreme Court reversed a trial court's extension of public nuisance law to hold Johnson & Johnson liable, it argued that the state's statute protected only the "public right" to access clean water and air, both "indivisible resources."²⁶³ In the majority's view, the case was properly one of products liability, not nuisance law.²⁶⁴ Although this reasoning was fatal to the public nuisance claim in that state, it indicates that future plaintiffs could strengthen their case on the "public right" element by focusing on plastic pollution's impacts through discharges and emissions.

b. Interference, Obstruction, or Offense

The discharge of plastic waste or emissions tied to plastic production or processing could constitute a substantial and unreasonable interference with the public's right to clean water or air. Discharges in public bodies of water or into the air surrounding a facility could affect a large number of people residing near that facility or body of water.²⁶⁵ Future plaintiffs could also provide testimonial or empirical evidence that the discharge or emissions interfere with the public's access to clean air or water in a way that annoys or disturbs an ordinarily reasonable person.²⁶⁶ Moreover, if future plaintiffs provide evidence of negligent or intentional action leading to the discharges or uncontrolled emissions at a facility, it would strongly support their case on this element.²⁶⁷

²⁶² See *supra* Section I.B.

²⁶³ Oklahoma *ex rel.* Hunter v. Johnson & Johnson, 499 P.3d 719, 726–27 (Okla. 2021).

²⁶⁴ *Id.* at 726.

²⁶⁵ See *supra* note 64 and accompanying text (discussing facility distribution and environmental justice issues). See also San Antonio Bay Estuarine Waterkeeper v. Formosa Plastics Corp., No. 6:17-CV-0047, 2019 WL 2716544, at *4 (S.D. Tex. June 27, 2019) (documenting large amounts of plastic nurdles in the bay nearby plaintiffs' homes); Copart Indus. v. Consol. Edison Co., 362 N.E.2d 968, 971 (N.Y. 1977) (defining public nuisance as an offense related to unreasonable interference based in part on how many people affected); State v. Waterloo Stock Car Raceway, 409 N.Y.S.2d 40, 44 (Sup. Ct., Seneca Cnty. 1978) (citing Town of Mt. Pleasant v. Van Tassell, 166 N.Y.S.2d 458, 461 (Sup. Ct. Westchester Cnty. 1957), *aff'd*, 6 A.D.2d 880 (App. Div. 1958)) (describing a public nuisance as conduct that "causes substantial annoyance and discomfort indiscriminately to many and diverse persons who are continually or may from time to time be in the vicinity").

²⁶⁶ See *supra* note 193 and accompanying text.

²⁶⁷ See *supra* notes 163–67 and accompanying text (discussing the relevance of negligence and intentional conduct to New York public nuisance law); see, e.g., San Antonio Bay

One important issue is the recurrence or permanence of the interference. Unlike plastic waste continually decomposing on land or floating in a river, discharges or emissions from a plastic production or recycling facility are discrete events, and they would need to be somewhat consistent—more than only occasional or intermittent—in order to constitute a substantial and unreasonable interference.²⁶⁸ Basing a public nuisance claim on only one instance of a plant discharging plastic waste into nearby public waters would likely be vulnerable to the counterargument that the interference with the public's clean water was not substantial or unreasonable. If plastic waste were significant in quality and remained in the area, though, the plaintiffs would then have a stronger argument that the inference is recurrent, even if it only stemmed from one initial discharge.²⁶⁹

In addition, violations of federal and state environmental regulations would reinforce that the defendants' discharges or emissions were unreasonable interferences with public rights.²⁷⁰ Two possibilities are the effluent limitations in facilities' permits under the Clean Water Act or ambient and emissions standards applicable to solid waste incineration plants or plastic production facilities under the Clean Air Act.²⁷¹ By asserting that the *same* defendants in a public nuisance case have run afoul of permit conditions, future plaintiffs could persuasively argue that the defendants' facilities acted unlawfully and unreasonably when interfering with public rights to clean water and air.²⁷²

Estuarine Waterkeeper, 2019 WL 2716544, at *5–7 (explaining Formosa Plastics' repeated intentional violations of state permits limiting their discharge of plastic particles).

²⁶⁸ See *Town of Hempstead v. S. Zara & Sons Contracting Co.*, 570 N.Y.S.2d 137, 138 (App. Div. 1991) (finding that public nuisance did not apply to an isolated incident of sewer system construction damaging a plaintiff's water main and roadway). Of course, plastic pollution on land or water is also mobile.

²⁶⁹ See *San Antonio Bay Estuarine Waterkeeper*, 2019 WL 2716544, at *10 (concluding that Formosa Plastics had continually violated the Clean Water Act and Texas regulations by exceeding its permitted limits of the discharge of plastic pellets into Lavaca Bay and Cox Creek).

²⁷⁰ See *supra* note 195 and accompanying text (explaining that whether "unlawful" activity occurred is relevant to whether an alleged interference is unreasonable and therefore a public nuisance under New York law); *id.* (addressing the treatment of state and federal statutory or regulatory violations in negligence actions). Earth Island did not plead violations of any federal environmental statutes in its initial complaint, nor did it connect those violations to its public nuisance cause of action. Earth Island Complaint, *supra* note 4, ¶¶ 161–226.

²⁷¹ See, e.g., *San Antonio Bay Estuarine Waterkeeper*, 2019 WL 2716544, at *2 (discussing Formosa's alleged violation of the Clean Water effluent limitations for plastic waste); *supra* note 74 and accompanying text (discussing Clean Air Act regulations).

²⁷² Future defendants would, of course, argue that they complied with all regulations to show that their action was completely "lawful," thus precluding a public nuisance action in New York. See *San Antonio Bay Estuarine Waterkeeper*, 2019 WL 2716544, at *1.

c. Causation

Compared to the causation argument when framing the public nuisance as plastic waste inundation or obstruction, the causal relationship for discharges or emissions would be relatively direct. For example, a specific facility that handles plastic products emits toxic chemicals that enter a nearby community through the air, causing negative health consequences for their residents that inhale those chemicals.²⁷³ Or a plant discharges plastic pellets into nearby waters connected to fishable or swimmable waters or sources of drinking water. The plastic particles then leach chemicals into the waters or directly into individuals.²⁷⁴ The consumer control issues likely to arise in the inundation or obstruction framing are unlikely to come up in this framing.

d. Parties

Determining the proper parties for this framing would involve (1) establishing that plastics affected water or air resources held by the State in public trust, and (2) assessing, if the plaintiffs are proprietary owners, whether the plastic-related interference caused them “special injury,” which would permit them to bring suit.

For discharges in particular, tracing the presence of plastics to specific bodies of water would be paramount for a case brought by the government. The same New York-specific ownership analysis for water bodies discussed in the inundation or obstruction framing would apply here too. The proper government plaintiff, State or municipality, would depend on the location of the public body of water and whether the water body is public trust property or not.²⁷⁵ For both discharges and emissions, the plaintiffs would need to identify specific facilities within New York that could potentially discharge plastic waste or emit toxic chemicals as a byproduct of their production or processing (including chemical recycling) procedures. The companies operating those facilities would then be defendants in future litigation. There are twenty plastics product manufacturing facilities in the state and seventy-two more chemical manufacturing facilities, which may produce plastic resins among other products.²⁷⁶ In addition, there are

²⁷³ See *supra* Section I.B.

²⁷⁴ See *supra* Section I.B.

²⁷⁵ See *supra* notes 242–49 and accompanying text.

²⁷⁶ See *Plastics Product Manufacturing*, ENV'T PROT. AGENCY (Mar. 15, 2023), <https://www.epa.gov/trinationalanalysis/plastics-product-manufacturing> [<https://perma.cc/GTB8-YTVE>] (presenting 2021 data on the locations of 981 domestic facilities, including four facilities located in Nassau and Suffolk Counties on Long Island); *Chemical Manufacturing*, ENV'T PROT. AGENCY (Mar. 15, 2023), <https://www.epa.gov/trinationalanalysis/chemical-manufacturing>

eight plastic recycling facilities and nineteen material recovery facilities (which handle plastic waste) in the state.²⁷⁷ Although documented regulatory violations may in part influence this analysis, there could be significant opportunities to advance environmental justice goals. Plastic production facilities, incineration operations, and a growing number of “chemical recycling” plants are disproportionately sited within low-income and minority communities across the country.²⁷⁸ Prioritizing litigation against the operators of regulated facilities in environmental justice communities could then direct relief to those most disproportionately impacted by the environmental and public health harms tied to plastic products.

Of course, private plaintiffs targeting a specific facility or set of facilities would need to pass the “special injury” bar in order to maintain their lawsuit. They would need to demonstrate an injury from plastic discharges or emissions that is distinct from the harm to the public.²⁷⁹ That would be fact-specific and likely challenging. For instance, losing access to local sources of water, such as a stream or well, due to the discharge of plastic pellets into those sources could support a private lawsuit, as long as the community generally draws water from a separate system.²⁸⁰ Alleging a distinct harm traceable to toxic emissions would likely involve connecting the acute health effects in individuals living near to a facility to exposure to specific chemicals emanating from that facility as a result of plastic production or processing. Connecting those health effects to a diminution or loss of livelihood (i.e., not being able to work) could strengthen a future case in New York.²⁸¹

[<https://perma.cc/5E6D-VJXV>] (presenting 2021 data on the locations of 3,404 domestic facilities, of which twelve percent (408 facilities) produce “resins and synthetic rubber” and five facilities are located in Nassau and Suffolk Counties on Long Island). Companies operating facilities located near New York’s borders with other states, especially New Jersey or Connecticut, could be potential defendants as well.

²⁷⁷ See *Recycling Infrastructure and Market Opportunities Map*, ENV’T PROT. AGENCY, <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=febf46fd31a14b80a836bd0bd4d788e2> [<https://perma.cc/68P6-BBEW>] (presenting data on U.S. recycling infrastructure and including three facilities in Suffolk County on Long Island).

²⁷⁸ See *supra* note 64 and accompanying text.

²⁷⁹ See *supra* notes 176–78, 254 and accompanying text.

²⁸⁰ See, e.g., *Booth v. Hanson Aggregates*, 791 N.Y.S.2d 766, 767–68 (App. Div. 2005) (reinstating public nuisance claim by residents who sustained a loss of water supply when their wells went dry because of defendant’s operation of a quarry, which did not affect other residents who utilized a public source of water).

²⁸¹ See, e.g., *Leo v. Gen Elec. Co.*, 538 N.Y.S.2d 844, 846–47 (App. Div. 1989) (explaining how the loss of subsistence fishing work in the Hudson was a special harm to the plaintiffs).

CONCLUSION

Professor Sarah J. Morath advocates for “multimodal approaches” to solving the complex, interdisciplinary problem of plastic pollution.²⁸² She raises a suite of solutions: expanded regulatory efforts from local, state, federal, and international governments; private environmental governance through business councils, eco-labels, and environmental management systems; and individual sustainability efforts.²⁸³ Litigation is just one mode of action for pressuring recalcitrant industry actors to change their business practices. It’s also one that could spur governments to pass new regulations.

Despite its challenges, a “public plastic nuisance” theory provides several benefits for the litigation effort. As this Note demonstrates, framings of the “public plastic nuisance” during multiple stages of the plastic product lifecycle are viable under New York law and grounded in historical and traditional conceptions of public nuisance. While Part III focused on the most auspicious avenues for pursuing this theory now, scientific research and the law may evolve to make other framings—such as a broader threat to public health and safety from microplastics—viable in the future.²⁸⁴ Moreover, proving that a public plastic nuisance theory is viable is just the first step. Stating a public plastic nuisance claim in New York would trigger a host of related questions over the proper forum and the relationship between those claims and federal law. The defendants in *Earth Island* and in public nuisance suits against fossil fuel producers argued that plaintiffs’ state law claims belong in federal court as a matter of common law or due to preemption by federal statutory law.²⁸⁵ There is still active debate on both issues. Plaintiffs with a successful public plastic nuisance suit could also seek abatement or damages related to their claims. Assuming the plaintiffs

²⁸² MORATH, *supra* note 20, at 53.

²⁸³ *Id.* at 57–157 (Chapter 4 to Chapter 7).

²⁸⁴ The public nuisance from microplastics could be the harm from toxic chemicals leaching into the human body from plastic particles after individuals ingest them in water or food. *See supra* note 59 and accompanying text. This is a very open-ended framing that would draw in an extremely broad array of possible plaintiffs and defendants because of the globalized nature of microplastics. An extensive list of industry defendants and general “public health” framing would likely face the most resistance from defendants and judges. *See, e.g.,* *People ex rel. Spitzer v. Sturm, Rugger & Co.*, 761 N.Y.S.2d 192, 194–95 (App. Div. 2003) (affirming dismissal of the state’s public nuisance case against handgun manufacturers, wholesalers, and retailers and noting that the plaintiff’s theory would stretch public nuisance to cover “societal problems concerning . . . already heavily regulated commercial activity”).

²⁸⁵ *See supra* note 8 (discussing Judge Gilliam’s ruling in *Earth Island*). *But see* *City of New York v. Chevron Corp.*, 993 F.3d 81, 100 (2d Cir. 2021) (holding that the Clean Air Act preempted New York City’s public nuisance claims against fossil fuel producers and dismissing those claims).

prove defendants' liability, structuring and enforcing those remedies would present additional hurdles. These procedural and remedial considerations are important, but their robust treatment is a topic for future scholarship.

Public nuisance is not a perfect tool. But the promise of a "public plastic nuisance" theory outweighs its perils. The remedies available in public nuisance cases could holistically address the domestic harms related to plastic pollution, including those present on Long Island's beaches. In the absence of comprehensive regulation of plastic products throughout their lifecycle, public nuisance could function as a regulatory "gap-filler" to pressure the plastic industry to change its business practices. The possibility of public nuisance liability could itself motivate plastic industry defendants to cooperate in addressing plastic pollution or accept new regulations. And strategic litigation in states like New York and California—whether *Earth Island* succeeds or fails in its case—would especially further these goals. Public nuisance is therefore a necessary tool for addressing gaps in existing law and pressing for changes in the legislative and executive branches. Ultimately, it is an effective means for securing the assistance of the most responsible parties in addressing a plastic waste crisis.