

Una Herida Abierta: Utilizing the National Environmental Policy Act and the Inflation Reduction Act to Address Environmental Injustice Along the Borderland

*Jonathan A. Picado**

ABSTRACT: Circuit courts are divided as to whether Section 602 of Title VI of the 1962 Civil Rights Act creates a private right of action enforceable under 42 U.S.C. § 1983. In the past, many environmental justice groups have brought their claims under Section 602, since it is easier to prove disparate impact as opposed to direct discrimination. However, recent trends in Section 1983 jurisprudence seem to indicate that unless the statute expressly creates a private right of action, it is usually not enforceable under Section 1983. Moreover, courts have muddled substantive due process claims related to “state-created dangers” by adding subjective thresholds (e.g., private actor requirements, “shock the conscience” standards, and mens rea requirements). The Administrative Procedure Act (“APA”) allows individuals to challenge agency compliance with the National Environmental Policy Act (“NEPA”) and seek judicial review of agency decisions implicating environmental justice issues; therefore, NEPA challenges through the APA would be an appropriate alternative to Section 1983 actions. In addition to the procedural mechanisms available through the APA, the Inflation Reduction Act of 2022 (“IRA”) includes several sources of funding dedicated to addressing environmental justice issues throughout the country. With a clear mandate from Congress, NEPA challenges will be the most effective strategy to address

* J.D. Candidate, The University of Iowa College of Law, 2024; M.A., Political Science, The University of Texas at El Paso, 2020; B.A., Political Science, The University of Texas at El Paso, 2018. Thank you to the members of the *Iowa Law Review*, past and present, who helped polish this piece for publication. Special thanks to Marisa Leib-Neri, Ben Tate, Spencer Culver, Jacob Taylor, Elena Hildebrandt, Alysha Rameshk, and Jane Jozefowicz for their invaluable work and thought-provoking suggestions. Thank you also to Professor Shannon Roesler for her guidance and insight during the early stages of this Note. Lastly, I am indebted to Oliver Engelhardt and my family for believing in me and supporting my work always. This Note is dedicated to the families of the Chamizal neighborhood of El Paso, Texas, who continue the fight for a just and livable environment. ¡El pueblo unido jamás será vencido!

environmental justice concerns along the U.S.-Mexico border where most environmental justice issues are linked to major federal actions.

INTRODUCTION	1337
I. BACKGROUND	1338
A. <i>HISTORICAL BACKGROUND OF THE ENVIRONMENTAL JUSTICE MOVEMENT</i>	1339
B. <i>UNIQUE ENVIRONMENTAL CHALLENGES ALONG THE U.S.-MEXICO BORDER</i>	1341
1. Institutional Frameworks for Binational Cooperation on Environmental Protection	1343
2. Industrialization of the Borderland and the Environmental Impacts of <i>Maquiladoras</i>	1344
3. The Paso del Norte Region: A Case Study on Environmental Injustice in the Borderland	1345
II. MURKY WATERS: INCONSISTENT RULINGS ON CIVIL RIGHTS & CONSTITUTIONAL CHALLENGES LIMIT THE LANDSCAPE OF AVAILABLE REMEDIES FOR ENVIRONMENTAL INJUSTICE CLAIMS	1347
A. <i>DISPARATE IMPACT UNDER TITLE VI OF THE CIVIL RIGHTS ACT AND SUBSTANTIVE DUE PROCESS CLAIMS UNDER 42 U.S.C. § 1983</i>	1347
III. REDUCING MORE THAN JUST INFLATION: UTILIZING THE NATIONAL ENVIRONMENTAL POLICY ACT, THE ADMINISTRATIVE PROCEDURE ACT, AND THE INFLATION REDUCTION ACT TO REMEDY ENVIRONMENTAL INJUSTICE CLAIMS	1351
A. <i>THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969</i>	1351
B. <i>THE INFLATION REDUCTION ACT OF 2022</i>	1355
CONCLUSION	1359

“The U.S.-Mexican border *es una herida abierta* where the Third World grates against the first and bleeds. And before a scab forms it hemorrhages again, the lifeblood of two worlds merging to form a third country—a border culture.”—Gloria Anzaldúa¹

1. GLORIA E. ANZALDÚA, *BORDERLANDS / LA FRONTERA: THE NEW MESTIZA* 3 (1987).

INTRODUCTION

In 2014, the issue of environmental injustice was catapulted to the foreground by the water crisis in Flint, Michigan. Flint was “the birthplace of General Motors,” and this proximity to the automobile industry contributed to the Flint River’s use as a disposal site for industrial toxins in the years leading up to the crisis itself.² The water crisis began when Flint’s municipal government decided to switch the city’s water supply from Detroit’s water-supply system to the Flint River.³ Anyone with internet access or who tuned into news during the mid-2010s likely recalls the videos and photographs of the discolored water flowing out of Flint residents’ sinks, as well as the well-documented “skin rashes, hair loss, and itchy skin.”⁴ Despite Flint government officials insistence that the water was safe to drink, several studies showed dangerously high levels of lead.⁵ Further, local pediatricians reported increased levels of lead in children’s blood, reporting nearly nine thousand cases of children drinking lead-contaminated water within an eighteen-month period.⁶ Through the collaborative, grassroots efforts of Flint citizens and community groups, Flint’s residents successfully sued city and state officials to secure safe drinking water.⁷ The resulting settlement forced the state to allocate funds dedicated to replacing Flint’s lead pipes as well as “guaranteeing further funding for comprehensive tap water testing, a faucet filter installation and education program, free bottled water through the following summer, and continued health programs to help residents deal with the residual effects of Flint’s tainted water.”⁸

These environmental justice concerns are not new or isolated to communities such as Flint. Certain areas of the United States, such as the U.S.-Mexico border, present unique environmental justice and sociopolitical challenges that complicate legal and political action.⁹ Many of the communities that are subjected to environmental toxins seek redress primarily through the legal system; however, muddled judicial doctrines and divergent interpretations of rights to environmental equity have complicated and significantly reduced the likelihood of success in environmental justice

2. Melissa Denchak, *Flint Water Crisis: Everything You Need to Know*, NAT. RES. DEF. COUNCIL (Nov. 8, 2018), <https://www.nrdc.org/stories/flint-water-crisis-everything-you-need-know#summary> [<https://perma.cc/C85Z-W3JK>]; *Fighting for Safe Drinking Water in Flint*, NAT. RES. DEF. COUNCIL (Apr. 13, 2022), <https://www.nrdc.org/resources/fighting-safe-drinking-water-flint> [<https://perma.cc/S343-GPA4>].

3. *Fighting for Safe Drinking Water in Flint*, *supra* note 2.

4. Denchak, *supra* note 2.

5. *Id.*

6. *See Fighting for Safe Drinking Water in Flint*, *supra* note 2.

7. *Id.*

8. Denchak, *supra* note 2.

9. *See infra* Section I.B.

lawsuits.¹⁰ Environmental justice plaintiffs have historically relied on causes of action through constitutional challenges and civil rights statutes, but the standards utilized by courts to adjudicate those causes of action are highly subjective and vary among courts, often foreclosing judicial remedies entirely.¹¹ However, an alternative legal strategy may provide a reliable path forward for these claimants.

This Note argues that NEPA, the APA, and the IRA provide the clearest and most rigorous procedural mechanism—through the APA’s predictable and uniform “arbitrary and capricious” standard—for communities along the U.S.-Mexico border to address issues of environmental injustice stemming from major federal actions along the border. Part I provides an overview of the environmental justice movement in the United States and the unique sociopolitical factors contributing to environmental justice concerns along the U.S.-Mexico border. Part II highlights the inconsistent rulings on environmental justice claims under Title VI of the Civil Rights Act and 42 U.S.C. § 1983. Finally, Part III outlines an alternative procedural mechanism under NEPA, the APA, and the IRA and applies it to a recent allocation of federal funds aimed at expanding a port of entry in the Paso del Norte region.

I. BACKGROUND

Environmental justice has taken many forms and continues to evolve as our understanding of environmental toxins and demographic predictors continues to expand. The first studies or discussions of environmental justice in the United States were primarily aimed at assessing the relationship between race and exposure to specific environmental pollutants.¹² Over time, the conversation regarding environmental justice began to incorporate a variety of case studies that diversified the typical demographic variables used to assess the impact of environmental injustice across the country.¹³ Although the environmental justice movement has made significant advancements over the decades, it has not meaningfully engaged with intersectional theories and geopolitical issues that transcend domestic analyses of environmental injustice.¹⁴ This notion is particularly relevant along the U.S.-Mexico border where race may not be as strong of a predictor of environmental injustice; most communities along the U.S.-Mexico border are minority-majority communities, and the borderland is heavily subjected to geopolitical

10. See *infra* Section II.A.

11. See *infra* Section II.A.

12. Stephanie A. Malin & Stacia S. Ryder, *Developing Deeply Intersectional Environmental Justice Scholarship*, 4 ENV'T SOCIO. 1, 2 (2018).

13. *Id.* at 2.

14. *Id.*

influences that have drastic effects on the environmental justice movements in this region.¹⁵

A. HISTORICAL BACKGROUND OF THE ENVIRONMENTAL JUSTICE MOVEMENT

The U.S. Environmental Protection Agency (“EPA”) defines environmental justice as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”¹⁶ A deeper understanding of environmental *injustice* is required in order to fully conceptualize what “fair treatment” and environmental *justice* truly mean. Particularly relevant in any discussion of environmental injustice is the increased exposure to environmental hazards that minority and low-income communities are disproportionately subjected to.¹⁷ Minority and low-income communities are often referred to “as ‘fenceline communities’ or ‘sacrifice zones’ [where] the health of residents in these neighborhoods is undervalued in pursuit of the production, resource extraction, and waste management demanded in the capitalist, modern world.”¹⁸

Increased exposure to environmental toxins also leads to issues of health inequities among minority and low-income communities, particularly among children and women.¹⁹ Rates of childhood asthma are disproportionately higher in minority and low-income communities, one study finding such neighborhoods in New York City had cases of childhood asthma four times higher than the national average.²⁰ Lead poisoning is also disproportionately prevalent among minority and low-income communities. Lead appears

15. Sara E. Grineski & Patricia M. Juárez-Carrillo, *Environmental Injustice in the US-Mexico Border Region*, in SOCIAL JUSTICE IN THE U.S.-MEXICO BORDER REGION 179, 179–80 (Mark Lusk, Kathleen Staudt & Eva Moya eds., 2012).

16. *About the Office of Environmental Justice and External Civil Rights*, EPA (Sept. 13, 2023), <http://www.epa.gov/aboutepa/about-office-environmental-justice-and-external-civil-rights> [<https://perma.cc/5GC3-TZBG>]; see also LUKE W. COLE & SHEILA R. FOSTER, FROM THE GROUND UP: ENVIRONMENTAL RACISM AND THE RISE OF THE ENVIRONMENTAL JUSTICE MOVEMENT 19–20 (2001) (conceptualizing environmental justice through the history of the environmental justice movement).

17. Camila H. Alvarez & Clare Rosenfeld Evans, *Intersectional Environmental Justice and Population Health Inequalities: A Novel Approach*, SOC. SCI. & MED., Jan. 2021, at 1, 1.

18. *Id.* (citation omitted).

19. Philip J. Landrigan, Virginia A. Rauh & Maida P. Galvez, *Environmental Justice and the Health of Children*, 77 MOUNT SINAI J. MED. 178, 179 (2010); Libby Leonard, *Environmental Toxins 101: Everything You Need to Know*, ECOWATCH (Sept. 25, 2022), <https://www.ecowatch.com/enviromental-toxins-guide.html> [<https://perma.cc/L3AC-GS43>]; see also Joe McCarthy, *Understanding Why Climate Change Impacts Women More than Men*, GLOB. CITIZEN (Mar. 5, 2020), <https://www.globalcitizen.org/en/content/how-climate-change-affects-women> [<https://perma.cc/HQ8H-YHMG>]. See generally Jonathan A. Picado & Rebecca A. Reid, *Mother Nature, Lady Justice: Ecofeminism and Judicial Decision-Making*, in OPEN JUDICIAL POLITICS 515 (2d ed. 2021), https://open.oregonstate.edu/education/open-judicial-politics/open/download?type=print_pdf [<https://perma.cc/4KZM-5HAF>] (discussing the postcolonial effects of capitalism on the environment, women, and indigenous communities).

20. Landrigan et al., *supra* note 19, at 182.

primarily in the form of lead-based paint chips typically found in homes and buildings constructed before 1978, but lead can also contaminate water when lead pipes fall into disrepair.²¹ A study found that “4.6 [percent] of [Black] children are estimated to have blood lead concentrations above 25 µg/dL versus 1.2 [percent] of white children.”²² Other recent studies have also found that children in minority and low-income communities are exposed to a variety of environmental toxins that function as endocrine disruptors that increase rates of childhood obesity.²³

Cancer rates linked to environmental toxin exposure are also increasingly prevalent in minority and low-income communities in the United States. An eighty-five-mile stretch of land in Louisiana between Baton Rouge and New Orleans has been referred to as “Cancer Alley” and is one of the most polluted areas in the United States.²⁴ Petrochemical companies have built “over 150 plants and refineries” along Cancer Alley, making it home to “the highest concentration of petrochemical facilities in the Western Hemisphere.”²⁵ Cancer Alley residents are approximately fifty times more likely to be diagnosed with cancer than those living in other parts of the country, and the dangerous levels of air and water pollutants have led to other respiratory and cardiovascular health issues among Cancer Alley’s residents.²⁶

Cancer Alley is a direct result of redlining and other Jim Crow-era policies in Louisiana that forced Black communities to relocate to the lower-elevation and swampy areas of New Orleans and Baton Rouge.²⁷ Moreover, most of the communities in Cancer Alley are within unincorporated towns and are therefore governed by parishes—Louisiana’s governmental equivalent of a county.²⁸ For example, St. John the Baptist Parish’s council, which is predominantly white, has authority over the unincorporated town of Wallace which is primarily comprised of Black residents.²⁹ When a petrochemical company applied to construct a new plant in Wallace, St. John the Baptist Parish voted to rezone the town of Wallace for industrial use so Formosa could build their petrochemical facility there.³⁰ Many state and parish governments justify decisions to allow hundreds of petrochemical

21. *Id.* at 183; see Denchak, *supra* note 2.

22. Landrigan et al., *supra* note 19, at 182.

23. *Id.* at 183–84.

24. James Pasley, *Inside Louisiana’s Horrifying ‘Cancer Alley,’ an 85-Mile Stretch of Pollution and Environmental Racism That’s Now Dealing with Some of the Highest Coronavirus Death Rates in the Country*, INSIDER (Apr. 9, 2020, 7:42 PM), <https://www.businessinsider.com/louisiana-cancer-all-ey-photos-oil-refineries-chemicals-pollution-2019-11> [<https://perma.cc/DE9P-M7RA>].

25. Idna G. Castellón, *Cancer Alley and the Fight Against Environmental Racism*, 32 VILL. ENV’T L.J. 15, 15–16 (2021).

26. *Id.* at 15; Pasley, *supra* note 24.

27. Castellón, *supra* note 25, at 21.

28. *Id.* at 22–23.

29. *Id.* at 23.

30. *Id.*

companies to continue building facilities and plants in Cancer Alley by arguing that their increased presence will lead to job opportunities, but “local residents often hold only a small percentage of industry jobs with the rest going to outsiders.”³¹ Although the environmental justice movement was intertwined with the Civil Rights Movement of the 1960s and largely political in nature, community groups began turning to the judicial system to seek injunctions and monetary damages for environmental harms and siting of environmental toxins. The first lawsuit of this kind was *Bean v. Southwestern Waste Management Corp.*³² A group of Black homeowners in Houston, Texas, challenged an order from the Texas Department of Health granting Southwestern Waste Management a permit to build a solid waste facility within 1,500 feet of a public school.³³ The plaintiffs filed the lawsuit under 42 U.S.C. § 1983—a civil rights statute designed to protect against “the deprivation of any rights, privileges, or immunities secured by the Constitution and laws.”³⁴ The court denied the plaintiffs’ requests for a preliminary injunction and permanent relief, stating that the plaintiffs had not “established a substantial likelihood of proving that the decision to grant the permit was motivated by purposeful racial discrimination in violation of 42 U.S.C. § 1983.”³⁵ Despite denying the plaintiffs’ requests for equitable relief, the court noted that

If this Court were [the Texas Department of Health (“TDH”)], it might very well have denied this permit. It simply does not make sense to put a solid waste site so close to a high school, particularly one with no air conditioning. Nor does it make sense to put the land site so close to a residential neighborhood. But I am not TDH and for all I know, TDH may regularly approve of solid waste sites located near schools and residential areas, *as illogical as that may seem.*³⁶

The unwillingness of the court in *Bean* to grant equitable or injunctive relief did not remain an isolated incident and was subsequently—and continues to be—replicated by courts across the United States.³⁷

B. UNIQUE ENVIRONMENTAL CHALLENGES ALONG THE U.S.-MEXICO BORDER

The environmental issues our global community faces are not bound by historically disputed geopolitical borders. The intersection of extreme

31. *Id.* at 42.

32. *Environmental Justice Timeline*, EPA (June 27, 2023), <https://www.epa.gov/environmental-justice/environmental-justice-timeline> [<https://perma.cc/56TN-N6JQ>].

33. *Id.*; *Bean v. Sw. Waste Mgmt. Corp.*, 482 F. Supp. 673, 675 (S.D. Tex. 1979).

34. 42 U.S.C. § 1983 (2018).

35. *Bean*, 482 F. Supp. at 680.

36. *Id.* at 679–80 (emphasis added).

37. *Lucero v. Detroit Pub. Schs.*, 160 F. Supp. 2d 767, 804–05 (E.D. Mich. 2001); *BFI Waste Sys. of N. Am. v. Dekalb County*, 303 F. Supp. 2d 1335, 1351 (N.D. Ga. 2004); *N.Y.C. Env’t Just. All. v. Giuliani*, 214 F.3d 65, 72–73 (2d Cir. 2000).

politicization and rampant industrialization of the U.S.-Mexico border presents unique and challenging environmental issues. The termination of the Bracero Program³⁸ in 1964 led to mass unemployment and overcrowding in Mexican border communities following the return of hundreds of thousands of Mexican braceros.³⁹ Mexico, therefore, established the Border Industrialization Program to modernize the agrarian Mexican economy and promote U.S.-Mexican business ventures by incentivizing the construction of manufacturing facilities within the border region.⁴⁰ This mass industrialization drastically increased the number of foreign-owned assembly factories that produce goods for export to the United States—known in the region as *maquilas* or *maquiladoras*.⁴¹ Although both the Mexican and U.S. economies benefited greatly from the industrialization of the border region, low-income and minority communities bore the environmental repercussions resulting from the rapidity of the shift.⁴² Today, these communities are plagued by environmental toxins ranging from byproducts of heavy-smelting metals to air pollutants resulting from increased freight border crossings, and cooperation at the local, state, national, and binational level is required to address these pressing environmental concerns.⁴³

38. Kristi L. Morgan, *Evaluating Guest Worker Programs in the U.S.: A Comparison of the Bracero Program and President Bush's Proposed Immigration Reform Plan*, 15 BERKELEY LA RAZA L.J. 125, 127 (2004). The Bracero Program was initiated by the United States following a labor shortage resulting from World War II. *Id.* Although the Bracero Program was designed to only last during the pendency of World War II, the program continued for another twenty-two years following the end of the war. *Id.* Migrant workers under the Bracero Program ("braceros") contracted directly with the U.S. government and did not require modern-day employer sponsorship to work legally in the United States. *Id.* at 129. Under the program, the employer was required "to pay the transportation, living, and repatriation expenses for the bracero, not to engage in discrimination, and to pay the same wage rate as that paid to domestic workers (but never less than [thirty] cents per hour)." *Id.* at 129–30. After World War II, the program was amended to require braceros to contract directly with employers, and "[t]he [United States] was not responsible for contract fulfillment, a minimum hourly wage was not set, and no unemployment payment was available." *Id.* at 130. In the wake of these changes, social and political opposition began to manifest primarily through the unfounded contention—still held by many to this date—that Mexican migrant workers were utilizing the program to take jobs away from domestic workers. *Id.* at 131. The Bracero Program's effects "overall were detrimental and . . . the advantage of earning a wage was far outweighed by the deplorable circumstances in which the worker found [them]self." *Id.* at 133.

39. Sara E. Grineski & Timothy W. Collins, *Exploring Patterns of Environmental Injustice in the Global South: Maquiladoras in Ciudad Juárez, Mexico*, 29 POPULATION & ENV'T 247, 252 (2008).

40. See Darryl M. Williams & Nuria Homedes, *The Impact of the Maquiladoras on Health and Health Policy Along the U.S.-Mexico Border*, 22 J. PUB. HEALTH POL'Y 320, 321 (2001); Grineski & Juárez-Carrillo, *supra* note 15, at 181–82.

41. Grineski & Collins, *supra* note 39, at 251–52.

42. See Williams & Homedes, *supra* note 40, at 320.

43. See *id.* at 325–26.

1. Institutional Frameworks for Binational Cooperation on Environmental Protection

The United States and Mexico entered into the U.S.-Mexico Agreement on Cooperation for the Protection and Improvement of the Environment in the Border Area (colloquially known as the “La Paz Agreement”) on August 14, 1983.⁴⁴ Although the framework agreement only lays out the institutional parameters for binational cooperation, the La Paz Agreement has outlived several shifts in the political landscape of “U.S.-Mexic[o] relations and remains the most important agreement in the issue of environmental protection.”⁴⁵ The La Paz Agreement serves as the overarching diplomatic mechanism through which several subsequent and subsidiary agreements are promulgated by both countries.⁴⁶ It also facilitates the cooperation of intergovernmental organizations, nongovernmental organizations, states, municipalities, and public participation.⁴⁷

Annex III of the La Paz Agreement, which governs the transboundary shipment of hazardous goods between the United States and Mexico, is crucial to environmental justice in the borderland.⁴⁸ Article IX of Annex III requires an exporting country to “readmit any shipment of hazardous substances that was not lawfully imported into the country of import.”⁴⁹ In essence, this requires that an exporting country—usually the United States exporting raw materials for industrial processing in Mexican *maquiladoras*—reimport any hazardous waste generated as a byproduct of the exported raw materials. In response to growing concerns regarding the increased production of hazardous waste by U.S.-owned *maquiladoras*, Mexico passed the General Law of Ecological Equilibrium and Environmental Protection (Ley General del Equilibrio Ecológico y la Protección al Ambiente, or the “LGEPA”) in 1988.⁵⁰ The LGEPA codified the Annex III treaty obligations

44. Stephen P. Mumme & Kimberly Collins, *The La Paz Agreement 30 Years On*, 23 J. ENV'T & DEV. 303, 303 (2014).

45. *Id.* at 303–04.

46. *Id.* at 305.

47. *Id.*

48. Agreement Between the United States of America and the United Mexican States on Cooperation for the Protection and Improvement of the Environment in the Border Area, Mex.-U.S., Annex III, Aug. 14, 1983, 35 U.S.T. 2916 (entered into force Feb. 16, 1984).

49. *Id.* Annex III, art. IX.

50. *Hazardous Waste: U.S. and Mexican Management of Hazardous Waste from Maquiladoras Hampered by Lack of Information: Testimony Before the Env't, Energy, and Nat. Res. Subcomm., Comm. on Gov't Operations*, 102d Cong. 1–2 (1991) (statement of Richard L. Hembra, Director, Environmental Protection Issues, Resources, Community & Economic Development Division) [hereinafter Statement of Richard L. Hembra]; Ley General del Equilibrio Ecológico y la Protección al Ambiente [LGEPA], Diario Oficial de la Federación [DOF] 28-01-1988, última reforma DOF 08-05-2023 (Mex.), <https://www.diputados.gob.mx/LeyesBiblio/pdf/LGEEPA.pdf> [https://perma.cc/7TRL-ZAgT].

into Mexican law to strengthen enforcement mechanisms against U.S.-owned *maquiladoras*.⁵¹

2. Industrialization of the Borderland and the Environmental Impacts of *Maquiladoras*

The *maquiladora* industry significantly contributed to the economic success and population growth in the borderland after 1965.⁵² Most *maquiladoras* are owned and operated by U.S. corporations and their Mexican subsidiaries, "including General Motors, Zenith Electronics, Chrysler, General Electric, United Technologies, Ford Motors, and Baxter International."⁵³ Originally, *maquiladoras* primarily produced textiles, furniture, and electronics.⁵⁴ However, recent industrial demands shifted the *maquiladora* industry toward electronic materials and automobile parts.⁵⁵ Moreover, increased demand from U.S. corporations led to substantial growth in the number of *maquiladora* plants, from a mere twelve in 1965 to over two thousand by 1993.⁵⁶ Industrial pollutants and environmental toxins had long affected the border region prior to the *maquiladoras*, often in the form of air pollutants, heavy metals from the smelting industry, and raw sewage in downstream communities along the Rio Grande.⁵⁷ The *maquiladora* industry, however, introduced a wide variety of chemical pollutants and unprecedented levels of hazardous waste production that presented new storage and exportation challenges under recently established binational and domestic regulatory requirements.⁵⁸ Limited access to reliable and public data complicated efforts to quantify the amount of hazardous waste produced and exported by *maquiladoras* to the United States.⁵⁹ One study explored data from a small sample of *maquiladoras* in Baja California and approximated that one hundred thousand tons of hazardous waste had been exported by 318 *maquiladora* facilities located in the Mexican state on a yearly basis.⁶⁰ However, these extrapolated figures were based solely on raw materials as a proxy for the total amount of hazardous waste, dangerously

51. Statement of Richard L. Hembra, *supra* note 50, at 4.

52. Williams & Homedes, *supra* note 40, at 321.

53. *Id.* at 323.

54. Suleiman A. Ashur, M. Hadi Baaj, K. David Pijawka & Derar S. Serhan, *Environmental Impact Assessment of Transporting Hazardous Waste Generated by Maquiladora Industry in U.S.-Mexico Border Region*, TRANSP. RSCH. REC., Jan. 1997, at 84, 84.

55. *Id.*; Roberto A. Sánchez, *Health and Environmental Risks of Maquiladora in Mexicali*, 30 NAT. RES. J. 163, 165-66 (1990).

56. Ashur et al., *supra* note 54, at 84.

57. Williams & Homedes, *supra* note 40, at 324-25.

58. *Id.* at 324; Andrew A. Skolnick, *Along US Southern Border, Pollution, Poverty, Ignorance, and Greed Threaten Nation's Health*, 273 J. AM. MED. ASS'N 1478, 1481-82 (1995).

59. Ashur et al., *supra* note 54, at 85; Sánchez, *supra* note 55, at 167-68.

60. Ashur et al., *supra* note 54, at 85.

underestimating the environmental and transportation risks associated with hazardous material exportation.⁶¹

3. The Paso del Norte Region: A Case Study on Environmental Injustice in the Borderland

The transborder agglomeration of Ciudad Juárez, Chihuahua, and El Paso, Texas, is home to over 2.5 million individuals, making it “the largest bilingual, binational work force in the Western Hemisphere.”⁶² After the explosive growth of *maquiladoras* in Ciudad Juárez and the passage of free-trade agreements such as the North American Free Trade Agreement (“NAFTA”), this region—also known as the Paso del Norte region—became an industrial hub for both the United States and Mexico, and the four ports of entry are some of the busiest border crossings in the world.⁶³ The industrialized economy of the Paso del Norte region exacerbates environmental justice concerns on both sides of the border. In Ciudad Juárez, the city’s centralized infrastructure and rent incentives for U.S.-owned *maquiladoras* have disproportionately affected low-income residents who are forced to live outside the centralized zone in areas known as *colonias*.⁶⁴ Due to the centralized nature of Ciudad Juárez’s infrastructure, individuals living in *colonias* do not have access to basic infrastructure needs such as sewage treatment, running water, and electricity.⁶⁵ Moreover, the placement of *maquiladoras* throughout Ciudad Juárez has two major impacts on environmental justice: (1) the *maquiladoras* located within the residential-industrial zones of Ciudad Juárez are disproportionately placed in low-income neighborhoods within the centralized zone; and (2) domestic industries (e.g., brick kilns or *ladrilleras*) cannot outbid U.S.-owned corporations for land in the residential-industrial zones, forcing them to relocate to the *colonias*.⁶⁶

In El Paso, the patterns of environmental injustice are reflective of environmental inequities found throughout the United States, where low-income and minority communities are forced to live in urban areas where exposure to industrial pollutants is significantly higher. El Paso’s proximity to the border and its status as a minority-majority city present unique environmental justice concerns, however.⁶⁷ El Paso’s four international ports

61. *Id.*

62. Lisa Chamberlain, *2 Cities and 4 Bridges Where Commerce Flows*, N.Y. TIMES (Mar. 28, 2007), <https://www.nytimes.com/2007/03/28/realestate/commercial/28juarez.html?> (on file with the *Iowa Law Review*); Sophie Eastaugh, *The Future of the US-Mexican Border: Inside the ‘Split City’ of El Paso-Juárez*, GUARDIAN (Jan. 25, 2017, 7:44 AM), <https://www.theguardian.com/cities/2017/jan/25/el-paso-juarez-us-mexican-border-life-binational-city> [<https://perma.cc/748B-3QZC>].

63. See Chamberlain, *supra* note 62.

64. See Grineski & Juárez-Carrillo, *supra* note 15, at 183; Williams & Homedes, *supra* note 40, at 320, 327.

65. Grineski & Juárez-Carrillo, *supra* note 15, at 183.

66. *Id.* at 183–84.

67. *Id.* at 179–80.

of entry significantly contribute to the hazardous air quality in the region due to the hundreds of thousands of motor and freight vehicles crossing the border each day.⁶⁸ Although air pollutants are not generally as restricted to certain residential zones, higher levels of cancer-causing air pollutants are found in higher concentrations within “El Paso neighborhoods with higher-than-average percentages of Spanish speakers with limited English language proficiency, foreign-born residents, and non-[U.S.] citizens.”⁶⁹

The Chamizal neighborhood in El Paso, for example, runs adjacent to the boundary between the United States and Mexico, and the neighborhood has been described as a “dumping ground” due to “Interstate 10, the international bridge, a bus depot, an industrial waste recycling facility and a nearby oil refinery.”⁷⁰ In 2018, a group of families in the Chamizal neighborhood, Familias Unidas del Chamizal, sued the EPA after the agency designated El Paso County as being “in attainment”⁷¹ with regard to air quality ozone standards under the Clean Air Act despite increasing evidence that ozone levels in El Paso County were consistently exceeding Clean Air Act standards.⁷² On appeal, the EPA did not provide a defense of its “attainment” classification for El Paso County and requested a remand to reassess its designation which the D.C. Circuit ultimately granted.⁷³ In November of 2021, the EPA revised its 2018 “attainment” designation of the county and recategorized it as a zone of “nonattainment” due to the contributory nature of air pollutants on surrounding counties in New Mexico and Texas.⁷⁴ With the EPA’s “nonattainment” designation, any future transportation projects funded by the federal government will need to comply with “transportation conformity” requirements to ensure that ozone emissions are kept below

68. *Id.* at 186–88.

69. *Id.* at 186.

70. Isa Gutierrez, Jackie Montalvo, Carlos P. Beltran & Albinson Linares, *Like a Dumping Ground: Latina Moms in Texas Border City Are Fighting Air Pollution*, NBC NEWS (Feb. 22, 2022, 7:47 AM), <https://www.nbcnews.com/news/latino/-dumping-ground-latina-moms-texas-border-city-are-fighting-air-polluti-rcna16789> [<https://perma.cc/KPD8-BCB3>].

71. An attainment area is one where “levels of a criteria air pollutant meet the health-based primary standard (national ambient air quality standard, or NAAQS) for the pollutant.” *Vocabulary Catalog: Air Permitting Terms*, EPA (Apr. 14, 2010), https://sor.epa.gov/sor_internet/registry/termreg/searchandretrieve/glossariesandkeywordlists/search.do?details=&vocabName=Air%20Permitting%20Terms [<https://perma.cc/T3JK-gCD6>]. These pollutant standards are set by the EPA and are measured separately from each other (i.e., an area may be “in attainment” for one pollutant standard but not for another). *Id.*

72. *Clean Wis. v. EPA*, 964 F.3d 1145, 1174–75 (D.C. Cir. 2020); Gutierrez et al., *supra* note 70; Martha Pskowski, *El Paso County Ruled a Nonattainment Area by EPA, Must Reduce Ozone Pollution*, EL PASO TIMES (Nov. 22, 2021, 3:07 PM), <https://www.elpasotimes.com/story/news/2021/11/22/epa-el-paso-county-must-reduce-ozone-pollution/8722780002> [<https://perma.cc/93EQ-N9CZ>].

73. *Clean Wis.*, 964 F.3d at 1175–77.

74. EPA, FINAL AREA DESIGNATIONS FOR THE 2015 OZONE NATIONAL AMBIENT AIR QUALITY STANDARDS TECHNICAL SUPPORT DOCUMENT FOR COUNTY REMANDED TO EPA: EL PASO-LAS CRUCES TX-NM 20 (2021), <https://www.epa.gov/system/files/documents/2021-11/final-el-pas-o-las-cruces-tsdl-remand.pdf> [<https://perma.cc/PUG5-F9P4>].

federal thresholds.⁷⁵ Familias Unidas del Chamizal’s lawsuit demonstrates the power community action can have in addressing environmental justice concerns. However, a more rigorous jurisprudential scheme is necessary to address the evolving nature of environmental injustice along the borderland.

II. MURKY WATERS: INCONSISTENT RULINGS ON CIVIL RIGHTS & CONSTITUTIONAL CHALLENGES LIMIT THE LANDSCAPE OF AVAILABLE REMEDIES FOR ENVIRONMENTAL INJUSTICE CLAIMS

Historically, environmental justice plaintiffs have brought claims through a variety of legal mechanisms, including constitutional challenges, federal and state environmental statutes, civil rights statutes, and common law tort actions.⁷⁶ Through a series of decisions in nonenvironmental cases, the U.S. Supreme Court has muddled the jurisprudential landscape of both Title VI of the Civil Rights Act of 1964 and 42 U.S.C. § 1983.⁷⁷ Environmental justice plaintiffs are now tasked with proving *prima facie* elements that are not conducive to environmental justice litigation.⁷⁸

A. DISPARATE IMPACT UNDER TITLE VI OF THE CIVIL RIGHTS ACT AND SUBSTANTIVE DUE PROCESS CLAIMS UNDER 42 U.S.C. § 1983

Early environmental justice plaintiffs claimed violations of the Fourteenth Amendment’s Equal Protection Clause.⁷⁹ These initial lawsuits were largely unsuccessful because the plaintiffs encountered difficulties proving discriminatory intent due to “the nature of environmental discrimination and degradation.”⁸⁰ Moreover, most minority and low-income communities are subject to a variety of multiple-pollution sources, and such cumulative effects further complicate proving discriminatory intent.⁸¹ Litigants instead turned to Title VI of the Civil Rights Act of 1964 to use discriminatory *impact* as opposed to discriminatory intent, reducing the requisite burden of proof.⁸² Unlike the heightened intent standard required under the Equal Protection Clause, a plaintiff must instead show that a facially neutral policy has a causal connection with “a disproportionate and adverse impact on minorities” to prove a *prima facie* case of discriminatory impact.⁸³

75. *Transportation Conformity*, TEX. COMM’N ON ENV’T QUALITY, <https://www.tceq.texas.gov/airquality/mobilesource/apr2003transconf.html> [https://perma.cc/CGB6-5PRY].

76. Lisa S. Core, Note, *Alexander v. Sandoval: Why a Supreme Court Case About Driver’s Licenses Matters to Environmental Justice Advocates*, 30 B.C. ENV’T AFFS. L. REV. 191, 193–94 (2002).

77. *See id.* at 196–97.

78. *Id.*

79. *Id.* at 194.

80. *Id.* at 196.

81. *Id.*

82. *Id.* at 196–97; *see, e.g.*, *Erie CPR v. PA Dep’t of Transp.*, 343 F. Supp. 3d 531, 548–49 (W.D. Pa. 2018) (utilizing disparate impact as an alternative cause of action to discriminatory intent to allege environmental justice concerns regarding the demolition of a bridge).

83. Core, *supra* note 76, at 197.

The foundational statutory components used by environmental justice plaintiffs are sections 601 and 602 of Title VI. Section 601 provides that “[n]o person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”⁸⁴ Section 602 allows federal agencies to require recipients of federal funds to refrain from actions that may result in discriminatory impacts.⁸⁵

Environmental justice plaintiffs have either sued under an implied private right of action under Title VI or by utilizing 42 U.S.C. § 1983, and recent litigation related to the Flint water crisis highlights the muddled jurisprudential landscape of environmental justice cases litigated under these statutes. The U.S. Supreme Court has ruled that Congress did not create a private right of action through “Title VI [and] is [instead] one implied by the judiciary rather than expressly created by Congress.”⁸⁶ This distinction is vital to a court’s evaluation of a plaintiff’s asserted cause of action because, even for statutes where courts find there is no *express* private right of action, courts are tasked with filling in the gaps and determining whether to imply a private right of action.⁸⁷

The U.S. Supreme Court set forth a four-factor test to determine whether a court may imply a private remedy where a statute does not expressly provide one.⁸⁸ Courts must determine whether (1) the plaintiff is the type of individual that the statute was designed to benefit; (2) legislative intent indicates the intention to create (or deny) a remedy; (3) granting a remedy would be “consistent with the underlying purposes of the legislative scheme”; and (4) the sought-after cause of action is traditionally in the realm of state law.⁸⁹

Alternatively to litigating under Title VI, environmental justice plaintiffs have brought claims under 42 U.S.C. § 1983. Section 1983 creates a cause of action for “any citizen of the United States or other person within the jurisdiction . . . depriv[ed] of any rights, privileges, or immunities secured by the Constitution and laws.”⁹⁰ The U.S. Supreme Court developed a two-part inquiry to “determin[e] whether” § 1983 is available to remedy a statutory or constitutional violation.⁹¹ A court first asks whether the plaintiff is asserting a violation of a federal right, and “consider[s] whether the provision in question creates obligations binding on the governmental unit or rather ‘does no more than express a congressional preference for certain kinds of

84. 42 U.S.C. § 2000d.

85. *See id.* § 2000d–1.

86. *Guardians Ass’n v. Civ. Serv. Comm’n*, 463 U.S. 582, 597 (1983).

87. *Core*, *supra* note 76, at 200–01.

88. *Cort v. Ash*, 422 U.S. 66, 78 (1975).

89. *Id.*

90. 42 U.S.C. § 1983.

91. *Golden State Transit Corp. v. City of Los Angeles*, 493 U.S. 103, 106 (1989).

treatment.”⁹² Second, the defendant may show that by providing a protective enforcement mechanism for the federal right on which the plaintiff is basing their claim, “Congress ‘specifically foreclosed a remedy under § 1983.’”⁹³

Although there is a trend toward utilizing § 1983 to hold government actors accountable for environmental harms through the “state-created danger doctrine,” courts have inconsistently applied the doctrine and added a variety of additional restrictions that have significantly reduced the likelihood of success for environmental justice plaintiffs.⁹⁴ The state-created danger doctrine rests primarily on the assumption that, “had [the government] intervened[,] they could have stopped or prevented the tragedy.”⁹⁵ In litigation related to the Flint water crisis, the district court articulated the requirements for a state-created danger claim:

(1) an affirmative act by the state which either created or increased the risk that the plaintiff would be exposed to an act of violence by a third party; (2) a special danger to the plaintiff wherein the state’s actions placed the plaintiff specifically at risk, as distinguished from a risk that affects the public at large; and (3) the state knew or should have known that its actions specifically endangered the plaintiff.⁹⁶

Some courts have developed a “private actor” requirement to limit the state-created danger doctrine to exclude acts committed by private actors.⁹⁷ This requirement generally states that “the [s]tate has no obligation to protect the life, liberty, [or] property of its citizens against invasion by private actors.”⁹⁸ For example, the Flint plaintiffs argued that the private actor requirement could be met in a myriad of ways and provided the example of “a mother [who] fed her child formula mixed with tainted Flint water. The mother would be the private actor, and the child would be the individual harmed under the state-created danger theory.”⁹⁹ The Sixth Circuit articulated two exceptions: “1) where the [s]tate enters into a ‘special relationship’ with an individual by taking that person into its custody, and 2) where the [s]tate creates or increases the risk of harm to an individual.”¹⁰⁰ The district court in the Flint litigation found that this limitation applied, holding that the

92. *Id.* (quoting *Pennhurst State Sch. & Hosp. v. Halderman*, 451 U.S. 1, 19 (1981)).

93. *Id.* (quoting *Smith v. Robinson*, 468 U.S. 992, 1005 n.9 (1984)).

94. See Shannon Roesler, *State-Created Environmental Dangers and Substantive Due Process*, 73 FLA. L. REV. 685, 700–01 (2021).

95. Erwin Chemerinsky, *The State-Created Danger Doctrine*, 23 TOURO L. REV. 1, 1 (2007); see Roesler, *supra* note 94, at 701 (“[I]n cases involving state-created environmental dangers, plaintiffs allege that governmental actors engaged in affirmative misconduct.”).

96. *In re Flint Water Cases*, Nos. 17-10164, 17-10342, 2019 WL 3530874, at *32 (E.D. Mich. Aug. 2, 2019), *aff’d in part*, 969 F.3d 298 (6th Cir. 2020).

97. *Gray v. Univ. of Colo. Hosp. Auth.*, 672 F.3d 909, 927–28 (10th Cir. 2012).

98. *Stiles ex rel. D.S. v. Grainger County*, 819 F.3d 834, 853 (6th Cir. 2016).

99. See *In re Flint Water Cases*, 2019 WL 3530874, at *34.

100. *Stiles*, 819 F.3d at 853.

plaintiffs failed to state a substantive due process claim under a theory of state-created dangers because a private individual did not contaminate the water.¹⁰¹ The district court further stated that

The residents of Flint were all made to use contaminated water that leached lead and bacteria from old lines. . . . For much of the time the Flint River was used as Flint's primary water source, residents did not and could not have known the danger the water posed to them or their families. . . . According to counsel, every person who showered or washed their hands or made coffee or boiled pasta with bacteria-infected, lead-tainted water provided to them by their government committed repeated acts of violence against themselves, their families, their friends, and their guests. *This is not what the state-created danger theory was developed to address.*¹⁰²

Courts have also placed state-of-mind requirements for substantive due process claims under § 1983. In *Daniels v. Williams*, the U.S. Supreme Court held that 42 U.S.C. § 1983 does not have a mens rea requirement, but “the plaintiff must still prove a violation of the underlying constitutional right; and depending on the right, merely negligent conduct may not be enough to state a claim.”¹⁰³ The Court did not clarify what types of governmental actions short of intentional conduct would suffice, so most courts “routinely require that plaintiffs allege facts supporting at least deliberate indifference on the part of defendants.”¹⁰⁴ Even though the district court in the *Flint* litigation dismissed the plaintiffs' state-created danger portion of their claim, the court ruled in favor of the plaintiffs under a “deliberate indifference” standard.¹⁰⁵ The *Flint* court relied on the “right to bodily integrity” protected by the Due Process Clause of the Fourteenth Amendment.¹⁰⁶ For a plaintiff to state a claim of infringement of bodily integrity, they must prove that their right “was infringed arbitrarily.”¹⁰⁷ Moreover, the plaintiff must prove that the conduct “shocks the conscience,”¹⁰⁸ by showing “that (1) officials knew of facts from which they could infer a ‘substantial risk of serious harm,’ (2) that they did infer it, and (3) that they nonetheless acted with indifference.”¹⁰⁹

Because of these strict and convoluted standards, Title VI of the Civil Rights Act and 42 U.S.C. § 1983 are not sufficient procedural mechanisms for addressing environmental justice claims in our courts. The U.S. Supreme

101. See *In re Flint Water Cases*, 2019 WL 3530874, at *32; Roesler, *supra* note 94, at 700–10.

102. See *In re Flint Water Cases*, 2019 WL 3530874, at *34 (emphasis added).

103. *Daniels v. Williams*, 474 U.S. 327, 330 (1986).

104. Roesler, *supra* note 94, at 712.

105. See *In re Flint Water Cases*, 2019 WL 3530874, at *14–17.

106. *Id.* at *14.

107. *Id.* (citing *Guertin v. State*, 912 F.3d 907, 922 (6th Cir. 2019)).

108. *Id.* at *15.

109. *Id.* (quoting *Range v. Douglas*, 763 F.3d 573, 591 (6th Cir. 2014)).

Court's decision in *Alexander v. Sandoval* held that only intentional discrimination is protected under Title VI, and the federal right to be protected against disparate-impact discrimination exists as a regulatory right under Section 602 of Title VI.¹¹⁰ Circuits are now split as to whether regulatory rights can be enforced under 42 U.S.C. § 1983, and the language from Title VI appears to already foreclose the idea—should the U.S. Supreme Court address the question—that § 1983 would support a cause of action for a regulatory right.¹¹¹

III. REDUCING MORE THAN JUST INFLATION: UTILIZING THE NATIONAL ENVIRONMENTAL POLICY ACT, THE ADMINISTRATIVE PROCEDURE ACT, AND THE INFLATION REDUCTION ACT TO REMEDY ENVIRONMENTAL INJUSTICE CLAIMS

Environmental justice plaintiffs will not be able to predictably rely on Title VI or § 1983. However, NEPA, through the judicial review mechanisms contained within the APA, may provide the most reliable and successful procedural mechanism to litigate environmental justice claims arising from major federal actions along the U.S.-Mexico border. Moreover, the IRA provides a clear mandate from Congress, requiring federal agencies to further incorporate environmental justice concerns in their NEPA analyses.¹¹²

A. THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

Judicial review of NEPA analyses through the APA is governed by a line of U.S. Supreme Court decisions that provide a more predictable and applicable standard of review through the “hard look” doctrine and “arbitrary and capricious” standard. NEPA was passed by Congress in 1969 and signed into law on January 1, 1970, and sets forth “a ‘national policy [to] encourage productive and enjoyable harmony between man and his environment.’”¹¹³ NEPA is primarily a procedural mechanism that “‘does not mandate particular results’ in order to accomplish these ends.”¹¹⁴ Instead, it mandates that any “major Federal actions significantly affecting the quality of the human environment” undertaken by a federal agency require the preparation of an Environmental Impact Statement (“EIS”).¹¹⁵ An EIS must include:

110. *Alexander v. Sandoval*, 532 U.S. 275, 281, 292–93 (2001).

111. *Core*, *supra* note 76, at 236, 242.

112. ENVIRONMENTAL JUSTICE IN THE INFLATION REDUCTION ACT, SENATE DEMOCRATS 2, https://www.democrats.senate.gov/imo/media/doc/environmental_justice_in_the_inflation_reduction_act.pdf [<https://perma.cc/Y2MP-7XKZ>].

113. *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 756 (2004) (alteration in original) (quoting 42 U.S.C. § 4321). For a critique of possessory and masculine language used when discussing the environment (e.g., “man and his environment”), see Picado & Reid, *supra* note 19, at 515, 523–28.

114. *Pub. Citizen*, 541 U.S. at 756 (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989)).

115. *See* 42 U.S.C. § 4332(C); Uma Outka, *NEPA and Environmental Justice: Integration, Implementation, and Judicial Review*, 33 B.C. ENV'T AFFS. L. REV. 601, 603 (2006).

[A] detailed statement by the responsible official on—(i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.¹¹⁶

NEPA also established the Council on Environmental Quality (“CEQ”), which promulgates regulations designed to interpret and provide guidance on which actions constitute “major Federal actions” under 42 U.S.C. § 4332(C).¹¹⁷ The CEQ has interpreted major federal actions to mean any “activity or decision subject to Federal control and responsibility”¹¹⁸ which can include “[a]doption of official policy,”¹¹⁹ “[a]doption of formal plans,”¹²⁰ “[a]doption of programs,”¹²¹ or “[a]pproval of specific projects.”¹²² The CEQ also provides the option for a federal agency to prepare a less-detailed document known as an Environmental Assessment (“EA”) should “the agency’s proposed action neither [be] categorically excluded from the requirement to produce an EIS nor would clearly require the production of an EIS.”¹²³ Upon completion of the EA, the federal agency may then opt to either proceed with preparing an EIS or otherwise be required to “issue a ‘finding of no significant impact’ (FONSI).”¹²⁴ A federal agency’s issuance of a FONSI requires that the agency detail the reasons it concluded the major federal “action will not have significant effects” and make it available to the public within thirty days for comment before the agency submits its final determination.¹²⁵

Any agency determinations made under NEPA are subject to judicial review under the APA.¹²⁶ Under these judicial review mechanisms, a court may set aside an agency decision if it is found to be “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.”¹²⁷ The “arbitrary and

116. 42 U.S.C. § 4332(C).

117. *Id.* § 4321; *Pub. Citizen*, 541 U.S. at 757.

118. 42 C.F.R. § 1508.1(q) (2022).

119. *Id.* § 1508.1(q)(3)(i).

120. *Id.* § 1508.1(q)(3)(ii).

121. *Id.* § 1508.1(q)(3)(iii).

122. *Id.* § 1508.1(q)(3)(iv).

123. *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 757 (2004).

124. *Id.*

125. 40 C.F.R. § 1501.6 (2022).

126. DANIEL R. MANDELKER, ROBERT L. GLICKSMAN, ARIANNE M. AUGHEY, DONALD MCGILLIVRAY & MEINHARD DOELLE, *NEPA LAW AND LITIGATION* § 3:5 (2d ed.), Westlaw (database updated Sept. 2023); see, e.g., *Pub. Citizen*, 541 U.S. at 763.

127. 5 U.S.C. § 706(2)(A).

capricious” standard found in paragraph (A) of the APA is the most applicable to judicial review of NEPA decisions, since this paragraph applies generally to agency decisions that are “not subject to formal rulemaking or adjudication procedures.”¹²⁸ Should an agency base conclusions of law or policy considerations on the fact-finding subject to paragraph (A), those agency conclusions will also be subject to the APA’s “arbitrary and capricious” standard.¹²⁹ The U.S. Supreme Court has held that a federal agency’s decision is arbitrary and capricious if

(1) its decision did not rely on the factors that Congress intended the agency to consider; (2) it failed entirely to consider an important aspect of the problem; (3) it offered [sic] an explanation which runs counter to the evidence; or (4) its decision is so implausible that it cannot be the result of differing viewpoints or the result of agency expertise.¹³⁰

Particularly relevant to judicial review of NEPA agency decisions is the Court’s decision in *Citizens to Preserve Overton Park, Inc. v. Volpe*.¹³¹ Although the case dealt with Section 4(f) of the Department of Transportation Act, which requires an environmental impact analysis from the U.S. Federal Highway Administration,¹³² the *Overton Park* Court’s interpretation of the “arbitrary and capricious” standard was subsequently applied to determine whether an agency’s decision to prepare an EIS was arbitrary and capricious.¹³³ Moreover, the Court in *Overton Park* held that a court’s review of an agency’s factual findings must be “searching and careful,” which is often cited as the jurisprudential foundation for the Court’s subsequent “hard look” requirements in judicial review of NEPA-based agency decisions.¹³⁴

Although the “hard look” doctrine is prevalent in judicial review of NEPA-based agency decisions, the doctrine is difficult to define, and the U.S. Supreme Court has not provided clear guidance on a reviewing court’s role in evaluating whether an agency took a “hard look” at the salient issues surrounding its decision.¹³⁵ Generally, pursuant to the “hard look” doctrine, “assumptions must be spelled out, inconsistencies explained, methodologies disclosed, contradictory evidence rebutted, record references solidly grounded, guesswork eliminated and conclusions supported in a ‘manner capable of

128. MANDELKER ET AL., *supra* note 126, § 3:5.

129. *Id.*

130. *Id.* (citing *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)).

131. *Citizens to Pres. Overton Park, Inc. v. Volpe*, 401 U.S. 402, 413–17 (1971).

132. *See* 49 U.S.C. § 303.

133. *See* MANDELKER ET AL., *supra* note 126, § 3:5; *Marsh v. Or. Nat. Res. Council*, 490 U.S. 360, 378 (1989).

134. MANDELKER ET AL., *supra* note 126, § 3:7 (quoting *Overton Park*, 401 U.S. at 416).

135. *Id.* § 3:8.

judicial understanding.”¹³⁶ Although a court’s inquiry into an agency’s action is searching, the court must not substitute its own judgment for that of the agency, and it must remain relatively deferential to the agency’s findings.¹³⁷ In deferring to the agency’s findings, however, the court must also look to the adequacy of the factual record to assess whether the agency acted within their authority.¹³⁸ Ultimately, the “hard look” doctrine has allowed reviewing courts to exercise a detailed level of judicial review to ensure that agencies are engaging in informed and reasoned decision-making.¹³⁹

The U.S.-Mexico border is no stranger to major federal actions and subsequent NEPA review. In *Department of Transportation v. Public Citizen*, the U.S. Supreme Court considered the adequacy of an EA related to increased cross-border operations of Mexican motor carriers after the Federal Motor Carrier Safety Administration (“FMCSA”) issued regulations to allow for increased border crossings.¹⁴⁰ The Interstate Commerce Commission was originally tasked with issuing certificates to motor carriers based in Canada or Mexico.¹⁴¹ Following international tensions related to discriminatory treatment of U.S.-based motor carriers in both Canada and Mexico, Congress passed a moratorium in 1982, placing a two-year ban on the issuance of certificates to Canadian and Mexican motor carriers.¹⁴² The United States agreed to lift the moratorium on Mexican motor carriers after Mexico, Canada, and the United States signed NAFTA in 1992.¹⁴³ However, the United States failed to phase out the moratorium pursuant to NAFTA’s timeline, and an international arbitration panel ruled that the United States was in breach of its obligations under NAFTA.¹⁴⁴

FMCSA subsequently issued a series of regulations aimed at “implement[ing] specific application and safety-monitoring requirements for Mexican carriers,” and, pursuant to NEPA, the FMCSA issued an EA to evaluate the environmental impacts of its proposed regulations.¹⁴⁵ FMCSA’s EA analyzed the regulations’ impacts on “traffic and congestion, public safety and health, air quality, noise, socioeconomic factors, and environmental justice.”¹⁴⁶ Relevant to FMCSA’s analysis was its presumption that the

136. William H. Rodgers, Jr., *A Hard Look at Vermont Yankee: Environmental Law Under Close Scrutiny*, 67 GEO. L.J. 699, 705–06 (1979) (quoting *E. I. du Pont de Nemours & Co. v. Train*, 541 F.2d 1018, 1038 (4th Cir. 1976)).

137. *See Sierra Club v. Costle*, 657 F.2d 298, 323 (D.C. Cir. 1981).

138. *Overton Park*, 401 U.S. at 415–16, 419.

139. MANDELKER ET AL., *supra* note 126, § 3:8.

140. *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 756 (2004).

141. *Id.* at 759.

142. *Id.*

143. *Id.* at 759–60.

144. *Id.*

145. *Id.* at 760.

146. *Id.* at 761.

proposed regulations would not increase border crossings by Mexican motor carriers, so “it did not consider any environmental impact that might be caused by the increased presence of Mexican trucks within the United States” and subsequently issued a FONSI.¹⁴⁷ The Ninth Circuit vacated the EA and ordered FMCSA to analyze conformity with Clean Air Act standards.¹⁴⁸ The U.S. Supreme Court unanimously reversed, “hold[ing] that where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant ‘cause’ of the effect.”¹⁴⁹

At the time *Public Citizen* was decided in 2004, federal agencies were acting under a policy directive from the Executive Branch to incorporate environmental justice concerns as part of their NEPA analyses pursuant to Executive Order 12898 (“EO 12898”).¹⁵⁰ EO 12898 required that “each Federal agency . . . make achieving environmental justice part of its mission by identifying and addressing . . . disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States.”¹⁵¹ Although EO 12898 does not provide specific guidance or standards for determining which communities are minority or low-income, it does provide a variety of requirements related to the collection and use of data, actual accessibility (i.e., translated and understandable) to important public documents, and cultural sensitivity to certain dietary patterns.¹⁵² EO 12898 provided a foundational framework for the incorporation of environmental justice in NEPA analyses, but the Executive Order is nonbinding, heavily reliant on policy directives of each presidential administration, and, ultimately, unenforceable in courts.¹⁵³ Although federal agencies are operating under EO 12898’s environmental justice mandate, courts will nevertheless emphasize and evaluate the agency’s efforts to engage in informed decision-making as required by the APA’s jurisprudential maxims.

B. THE INFLATION REDUCTION ACT OF 2022

President Joe Biden signed the IRA into law on August 16, 2022, approving \$369 billion in government spending on climate and energy initiatives aimed at “slash[ing] the country’s carbon emissions by roughly 40

147. *Id.*

148. *Id.* at 762–63.

149. *Id.* at 770.

150. Exec. Order No. 12898, 59 Fed. Reg. 7629 (Feb. 11, 1994).

151. *Id.*

152. Amanda K. Franzen, Comment, *The Time Is Now for Environmental Justice: Congress Must Take Action by Codifying Executive Order 12898*, 17 PENN ST. ENV'T L. REV. 379, 388 (2009).

153. *See id.* at 389.

[percent] by 2030.”¹⁵⁴ The IRA also provides funding to advance environmental justice policies—by allocating federal funds dedicated to preparing robust NEPA-mandated analyses in an EA or EIS—through different federal agencies to “address air pollution, greenhouse gas emissions, and other legacy pollution.”¹⁵⁵ The Clean Air Act is amended by the IRA through its incorporation of Environmental and Climate Justice Block Grants (“ECJB Grants”).¹⁵⁶ Community-based nonprofit organizations, indigenous tribes, local governments, and institutions of higher education may qualify for ECJB Grants for

(A) community-led air and other pollution monitoring, prevention, and remediation, and investments in low- and zero-emission and resilient technologies and related infrastructure and workforce development that help reduce greenhouse gas emissions and other air pollutants; (B) mitigating climate and health risks from urban heat islands, extreme heat, wood heater emissions, and wildfire events; (C) climate resiliency and adaptation; (D) reducing indoor toxics and indoor air pollution; or (E) facilitating engagement of disadvantaged communities in State and Federal advisory groups, workshops, rulemakings, and other public processes.¹⁵⁷

The IRA also provides additional grants for reducing air pollution at ports in nonattainment areas¹⁵⁸ under the Clean Air Act, improving transportation access to reconnect communities and “mitigate negative impacts of transportation facilities or construction projects on disadvantaged or underserved communities.”¹⁵⁹ Additional legacy pollution reduction measures include (1) one billion dollars toward the implementation of zero-emission, heavy-duty vehicles (e.g., “school buses, garbage trucks and transit buses”); (2) sixty million dollars to reduce diesel emissions in industrial facilities dedicated to moving goods (e.g., “airports, railyards, and distribution centers”); (3) \$236 million to monitor air pollution in nonattainment communities; (4) fifty million dollars to “reduc[e] air pollution at public schools in low-income and disadvantaged communities”; and (5) reinstatement of the Superfund tax¹⁶⁰

154. Kevin Breuninger, *House Passes Massive Climate, Tax, and Health Bill, Sending Biden a Core Piece of His Agenda to Sign*, CNBC (Aug. 12, 2022, 9:05 PM), <https://www.cnbc.com/2022/08/12/house-to-vote-on-inflation-reduction-act-tax-and-climate-bill.html> [<https://perma.cc/T5BH-RLSV>].

155. ENVIRONMENTAL JUSTICE IN THE INFLATION REDUCTION ACT, *supra* note 112, at 1.

156. 42 U.S.C.A. § 7438 (Westlaw through Pub. L. No. 118-19).

157. *Id.*

158. *See supra* note 71 and accompanying text.

159. ENVIRONMENTAL JUSTICE IN THE INFLATION REDUCTION ACT, *supra* note 112, at 1.

160. The Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”) is also known as the “Superfund.” CERCLA established a tax regime where manufacturers, importers, or producers of certain chemicals would be taxed at the point of sale. Tax revenues are then deposited into a trust account that is used by the EPA to clean up hazardous waste sites. *See Superfund: CERCLA Overview*, EPA (Jan. 24, 2023), <https://www.epa>

to raise eleven billion dollars dedicated to Superfund cleanups in low-income and disadvantaged communities.¹⁶¹

Especially relevant in the IRA is the allocation of over \$750 million to implement these measures and other environmental justice policy initiatives through NEPA.¹⁶² By allocating additional NEPA funding to federal agencies, Congress is ensuring that federal agencies adequately take into consideration all environmental justice impacts while preparing an EA or EIS. Moreover, Congress allocated fifty million dollars to both the Office of Management and Budget Oversight and the Governmental Accountability Office “to provide transparency on how the larger package is enacted and allow the public to ensure it delivers on [environmental justice] priorities.”¹⁶³ This clear mandate from Congress directly addresses critics’ concerns regarding the enforceability of environmental justice policies through EO 12898 and provides clear guidance and funding for federal agencies to adequately assess environmental justice impacts through their NEPA analyses.

A recent allocation of federal funds through the Bipartisan Infrastructure Law to expand the Bridge of the Americas port of entry in the Paso del Norte region provides an insightful example of how the NEPA/APA/IRA framework could be utilized by litigants for environmental justice claims. The Bipartisan Infrastructure Law provides over \$3.4 billion in federal funding to modernize land ports of entry along both the Mexican and Canadian borders.¹⁶⁴ Of those \$3.4 billion, six hundred million dollars will be allocated to a proposed modernization project of the Bridge of Americas port of entry connecting El Paso and Ciudad Juárez.¹⁶⁵ Since the Bridge of the Americas is toll free, “the volume of traffic is heavy with many travelers and commercial vehicles choosing to enter and exit through this facility in lieu of paying a toll.”¹⁶⁶ The Bridge of the Americas is adjacent to the Chamizal neighborhood and residents in the area may be subject to relocation should the federal

gov/superfund/superfund-cercla-overview [https://perma.cc/2WJ9-K5AE]; *What Is Superfund?*, EPA (Nov. 1, 2022), https://www.epa.gov/superfund/what-superfund [https://perma.cc/2E4E-TA74]; Superfund Chemical Taxes, 88 Fed. Reg. 18446, 18446 (proposed Mar. 29, 2023) (to be codified at 26 C.F.R. pt. 52).

161. ENVIRONMENTAL JUSTICE IN THE INFLATION REDUCTION ACT, *supra* note 112, at 1.

162. *Id.* at 2.

163. *Id.*

164. See Lianna Golden, *Unknown if Land Will Be Acquired in Project to Expand Bridge of the Americas*, KFOX14 (Mar. 25, 2022, 5:18 PM), https://kfoxtv.com/news/local/unknown-if-land-will-be-acquisitioned-in-project-to-expand-bridge-of-the-americas [https://perma.cc/PMH9-BPBH].

165. See *id.*; Julia Lucero, *\$600M in Federal Money Aimed at Modernizing, Reducing Air Pollution at Bridge of Americas*, EL PASO TIMES (Feb. 20, 2022, 11:36 AM), https://www.elpasotimes.com/story/news/2022/02/18/el-paso-bridge-americas-federal-funds-improve-port-entry/6847698001 [https://perma.cc/YE7L-BW7H].

166. *Bridge of the Americas Land Port of Entry*, U.S. GEN. SERVS. ADMIN. (Sept. 7, 2023), https://www.gsa.gov/about-us/regions/region-7-greater-southwest/buildings-and-facilities/texas/bridge-of-the-americas-land-port-of-entry [https://perma.cc/QAT8-A2B8].

government require additional land to expand the port of entry.¹⁶⁷ The Paisano Green Community, one of El Paso's affordable housing units, is also located adjacent to the Bridge of the Americas, and the Housing Authority for the City of El Paso has expressed concerns regarding the expansion of the port of entry that could potentially displace at least seventy-four families currently living in the Paisano Green Community.¹⁶⁸

The expansion of the Bridge of the Americas port of entry will be considered a major federal action under NEPA, since the project is receiving federal funds and will be "subject to Federal control and responsibility."¹⁶⁹ Although several agencies could prepare an EIS for the port of entry expansion, the General Services Administration ("GSA") will likely be tasked with preparing the EIS—as evidenced by the historic practice of the GSA undertaking an EIS for other port of entry expansions.¹⁷⁰ In evaluating environmental justice impacts, the GSA will first identify the minority and low-income populations utilizing demographic data from the U.S. Census.¹⁷¹ After identifying the minority and low-income populations that could be affected by the port of entry expansion, the GSA will then need to designate a separate region that shares similar minority and low-income populations in order to provide a baseline to compare any disproportionately high or adverse impacts resulting from the port of entry expansion.¹⁷² The GSA must then assess the environmental justice impacts under the proposed project design, any reasonable alternatives, and a "No Action Alternative."¹⁷³ After publishing the draft EIS and allowing for public comments, the GSA may then publish the final EIS.¹⁷⁴

The finality of the EIS opens the door for judicial review of the EIS and injunctive relief under the APA's "arbitrary and capricious" standard which would provide a detailed level of judicial review should the GSA fail to take a "hard look" at the environmental justice impacts of the Bridge of the Americas port of entry expansion.¹⁷⁵ Through judicial review of the EIS, courts would be able to fashion injunctive relief that would promptly halt any federal projects that adversely impact minority and low-income communities, while also having the authority to vacate an EIS to force the agency to perform a

167. See Golden, *supra* note 164.

168. Vania Castillo, *El Paso Housing Authority CEO Fears Bridge of the Americas Expansion May Impact Residents*, CBS4 (Aug. 15, 2022, 11:12 PM), <https://cbs4local.com/news/local/ceo-of-housing-authority-of-el-paso-fears-families-may-be-displaced-august-15-2022> [<https://perma.cc/J2LE-S924>].

169. 40 C.F.R. § 1508.1 (q) (2022).

170. See U.S. GEN. SERVS. ADMIN., FINAL ENVIRONMENTAL IMPACT STATEMENT FOR EXPANSION AND RECONFIGURATION OF THE LAND PORT OF ENTRY IN DOWNTOWN CALEXICO, CALIFORNIA S-1 (2011).

171. See *id.* at 3-44 to 3-46.

172. See *id.* at 4-43 to 4-44.

173. See *id.* at 4-44 to 4-45; 40 C.F.R. § 1502.14 (2022).

174. 40 C.F.R. § 1502.9 (2022).

175. See discussion *supra* Section III.A.

more detailed analysis of environmental justice impacts.¹⁷⁶ The border communities that are most affected by federal projects, such as highways and international ports of entry, would have the benefit of a thorough environmental impact analysis—by evaluating the EIS or EA under the “hard look” doctrine—and an injunctive remedy should the analysis indicate that low-income and minority communities would disproportionately bear the environmental repercussions of the federal project.

CONCLUSION

The U.S.-Mexico border is a unique sociopolitical landscape that will continue to evolve through international relations, domestic policy initiatives, and climate change.¹⁷⁷ As this evolution of the borderland plays out, environmental justice issues will continue to affect communities on both sides of the border, and our judicial system must be prepared for the rigorous process of remedying the environmental injustices suffered by border communities for the benefit of the rest of the nation. The doctrinal inconsistencies of Title VI of the Civil Rights Act and 42 U.S.C. § 1983 will not be sufficient to remedy most, if not all, environmental injustice claims in the future.¹⁷⁸ With a clear mandate from Congress through the IRA, NEPA and the judicial review mechanisms offered by the APA offer the most efficient procedural tool for borderland communities to bring environmental justice lawsuits.¹⁷⁹

176. See discussion *supra* Section III.A.

177. See Grineski & Juárez-Carrillo, *supra* note 15, at 192–94.

178. See discussion *supra* Section II.A.

179. See discussion *supra* Sections III.A–B.