TOO LITTLE TOO LATE: WHY THE ENVIRONMENTAL JUSTICE PROBLEMS CAUSED BY THE ARMY CORPS'S NATIONWIDE PERMIT PROGRAM RUN MUCH DEEPER THAN PERMIT 12

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The United States Army Corps of Engineers (the Corps) recently announced its intention to review Nationwide Permit 12 (NWP 12) to address widespread criticism that the permit raises serious environmental justice concerns. Such concerns are well-founded. NWP 12 fast tracks the development of oil and natural gas pipelines with minimal notice or environmental review. It has been instrumental to the permitting of proposed pipelines such as the notorious Keystone XL Pipeline or the Byhalia Pipeline in Southwest Memphis, both of which presented significant issues of environmental justice. For this reason, the Corps's decision to review NWP 12 is a watershed moment for critics of the Nationwide Permit Program. However, simply addressing NWP 12 in isolation will not solve the fundamental environmental justice problems that are built into the Nationwide Permit Program as a whole. Drawing on theories of procedural environmental justice, this Article will explain how the Nationwide Permit Program as a whole systematically disadvantages communities of color and other socially vulnerable communities and denies them the procedural rights that are necessary to protect their communities. By removing the public comment requirement of a standard Clean Water Act individual permit, these Nationwide Permits make it harder for communities to make their voices heard to object to the siting and construction of harmful infrastructure in areas already overburdened by pollution. This Article will explain why NWP 12 should be revoked and will discuss how other Nationwide Permits, most notably Nationwide Permit 13, which permits seawalls and bulkheads, raise similar environmental justice concerns. Finally, this Article will explain how the Nationwide Permit Program should be reformed to address environmental justice concerns.

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Introduction

On March 28, 2022, the United States Army Corps of Engineers (the Corps) announced that it intended to review its ongoing usage of Nationwide Permit 12 (NWP 12) due to concerns regarding NWP 12's impacts on "environmental justice" and its potential to conflict with President Biden's "national objective" to avoid permitting pollution sources that "disproportionately harm communities of color and low-income communities."² These concerns are well-founded. NWP 12, a deeply controversial general permit under Section 404 of the Clean Water Act (CWA)³ that provides fast-track permitting for oil and natural gas pipelines crossing rivers, streams, wetlands or other water bodies under the Corps's jurisdiction, was hastily reissued by the Corps as one of the final regulatory actions of the Trump Administration.⁴ NWP 12 has been integral in the planning and permitting of oil and gas pipeline projects, such as the notorious Keystone XL pipeline⁵ and the proposed Southwest Memphis Byhalia Pipeline, 6 that have been targeted for construction in communities of color and other socially vulnerable communities that are already subject to a high pollution burden.⁷

African American individuals face elevated risk of cancer and asthma because they live within a half-mile

of natural gas facilities and are exposed to toxic chemicals emitted by those facilities).

^{1.} Review of Nationwide Permit 12, 87 Fed. Reg. 17281, 17282 (Mar. 28, 2022) ("The Army seeks input on the appropriate balance for allowing efficient authorization processes with due consideration for the potential effects of oil and natural gas pipelines as well as the need to engage and inform the public, particularly communities that potentially may be impacted by pipeline construction and operations.").

^{2.} Exec. Order No. 13990, 86 Fed. Reg. 7037, 7037 (Jan. 20, 2021).

^{3.} Federal Water Pollution Control Act § 404, 33 U.S.C. § 1344(e) (2018).

^{4.} See Army Corps of Eng'rs, Decision Document: Nationwide Permit 12 (2021) [hereinafter NWP 12 DECISION DOCUMENT].

^{5.} For discussion of the role of NWP 12 in the permitting of the Keystone XL pipeline, see Megan Rulli, When Fast-Tracking Slows You Down: Reconsidering Nationwide Permit 12 Use for Large-Scale Oil Pipelines, 126 DICK. L. REV. 273, 297-99 (2021).

^{6.} See, e.g., Review of Nationwide Permit 12, 87 Fed. Reg. at 17282 (discussing how the proposed Byhalia oil pipeline in Memphis, Tennessee was "located in an area which was already the site of many industrial and emission sources, would result in increased air emissions, and would be routed through a drinking water well field providing drinking water to communities and businesses in Memphis"). For further discussion of the proposed Byhalia Pipeline, see infra Parts II.A-B.

^{7.} See generally Mariann Engelman Lado & Kenneth Rumelt, Pipeline Struggles: Case Studies in Ground Up Lawyering, 45 HARV. ENV'T. L. REV. 377, 400 (2021) (noting how pollution disproportionally impacts communities of color and low-income communities); see also LESLEY FLEISCHMAN & MARCUS FRANKLIN, NAACP & CLEAN AIR TASK FORCE, FUMES ACROSS THE FENCE-LINE: THE HEALTH IMPACTS OF AIR POLLUTION FROM OIL & GAS FACILITIES ON AFRICAN AMERICAN COMMUNITIES 4 (2017), https://www.catf.us/wpcontent/uploads/2017/11/CATF_Pub_FumesAcrossTheFenceLine.pdf (finding that over one million

As it currently stands, NWP 12 greatly streamlines the process of permitting such pipelines by eliminating the need for an individual permit under Section 404 of the CWA.⁸ That means that fossil fuel developers can receive a permit to build pipelines of indefinite length without any opportunity for public comment, and with only very limited individual environmental review.⁹ As a result, NWP 12 places a heavy thumb on the scales for the development of oil and methane gas pipelines that not only threatens the drinking water of vulnerable communities,¹⁰ but also supports the development and maintenance of fossil fuel infrastructure that produces pollutants linked to cancer, respiratory illness, and other negative health impacts.¹¹

For this reason, it is a watershed moment for the Corps to acknowledge the environmental justice concerns raised by NWP 12 and to undertake a review of the permit. However, there are reasons to be skeptical of the Corps's intentions. First, the Corps focused primarily on the question of what "modifications" to the permit would resolve the environmental justice concerns raised by the permit, rather than calling for the revocation of NWP 12 altogether. Second, despite the Biden Administration's Executive Order in January of 2021, requiring agencies to consider matters of "environmental justice" in their regulatory actions, the Corps did not employ any heightened environmental justice analysis when it reissued the remaining 40 Nationwide Permits nearly a year after the Trump Administration reissued NWP 12, even though several of the reissued permits similarly raised significant questions of environmental justice.

Most profoundly, the Corps has so far shown no interest in examining the larger environmental justice problems posed by the Nationwide Permit

^{8.} See 33 C.F.R. § 330.1(b) (2022) (explaining "[n]ationwide permits... are designed to regulate with little, if any, delay or paperwork certain activities having minimal impacts" in federally jurisdictional waters and wetlands).

^{9.} See NWP 12 DECISION DOCUMENT, supra note 4, at 1 (authorizing projects that do "not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project"). Because the Corps defines a "single and complete project" in regard to linear projects as "each crossing of a separate water of the United States," see 33 C.F.R. § 330.2(i) (2023), pipeline developers are able to break their projects up into an indefinite number of stream crossings rather than requiring a permit for the entire project. For further discussion of this issue, see infra text accompanying note 98.

 $^{10. \ \}textit{See} \ \text{JAYNI HeIN ET AL.}, \ N.Y.U. \ INST. \ FOR \ POL'Y \ INTEGRITY, \ PIPELINE \ APPROVALS \ AND \ GREENHOUSE \ GAS \ EMISSIONS \ 4, 56 (2019), \ https://policyintegrity.org/files/publications/Pipeline_Approvals_and_GHG_Emissions.pdf.$

^{11.} See Fleischman & Franklin, supra note 7, at 12.

^{12.} See Review of Nationwide Permit 12, 87 Fed. Reg. 17281, 17282 (Mar. 28, 2022).

^{13.} Exec. Order No. 13990, 86 Fed. Reg. 7037, 7037 (Jan. 20, 2021).

^{14.} Reissuance and Modification of Nationwide Permits, 86 Fed. Reg. 73522, 73527 (Dec. 27, 2021) (to be codified at 33 C.F.R. pt. 330).

Program as a whole.¹⁵ As this Article will explain, NWP 12 is merely emblematic of deeper structural problems with the Nationwide Permit Program that systematically disadvantage communities of color and other socially vulnerable communities and deny them the procedural rights that are central to environmental justice.¹⁶ By eliminating or diffusing opportunities for public comment, and by ignoring the place-based knowledge necessary to properly evaluate environmental justice impacts, the Nationwide Permit Program allows for environmental injustice in communities already burdened by pollution and struggling with climate change. If the Corps believes that "[e]nvironmental justice is achieved when everyone enjoys the same degree of protections and equal access to Civil Works programs and services to achieve a healthy environment in which to live," it is imperative for the Corps to reconsider the entire Nationwide Permit Program and re-center its focus on environmental justice.

The first Part of this Article will discuss the Corps's decision to reconsider NWP 12 and will explain the environmental justice issues and community-based litigation that led to that decision. As this Article will explain, NWP 12 is a fundamentally flawed general permit that cannot be maintained or fixed but should instead be eliminated. First, NWP 12 is facially arbitrary and capricious under the CWA because it permits activities that demonstrably have more than "minimal adverse environmental effect" both cumulatively and individually on communities of color and low-wealth communities by exposing them to hazardous airborne chemicals and drinking water contamination. Second, by eliminating the opportunities for public comment that would normally be a necessary part of the Section 404 individual permit process, NWP 12 shuts affected communities out of the discussion about the effects of a proposed pipeline project on their homes and families. Finally, by providing a mechanism to developers whereby

^{15.} When the Corps most recently reissued most of its Nationwide Permits in 2021, it announced: "The Army will also be reviewing the overall NWP program to ensure consistency with the administration's policies, including the need to engage affected communities." See U.S. Army Corps of Engineers Announces Publication of a Set of 41 Nationwide Permits, U.S. ARMY CORPS OF ENG'RS (Dec. 28, 2021), https://www.usace.army.mil/Media/News/NewsSearch/Article/2884528/us-army-corps-of-engineers-announces-publication-of-a-set-of-41-nationwide-perm/. However, apart from the review of NWP 12 discussed above, the author is not aware of any further ongoing review of the program.

^{16.} See, e.g., Jonathan Skinner-Thompson, *Procedural Environmental Justice*, 97 WASH. L. REV. 399, 413, 416 (2022) (discussing the importance of public participation to environmental justice).

^{17.} Jay Shannon, Assistant Secretary of the Army for Civil Works Issues Environmental Justice Guidance to the Army Corps of Engineers, U.S. ARMY (Mar. 22, 2022), https://www.army.mil/article/2 54935/assistant_secretary_of_the_army_for_civil_works_issues_environmental_justice_guidance_to_th e_army_corps_of_engineers.

^{18.} See infra Parts II.A-B.

^{19.} See infra Part III.B.

they can "piecemeal" their projects into a chain of ostensibly separate permits with "minimal" environmental impacts, NWP 12 allows for the development of fossil fuel projects with devastating environmental justice impacts without any of the public interest review of cumulative impacts that would normally accompany an individual permit.

The second Part of this Article will step back from NWP 12 to consider the Corps's Nationwide Permit Program more broadly in relation to the larger academic literature of procedural environmental justice. By minimizing opportunities for public comment and involvement in permitting decisions, the Nationwide Permit Program frustrates the individualized, place-based decision making that is essential to preventing environmental injustices.²⁰ In addition, the Nationwide Permit Program makes participation in the creation of general permits difficult for anyone but the most legally sophisticated stakeholders because it creates significant time gaps between authorization of the general permit, and its application to a particular site.²¹ That effect is compounded by the fact that at the time of its authorization, the general permit is only analyzed in the abstract and receives no place-based review, even for purposes of the Endangered Species Act or National Environmental Policy Act.²²

Finally, the structure of the Nationwide Permit Program makes it difficult for affected communities to obtain judicial review. The lack of public notice makes it difficult to seek review before damage is done and makes it more difficult to obtain standing to challenge the validity of the general permit. Moreover, the complexity of the Nationwide Permit Program, with its overlapping processes of authorization, reauthorization, and the adoption and modification of general permits by the Corps Districts²⁴

^{20.} See, e.g., COUNCIL ON ENV'T QUALITY, ENVIRONMENTAL JUSTICE: GUIDANCE UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT 8, 12 (1997) (explaining that environmental justice impacts are always site-specific because "whether [an] agency action raises environmental justice issues is highly sensitive to the history or circumstances of a particular community or population").

^{21.} See infra Part III.A.

^{22.} Notably, in 2020, a district court in Montana issued an injunction against NWP 12 on account of its failure to adequately consider impacts of the permit on endangered species during the reissuance of the permit, as required by Section 7 of the Endangered Species Act. See N. Plains Res. Council v. U.S. Army Corps. of Eng'rs, 454 F. Supp. 3d 985, 987 (D. Mon. 2020). However, as discussed above, the Corps reissued the permit in 2021 without any additional review under the Endangered Species Act. See supra note 15.

^{23.} See, e.g., Nat'l Wildlife Fed'n v. U.S. Army Corps of Eng'rs, 170 F. Supp. 3d 6, 11 (D.D.C. 2016) (noting that plaintiffs were unable to identify any pending projects under NWP 13 because there was no public notice).

^{24.} See Travis O. Brandon, A Wall Impervious to Facts: Seawalls, Living Shorelines, and the U.S. Army Corps of Engineers' Continuing Authorization of Hard Coastal Armoring in the Face of Sea Level Rise, 93 Tul. L. Rev. 557, 560, 594–96 (2019) [hereinafter Brandon, A Wall Impervious to Facts].

renders the process of issuing and employing general permits opaque to judges, who often seem to struggle to identify the proper scope of review.

As an example of other Nationwide Permits that pose significant threats of environmental injustice, this Article will briefly consider the case of Nationwide Permit 13 (NWP 13), a general permit which authorizes the construction of bulkheads, seawalls, and other erosion control measures.²⁵ As this Article will explain, NWP 13 allows for private armoring of the coast and wetlands by private landowners, but at the cost of intensifying erosion and pushing it onto communities and landowners who cannot afford armoring.²⁶ Moreover, the lack of any public notice requirement means that neighboring communities have no say in armoring decisions that will directly affect them. Indeed, in many cases NWP 13 does not even require permittees to provide notice to the Corps itself, but instead allows them to self-determine whether they fit within the general permit.²⁷ As a result, the Corps fails to gather basic data on usage of the permit that would allow it to assess the cumulative impacts of armoring, or to gather data for the Geographic Information System (GIS) screening technologies that have been essential for identifying patterns of environmental injustice in other contexts.

This Article will conclude by considering several ways that the Corps could update the Nationwide Permit Program to recenter it around the important concerns of environmental justice. While some of the existing Nationwide Permits, such as NWP 12 and NWP 13, should be eliminated outright because they pose too great of a threat of harm to communities of color and other socially vulnerable communities, many of the Nationwide Permits could continue to serve a valuable administrative purpose if there were more regulatory safeguards in place to identify when projects under the Permit might affect vulnerable communities and to trigger individual permitting when necessary. Drawing on the literature of procedural environmental justice, this Article will discuss several regulatory approaches that would help to reduce the risk of environmental injustice in the general permit program and make community participation in permitting decisions more collaborative and empowering.

^{25.} See Army Corps of Eng'rs, Decision Document: Nationwide Permit 13, at 1, 3 (2021) [hereinafter NWP 13 Decision Document].

^{26.} See infra Part III.B.

^{27.} NWP 13 DECISION DOCUMENT, *supra* note 25, at 1 (requiring no notice to the Corps when the bulkhead is less than 500 feet in length).

I. BACKGROUND

A. Environmental Justice and the Importance of Public Participation in Permitting Decisions

The most widely used definition of environmental justice is the one developed by the Environmental Protection Agency (EPA), which states that environmental justice is "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."²⁸

The concept of "[f]air treatment means no group of people should bear a disproportionate share of the negative environmental consequences resulting from . . . governmental and" private actions. 29 And "[m]eaningful involvement" in the development of regulation and policy means that community concerns will not only be "considered in the decision making process," but also that "[d]ecision makers will seek out and facilitate the involvement of those potentially affected." 30

Such a definition reflects the reality of a long history of environmental injustice in the United States that has been marked by unfair treatment of people of color and other socially vulnerable groups and their exclusion from meaningful involvement in important decision-making processes.³¹ As a result of this ongoing history, communities of color throughout the United States are disproportionately exposed to both air pollutants and toxic wastes.³² The burden of polluting fossil fuel infrastructure falls more heavily

^{28.} Learn About Environmental Justice, U.S. EPA [hereinafter EPA, Environmental Justice], https://www.epa.gov/environmentaljustice/learn-about-environmental-justice (last updated Aug. 16, 2023); see also Clifford J. Villa, Remaking Environmental Justice, 66 Loy. L. Rev. 469, 476–77 (2020) (describing the EPA's definition as "the most common definition," but noting that "environmental justice itself has been subject to multiple and competing definitions over time").

^{29.} EPA, Environmental Justice, supra note 28.

^{30.} *Id*

^{31.} See Rebecca Bratspies, "Underburdened" Communities, 110 CALIF. L. REV. 1933, 1952 (2022). Bratspies stated:

Rather than a positive definition of what environmental justice is, these two concepts [in EPA's definition of environmental justice] offer a kind of metric for surfacing and evaluating its absence. Thus, we can say with some confidence that any decision involving a lack of meaningful involvement or resulting in a lack of fair treatment is environmental injustice.

Id.

^{32.} See, e.g., Julian Agyeman et al., Trends and Directions in Environmental Justice: From Inequity to Everyday Life, Community, and Just Sustainabilities, 41 ANN. REV. ENV'T. & RES. 321, 326–27 (2016).

on socially vulnerable communities,³³ and the EPA has found that "[r]ace, in particular, plays a significant role in determining one's risk of exposure to air pollution, even after controlling for other socioeconomic and demographic factors."³⁴

Studies have found that over one million African Americans live within a half mile of an existing natural gas facility, and that proximity leads to elevated risks of cancer and asthma. People of color in the United States have 1.28 times the exposure to particulate matter compared with the overall population, while Black people in particular are exposed to 1.54 times as much of the harmful air pollutant. Exposure to particulate matter is "responsible for 85,000 to 200,000 excess deaths per year in the United States" and "[r]acial-ethnic and socioeconomic disparities in air pollution exposure in the United States . . . have persisted despite overall decreases in $PM_{2.5}$ pollution."

Not only are communities of color and other socially vulnerable communities disproportionately exposed to toxic pollutants, they also face greater risks of displacement from flooding because property and housing costs are lower in floodplains.³⁸ Socially vulnerable communities often lack the resources to recover from flooding damage on their own, and they also

^{33.} See, e.g., Ryan E. Emanuel et al., Natural Gas Gathering and Transmission Pipelines and Social Vulnerability in the United States, GEOHEALTH, May 18, 2021, at 1, 6 ("[I]n general, counties with more socially vulnerable populations experience significantly higher [pipeline] densities . . . than counties with less socially vulnerable populations.").

^{34.} U.S. EPA, CLIMATE CHANGE AND SOCIAL VULNERABILITY IN THE UNITED STATES: A FOCUS ON SIX IMPACTS 21 (2021) [hereinafter EPA, CLIMATE CHANGE AND SOCIAL VULNERABILITY], https://www.epa.gov/system/files/documents/2021-09/climate-vulnerability_september-2021_508.pdf.

^{35.} See Fleischman & Franklin, supra note 7, at 4.

^{36.} Ihab Mikati et al., Disparities in Distribution of Particulate Matter Emission Sources by Race and Poverty Status, 108 Am. J. Pub. Health 480, 480 (2018).

^{37.} Christopher W. Tessum et al., $PM_{2.5}$ Polluters Disproportionately and Systematically Affect People of Color in the United States, Sci. ADVANCES, Apr. 28, 2021, at 1.

^{38.} See Dalbyul Lee & Juchul Jung, The Growth of Low-Income Population in Floodplains: A Case Study of Austin, TX, 18 KSCE J. CIV. ENG'G 683, 684 (2014). The study recognizes:

Recent analyses of the wind damage and flooding caused by Hurricane Katrina also found that the impact of the storm was disproportionately borne by the African American Community, by people who rented their homes, and by the poor and unemployed. This fact means that "they lived in the floodplains out of economic necessity rather than choice."

Id. (citations omitted); see also Jonathan M. Katz, Who Suffers When Disasters Strike? The Poorest and Most Vulnerable., WASH. POST (Sept. 1, 2017), https://www.washingtonpost.com/outlook/who-suffers-when-disasters-strike-the-poorest-and-most-vulnerable/2017/09/01/0efab8a2-8e65-11e7-84c0-02cc069f2c37 story.html.

receive disproportionately less recovery funding from federal and state governments compared to whiter and wealthier communities.³⁹

All of these inequities will be exacerbated by climate change. In a 2021 analysis, the EPA found that communities of color face heightened vulnerability to the poor air quality, heat waves, and flooding that will result from climate change. ⁴⁰ For example, the EPA found that "Black and African American individuals are 34% more likely to live in areas with the highest projected increases in childhood asthma diagnoses due to climate-driven changes in particulate air pollution" and "40% more likely" to live in areas with the highest projected increases in deaths caused by extreme temperature. ⁴¹ Another recent study found that communities in which at least 20% of the population is Black will see a 40% increase in flood risk by 2050, an increase that is almost double that of communities with the smallest Black populations. ⁴²

At root, these inequities are the result of the failure of the second major principle of the EPA's concept of environmental justice: the "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." Shut out of political and administrative decision-making processes, and lacking the resources to draw on political power, communities of color and other socially vulnerable communities have disproportionately carried the burden of pollution, displacement, and economic disruption that has accompanied the development of the modern infrastructure and economy of the United States. Without a meaningful say in the political system, these communities

^{39.} See Travis Brandon, Sea Level Rise Planning for Socially Vulnerable Communities: A More Equitable Approach to Federal Buyout Programs, 97 U. DET. MERCY L. REV. 435, 448–51 (2020); Rebecca Hersher & Robert Benincasa, How Federal Disaster Money Favors the Rich, NPR (Mar. 5, 2019), https://www.npr.org/2019/03/05/688786177/how-federal-disaster-money-favors-the-rich; A. R. Siders, Social Justice Implications of US Managed Retreat Buyout Programs, 152 CLIMATIC CHANGE (SPECIAL ISSUE) 239, 249 (2019).

^{40.} See EPA, CLIMATE CHANGE AND SOCIAL VULNERABILITY, supra note 34, at 6-8.

^{41.} Id. at 6.

^{42.} Oliver E. J. Wing et al., *Inequitable Patterns of US Flood Risk in the Anthropocene*, 12 NATURE CLIMATE CHANGE 156, 159 (2022) ("Areas with high Black population proportions are clearly concentrated across the Deep South, in the very locations where climate change is expected to intensify flood risk. . . . In contrast, most census tracts with the lowest Black population proportions see very little increase in climate-induced flood risk." (citations omitted)).

^{43.} See EPA, Environmental Justice, supra note 28.

^{44.} See, e.g., Deborah N. Archer, "White Men's Roads Through Black Men's Homes": Advancing Racial Equity Through Highway Reconstruction, 73 Vand. L. Rev. 1259, 1268 (2020) (detailing the history of racial inequity in the development of the federal highway system); Luke W. Cole & Sheila R. Foster, From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement 58 (2001).

are considered "the path of least resistance" when it comes to siting undesirable transportation lines, pipelines, and fossil fuel plants. As one study explained, Black Americans frequently live near hazardous fossil fuel infrastructure because "[c]ompanies take advantage of communities that have low levels of political power. In these communities, companies may face lower transaction costs associated with getting needed permits, and they have more of an ability to influence local government in their favor."

For federal agencies like the Army Corps of Engineers (the Corps) to "advance environmental justice" as called for by Executive Order 13990, they will have to rectify the long exclusion of communities of color from "meaningful involvement" in the development of environmental policies.⁴⁷ As the Corps has recognized, public participation in permitting decisions that affect a community is essential to environmental justice. 48 Jonathan Skinner-Thompson explains, "[i]n order to make meaningful change, an environmental justice agenda must provide impacted communities not just the formal right, but the substantive ability to participate as partners at every level of environmental decision-making."49 That "substantive ability to participate" will require a recognition on the part of agencies that they must do more than just "inform" the public and offer a "formal right" of participation, but must actively seek out the vital placebased expertise of affected communities: "A decision-making structure that precludes meaningful participation by community groups cannot hope to achieve systematically equitable environmental protection."50

^{45.} See, e.g., Bratspies, supra note 31, at 1945–46; Micaela A. Watts & Laura Testino, Memphians Question Plains All American About Route for Proposed Byhalia Connection Pipeline, COM. APPEAL (Feb. 17, 2020), https://www.commercialappeal.com/story/news/2020/02/15/memphians-question-plains-all-american-byhalia-connectionpipeline/4761549002 (noting that a representative of All American oil pipeline described the historic Boxtown neighborhood of Memphis as "a point of least resistance"); see also Darryl Fears & John Muyskens, Black People Are About to Be Swept Aside for a South Carolina Freeway—Again, WASH. POST (Sep. 8, 2023), https://www.washingtonpost.com/climate-environment/interactive/2021/highways-black-homes-removal-racism/ (describing the Liberty Park neighborhood of North Charleston, South Carolina, as "the point of least resistance").

^{46.} See FLEISCHMAN & FRANKLIN, supra note 7, at 6 (footnote omitted).

^{47.} See Exec. Order No. 13990, 86 Fed. Reg. 7037, 7037 (Jan. 20, 2021) (explaining "[w]here the Federal Government has failed to meet that commitment in the past, it must advance environmental justice").

^{48.} See Review of Nationwide Permit 12, 87 Fed. Reg. 17281, 17282 (Mar. 28, 2022) (recognizing "the need to engage and inform the public, particularly communities that potentially may be impacted by pipeline construction and operations").

^{49.} Skinner-Thompson, *supra* note 16, at 402.

^{50.} Eileen Gauna, *The Environmental Justice Misfit: Public Participation and the Paradigm Paradox*, 17 STAN. ENV'T L.J. 3, 27–28, 36 (1998). Gauna explains:

Environmental regulation cannot proceed while blind to social realities, and social realities cannot be explored adequately without the assistance of those whose lives are most impacted by environmental risk. . . . Indigenous, cultural, and community

B. Clean Water Act Section 404 Permits: The Statutory and Regulatory Framework

Congress passed the Clean Water Act (CWA) "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." In order to achieve that goal, Section 301 of the CWA imposes a broad prohibition on "the discharge of any pollutant by any person," except when the discharger has received a permit under the Act. One of the most important permitting programs under the CWA is the Section 404 program, administered by the Corps, which grants the agency the authority to issue permits "for the discharge of dredged or fill material into the navigable waters at specified disposal sites." Dredged material is defined as material excavated from waters of the United States, while "fill material" is material "placed in waters of the United States where the material has the effect of: (i) [r]eplacing any portion of a water of the United States with dry land; or (ii) [c]hanging the bottom elevation of any portion of a water of the United States."

Under Section 404, the Corps has the authority to issue two types of dredge and fill permits: individual permits authorizing a particular project submitted to the Corps for review on a case-by-case basis,⁵⁵ and general permits authorizing categories of activities that the Corps determines do not require intensive individualized review because they pose a minimal risk of individual or cumulative harm to the environment.⁵⁶

Both individual and general permits are subject to the Corps's "public interest review," a "general balancing process" established by the Corps's regulations that "reflect[s] the national concern for both protection and

expertise arises not from formal study but from intimacy with social and physical environments over time and often over generations. These forms of expertise are exogenous to the agency and are as important as formal expertise in law, science, and technology.

Id. at 36 (footnotes omitted).

- 51. 33 U.S.C. § 1251(a) (2018).
- 52. 33 U.S.C. § 1311(a) (2018) (stating that, "[e]xcept as in compliance with this section and sections 1312, 1316, 1317, 1328, 1342, and 1344 of this title, the discharge of any pollutant by any person shall be unlawful").
- 53. 33 U.S.C. § 1344(a) (2018). The other major permitting program under the CWA is Section 402, the National Pollutant Discharge Elimination System (NPDES), administered by the EPA. *See id.* § 1342.
 - 54. 33 C.F.R. §§ 323.2(c), (e)(1) (2022).
- 55. See Permit Program Under CWA Section 404, U.S. EPA, https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404 (last updated Mar. 31, 2023).
 - 56. 33 U.S.C. § 1344(e)(1) (2018).

utilization of important resources."⁵⁷ Evaluating the public interest "requires a careful weighing of all those factors which become relevant in each particular case" and the decision to issue permits should be based on "an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use"⁵⁸ The Corps considers a large number of factors in making its public interest determination, but the broad focus on the analysis is on "the needs and welfare of the people."⁵⁹ The "cumulative impacts" of a Section 404 permit include not just the portion of a project directly permitted, but also the cumulative impacts of the project as a whole.⁶⁰

An individual permit is required when a dredge and fill activity will have a "potentially significant impact[]" on the waters of the United States. An individual permit application is evaluated under two separate criteria: the Corps's public interest analysis discussed above, and the EPA's Section 404 guidelines, which are incorporated into the regulations for individual permits. The EPA's guidelines are binding on the Corps and are designed to avoid "unacceptable adverse impact[s]" on aquatic ecosystems. Therefore the "fundamental" guiding precept of the EPA's guidelines is that "dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern."

Because the individual permit analysis starts with the presumption that "the unnecessary alteration or destruction of [wetlands] should be discouraged as contrary to the public interest," the individual permit process

Id.

^{57. 33} C.F.R. § 320.4(a)(1) (2022).

^{58.} Id.

^{59.} Id. The individual factors considered in the public interest analysis include: [C]onservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

^{60.} See Columbia Riverkeeper v. U.S. Army Corps of Eng'rs, No. 19-6071, 2020 WL 6874871, at *2 (W.D. Wash. Nov. 23, 2020) (rejecting the Corps's argument that it only needed to consider the public interest impact of an export terminal for a refinery without also considering the larger impacts of the associated refinery itself).

^{61.} See Permit Program Under CWA Section 404, supra note 55.

^{62.} See 40 C.F.R. § 230.1(a) (2022).

^{63.} Id. § 230.1(c).

^{64.} *Id*.

requires a time consuming and detailed analysis regarding the scope of the project, its potential cumulative impacts, and the range of available alternatives before a permit may be granted.⁶⁵ For example, under the EPA's guidelines, the Corps is required to consider whether there is a "practicable alternative to the proposed discharge [that] would have less adverse impact on the aquatic ecosystem," a daunting factual determination that requires consideration of other alternatives including a "no discharge" alternative, or consideration of discharges at a different location.⁶⁶ On top of these requirements, Section 404 also requires the Corps to provide public notice and the opportunity for public hearings before the permit is issued.⁶⁷ Not only does this process allow for comment from environmental groups and neighbors who might learn about the project through public notice and oppose the project, but also from agencies such as the EPA and the Department of Interior that might have concerns with the project.⁶⁸

Because the individual permit process is so work-intensive both for permittees and the Corps, Section 404 of the CWA also authorizes the Corps to issue general permits, or Nationwide Permits, for broad categories of actions where the Corps determines that those actions will have "minimal adverse environmental effects" both individually and cumulatively. Congress's intent in regard to the general permit program was to "eliminate unnecessary paperwork and delays in permit processing" where common types of projects involved genuinely minimal adverse environmental effects. However, since its establishment, the Nationwide Permit Program has grown enormously and largely swallowed the Section 404 program: the Corps now processes 97% of permit applications as general permits.

^{65. 33} C.F.R. § 320.4(b)(1) (2022); *see also* Buttrey v. United States, 690 F.2d 1170, 1180 (5th Cir. 1982) (noting that this presumption is "*very* strong").

^{66. 40} C.F.R. § 230.10(a) (2021); see Michael C. Blumm & Elisabeth Mering, Vetoing Wetland Permits Under Section 404(c) of the Clean Water Act: A History of Inter-Federal Agency Controversy and Reform, 33 UCLA J. ENV'T. L. & POL'Y 215, 237–41 (2015) (describing the detailed analysis required for individual Section 404 permits); see generally Jon Schutz, The Steepest Hurdle in Obtaining a Clean Water Act Section 404 Permit: Complying with EPA's 404(b)(1) Guidelines' Least Environmentally Damaging Practicable Alternative Requirement, 24 UCLA J. ENV'T L. & POL'Y 235, 238 (2006) (explaining that one of the requirements for permit approval is consideration of practicable alternatives).

^{67. 33} U.S.C. § 1344(a) (2018).

^{68.} See Blumm & Mering, supra note 66, at 241 ("EPA and federal fish and wildlife agencies participate in the section 404(b)(1) evaluative process and may raise concerns.").

^{69. 33} U.S.C. § 1344(e)(1) (2018).

^{70.} See S. REP. No. 95-370, at 75 (1977).

^{71.} NICOLE T. CARTER, CONG. RSCH. SERV., 97-223, THE ARMY CORPS OF ENGINEERS' NATIONWIDE PERMITS PROGRAM: ISSUES AND REGULATORY DEVELOPMENTS 2 (2017) (noting "between 2012 and 2015, the agency authorized an average of 63,000 activities per year; 97% were authorized by nationwide and other general permits").

In order to issue a general permit, the Corps must follow a procedure similar to that employed when issuing an individual permit: the Corps must evaluate the individual and cumulative effects of the proposed general permit under the EPA's Section 404(b)(1) guidelines and the Corps's own public interest review.⁷² The Corps must provide an opportunity for public comment regarding the proposed general permits,⁷³ and must publish a written evaluation of the proposal including "documented information supporting each factual determination."⁷⁴ However, because Nationwide Permits are authorized in advance at the national level, there is no consideration of site-specific environmental and public interest review as with individual permits. A general permit is valid for five years after the date of its issuance, at which point the Corps must reissue, modify, or revoke the permit after providing another opportunity for public comment.⁷⁵

However, even this minimal level of notification is not required for many general permits. Unless a PCN is required by the general permit, the permittee may self-determine whether the project meets the terms of the general permit and "proceed with activities authorized by the NWPs without notifying the [district engineer]."80 Thus,

^{72. 40} C.F.R. § 230.7(b) (2022); 33 C.F.R. § 320.4(a) (2022).

^{73. 33} U.S.C. § 1344(e)(1) (2018).

^{74. 40} C.F.R. § 230.7(b)(1) (2022).

^{75. 33} U.S.C. § 1344(e)(2) (2018).

^{76.} See, e.g., NWP 13 DECISION DOCUMENT, supra note 25, at 1 (limiting projects under the general permit to 500 feet of bank footage).

^{77.} See 33 C.F.R. § 330.1(e)(1) (2022).

^{78.} Id.

^{79.} Steven G. Davison, General Permits Under Section 404 of the Clean Water Act, 26 PACE ENV'T. L. REV. 35, 68–69 (2009).

^{80. 33} C.F.R. § 330.1(e)(1) (2022).

[I]n many cases a person can fill in a federally protected wetland under the authorization of a [S]ection 404 general permit without the person having to give prior notice to the Corps... without a public hearing, without any limit on the total amount of protected wetlands that are filled under a particular general permit, and without any requirement that compensatory mitigation be provided for wetlands authorized to be filled or otherwise harmed under a general permit.⁸¹

As a result, the Corps is often only able to speculate on the true environmental impact of a general permit.⁸² Nearly half of the projects authorized by the general permit program require no notice to the Corps.⁸³

II. NWP 12 CANNOT BE REFORMED AND SHOULD BE REVOKED BECAUSE IT POSES A GRAVE AND ONGOING THREAT TO ENVIRONMENTAL JUSTICE COMMUNITIES

The reissuance of Nationwide Permit 12 (NWP 12) on January 13, 2021, was one of the final regulatory acts of the Trump Administration. WP 12 had long been controversial for its role in the approval of the Keystone XL pipeline among others. The Army Corps of Engineers (the Corps) reissued the permit with only the most cursory discussion of the two topics that had raised the most significant public protest: NWP 12's impact on facilitating increased fossil fuel production and on environmental justice. Regarding the impact of NWP 12 on climate change related emissions, the Corps conceded that "oil and natural gas pipeline activities authorized by this NWP may induce higher rates of energy consumption in the area by making natural gas and petroleum products more readily available to consumers." However, the Corps declined to consider the scope of those impacts because it contended that it "does not have the authority to control the burning of fossil fuels or the adverse environmental effects that are caused by burning those

^{81.} Davison, supra note 79, at 39.

^{82.} See Thomas Addison & Timothy Burns, *The Army Corps of Engineers and Nationwide Permit 26: Wetlands Protection or Swamp Reclamation?*, 18 ECOLOGY L.Q. 619, 637–38 (1991) (noting the lack of data available regarding the impact of general permits and quoting a Corps official stating, "[w]e don't really know what the impacts of the NWP's are").

^{83.} See CARTER, supra note 71, at 2 (noting that "about 31,000 authorized activities are 'non-reporting' each year" out of 63,000 total).

^{84.} See NWP 12 DECISION DOCUMENT, supra note 4, at 123.

^{85.} Id. at 97.

fossil fuels to produce energy." Regarding environmental justice concerns, the Corps simply concluded, without analysis, that the Nationwide Permit Program as a whole was "not expected to have any discriminatory effect or disproportionate negative impact on any community or group, and therefore [was] not expected to cause any disproportionately high and adverse impacts to minority or low-income communities," without any individual discussion of NWP 12 or any other general permit.87

This analysis falls far short of the Corps's requirement to consider whether its Nationwide Permits have "minimal adverse environmental effects" both individually and cumulatively⁸⁸ and are in the "public interest," including their impacts on the "needs and welfare of the people." For that reason, it is welcome that the Corps is currently reviewing NWP 12 based on concerns "such as environmental justice, climate change impacts, drinking water impacts, and notice to impacted communities."

However, there are reasons for concern that the Corps will not take decisive action regarding NWP 12. For example, despite the Biden Administration's Executive Order in January of 2021 requiring agencies to consider matters of "environmental justice" in their regulatory actions, 91 the Corps did not employ any heightened analysis of environmental justice issues when it reissued the remaining Nationwide Permits nearly a year later. 92 Indeed, it simply repeated the cursory statement that the permits were "not expected to have any discriminatory effect"—despite the fact that several of the reissued permits similarly raised significant questions of environmental justice, including Nationwide Permit 13, discussed below. 93 Moreover, in its notice that it was reconsidering NWP 12, the Corps focused primarily on what "modifications" to the permit would resolve the environmental justice

^{86.} *Id.* at 91. The Corps's argument that it "does not have the authority to control the burning of fossil fuels" and therefore does not have to account for their impact in its National Environmental Policy Act documents is false. *See* Jayni Foley Hein & Natalie Jacewicz, *Implementing NEPA in the Age of Climate Change*, 10 MICH. J. ENV'T. & ADMIN. L. 1, 23–24 (2020) (discussing "[t]he 'Our Hands Are Tied' [f]allacy" and explaining why it is false).

^{87.} Reissuance and Modification of Nationwide Permits, 86 Fed. Reg. 2744, 2859 (Jan. 13, 2021) (to be codified at 33 C.F.R. pt. 330).

^{88. 33} U.S.C. § 1344(e)(1) (2018).

^{89. 33} C.F.R. § 320.4(a)(1) (2022); see also Ohio Valley Env't Coal. v. Aracoma Coal Co., 556 F.3d 177, 191 (4th Cir. 2009) ("[T]he § 404 permitting process requires . . . significant consideration of the public interest.").

^{90.} Review of Nationwide Permit 12, 87 Fed. Reg. 17281, 17282 (Mar. 28, 2022).

^{91.} See Exec. Order No. 13990, 86 Fed. Reg. 7037, 7037 (Jan. 20, 2021).

^{92.} Reissuance and Modification of Nationwide Permits, 86 Fed. Reg. at 73527.

^{93.} Id.; see also infra Part III.B.

concerns it raises, rather than calling for the revocation of NWP 12 altogether. $^{94}\,$

As this Part will explain, such half measures are inadequate to resolve the profound environmental justice problems raised by NWP 12. The only adequate regulatory decision would be complete revocation of the permit and the requirement that all future decisions regarding the permitting of oil and gas pipelines be committed to the individual permit process.

A. The Use of NWP 12 to Permit Oil and Gas Pipelines Perpetuates Deep Historical Inequities and Causes Environmental Justice Communities to Bear a "Disproportionate Share" of the Environmental Burden

By permitting oil and gas pipelines with little administrative review and no public comment, NWP 12 perpetuates the status quo in which communities of color and other socially vulnerable groups bear a "disproportionate share of the negative environmental consequences." As discussed above, these communities are historically overburdened with polluting industry and infrastructure, and thus, members of the community are disproportionately exposed to toxic wastes and other pollutants. The oil and gas pipelines permitted under NWP 12 pose significant health threats to the communities where they are located, resulting in environmental injustice. Natural gas pipelines leak frequently, releasing numerous chemicals linked to cancer, respiratory illness, and other health effects. Similarly, crude oil pipelines leak and spill, releasing dangerous quantities of deeply toxic chemicals, such as benzene, that contribute to cancer and respiratory illness.

However, despite the grave health and environmental risks posed by oil and natural gas pipelines, and despite their documented negative effects on the communities where they are located, NWP 12 fast tracks their construction with no individual review, no notice to the affected public, and, in some cases, no requirement even to notify the Corps that a developer plans to make use of the permit. 99

Moreover, even though the use of NWP 12 is limited to stream crossings that result in a loss of one-half acre or less of "waters of the United States for

^{94.} Review of Nationwide Permit 12, 87 Fed. Reg. at 17282.

^{95.} EPA, Environmental Justice, supra note 28.

^{96.} See supra text accompanying notes 29-43.

^{97.} See FLEISCHMAN & FRANKLIN, supra note 7, at 4, 12; see also HEIN ET AL., supra note 10, at 4 (explaining that natural gas pipelines emit methane during leakages and safety tests).

^{98.} See, e.g., Mark A. D'Andrea & G. Kesava Reddy, The Development of Long-Term Adverse Health Effects in Oil Spill Cleanup Workers of the Deepwater Horizon Offshore Drilling Rig Disaster, FRONTIERS IN PUB. HEALTH, Apr. 26, 2018, at 1, 2.

^{99.} See NWP 12 DECISION DOCUMENT, supra note 4, at 4.

each single and complete project," the Corps provides that "[f]or oil or natural gas pipeline activities crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization." In other words, there is no limit on how many times a pipeline project can make use of NWP 12, and there is no maximum acreage that a pipeline can affect that would trigger review under the individual permit program. As a result, a pipeline permitted under NWP 12 could potentially stretch for hundreds of miles and impact numerous communities along its path—with no requirement of public notice or any individualized public interest review by the Corps.

The potentially devastating environmental justice impact of NWP 12 is clearly demonstrated by the recent example of the proposed Byhalia crude oil pipeline that would have cut through the "low income, overwhelmingly Black South Memphis neighborhood of Boxtown." The neighborhood is already burdened with an oil refinery, a steel mill, and an active methane gas plant, which is why one study found that South Memphis is a "hot spot," where "levels of air toxics are greater than many other industrialized urban regions in the U.S., indicating that this community is at high risk from exposure to ambient air toxics" resulting in elevated cancer risks. ¹⁰²

The route of the pipeline would have crossed through a drinking water wellfield that serves the neighborhood, posing a risk that pipeline leaks would contaminate the main water supply for the community. When asked why the pipeline needed to cross through the Boxtown neighborhood and over the wellfield, a representative for the pipeline company explained that the pipeline "had to go through South Memphis to connect to the refinery" located there—a stark illustration of how the presence of environmental injustice in a community tends to perpetuate further acts of injustice. ¹⁰⁴ Moreover, according to the representative, the neighborhood was chosen

^{100.} Id. at 1, 3.

^{101.} Bratspies, *supra* note 31, at 1945 & n.80 (explaining "Boxtown is a historic Black neighborhood that was originally built by freed slaves, where many properties are still owned by descendants of the original families; the neighborhood was underserved—remaining without electrical and plumbing services well into the 1960s").

^{102.} Chunrong Jia & Jeffrey Foran, Air Toxics Concentrations, Source Identification, and Health Risks: An Air Pollution Hot Spot in Southwest Memphis, TN, 81 ATMOSPHERIC ENV'T 112, 115 (2013).

^{103.} See Leanna First-Arai, Pipeline Through the Heart: A Black Neighborhood's Uphill Battle Against Oil Developers, MLK50 (Sept. 10, 2020), https://mlk50.com/2020/09/10/this-black-neighborhood-is-trying-to-stop-an-oil-pipeline-theyre-running-out-of-time/.

^{104.} Bratspies, supra note 31, at 1946.

because it was "the path of least resistance," and residents "just need[ed] to get used to the fact that [the pipeline was] going to be here." 105

In order to construct the 50-mile pipeline, the route would have to construct 29 stream crossings in Tennessee and Mississippi, which would normally require a Section 404 permit from the Corps for approval. However, the developer instead simply submitted a pre-construction notification (PCN) to the Corps, utilizing NWP 12 to permit the various crossings. The Corps verified the project by letter in 2021, having never solicited information or comments from the affected neighborhoods, never examined any environmental justice concerns, and never made any public interest findings. To the construction of the strength of the corps are the concerns, and never made any public interest findings.

Fortunately, the Byhalia Pipeline was never developed: the developer canceled the project in July 2021 in the face of community resistance and efforts to fight the project at the local, state, and federal level. ¹⁰⁹ However, the fact remains that the existence of NWP 12 nearly allowed the developer to move forward with the construction of large and dangerous fossil fuel infrastructure that would have remained in place for decades, poisoning an already overburdened community of color, without any individual environmental review or opportunity for public comment.

B. The Absence of Opportunities for Public Comment and Site-Specific Analysis Created by NWP 12 Denies Environmental Justice Communities "Meaningful Involvement" in Permitting Decisions

The example of the proposed Byhalia Pipeline illustrates one of the most profound problems with NWP 12: the way that it cuts affected communities out of the decision-making process, denying them the "meaningful involvement" essential to environmental justice according to the Environmental Protection Agency (EPA). As discussed above, the EPA defines "meaningful involvement" as a process whereby community views

^{105.} Id. at 1945, 1946 (alteration in original) (quotations omitted).

^{106.} See Letter from Zachary L. Miller, District Commander, U.S. Army Corps of Engineers, to Steve Cohen, U.S. House of Representatives 1 (Feb. 5, 2021) [hereinafter Cohen Letter], https://mlk50.com/wp-content/uploads/2021/02/2021.2.5-USACE-Reply-to-Congressman-Cohen-Byhalia-Letter-1.pdf.

^{107.} Id.

 $^{108.\ \ \}textit{See}\ Letter\ from\ U.S.\ Army\ Corps\ of\ Engineers\ to\ Carol\ Howard,\ Byhalia\ Pipeline\ LLC\ 1-2\ (Feb.\ 1,\ 2021)\ [hereinafter\ NWP\ 12\ Byhalia\ Verification\ Letter],\ https://www.mvm.usace.army.mil/Port\ als/51/Byhalia%20Pipeline%20LLC%20NWP12%20Verification.pdf.$

^{109.} Carrington J. Tatum & Hannah Grabenstein, 'A Victory for Us': Southwest Memphis Residents Elated as Developers Drop Byhalia Pipeline Project, MLK50 (July 2, 2021), https://mlk50.com/2021/07/02/byhalia-connection-pipeline-pulls-project/.

^{110.} EPA, Environmental Justice, supra note 28.

will not only be "considered in the decision making process," but also that "[d]ecision makers will seek out and facilitate the involvement of those potentially affected." Nothing of the sort happened in the case of the Byhalia Pipeline: many community residents were unaware of the plans for the pipeline, and the ones that had learned of it were denied any meaningful involvement in the regulatory process. 112

Byhalia applied to the Corps to make use of NWP 12 by submitting a PCN to the Vicksburg and Memphis Districts of the Corps. ¹¹³ The Corps approved the use of NWP 12 for the pipeline in the Memphis District on February 1, 2021. ¹¹⁴ In the verification letter regarding the PCN, the Corps did not discuss either environmental justice issues or address the public interest more broadly. ¹¹⁵ Moreover, the Corps made no effort to seek input from members of the affected community before proceeding with the verification of the permit.

When questioned by Congressperson Steve Cohen regarding the Corps's decision to verify the use of NWP 12 for the Byhalia Pipeline, the District Commander for the Memphis District of the Corps responded on February 5 saying that it was not necessary in this case for the Corps to consider issues of environmental justice in verifying the permit. 116 The District Commander explained that while it was true that the project met the EPA's first environmental justice criteria in that it would affect "minority populations, low-income populations, or Indian tribes present in the area," there was no evidence that there would be "disproportionately high and adverse human health or environmental effect[s]" on those communities because the project approval only covered the effects of the stream crossings, rather than the pipeline as a whole.¹¹⁷ Although the permits were essential for the viability of the project, and would determine whether it could be completed, the Corps asserted that it had no jurisdiction over any potential risk of oil spills or air pollution from the pipeline and was limited to consideration of the stream crossing themselves. 118

^{111.} Id.

^{112.} See Lucas Finton, Proposed Byhalia Connection Pipeline Finds Resistance Down So-called "Path of Least Resistance," DAILY HELMSMAN (Mar. 24, 2021), https://www.dailyhelmsman.com/article/2021/03/proposed-byhalia-connection-pipeline-finds-resistance-down-so-called-path-of-least-resistance (quoting a resident who reported: "We haven't even been informed, and it's running basically right through the back of our house. It's really going to affect us and I want to learn what's going on").

^{113.} See Cohen Letter, supra note 106, at 1.

^{114.} NWP 12 Byhalia Verification Letter, *supra* note 108, at 1–2.

^{115.} Id. at 2.

^{116.} Cohen Letter, supra note 106, at 5–7.

^{117.} Id. at 5, 7.

^{118.} Id. at 6.

Finally, the District Commander noted that even if a project involved a "disproportionately high and adverse human health or environmental effect" on low-income or minority groups, that would not necessarily "preclude a proposed agency action from going forward, nor does it necessarily compel a conclusion that a proposed action is environmentally unsatisfactory." Instead, "the identification of such an effect should heighten agency attention to alternatives (including alternative sites), mitigation strategies, monitoring needs, and preferences expressed by the affected community or population." However, the District Commander explained that the Corps itself could not consider those alternatives because it only had jurisdiction over the stream crossings, and it treated each of those as "its own individual verification action under the NWP program."

The District Commander's response shows the deep problems with using NWP 12 to permit projects such as oil and gas pipelines that have significant adverse environmental impacts. First, by piecemealing the project into individual stream crossings rather than considering the project as a whole, NWP 12 allows developers to sidestep the public comment period, which would have allowed concerned community members to share their expertise and express their concerns with the project. 122 If the Byhalia Pipeline had required an individual permit, the community would have been able to highlight the historic nature of the Boxtown community, the extent of the community's existing burden of polluting infrastructure, the community's concerns about local health impacts from the total burden of pollution, and the importance of the local drinking water supply crossed by the proposed pipeline. 123 Moreover, in issuing its final decision on the individual permit, the Corps would have to address those public interest concerns and explain publicly why it did or did not believe the project raised environmental justice concerns. As it was, the Corps verified Byhalia's NWP 12 applications without saying a word regarding either environmental justice or the public interest. 124

Second, the District Commander's response highlights how the use of NWP 12 prevents any meaningful consideration of alternatives to the project that would be less damaging to the affected community. As the Corps acknowledged, the Council on Environmental Quality's (CEQ) environmental justice guidance explains that when an agency action will

^{119.} Id. at 7.

^{120.} Id.

^{121.} Id.

^{122. 33} U.S.C. § 1344(a) (2018).

^{123.} See First-Arai, supra note 103.

^{124.} See NWP 12 Byhalia Verification Letter, supra note 108, at 2.

have an impact on a "low-income population, minority population, or Indian tribe," the agency should "heighten" its "attention to alternatives (including alternative sites)." The CEQ explained that agencies should take active steps to "encourage the members of the communities that may suffer a disproportionately high and adverse human health or environmental effect from a proposed agency action to help develop and comment on possible alternatives . . . as early as possible in the process." ¹²⁶

Moreover, through consideration of the no-action alternative, the Corps would have been compelled to consider whether the project was necessary in the first place, and whether there were other routes that would "have a less disproportionate and adverse effect." Indeed, subsequent to the verification of the NWP 12 permit, it became evident that there was already a crude oil pipeline that connected the two points that the Byhalia Pipeline was meant to connect, but which avoided the environmental justice communities. However, because of the rushed and closed nature of the PCN process, the Corps was apparently unaware of the existence of this alternative pipeline, and did not consider whether the existing pipeline could satisfy the project requirements or whether the new pipeline could run along the old route, causing less environmental impact. 129

Ultimately, the Byhalia Pipeline provides a perfect case study of the environmental justice impact of the fast-track permitting provided by NWP 12. In processing Byhalia's NWP 12 PCN, the Corps did not seek out or make use of any input from the Boxtown community regarding the impact of the proposed project on their families, their health, or their community. Even when members of the community actively submitted information to the Corps expressing their concerns, the agency disregarded their valuable expertise and excluded it from mention in the verification letters. And finally, thanks to the arbitrarily piecemeal way in which NWP 12 breaks a 50-mile pipeline into a patchwork of 29 individual stream crossings, the Corps can shirk its basic responsibility under Section 404 to consider alternatives that would minimize damage to the nation's wetlands and further important public interests like environmental justice.

^{125.} COUNCIL ON ENV'T QUALITY, supra note 20, at 10.

^{126.} Id. at 15.

^{127.} Id.

^{128.} Mike Soraghan, *Tenn. Environmental Justice Fight Overlooks Existing Pipeline*, E&E NEWS (Apr. 15, 2021), https://www.eenews.net/articles/tenn-environmental-justice-fight-overlooks-existing-pipeline/.

^{129.} Id.

^{130.} See Cohen Letter, supra note 106, at 5 (noting "[p]rior to verifying this permit, members of the public raised environmental justice . . . concerns"); see also NWP 12 Byhalia Verification Letter, supra note 108, at 2 (making no mention of environmental justice concerns).

Had Byhalia been compelled to seek an individual Section 404 permit, it would have faced significant and immediate public scrutiny, and the Corps would have been compelled to analyze the larger cumulative impacts of permitting a crude oil pipeline that ran over the most essential drinking water source in Memphis and through a historic Black neighborhood already burdened with polluting infrastructure. Instead, NWP 12 simply gave a rubber stamp to the pipeline, entirely excluding an already overburdened environmental justice community from a decision-making process that directly affected them.

III. THE NATIONWIDE AS A WHOLE RAISES FUNDAMENTAL ENVIRONMENTAL JUSTICE CONCERNS THAT MUST BE ADDRESSED BY THE CORPS

Even if the Army Corps of Engineers (the Corps) chose to revoke Nationwide Permit 12 (NWP 12), it would only be a small step towards solving the environmental justice concerns posed by the Nationwide Permit Program as a whole. Indeed, NWP 12 and the case study of the Byhalia Pipeline only serve to highlight the larger problems with the program. This Part will begin by discussing several structural problems with the Nationwide Permit Program that raise environmental justice concerns. Next, it will examine the case of Nationwide Permit 13 (NWP 13), another controversial Nationwide Permit, as an example of how the environmental justice problems with the Nationwide Permit Program are not limited to NWP 12.

A. The Structure of the Nationwide Permit Program Cuts Environmental Justice Communities Out of Permit Decisions, Removes Most Section 404 Decisions from Any Environmental Justice Review, and Makes It Difficult for Affected Communities to Challenge Decisions in Court

As the Byhalia Pipeline example illustrates, Nationwide Permits are regularly utilized to authorize projects with little input, not only from the Corps, but even from the applicant. As the Corps explained in its response letter regarding the Byhalia Pipeline, "the nationwide permit program was designed to enable quick determinations of activities with minimal environmental impacts." As Congress recognized when it created the Nationwide Permit Program, this kind of fast-tracking permitting process may make sense for projects that genuinely have a minimal environmental and social impact, and where a mistakenly issued permit is unlikely to do any

lasting harm.¹³² However, over the decades the Corps has turned the congressional design on its head, and now relies on Nationwide Permits for over 97% of its permitting decisions, even in cases where the proposed projects clearly have a substantial impact on the environment.¹³³ As a result, contrary to congressional design, the public is cut out of the decision-making process for most of the Section 404 permitting involving the nation's vulnerable wetlands.

For communities of color and other socially vulnerable communities, this shift from individual to general permits is particularly devastating because it forecloses one of the few effective mechanisms for making their knowledge and concerns known when a proposed project threatens to impact their community. Such communities often lack the kind of political influence and legal expertise, as well as the available time and money possessed by wealthier communities, to access the other mechanisms that allow wealthier communities to push back outside of the permit system itself. 134 Moreover. by their nature, general permits that sidestep the public comment requirement result in a situation where "agency expertise is substituted for the participation of powerless and excluded groups."135 For example, in the District Commander's letter, the Corps claimed that in verifying the Byhalia Pipeline, it considered whether the proposed project would have an effect on air quality in the community, but determined that any effect would be negligible, or would even benefit the community. 136 However, none of that environmental justice analysis was present in the actual verification letter provided to the public or made available for public comment, nor was the Corps's supposed determination in any way informed by the actual experience of the affected community, which the Corps neither sought out nor considered. The Nationwide Permit Program as a whole facilitates exactly this kind of permitting decision that allows agencies to "proceed

^{132. 33} U.S.C. § 1344(e)(1) (2018).

^{133.} Carter, *supra* note 71, at 2 (noting "between 2012 and 2015, the agency authorized an average of 63,000 activities per year; 97% were authorized by nationwide and other general permits").

^{134.} See Gauna, supra note 50, at 12.

^{135.} Id. at 32.

^{136.} *See* Cohen Letter, *supra* note 106, at 5–6 (noting community concerns about "toxic air tied to industrial and transportation-related pollutants like benzene and formaldehyde"). District Commander Miller also stated:

[[]I]t is anticipated that the proposed pipeline's effect on air quality will be negligible or positive as the pipeline's purpose is to move oil out of Memphis, and the pipeline's own website indicates that the pipeline's effect will be to reduce traffic from trucks transporting oil from the area.

Id. at 6; see also Gauna, supra note 50, at 32 (noting how in such decisions, the "agency expert" concludes that it "knows what is best for poor, uneducated people of color").

without thinking about the environmental justice implications" of their actions by hiding the actual decision-making process from public scrutiny. 137

The asymmetry created by the fast tracking of the Nationwide Permit Program, in which the agency's "expertise" regarding what is and is not a "minimal environmental impact" is privileged absolutely over that of the communities affected by that judgment, results in poor decisions and bad outcomes. In many cases, the residents of communities of color or other socially vulnerable communities have essential expertise that the agency lacks: they "possess direct experiential knowledge about potential flaws in a project and may be able to provide a broader range of alternatives for agencies to consider." As Eileen Gauna explains, "[i]n a very real sense, residents from impacted communities are experts in the reality of environmental inequity.... A decision-making structure that precludes meaningful participation by community groups cannot hope to achieve systematically equitable environmental protection." 139

An additional asymmetry that arises in the Nationwide Permit Program is the fact that, in its current practice, the only time the Corps actually makes a determination regarding the environmental justice impacts of the Nationwide Permits is when it is reissuing the Nationwide Permits as a whole at the national level. 140 These determinations are plainly inadequate. For example, in the most recent reissuance of the Nationwide Permits by the Corps under the Biden Administration, the agency concluded, without explanation, that the entire suite of reissued Nationwide Permits "are not expected to have any discriminatory effect or disproportionate negative impact on any community or group, and therefore are not expected to cause any disproportionately high and adverse impacts to minority or low-income communities."¹⁴¹ Indeed, much like with the Byhalia Pipeline, the Corps concluded that, if anything, reissuance of the Nationwide Permits would benefit environmental justice communities because the Nationwide Permits "can be used by communities with environmental justice interests that want to conduct activities that require [the Department of the Army's] authorization that will help improve environmental quality within their communities."142

^{137.} Gauna, supra note 50, at 32.

^{138.} Stephanie Tai, *Three Asymmetries of Informed Environmental Decisionmaking*, 78 TEMP. L. REV. 659, 688 (2005).

^{139.} Gauna, *supra* note 50, at 36.

^{140.} See, e.g., Reissuance and Modification of Nationwide Permits, 86 Fed. Reg. 73522, 73527 (Dec. 27, 2021) (to be codified at 33 C.F.R. pt. 330).

^{141.} *Id*.

^{142.} Id.

Such a conclusion is belied in the Byhalia Pipeline example, where Byhalia targeted an environmental justice community precisely because it perceived them as "the path of least resistance" and because it believed that it could push the project through quickly with minimal public resistance through use of the Nationwide Permit process.¹⁴³ But at a larger level, the Corps's bald assertion of expertise is only possible at all because it takes place before any of the Nationwide Permits are applied to individual cases. By pushing the analysis back to the national level, the Nationwide Permit Program shuts out members of environmental justice communities, who are often ill-equipped to perceive or respond to a vague national policy years before it has any concrete effect on their community.¹⁴⁴ For example, when the Corps verified the Byhalia Pipeline pre-construction notification (PCN) in 2021, it was relying on a version of NWP 12 that had last been reissued in 2017, four years earlier. 145 It is unrealistic to expect community groups to dedicate time and energy to commenting on a vague national policy years before it has any concrete effect on them.

Finally, the structure of the Nationwide Permit Program makes it difficult for parties to seek judicial review of decisions made under the permits or of the Nationwide Permits themselves, which denies a fundamental aspect of procedural environmental justice. Because development under a Nationwide Permit may proceed without the warning provided by a public notice, affected parties are often unable to file a challenge before the damage is already done. Meanwhile, it is difficult to establish standing to challenge the permit as a whole because parties struggle to show that they have suffered a cognizable injury when they cannot identify an imminent use of the permit. He Permit 148 Finally, the opaque and complicated nature

When notice and comment procedures move from a local decision-making level to a national policy-making level, the limitations are even more severe. Many community residents and environmental justice organizations are busy addressing local problems, usually on shoestring budgets, and have little time or resources to peruse the Federal Register for proposed rules and statements interpreting legislative provisions.

Id.

^{143.} See Bratspies, supra note 31, at 1945 (quotation omitted).

^{144.} Gauna, supra note 50, at 66. Gauna discusses that:

^{145.} See Byhalia NWP 12 Verification Letter, supra note 108, at 1.

^{146.} See Skinner-Thompson, supra note 16, at 411 ("Enhancing public power within administrative governance, accordingly, must be tied to principles of judicial review—unless the public can better its odds in court, the intervention will have failed.").

^{147.} See, e.g., Nat'l Wildlife Fed'n v. U.S. Army Corps of Eng'rs, 170 F. Supp. 3d 6, 14 (D.D.C. 2016) (noting that plaintiffs were unable to identify any pending projects under NWP 13 because there was no public notice).

^{148.} Id. at 16 (finding that plaintiffs challenging NWP 13 lacked standing because they could not identify a concrete and redressable injury: "It is not hard to imagine a nearly identical case where the

of the Nationwide Permit Program makes it difficult for courts to grasp the nature of any individual verification decision. For example, the permits are authorized at a national level but implemented at the local and regional level by district engineers, who are empowered to "add conditions on a regional . . . basis to certain NWPs," making it difficult for a court to pin down what is regional and national policy.¹⁴⁹

Moreover, the Corps asserts that "[a]dditional safeguards" through use of a Nationwide Permit, such as allowing district engineers to "assert discretionary authority and require an individual permit for a specific activity" or adding "special conditions on a case-by-case basis," could avoid harming the environment and the public interest. This creates the false impression for courts that each PCN receives close environmental scrutiny that is roughly equivalent to the "hard look" provided to individual permits, and thus equally deserving of deference. The safeguards is a safeguards to the safeguards and thought a safeguards and the safeguards are safeguards and the safeguards are safeguards as allowing district engineers to "assert discretionary authority and require an individual permit for a specific activity or adding "special conditions on a case-by-case basis," could avoid harming the environment and the public interest. This creates the false impression for courts that each PCN receives close environmental scrutiny that is roughly equivalent to the "hard look" provided to individual permits, and thus equally deserving of deference.

The Corps's assertion that it closely reviews each PCN and considers whether utilization of the full process of an individual permit would be more appropriate is called into question by the District Commander's letter in the Byhalia Pipeline case. In that letter, the District Commander repeatedly asserted that, under the terms of NWP 12, the Corps "lacks jurisdiction" to consider alternative pipeline alignments or to require any changes to the location of individual stream crossings, even though it would have the power to consider those alternatives if it treated the pipeline as a whole under an individual permit. However, the Corps elected not to employ its discretion to convert the PCN into an individual permit because, according to the Corps's circular logic, "the aquatic impacts of the project are minimal, and verification of this action is consistent with the processing of similar PCNs across [the Corps]." 153

Notably, the "minimal" nature of the environmental impact depended, in several cases, not on the Corps's expert judgment but on the unverified assertions of the applicant. For example, regarding the question of whether any parts of the Byhalia Pipeline would be located near "a public water

plaintiffs have standing based on an identified and imminent general permit activity that, if constructed, threatens to cause a concrete and particularized injury").

^{149.} See NWP 12 DECISION DOCUMENT, supra note 4, at 5–6.

^{150.} Id.

^{151.} See, e.g., Ohio Valley Env't Coal. v. Bulen, 429 F.3d 493, 500–01 (4th Cir. 2005) (deferring to the Corps's judgment regarding the minimal impacts of a nationwide permit because "neither [Section 404] nor any other provision of the CWA specifies how the Corps must make the minimal-impact determinations, [or] the degree of certainty that must undergird them"); see also Ohio Valley Env't Coal. v. Aracoma Coal Co., 556 F.3d 177, 194, 199 (4th Cir. 2009).

^{152.} See Cohen Letter, supra note 106, at 2.

^{153.} Id. at 4.

supply intake" in violation of General Condition 7, the Corps explained that it was not obligated to verify, as a matter of fact, that the applicant's claim in the PCN would not violate Condition 7 because "where a general condition is written to not require a permit application to provide verifying documentation, [the Corps] relies on the PCN as sufficient evidence of compliance." 154

Courts may also be misled by the fact that the Corps reissues the Nationwide Permits every five years, which might lead courts to assume that the Corps will update the permits and resolve any issues or concerns raised in the interim. However, this is not the case. Many of the Nationwide Permits have barely changed since they were originally issued nearly 50 years ago. ¹⁵⁵ Moreover, the Corps has resisted any change to the Nationwide Permits, even under direct court order. For example, in 2020, a district court in Montana issued an injunction against NWP 12 on account of its failure to adequately consider the permit's impacts on endangered species during the reissuance of the permit, as required by Section 7 of the Endangered Species Act. ¹⁵⁶ However, the Corps has subsequently reissued NWP 12 and the rest of the Nationwide Permits in two separate actions, under both the Trump¹⁵⁷ and Biden Administrations, without providing the individualized Section 7 analysis ordered by the district court.

Given the lack of review and input at the national, regional, or individual level, the Nationwide Permit Program inevitably excludes the voices of environmental justice communities most effected by projects authorized under the Program. As Eileen Gauna explains: "Environmental regulation cannot proceed while blind to social realities, and social realities cannot be explored adequately without the assistance of those whose lives are most impacted by environmental risk." However, the Nationwide Permit Program has historically failed to make room for those voices or those social realities throughout the Program, not just in NWP 12.

^{154.} Id. at 2-3.

^{155.} Compare Permits for Activities in Navigable Waters or Ocean Waters, 40 Fed. Reg. 31320, 31322 (July 25, 1975) (to be codified at 33 C.F.R. pt. 209) (permitting bulkheads up to 500 feet in length in nearly the same language as the modern NWP 13) with NWP 13 DECISION DOCUMENT, supra note 25, at 1 (same).

See N. Plains Res. Council v. U.S. Army Corps of Eng'rs, 454 F. Supp. 3d 985, 993, 996–97 (D. Mon. 2020).

^{157.} See Reissuance and Modification of Nationwide Permits, 86 Fed. Reg. 2744, 2744 (Jan. 13, 2021) (to be codified at 33 C.F.R. pt. 330).

^{158.} See Reissuance and Modification of Nationwide Permits, 86 Fed. Reg. 73522, 73522 (Dec. 27, 2021) (to be codified at 33 C.F.R. pt. 330).

^{159.} Gauna, supra note 50, at 36.

B. Other Nationwide Permits, Including Nationwide Permit 13, Present Similar Environmental Justice Concerns to Nationwide Permit 12

Given the general problems with the Nationwide Permit Program discussed above, it is not surprising that several other Nationwide Permits threaten environmental justice in the same way as NWP 12, and are equally deserving of review by the Corps. Another particularly controversial Nationwide Permit is NWP 13, which authorizes the construction of coastal armoring, a category which includes seawalls, bulkheads, and revetments. ¹⁶⁰

NWP 13 permits the construction of a bulkhead of up to 500 feet in length, or up to 1,000 feet if the District Engineer determines that the project will have "minimal adverse environmental effects." Remarkably, for projects less than 500-feet long, there is no requirement to submit a PCN to the Corps; instead, the applicant may simply self-determine that the project meets the NWP 13 criteria and proceed with construction. ¹⁶²

In recent years, NWP 13 has faced sustained criticism and legal challenges due to the growing and overwhelming scientific evidence that it permits the development of coastal armoring projects that have significant impacts on the environment. A 500-foot bulkhead is a massive project— 500 feet is well over the length of a football field—and significantly disrupts the local shoreline ecosystem. 164 Numerous scientific studies have shown that hardened coastal armoring: (1) directs the erosive force of waves to the sides and bottom of the armoring, increasing erosion near the bulkhead and scouring out the seafloor beneath the armoring; (2) destroys intertidal habitat essential for the survival of some species; (3) blocks species such as sea turtles from crossing from ocean to shoreline habitats; and (4) prevents the landward migration of coastal and wetland habitat, ultimately destroying the beach beneath the bulkhead. 165 As these studies show, the damaging coastal armoring projects authorized under NWP 13 cause impacts that have more than a minimal impact on the environment, both on their own and cumulatively, putting NWP 13 in direct contravention of the statutory requirements for the Nationwide Permit Program.

^{160.} See NWP 13 DECISION DOCUMENT, supra note 25, at 1.

^{161.} Id.

^{162.} Id. at 2.

^{163.} See, e.g., Nat'l Wildlife Fed'n v. U.S. Army Corps of Eng'rs, 170 F. Supp. 3d 6, 10 (D.D.C. 2016) (challenging NWP 13); see also Brandon, A Wall Impervious to Facts, supra note 24, at 557, 560, 571–72.

^{164.} Brandon, A Wall Impervious to Facts, supra note 24, at 571, 573-75.

^{165.} Id. at 572-74 (collecting scientific studies).

However, there are also a growing number of scientific and economic studies showing that freely permitted coastal armoring poses significant environmental justice concerns as well. Building bulkheads is expensive, and generally only wealthier property owners will be able to afford to make use of NWP 13; indeed, studies have shown that one of the primary determinants of whether a property adopts armoring is the wealth of the landowner and the value of the property. The problem is that while a bulkhead may at least temporarily reduce the risk of flooding and erosion on an individual property, it does not eliminate the erosive force of the waves; instead, it redirects the waves to the sides of the bulkhead. The area result, erosion is heightened on neighboring properties. One study has found that a bulkhead on one property may decrease neighboring property values by as much as 8%. In many cases, those neighbors build their own armoring in response, creating a chain reaction that multiplies the dispersive effect of the armoring down the coastline.

This effect is not merely local: studies have shown that construction of armoring in one community can increase erosion in other communities even at a distance.¹⁷⁰ For example, one study showed that using hard armoring to

^{166.} See, e.g., Nicole E. Peterson et al., Socioeconomic and Environmental Predictors of Estuarine Shoreline Hard Armoring, SCI. REPS., Nov. 8, 2019, at 1, 7 ("Estuarine parcels with valuable capital assets are more likely to have shoreline armoring.... [L]arger parcels may be more commonly held by wealthier landowners with the ability to afford hard armoring."); see also Melissa K. Hill et al., Coastal Armoring and Sea Turtles: Beachfront Homeowners' Opinions and Intent, 47 COASTAL MGMT. 594, 607 (2019) (finding positive association between higher assessed property values and coastal armoring).

^{167.} See Peterson et al., supra note 166, at 7.

^{168.} Steven J. Dundas & David J. Lewis, Estimating Option Values and Spillover Damages for Coastal Protection: Evidence from Oregon's Planning Goal 18, 7 J. ASS'N ENV'T & RES. ECONOMISTS 519, 547 (2020).

^{169.} See Peterson et al., supra note 166, at 7 ("The neighbor armoring variable has notably high influence on the likelihood of hard armoring; if a given parcel is adjacent to a parcel with hard armoring, the probability of the initial parcel having hard armoring increases by 18%."); see also Hill et al., supra note 166, at 607 ("For property owners that are intending to, or have already installed coastal armoring on their property, the survey showed that the presence of a neighbor already having coastal armoring proved the most influential factor on this decision.").

^{170.} See, e.g., Sathya Gopalakrishnan et al., Economics of Coastal Erosion and Adaptation to Sea Level Rise, 8 ANN. REV. RES. ECON. 119, 123–24 (2016). Gopalakrishnan highlights how:

[[]C]oastal management decisions in one location can create spatial externalities that affect geophysical conditions and the flow of economic benefits in other locations along the coast.... There is also increasing evidence that stabilization of an eroding shoreline—either through beach nourishment or hard structures—can affect long-term rates of shoreline change over surprisingly long distances up to tens of kilometers.

Id.; see also Kenneth Ells & A. Brad Murray, Long-Term, Non-Local Coastline Responses to Local Shoreline Stabilization, GEOPHYSICAL RSCH. LETTERS, Oct. 2, 2012, at 1, 6 ("A town located downdrift

protect valuable property in the San Francisco Bay Area would push erosion onto communities with lower property values. ¹⁷¹ These areas, which are more likely to be populated by minority or other socially vulnerable groups, are already subject to higher flood risk, an effect that will only be magnified by further armoring in wealthier neighboring communities. ¹⁷² Moreover, all of these effects will be exacerbated by the sea level rise associated with climate change, which will increase both the rate of public and private armoring in the communities that can afford it, and the rate of erosion in the communities that cannot. ¹⁷³

Thus, the hard armoring permitted by NWP 13 allows individual wealthy landowners to externalize the costs of erosion and sea level rise onto socially vulnerable communities. Notably, the increased risk of erosion and flooding caused by hard armoring affects all the residents of the community, not just the individual landowners, who suffer from the impact of flooding,

of a community protecting their shore with a seawall, for example, may cease to benefit from a convergence of sediment flux and thus become forced to alter their own stabilization behaviors.").

171. Michelle A. Hummel et al., Economic Evaluation of Sea-Level Rise Adaptation Strongly Influenced by Hydrodynamic Feedbacks, 118 PROC. NAT'L ACAD. OF SCIS., July 12, 2021, at 1, 6. The article discussed:

Regional externalities resulting from hydrodynamic feedbacks are an important consideration when evaluating protection strategies in highly developed coastal embayments. Although there are large potential benefits from avoided flood damage behind protective infrastructure in the San Francisco Bay Area, the analysis shows that these benefits can come at a cost to other shoreline communities, both nearby and in other parts of the bay.

Id.

172. See EPA, CLIMATE CHANGE AND SOCIAL VULNERABILITY, supra note 34, at 56 (noting "[c]limate change, including current and future SLR, is expected to exacerbate many long-standing inequities that affect socially and economically marginalized groups in the coastal zone").

173. *Id.* ("In particular, cases where decisions are made based on whether the benefits of protecting vulnerable property outweigh the cost of the adaptation measures can result in the exclusion of areas with lower market values, which is where socially vulnerable communities are more likely to reside."); see also Donald T. Hornstein, *Public Investment in Climate Resiliency: Lessons from the Law and Economics of Natural Disasters*, 49 ECOLOGY L.Q. 137, 184–85 (2022). Hornstein explains:

[A] community's ability to finance proactive resiliency measures is directly tied to the strength of its tax base and indirectly to the administrative capabilities that a greater tax base can support... and, [quoting a commenter regarding coastal armoring who] "couldn't think of a single project that primarily benefited people of color."

including loss of personal property, risk of physical harm, 174 and inability to travel to work for income. 175

Moreover, as with every Nationwide Permit, NWP 13 does not provide opportunities for public comment, meaning that if a community wants to protest the construction of hard armoring in the region, they receive no notice and have no opportunity to provide the kind of specialized local knowledge about how the armoring will harm their community—which is essential for environmental justice. As a result, affected communities are often unaware of the armoring until it is already built. Exacerbating the problem is the fact that NWP 13 does not require a PCN for armoring projects less than 500 feet in length. Without such notice, even the Corps has no way of knowing how many projects are authorized under NWP 13 or how to review individual applications that might have outsized effects on the environment or socially vulnerable communities.

By granting a free pass to large armoring projects that are scientifically demonstrated to have significant negative effects on the environment and which harm the public interest, the Corps has unlawfully abdicated its statutory responsibility under the Clean Water Act to protect and preserve the nation's shorelines and wetlands.¹⁷⁷ In doing so, the Corps has effectively handed the responsibility for managing seawalls and bulkheads over to the states, which have the option of imposing their own restrictions on coastal development. However, these restrictions are patchy, inconsistent, and rarely show any regional coordination.¹⁷⁸

Some states, like California, regulate coastal armoring strictly and comprehensively, so that NWP 13 has little relevance in state permitting

Residents of low-lying affordable housing in the coastal zone tend to be low income individuals living in old and poor-quality structures, which are especially vulnerable to coastal floods. Low income individuals are also more likely to be adversely affected as they have fewer financial resources to protect against and recover from flooding damage or loss of property.

^{174.} See EPA, CLIMATE CHANGE AND SOCIAL VULNERABILITY, supra note 34, at 56. The report emphasized:

Id. (footnotes omitted).

^{175.} See id. at 46 (explaining "[i]ncreased travel times [due to periodic flooding] may reduce the accessibility of employment or social engagement, exacerbating trends of reduced proximity to job opportunities experienced by minority populations").

^{176.} NWP 13 DECISION DOCUMENT, supra note 25, at 2.

^{177.} See 33 U.S.C. § 1251(a) ("The objective of [the CWA] is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.").

^{178.} For two excellent analyses of coastal management legislation at the state level, see Shana Jones & J. Scott Pippin, *Stabilizing the Edge: Southeastern and Mid-Atlantic Shorescapes Facing Sea-Level Rise*, 46 COLUM. J. ENV'T L. 293, 369 (2021) and Julia M. Shelburne, *Shore Protection for a Sure Tomorrow: Evaluating Coastal Management Laws in Seven Southeastern States*, 10 SEA GRANT L. & POL'Y J. 103, 103 (2020).

decisions. 179 However, many other states, especially in the Southeast, have more relaxed regulations, such that NWP 13 functions as a significant part of the permitting process, especially in estuarine wetlands, which tend to receive less state-regulatory attention than ocean shorelines. 180 In addition, state decision makers are naturally more susceptible to local politics and pressure, and commentators have noted a tendency to favor the interests of wealthy individual property owners over the larger environmental or public interest concerns when it comes to decisions regarding armoring permits. 181 Indeed, even in states where there is stricter regulation of armoring, there has been a distinct pattern of backsliding on regulatory restrictions as sea level rise puts more and more private property at risk of flooding: both North Carolina and South Carolina have taken steps in recent years to permit armoring of expensive beachfront property despite their strict state statutes limiting such development. 182 The inevitable result of these compromises is that the states favor the interests of wealthier landowners over those of poorer communities and of property renters.

The Corps's unlawful abdication of its responsibility to oversee the permitting of seawalls and bulkheads in the waters of the United States means that there is no authority that considers the effects of coastal armoring at a regional level across state lines. Especially in the face of sea level rise—which will drive many landowners and communities to pursue armoring to mitigate flooding risks—taking a region-wide perspective will be essential to considering the full risk of externalities from individual armoring decisions and coordinating flood-mitigation programs so that they benefit the public broadly, not just wealthy landowners. ¹⁸³ However, by leaving decisions about armoring entirely up to private landowners, the Corps all but guarantees that armoring will happen in an uncoordinated and unsupervised fashion such that minority and socially vulnerable communities will suffer the most pronounced effects of climate change.

^{179.} See, e.g., CAL. NAT. RES. AGENCY, CALIFORNIA COASTAL COMMISSION SEA LEVEL RISE POLICY GUIDANCE 164, 167 (2018) (discussing sections of California's Coastal Act and its strict regulation of seawalls and coastal armoring).

^{180.} See Jones & Pippin, supra note 178, at 300 (explaining how state regulation of estuarine wetlands is often less dynamic than regulation of coastal shorelines).

^{181.} *Id.* at 381 ("[P]ublic interest values, as important as they are, are often eclipsed by strong sympathy for and bias towards individual private property owners, particularly when a structure's destruction is at stake.").

^{182.} *Id.* at 373 (discussing how both North Carolina and South Carolina have taken steps away from a policy of retreat from rising seas and have moved towards fixed coastal baselines that "freeze[] in time what had been a more dynamic approach").

^{183.} See, e.g., Hummel et al., supra note 171, at 8 (emphasizing the need for "a coordinated, regional focus across jurisdictions" for managing sea level rise to avoid inequities).

More pointedly, the fact that the Corps does not even require the submission of a PCN before constructing a bulkhead up to 500 feet in length means that the Corps is not gathering essential information on where NWP 13 is being utilized. 184 Requiring a PCN for the use of NWP 13 would have a minimal administrative cost for the Corps, which is not even obligated to respond to a PCN. 185 However, data about the location, size, and type of armoring along the coastline would be invaluable for coastal planners and researchers developing strategies for adapting to sea level rise and working to understand the impact of armoring on coastal ecosystems and communities.¹⁸⁶ The use of such data in Geographic Information Systems (GIS) technology has revolutionized environmental management in recent years. 187 In particular, GIS technology has been widely used to visualize and identify environmental justice issues with new developments, and to facilitate community litigation against environmental injustice. 188 It is inexplicable and arbitrary that the Corps does not collect this easily available spatial data, especially in regard to such an important Nationwide Permit.

C. Reforming the Nationwide Permit Program to Address Social Justice Concerns

As previously discussed in Parts A and B, the Corps's Nationwide Permit Program has several features that fundamentally threaten environmental justice values. Most notably: (1) Nationwide Permits deny affected communities the opportunity to engage in the planning process and include their vital place-based knowledge and concerns to regulators before a final decision is made; (2) they fail to consider alternatives to the proposed project that might meet the project needs while causing fewer social and environmental harms; and (3) they are structured in a fashion that makes them difficult to challenge in court, a vital necessity to allow for

^{184.} See Addison & Burns, supra note 82, at 637–38 (explaining how lack of information on the use of NWPs means "[w]e don't really know what the impacts of the NWP's are" (citation omitted)).

^{185. 33} C.F.R. § 330.1(e)(1) (2022).

^{186.} See Hummel et al., supra note 171, at 8 ("[A]ugmenting information about physical and economic externalities with estimates of associated human impacts can provide an additional means through which to evaluate proposed shoreline adaptation projects and to inform more equitable risk reduction.").

^{187.} See Dave Owen, Mapping, Modeling, and the Fragmentation of Environmental Law, 1 UTAH L. REV. 219, 219, 244–45 (2013) (discussing how "spatial analysis can change the problems environmental law addresses, the regulatory instruments environmental law uses, the entities law empowers to address those problems, and the methodologies of environmental law research").

^{188.} See, e.g., Charles Lee, A Game Changer in the Making? Lessons from States Advancing Environmental Justice Through Mapping and Cumulative Impact Strategies, 50 ENV'T. L. REP. 10203, 10213 (2020).

environmental justice. However, despite these flaws, there is some real value to the Nationwide Permit Program. There are some common development activities on our coasts and wetlands that genuinely have minimal environmental and social impact in most cases, ¹⁸⁹ and a streamlined permitting process helps to reduce administrative costs for both the agency and permit applicants. ¹⁹⁰

This Part will briefly consider several regulatory steps the Corps could take to address some of the environmental justice concerns with the Nationwide Permit Program. The first and most obvious is that the Corps should carefully re-evaluate its entire slate of Nationwide Permits to determine whether there are types of projects that cause more than minimal environmental harm, or which frequently burden minority and socially vulnerable communities. The seawalls, bulkheads, and oil and gas pipelines permitted under NWP 12 and NWP 13 clearly fall into this category and should be revoked entirely. However, other Nationwide Permits may warrant similar review and revocation as well, such as permits for other types of utility lines and pipelines, ¹⁹¹ mining related activities, ¹⁹² agricultural activities, ¹⁹³ and linear transportation projects. ¹⁹⁴

For the Nationwide Permits that do not require revocation, the Corps should require a PCN for every Nationwide Permit that has the potential to cause anything more than a *de minimis* environmental impact. PCNs place a lesser administrative demand on the Corps than an individual permit because they do not necessarily require a response from the agency. ¹⁹⁵ But PCNs provide a treasure trove of useful data about where and how a Nationwide Permit is being utilized, ¹⁹⁶ which can help to identify situations where a

^{189.} See, e.g., ARMY CORPS OF ENG'RS, DECISION DOCUMENT: NATIONWIDE PERMIT 10, at 1 (2022) (stating "[n]on-commercial, single-boat, mooring buoys" must have "no . . . more than a minimal adverse effect").

^{190.} See CLAUDIA COPELAND, CONG. RSCH. SERV., 97-223, THE ARMY CORPS OF ENGINEERS NATIONWIDE PERMITS PROGRAM: ISSUES AND REGULATORY DEVELOPMENTS 2 (2012) ("General permits, including nationwide permits, are a key means by which the Corps seeks to minimize the burden and delay of its regulatory program").

^{191.} See Army Corps of Eng'rs, Nationwide Permit 57 — Electronic Utility Line and Telecommunications Activities, at 1 (2021); Army Corps of Eng'rs, Nationwide Permit 58 — Utility Line Activities for Water and Other Substances, at 1 (2021).

^{192.} See Army Corps of Eng'rs, Nationwide Permit 21 – Surface Coal Mining Activities, at 1 (2021); Army Corps of Eng'rs, Nationwide Permit 44 – Mining Activities, at 1 (2021); Army Corps of Eng'rs, Nationwide Permit 49 – Coal Remining Activities, at 1 (2022); Army Corps of Eng'rs, Decision Document: Nationwide Permit 50, at 1 (2021).

^{193.} See Army Corps of Eng'rs, Decision Document: Nationwide Permit 40, at 1 (2017).

^{194.} See Army Corps of Eng'rs, Decision Document: Nationwide Permit 14, at 1 (2021).

^{195. 33} C.F.R. § 330.1(e)(1) (2022).

^{196.} See, e.g., NWP 12 DECISION DOCUMENT, supra note 4, at 35 (explaining the Corps maintains a "centralized database that tracks NWP verifications issued" and that "[f]rom that data, the

permit may be having larger cumulative impacts than expected. In addition, all PCNs should be publicly available and the data from the PCNs should be incorporated into publicly available government GIS so concerned citizens can understand how the permit is being applied.

Moreover, as part of the PCN process, both applicants and the Corps should be required to make use of publicly available screening tools that help to identify whether a project may harm a community that is already overburdened by pollution. These state and federal tools—such as the Environmental Protection Agency's EJScreen, 197 the Council on Environmental Quality's Climate and Economic Justice Screening Tool, 198 or California's CalEnviroScreen 199—are not perfect, 200 but can be helpful for identifying potential conflicts early in the decision-making process. Where the PCN process identifies a potential environmental justice concern, the Corps should take steps to acquire more on-the-ground data regarding potential environmental justice impacts in the community.

Finally, the Corps should include environmental justice as one of the core considerations in the regulatory public interest analysis that guides both individual and Nationwide Permits under Section 404. While the existing public interest factors include several terms that broadly allow for consideration of environmental justice issues—most notably the requirement that the Corps consider "the needs and welfare of the people" is important for the Corps to move the question of environmental justice to the center of its analysis. At present, for example, there is no explicit regulatory requirement that the Corps consider any proposed Section 404 permits, whether individual or general permits, within the larger context of historical environmental injustice that has disproportionately affected minority and socially vulnerable communities, even though President Biden's Executive

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Corps was able to estimate the number of NWP activities that were likely associated with oil or natural gas pipelines, electric and telecommunications lines, and utility lines for water and other substances").

^{197.} EJScreen: Environmental Justice Screening and Mapping Tool, U.S. EPA, https://www.epa.gov/ejscreen (last updated Nov. 14, 2023).

^{198.} Explore the Map, COUNCIL ON ENV'T QUALITY: CLIMATE & ECON. JUST. SCREENING TOOL, https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5 (last visited Dec. 2, 2023, 2023).

^{199.} *CalEnviroScreen*, CAL. OFF. OF ENV'T HEALTH HAZARD ASSESSMENT, https://oehha.ca.gov/calenviroscreen (last visited Dec 2, 2023).

^{200.} See Purposes and Uses of EJScreen, U.S. EPA, https://www.epa.gov/ejscreen/purposes-and-uses-ejscreen (last updated Jan. 30, 2023) ("Screening is a useful first step in understanding or highlighting locations that may be candidates for further review. However, it is essential to remember that screening-level results . . . do not, by themselves, determine the existence or absence of environmental justice concerns in a given location").

^{201. 33} C.F.R. § 320.4(a)(1) (2022).

Order specifically directs agencies to "address the disproportionately high and adverse . . . cumulative impacts on disadvantaged communities." ²⁰²

One of the fundamental challenges in addressing environmental justice is that patterns of historical injustice in the siting of polluting infrastructure in disadvantaged communities results in a reality where placing future polluting projects in those communities often appears to be a "rational" course of action from a cost-benefit perspective because the new project will connect with existing infrastructure, which in turn has lowered the property values in the area compared with wealthier areas that have not been historically burdened.²⁰³ Unless the Corps has a clear regulatory requirement to consider patterns of historical injustice as part of any permitting decision, and to prioritize avoiding their perpetuation, it is certain to continue to perpetuate the status quo of environmental injustice. Thus, the Corps should make environmental justice central to its public interest analysis and prohibit any project that will disproportionately benefit wealthier and white communities while imposing "disproportionately adverse . . . cumulative impacts on disadvantaged communities."²⁰⁴

CONCLUSION

Minor revisions to NWP 12 will not solve the larger environmental justice problems raised by NWP 12 itself or the Nationwide Permit Program as a whole. The Corps has pushed the Nationwide Permit Program far beyond what Congress intended and, through permits such as NWP 12 and NWP 13, routinely authorizes activities that have a potentially devastating effect on the environment and environmental justice communities with little or no administrative review. These permits must be eliminated, not merely revised. Regarding the remainder of the Nationwide Permit Program, the Corps should thoroughly and individually review each permit to determine whether it genuinely meets the statutory standard of authorizing only those activities that have minimal impact on the environment and the public interest either individually or cumulatively. In doing so, the Corps should actively seek out the input of the communities of color and other socially vulnerable communities who are most affected by the permits and develop regulatory mechanisms to guarantee that no projects authorized under the program will have "disproportionately high and adverse . . . cumulative impacts on disadvantaged communities."205

^{202.} Exec. Order No. 14008, 86 Fed. Reg. 7619, 7629 (Jan. 27, 2021).

^{203.} See Gauna, supra note 50, at 41-42.

^{204.} Exec. Order No. 14008, 86 Fed. Reg. at 7629.

^{205.} Id.