Sacoby M. Wilson, PhD, MS
Director, Center for Engagement, Environmental Justice, and Health INPowering Communities (CEEJH INC)

Dear Environmental Protection Agency (EPA),

We are writing in response to the Federal Register notice at Docket ID No. EPA-HQ-OLEM-2024-0360. The *Interim Framework for Advancing Consideration of Cumulative Impacts* provides EPA with a foundation to incorporate analysis and consideration of cumulative impacts (CI) into programmatic work, with the goal of achieving results that improve peoples' lives.

Background. The history of industry in this country jeopardizes the quality of life.[1] In fact, a person's zip code is a stronger predictor of health than their genetic code, and being on the "wrong side of the tracks" plays a strong role in the environmental health disparities we observe to this day.[2] There have been multiple studies finding that the history of planning and development has built housing, schools, and jobs in spaces that lead to cancerous and deadly outcomes.[3,4] Now when these same practices are conducted for generations, CIs become more apparent.[5] For example, the United Church of Christ's (UCC) report, "Toxic Waste and Race in the United States" found that racial composition of a community was found to be the single variable best able to explain the existence or non-existence of commercial hazardous waste facilities in a given community area.

As the United States prepares for a more sustainable and resilient future it is imperative that ecologically conscious decisions are made. The Office of Federal Activities stated that "federal agencies have the responsibility of determining how and the extent to which CIs are assessed in National Environmental Policy Act (NEPA) documents and documenting that effort".[6] Former President Joe Biden and his administration enacted unprecedented and sweeping environmental justice (EJ) policy reforms, including an expansion of President Clinton's Executive Order (EO). This expansion established the "Justice40 Initiative" aimed at ensuring that marginalized or disadvantaged communities received at least 40% of federal benefits relating to the environment, housing, economic development, and other areas. Additionally, the expansion required federal agencies to develop equity action plans to detail their efforts to advance DEI to the agencies' internal and external activities. After taking office in January 2025, the Trump Administration announced plans to "terminate" "unspent" IRA funds; Project 2025 outlines plans to repeal, scale back, or redirect federal climate funding.[7]

Current Strengths of CI Framework. The framework explicitly acknowledges that pollution, socioeconomic disadvantage, lack of greenspace, and health vulnerabilities tend to be spatially clustered in historically overburdened communities. It also aligns with EO 14096, emphasizing environmental justice and addressing disproportionate adverse health and environmental effects. The current framework establishes important points regarding community participation and working collaboratively, ensuring that lived experiences guide the assessment and decision-making process. It encourages participatory science, co-production of evidence, and integrating cultural knowledge. As it stands, the framework moves beyond traditional risk assessment to include both chemical and nonchemical stressors, such as social determinants of health, climate change vulnerabilities, and access to environmental benefits. Unlike modern antagonists of the EJ movement, the framework does a good job of recognizing cumulative impacts as lifelong exposures rather than isolated incidents, considering historic and structural inequalities. The framework focuses on revitalization, which is essential for combatting CIs within community solutions. The Community-Scale and Action Planning section discusses land/neighborhood revitalization strategies, focusing on identifying the positive and negative public health impacts

[1] Jackson, T. (2013). Material concerns: Pollution, profit and quality of life. Routledge.
[2] Do, D. P., Finch, B. K., Basurto-Davila, R., Bird, C., Escarce, J., & Lurie, N. (2008). Does place explain racial health disparities? Quantifying the contribution of residential context to the Black/white health gap in the United States. Social science & medicine, 67(8), 1258-1268.
[3] Sze, J. (2006). Noxious New York: The racial politics of urban health and environmental justice. MIT press.
[4] Bullard, R. (2005). Environmental justice in the 21st century. Debating the earth, 3222-3356.
[5] Bakkensen, L. A., Ma, L., Muehlenbachs, L., & Benitez, L. (2024). Cumulative impacts in environmental justice: Insights from economics and policy. Regional Science and Urban Economics, 107, 103993.
[6] EPA. (1999). Consideration Of Cumulative Impacts In EPA Review of NEPA Documents . Environmental Protection Agency. https://www.epa.gov/sites/default/files/2014-08/documents/cumulative.pdf
[7] Harvard Law School. (2025, January 17). Executive and Congressional control mechanisms over IRA and IIJA funding. Environmental and Energy Law Program. https://eelp.law.harvard.edu/executive-and-congressional-control-mechanisms-over-ira-and-iija-funding/

essential to deducing what form of programming best fits the needs of the community (e.g., housing, greenspace, crime, safety, employment).

Weaknesses of CI Framework. While the framework acknowledges the historic impact of polluting industries it does not expand on the multiple stressors that further exacerbate communities' opportunity to be sustainable and resilient. While the framework also prioritized community engagement, it should be noted that engagement must be multifaceted. Solely receiving testimony and acquiring feedback from residents is only the first step. Programs that develop employment, education and creative opportunities further embedded residents in revitalizing their communities while also combating cumulative impacts. The framework mentions that implementation depends on available time, budget, legal constraints, and statutory requirements, potentially limiting its application and downplaying the urgency of the EJ movement. While the framework provides guidance for assessments, there is less clarity on enforcement mechanisms and regulatory consequences for non-compliance, presenting concerns regarding retributional justice. Under the recent EO, several EJSM tools have been taken down. These include EPA EJSCREEN and The Climate and Economic Justice Screening Tool (CEJST).[8] Developed under the Biden administration, despite not including race as an indicator, the tool helped federal agencies identify disadvantaged communities based on eight categories: climate change, clean energy and energy efficiency, clean transit, affordable and sustainable housing, reduction and remediation of legacy pollution, critical clean water and wastewater infrastructure, health burdens, and training and workforce development. Shortly after President Trump's inauguration, access to the CEJST was removed from federal websites. In response, a coalition of data scientists from the Public Environmental Data Project restored a functional, albeit unofficial, version of the tool on an independent domain to ensure continued public access. Likewise, EPA EJSCREEN was used for the agency to screen for areas that may be candidates for additional consideration, analysis or outreach as EPA develops programs, policies, and interventions. Environmental coalitions have been data mining to replicate the tool and host it on a backup server. In addition to EJSM tools, the rescission also terminates the Justice40 Initiative altogether, as well as the EJ Scorecard to hold federal agencies accountable for their commitment to environmental justice. Furthermore, the framework frequently incorporates revitalization. In the action planning process, however, remediation is not mentioned. Remediation also provides an opportunity to educate and possibly partner with community-based organizations (CBOs) to test their homes. An ecosystem of environmental quality testing, whether it is air, water, or soil, allows for a comprehensive assessment to best inform a revitalization plan.

A relatively small number of states have CI frameworks. Following are summaries of selected state tools that contain domains and indicators that are specific to their environmental riskscapes. These tools were developed with community input and voices from public comment periods and in-person community listening sessions, further highlighting the role of community-driven decision making within the lens of addressing cumulative impacts through first-hand lived experiences. This is not an exhaustive listing of tools that federal and state agencies can use and the brief does not cover other types of CI surveillance that can be important to reducing environmental health disparities.

- **California**: CalEnviroScreen. The tool was used to determine that the odds of living in one of the 10% most disadvantaged zip codes were 6.2, 5.8, 1.9, 1.8, and 1.6 times greater for Hispanics, African Americans, Native Americans, Asian/Pacific Islanders, and other or multiracial individuals, respectively, than for non-Hispanic Whites.[9] Environmental hazards were more regressively distributed with respect to race/ethnicity than poverty, with pesticide use and toxic chemical releases being the most unequal, showcasing the granularity of CalEnviroScreen to California's riskscape. California defined disadvantaged communities as areas representing the 25% highest scoring census tracts in CalEnviroScreen 4.0, census tracts previously identified in the top 25%

[8] Harvard Law School. (2025, January 20). Rollback: Trump rescinded Biden's Executive Order 14008 establishing Justice40 Initiative. Environmental and Energy Law Program. https://eelp.law.harvard.edu/tracker/rollback-trump-rescinded-bidens-executive-order-14008-that-established-justice40-initiative/
[9] Cushing, L., Faust, J., August, L. M., Cendak, R., Wieland, W., & Alexeeff, G. (2015). Racial/ethnic disparities in cumulative environmental health impacts in California: evidence from a statewide environmental justice screening tool (CalEnviroScreen 1.1). American journal of public health, 105(11), 2341-2348.

in CalEnviroScreen 3.0, census tracts with high amounts of pollution and low populations, and federally recognized tribal areas.[10]

- **Maryland**: MD EJSCREEN. During the 2025 Legislative Session, Delegate Jazz Lewis introduced the Cumulative Harms to Environmental Restoration For Improving Shared Health (CHERISH Our Communities) Act.[11] MD EJSCREEN was used to determine that the overall MD EJSCORE was a statistically significant parameter toward estimating health outcomes in Baltimore, Maryland.[12] This cements MD EJSCREEN as an effective tool in capturing the intersectionality between environmental burden, vulnerable population, and health disparities. Based on these findings, Maryland can adopt standards, such as restricting permits for polluting facilities (implementation of CHERISH Act), encouraging uptake of electric vehicles, and promoting clean energy to ameliorate air quality in disadvantaged communities, particularly in Baltimore. This framework can be used at the federal level, as well for other states.
- **New York:** The Climate Leadership and Community Protection Act (Climate Act) requires the identification and consideration of disadvantaged communities (DACs) in implementing the Climate Act and other State-led actions.[13] A requirement of 35%—with a goal of 40%—of the benefits from the State's investments must be directed to DACs and State agencies need to consider impacts on DACs in decision making. The New York State Energy Research and Development Authority created a Disadvantaged Communities Mapper, where the Climate Justice Workgroup used 45 indicators to identify 35% of New York as DACs, presenting a case of CIs. Domains include: 1) Race and Ethnicity; 2) Income; 3) Health Outcomes and Sensitivities; and 4) Housing Mobility & Communications
- **New Jersey:** In 2023, Governor Murphy announced the final adoption of regulations to implement New Jersey's EJ Law. This requires enhanced upfront community engagement before facilities are proposed in the state's overburdened communities. Second, using community-level environmental and public health data available through the Department of Environmental Protection (DEP's) Environmental Justice Mapping, Assessment and Protection (EJMAP) tool, the regulations direct permit applicants to avoid and minimize environmental and public health stressors and enable the DEP to establish permit conditions that better protect vulnerable communities.[14]
- **Massachusetts:** Massachusetts Department of Environmental Protection (MassDEP) promulgated cumulative impact analysis regulations in March 2024.[15] It utilizes a publicly accessible Cumulative Impact Analysis Mapping Tool at the census block group resolution for the assessment of existing community conditions.[16] It helps applicants seeking permits to gather this information in the areas surrounding their proposed project and present the data in their CIA report. MassDEP also developed an Air Toxics Risk Screening spreadsheet tool that can be used to estimate cumulative air toxics risks from proposed projects.
- **Minnesota:** The state's 2024 CIA bill requires a permit applicant or permit holder to conduct a CIA under this section must hold at least two public meetings in the environmental justice area impacted by the facility before the commissioner issues or denies a permit. Based on the bill, if a facility's pollution contributions are found to have a "substantial adverse impact" on the community, two paths forward exist: the permit can be denied, or the facility can enter into a community benefit agreement (CBA). Other states should take the concept of CBAs into account, which are strategic methods of community development and economic justice. This can include commitments to hire directly from a community, contributions to economic trust funds, and local workforce training guarantees.

[10] OEHHA. (2023, May 1). CalEnviroScreen 4.0. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40
[11] Clean Water Action. (2025). CHERISH Act. https://cleanwater.org/sites/default/files/2025-01/CHERISH%20Act%202025%20Factsheet_English.pdf
[12] Ravichandran, V., Archer, J. M., Aiyar, L., Thompson, J., Teirstein, M., Shah, A., ... & Wilson, S. M. (2024). Utilization of MD EJSCREEN to Assess Health Outcomes in Baltimore, Maryland. Environmental Justice.
[13] NYSERDA. (2022). The Climate Leadership and Community Protection Act. https://climate.ny.gov/resources/disadvantaged-communities-criteria/
[14] NJDEP. (n.d.). Environmental Justice, Mapping, Assessment, and Protection Tool (EJMAP). New Jersey Department of Environmental Protection. https://experience.arcgis.com/experience/548632a2351b41b8a0443cfc3a9f4ef6
[15] The Commonwealth of Massachusetts. (2024, April 5). MassDEP finalizes cumulative impact analysis regulations for Air Permits. https://www.bdlaw.com/publications/massdep-finalizes-cumulative-impact-analysis-regulations-for-air-permits/
[16] MassDEP. (n.d.). Cumulative Impact Analysis Mapping Tool . ArcGIS web application. https://mass-eoeea.maps.arcgis.com/apps/webappviewer/index.html?id=5a876b759df24d10b4a9e9e5b3921310#

- **Colorado:** During the 2024 Legislative Session, HB24-1338 was enacted to create the office of environmental justice in the Colorado Department of Public Health and Environment (CDPHE) and requires the office to oversee a process to develop at least 2 environmental equity and cumulative impact analyses for specific geographic locations in the state.[17] Since Jan 2025, the Division of Administration in CDPHE has consulted a petroleum refinery regulation expert to examine whether a rule establishing petroleum refinery control regulations should be adopted by the air quality control commission and examine other regulatory or nonregulatory measures performed. $1,829,087 is appropriated from the general fund to CDPHE for implementation of HB24-1338, highlighting the importance of allocated funding to conduct effective CIAs.

We have listed several recommendations to incorporate analysis and consideration of CIs into their work, within the bounds of the new administration's plan, with the goal of achieving results that improve health and quality of life in America's communities:

1. **A framework for the EPA to consider CIs is necessary to ensure the protection and preservation of communities who are the fabric of our society.** Due to the lack of accessible information and inadequate representation, many communities are suffering disproportionately from decades of pollution.[18] It must also be considered that due to the history of inequitable planning, zoning, and development in this country, the exclusionary practices of placing unwanted industries are in proximity to lower-income communities of color.
2. **Account for both legacy and current sources of pollution and intergenerational harm.** Many of our communities continue to grapple with the lasting effects of industrial pollution that took place decades ago. Pollutants like lead, mercury, asbestos, and chemicals such as polychlorinated biphenyls (PCBs) have left lasting scars on ecosystems, human health, and community well-being. A North Charleston, South Carolina study found that residential arsenic, lead, and mercury levels were elevated, with arsenic levels being more than U.S. Environmental Protection Agency (EPA) residential screening levels (RSLs) for health risks. This is a predominantly African American community already overburdened by Superfund sites, brownfields, leaking underground storage tanks, toxic release inventory facilities, a coal-fired plant, an old incinerator site, and diesel truck traffic.[19] Despite efforts to clean up these sites, the legacy of such pollution continues to have real-world effects on current and future generations. The harms associated with these pollutants are not only physical but also socio-economic. Disadvantaged communities—often communities of color—are disproportionately impacted, bearing the burden of long-term exposure to these toxins. Furthermore, the ongoing economic consequences of such contamination (e.g., reduced property values, health care costs, lost economic opportunities) continue to undermine these communities' resilience and ability to recover. Recognizing the need to bolster the scientific basis for identifying actions that can improve community health and well-being, and to select, implement, and evaluate these actions, EPA has made CI research a priority.
3. **Research Gaps to implement CI research at EPA, and How to Advance CI research going forward.** Current environmental data is often siloed, with separate datasets on air, water, soil, and health outcomes that are not linked.[20] This fragmentation limits the ability to assess CIs across multiple pollution sources. Comprehensive datasets that integrate these factors are essential for understanding the full scope of cumulative harm. A National Wildlife Federation report highlights gaps for CI and EJSCREEN tools. On a practical lens, legislators and urban planners should be trained on how to use the tool. Formal guidance on proper use and acceptability of CI tools, their data, and their analysis will increase application and impact for translation into policy and better public

[17] Colorado General Assembly. (2024, May 8). Cumulative Impacts & Environmental justice. https://leg.colorado.gov/bills/hb24-1338
[18] American Lung Association. (2001). Urban air pollution and health inequities: a workshop report. Environmental Health Perspectives, 109(suppl 3), 357-374.
[19] Wilson, S., Aber, A., Ravichandran, V., Wright, L., & Muhammad, O. (2017). Soil contamination in urban communities impacted by industrial pollution and goods movement activities. Environmental Justice, 10(1), 16-22.
[20] Ramírez-Andreotta, M. D., Walls, R., Youens-Clark, K., Blumberg, K., Isaacs, K. E., Kaufmann, D., & Maier, R. M. (2021). Alleviating environmental health disparities through community science and data integration. Frontiers in sustainable food systems, 5, 620470.

health.[21] Because the recent EOs under the Trump-Vance Administration have caused the removal of EPA EJSCREEN, having a better way to visualize CIs without infringing on recent EO is critical.

4. **Expand the development of cumulative impact assessment tools.** To support cumulative impact analysis, a federal tool should integrate data layers that reflect the cumulative burdens of environmental stressors, such as climate change, air quality, water contamination, industrial emissions, and socioeconomic factors. To develop a more sophisticated and inclusive tool, developers should engage communities in the data collection process, encouraging them to provide local knowledge on environmental hazards and health concerns. This could ensure that the tool captures real-world, localized cumulative impacts that might not be fully represented in national or regional datasets. Developers must also align the tool with the EPA's programs and initiatives that aim to reduce environmental disparities, ensuring that it becomes a tool used in environmental justice assessments, permitting, and enforcement. Lastly, the tool must provide actionable insights for decision-makers, helping them prioritize interventions in areas most at risk (CI scores > 90th percentile) of cumulative environmental burdens. With rapidly changing environmental riskscapes, developers must also continuously update the data used in the tool to reflect new research, emerging pollutants, and changes in environmental conditions. This will ensure that the tool remains a relevant and accurate resource for addressing cumulative impacts.
5. **Location, design, and construction.** Given the nature of the new EO, which seeks to end certain diversity, equity, and inclusion (DEI) initiatives within federal programs, it is important to consider how policies surrounding location, design, and construction can still be aligned with the principles of fairness, efficiency, and long-term sustainability, without necessarily emphasizing DEI as a central objective. For example, the location of industrial facilities, waste disposal sites, and infrastructure projects—whether intentional or a result of historical planning—has contributed to environmental and social inequities over time.[22] Cumulative impacts often stem from the concentration of pollution in certain areas, where low-income or minoritized communities, who have historically had less political influence, are situated.[23] The EO emphasizes efficiency and prioritizing economic outcomes. When determining locations for new projects, government agencies and developers should focus on "smart growth" and cost-effective solutions that minimize long-term public health costs.[24] This involves ensuring that projects are sited in areas with infrastructure capable of handling the environmental management and mitigation needs, avoiding clusters of polluting facilities in already burdened communities. The design of projects can influence how pollutants are managed and whether CIs are avoided or mitigated.
6. **Mitigation plans should focus on advanced treatment, storage, and/or disposal.** Treatment efforts traditionally focus on reducing or neutralizing harmful pollutants, often on a site-by-site or pollutant-by-pollutant basis. However, this narrow approach may not address the cumulative harm caused by the combined effects of multiple pollutants or sources over time. Special attention should be paid to pollutants that persist in the environment (e.g., heavy metals, plastics) or accumulate in the food chain (e.g., mercury, PFAS).[25] Effective treatment technologies that are subsidized by the government would allow corporations to focus on reducing these types of pollutants, as they contribute significantly to cumulative impacts. Additionally, advanced storage infrastructure can create jobs in sectors such as construction, environmental monitoring, and waste management. By encouraging industries to assume responsibility for the entire lifecycle of their products, including disposal, the burden on local governments and taxpayers can be reduced. This approach incentivizes companies to design products that are easier to recycle or dispose of safely, which can ultimately lower disposal costs and stimulate new markets for sustainable goods. Cumulative impacts span generations, but a proactive, cross-sectoral approach to mitigation creates long-term economic stability. Businesses that lead the way in reducing cumulative pollution

[21] Ravichandran Vivek, Rose Albert, Max Teirstein, Anushi Garg, Justice Nagovich, Hamani Wilson, and Sacoby Wilson. Gaps in Environmental Justice Screening and Mapping Tools and Potential New Indicators. National Wildlife Foundation; 2021. Available from: http://nwf.org/EJSMtools.
[22] Maantay, J. (2002). Mapping environmental injustices: pitfalls and potential of geographic information systems in assessing environmental health and equity. Environmental health perspectives, 110(suppl 2), 161-171.
[23] Lee, C. (2019). Toxic waste and race in the United States. In Race and the incidence of environmental hazards (pp. 10-27). Routledge.
[24] Bullard, R. D. (Ed.). (2007). Growing smarter: Achieving livable communities, environmental justice, and regional equity. Mit Press.
[25] Falandysz, J., Liu, G., & Rutkowska, M. (2024). Analytical progress on emerging pollutants in the environment: An overview of the topics. TrAC Trends in Analytical Chemistry, 117719.

today can be positioned to meet future regulatory requirements, saving on compliance costs and improving their long-term profitability.

7. **Healthy neighbor practices of the owner.** Property owners and entities have a responsibility to minimize negative impacts on neighboring communities, especially those in EJ communities that have already been disproportionately affected by current and legacy pollution. These practices are especially critical as they can help reduce the burden of cumulative impacts and environmental health disparities that affect the nation. Owners of polluting entities should establish clear and open lines of communication with community residents, leaders, and environmental justice organizations following engagement and transparency guidance outlined in the Community Right to Know Act. Regularly updating residents on operations, emissions, and potential risks is essential to building trust and fostering cooperation. Owners should conduct thorough environmental and public health assessments before initiating new activities or expanding existing ones. This includes assessing the cumulative impacts of pollution, considering both the direct and indirect effects on the community's health, air quality, and ecosystem. Several states already have related bills introduced or prefiled at their respective state legislature. Examples include Massachusetts H.D. 1924, Washington H.B. 1303, and Arizona H.B. 2367.

The steps needed to rectify the harm communities experience is not solely just but also moral. Environmental stewardship is a testament to our own humanity and responsibility for future generations. Policies like Justice40 are only one component of the muti-faceted solution needed to make sure the most vulnerable communities are protected. The framework is a pivotal part of that solution. CIs must consider the concentration of chemical and non-chemical polluters, as well as analyzing the concentration of multiple stressors in proximity to communities. CIs must consider not only the continued history of harm but also must explore the scale of compounding impacts which further exacerbate the health of communities. One point of emphasis is the collaboration with communities to identify solutions. Pre, during, and after implementation strategies are needed to ensure anti-displacement and minimizing the potential of green gentrification. However, a sustainable future should not be an expensive one. Communities who have carried the brunt must have a voice in their future. The recommendations outlined in this document will make the CI framework more comprehensive as it pertains to data collection, remediation, and revitalization. Industry and community are both essential to our very fabric as a country. However, throughout history some areas have become epicenters of harm and pollution. There is a future where we all live sustainably but to accomplish that, we must utilize this framework to best prioritize the most vulnerable against CIs.

Sincerely,

CEEJH INC