Environmental Justice in Cumulative Impacts Analysis

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DOI: https://doi.org/10.15779/Z380283

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^{*} JD, University of California, Berkeley, School of Law, 2024. Thank you to Professor Robert Infelise and teaching assistant Christina Libre for providing feedback and guidance on this Note. Thank you as well to the Ecology Law Quarterly editorial board for the additional support. Lastly, thank you to my partner and family for all their love and encouragement.

INTRODUCTION

Welcome to California's San Bernardino County, home of the poorest air quality in the United States. In 2021, the American Lung Association's annual "State of the Air" report listed San Bernardino County as having the worst ozone pollution in the country, based on data collected from 2017 to 2019. As of 2023, the county remains ranked first for having the country's worst ozone pollution. Since 1996, San Bernardino County has received "F" grades from the State of the Air report for its annual weighted average number of high ozone days, indicating severe air pollution.

San Bernardino County is also a community comprised primarily of people of color; its population is 73 percent Latinx and 13 percent Black.⁵ Over 95 percent of the community lives below the federal poverty level.⁶ In a population of about two million people, the County has 35,481 cases of pediatric asthma and 124,483 cases of adult asthma.⁷ The community's pediatric and adult asthma rates are in the top 2 percent in California, and a disproportionate number of its children miss school due to breathing difficulties.⁸ This community's respiratory health burdens are attributable to the toxic pollution from countless giant delivery trucks rumbling to and from the many Amazon warehouses located throughout San Bernardino County, which also has the highest regional concentration of Amazon logistics facilities in the world.⁹ Although these statistics are striking, San Bernardino County is not unique in the United States.¹⁰ As Judge Rawlinson, a Black woman, notes in her dissent in *Center for Community Action and Environmental Justice v. Federal Aviation Administration (Center for Community Action and Environmental Justice v. Federal Aviation Administration (Center for Center for Community Action and Environmental Justice v. Federal Aviation Administration (Center for Center for Cente*

^{1.} See Abigail Medina, Kids Deserve Better with Airport Expansions, SAN BERNARDINO SUN (Nov. 21, 2019), https://www.sbsun.com/2019/11/21/kids-deserve-better-with-airport-expansion-abigail-medina/.

 $^{2. \}quad AM. \ LUNG \ ASS'N, \ STATE \ OF \ THE \ AIR \ 18 \ (2021), \ https://www.lung.org/getmedia/17c6cb6c-8a38-42a7-a3b0-6744011da370/sota-2021.pdf.$

^{3.} Most Polluted Places to Live, AM. LUNG ASS'N, https://www.lung.org/research/sota/key-findings/most-polluted-places (last visited May 29, 2023).

California: San Bernardino, AM. LUNG ASS'N, https://www.lung.org/research/sota/city-rankings/states/california/san-bernardino (last visited May 29, 2023); see generally Methodology, AM. LUNG ASS'N, https://www.lung.org/research/sota/about-the-report/methodology (last visited May 29, 2023).

^{5.} Ctr. for Cmty. Action & Env't Just. v. Fed. Aviation Admin., 18 F.4th 592, 614 (9th Cir. 2021).

^{6.} *Id*

^{7.} Zoe Woodcraft, Environmental Voices Team Up with Teamsters to Fight Rumored Amazon Airport Terminal in California's Inland Empire, EARTHJUSTICE (Jan. 29, 2020), https://earthjustice.org/news/press/2020/environmental-voices-with-teamsters-fight-rumored-amazon-airport-terminal-in-california-inland.

^{8.} Ctr. for Cmty. Action, 18 F.4th at 614; Medina, supra note 1; see also Woodcraft, supra note 7.

^{9.} Medina, *supra* note 1; Kaveh Waddell, *When Amazon Expands, These Communities Pay the Price*, CONSUMER REP. (Dec. 9, 2021), https://www.consumerreports.org/corporate-accountability/when-amazon-expands-these-communities-pay-the-price-a2554249208/.

^{10.} See Ihab Mikati et al., Disparities in Distribution of Particulate Matter Emission Sources by Race and Poverty Status, 108 Am. J. OF PUB. HEALTH (ENV'T JUST.) 480, 482 (2018).

Community Action), "[H]igh non-White populations [such as San Bernardino County] coincide with high emissions nationally."11

Despite the county's preexisting extreme air pollution, in 2019, the Federal Aviation Administration (FAA) approved the construction and operation of a new Amazon air cargo facility at the public San Bernardino International Airport. Under the National Environmental Policy Act (NEPA), the FAA conducted an environmental assessment (EA) of the proposed Amazon facility, finding that the project's construction and operation would have "no significant environmental impact." The FAA's EA for the project included a cumulative impact analysis (CIA) as required by NEPA. HePA defines cumulative impacts as environmental impacts resulting from an action's incremental effects when combined with other past, present, or reasonably foreseeable future actions.

According to the FAA's EA, operating the Amazon facility would result in 500 truck trips per day, releasing one ton of toxic air pollution in the San Bernardino County community daily. Altogether, the facility would inject 355 tons of toxic air pollution into the community annually from 7,516 truck trips. The FAA's CIA conclusion that the project's cumulative emissions are not expected to potentially and significantly worsen the San Bernardino community's already-poor air quality als into question the adequacy of NEPA's CIA framework to account for environmental justice concerns. Environmental justice is the principle that all communities, but especially low-income communities of color, have equal environmental protection under the law and the right to live, work, play, and pray in safe, healthy, and pollutant-free environments.

Relevant to this Note, two major environmental review laws in the United States, NEPA and the California Environmental Quality Act (CEQA), each include CIA requirements.²⁰ However, these requirements have been, and are, statutorily inadequate to address environmental justice concerns because they do not capture projects' full environmental justice impacts and fail to adequately ensure that government agencies truly consider the environmental justice

^{11.} Ctr. for Cmty. Action, 18 F.4th at 615.

^{12.} See id. at 598, 613, 616.

^{13.} Id. at 596-97.

^{14.} Id. at 603; See Native Ecosystems Council v. Dombeck, 304 F.3d 886, 895–96 (9th Cir. 2002).

^{15. 32} C.F.R. § 651.16(a) (2019).

^{16.} Woodcraft, supra note 7.

^{17.} Id.

^{18.} See Ctr. for Cmty. Action, 18 F.4th at 597, 605.

^{19.} What is Environmental Justice?, DETROITERS WORKING FOR ENV'T JUST., https://detroitenvironmentaljustice.org/what-is-environmental-justice/ (last visited Sept. 12, 2023).

^{20.} See 40 C.F.R. \$1508.1(g)(3) (2022); 42 U.S.C. \$ 4332(2)(C)(i); CAL. CODE REGS. tit. 14, \$ 15130(a)(1) (2010).

implications of their actions.²¹ This inadequacy in requirements negatively affects how government agencies like the FAA conduct their EAs of projects with potential environmental justice implications. Likewise, this inadequacy affects how courts evaluate whether agencies have performed a statutorily sufficient EA of such projects. To better account for environmental justice concerns moving forward, government agencies should modify the CIA provisions under NEPA and CEQA.

Part I of this Note introduces CIA in environmental review law and provides an overview of NEPA and CEOA, focusing on their current CIA frameworks. Part II argues that the present provisions for CIA under NEPA and CEQA insufficiently consider environmental justice issues. Subpart II(A) describes environmental justice, explores the origins of the U.S. environmental justice movement, and explains why environmental justice values are important. Subpart II(B) offers an overview of Center for Community Action, highlighting Judge Rawlinson's dissent. This Subpart also uses Center for Community Action as a key case study and launching point to discuss how current CIA requirements fail to serve environmental justice aims adequately. Finally, Part III proposes various modifications to NEPA and CEQA's CIA requirements to help better address and prioritize environmental justice concerns in EAs. Proposed modifications include: (1) soliciting local community perspectives on how an action's effects would interact with those of other actions; (2) conducting CIA at a regional scale; (3) managing CIA at a policy level or expanded regulatory level; (4) involving interagency coordination among multiple jurisdictions and government tiers; and (5) consulting with a national environmental baseline database.

I. CIA IN NEPA AND CEQA

NEPA and CEQA each require analysis of the cumulative impacts of a project.²² This Part starts by describing CIA and its general purpose. It then details the current CIA frameworks in NEPA and CEQA.

A. CIA and its Intended Role in Environmental Review Law

Cumulative impacts are changes to the environment caused by the combined effect of past, present, and reasonably foreseeable future actions and processes, both human and natural.²³ Cumulative impacts are important because although various projects' separate effects may be individually negligible, their

^{21.} Telephone Interview with Emily Jeffers, Staff Att'y, Ctr. for Biological Diversity (Sept. 23, 2022).

^{22.} See 42 U.S.C. \$4332(2)(C)(i); 40 C.F.R. \$1508.1(g)(3) (2022); CAL. CODE REGS. tit. 14, \$15130(a)(1) (2010).

^{23.} Ray Clark, *Cumulative Effects Assessment: A Tool for Sustainable Development*, 12 IMPACT ASSESSMENT & PROJECT APPRAISAL 319, 320 (1994), https://www.tandfonline.com/doi/pdf/10.1080/07349165.1994.9725869?needAccess=true.

collective effect can be much more significant as they occur and accumulate over a period of time.²⁴ The consequences of different actions and natural processes can have additive, synergistic, or antagonistic effects on each other.²⁵

A CIA evaluates the environmental and human health effects that may result from a proposed activity's incremental impacts when combined with past, present, and reasonably foreseeable future activities. ²⁶ Cumulative impacts can be difficult to predict and manage due to insufficient or limited baseline data, the complexity of ecological processes, and the large spatial scale at which cumulative effects play out. ²⁷ The difficulty of predicting and managing the cumulative impacts of a particular project can influence the agency's ability to produce a detailed CIA for that project. The harder it is to predict a project's cumulative impacts, the less detailed and insightful the project's CIA will be. Currently, there is no universally accepted approach or set of principles to performing the CIA requirement in environmental regulations. ²⁸

CIAs are predominantly used in EAs of proposed projects, as mandated by environmental review law. CIAs intend to account for the notion that proposed projects should not be analyzed separately from their surrounding environments because natural and human processes are not evenly spaced and do not operate in isolation, just as communities are not exposed to single pollutants one at a time.²⁹ Often, serious environmental harms may not stem from the direct effects of a single proposal but instead result from the interaction and addition of preexisting environmental stresses and other individually insignificant effects from multiple activities over time.³⁰ Environmental regulations should reflect this reality.³¹

CIAs are also intended to be more than perfunctory; they supposedly offer a useful examination of past, present, and future projects' cumulative effects.³² However, CIAs do not fulfill this role when they only discuss a project's direct effects on a small area and merely "contemplate" the effects of other projects but have "no quantified assessment" of their combined effects.³³

- 24. See Native Ecosystems Council v. Dombeck, 304 F.3d 886, 895–96 (9th Cir. 2002).
- See Clark, supra note 23, at 320.
- 26. Cumulative Impact Assessment Definition, LAW INSIDER, https://www.lawinsider.com/dictionary/cumulative-impact-assessment (last visited May 28, 2023).
 - 27. Clark, supra note 23, at 321.
 - 28. Id. at 322.

- 30. Clark, *supra* note 23, at 320.
- 31. Ellickson, supra note 29.
- 32. See Native Ecosystems Council v. Dombeck, 304 F.3d 886, 895–96 (9th Cir. 2002).
- 33. Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt., 387 F.3d 989, 994 (9th Cir. 2004).

^{29.} See Larry Canter & Bill Ross, State of Practice of Cumulative Effects Assessment and Management: The Good, the Bad and the Ugly, 28 IMPACT ASSESSMENT & PROJECT APPRAISAL 261, 262 (2010), https://www.tandfonline.com/doi/pdf/10.3152/146155110X12838715793200?needAccess=true; Kristie Ellickson, Cumulative Impacts: Why Environmental Protections Need to Take Them Into Account, UNION OF CONCERNED SCIENTISTS (Nov. 22, 2022, 2:45 PM), https://blog.ucsusa.org/kellickson/cumulative-impacts-why-environmental-protections-need-to-take-them-into-account/.

B. CIA Framework Under NEPA

NEPA is a federal environmental statute intended to promote "productive and enjoyable harmony between man and his environment" and encourage efforts to prevent or mitigate environmental harm and improve human health.³⁴ For every proposed federal action that has unknown or potentially significant environmental effects and is not subject to a categorical exclusion,³⁵ NEPA requires that federal agencies prepare an environmental assessment (EA) to evaluate the action's underlying purpose, environmental impacts, and alternatives.³⁶

The EA must also provide sufficient evidence and analysis to determine whether the agency must prepare an environmental impact statement (EIS) or a finding of no significant impact (FONSI).³⁷ An EIS is a "detailed statement" that discusses the environmental effects of a proposed action, alternatives to the proposal, the relationship between local short-term environmental uses and the maintenance of long-term environmental productivity, and any irreversible and irretrievable resource commitments involved in the proposed action.³⁸ NEPA requires agencies to prepare an EIS when their EA finds that a proposed major federal action³⁹ will significantly affect the quality of the human environment.⁴⁰ They also must prepare an EIS if substantial questions are raised regarding whether a project "may cause significant degradation of some human environmental factor."⁴¹ However, agencies do not need to prepare an EA if they decide to go straight to preparing an EIS instead.⁴² The regulatory requirements for an EIS are more detailed and rigorous than those for an EA.⁴³ EISs should consider cumulative impacts.⁴⁴

On the other hand, agencies must issue a FONSI, not an EIS, if their EA concludes that a proposed action will not have significant environmental effects

^{34. 42} U.S.C. § 4321.

^{35.} A "categorical exclusion" is a category of actions that a federal agency has determined, in its NEPA procedures, normally do not have significant impacts on the human environment. 40 C.F.R. § 1508.1(d) (2022).

^{36. 40} C.F.R. § 1501.5(a), (c)(2) (2020).

^{37. 40} C.F.R. § 1501.5(c)(1) (2020).

^{38. 42} U.S.C. § 4332(2)(C).

^{39. 40} C.F.R. § 1508.18 (2010) ("Major federal actions" include actions with effects that may be significant and are potentially subject to federal responsibility. These actions include new and continuing projects and programs entirely or partly financed, assisted, conducted, regulated, adopted, or approved by federal agencies. These actions also include new or revised agency rules, regulations, plans, policies, or procedures and legislative proposals. Major federal actions do not include funding assistance solely in the form of general revenue sharing funds, with no federal agency control over how the funds are subsequently used. These actions also exclude judicial or administrative civil or criminal enforcement actions.).

^{40. 42} U.S.C. § 4332(2)(C)(i).

^{41.} Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1212 (9th Cir. 1998).

^{42. 40} C.F.R. § 1501.3(a) (2020).

^{43.} National Environmental Policy Act Review Process, EPA, https://www.epa.gov/nepa/national-environmental-policy-act-review-process (Oct. 5, 2022).

^{44.} See 42 U.S.C. § 4332(2)(C)(i); 40 C.F.R. § 1508.1(g)(3)–(4) (2022).

and establishes the reasonableness of their choice to forego preparation of an EIS.⁴⁵ FONSIs must include the EA or incorporate it by reference and briefly explain why a project's environmental impacts are insignificant.⁴⁶

In their EA, agencies must consider every major aspect of the proposed action's environmental impact and take a "hard look" at the action's environmental consequences before deciding whether to approve it.⁴⁷ Furthermore, an agency must inform the public that it has accounted for environmental concerns in its decision-making process.⁴⁸ The Council on Environmental Quality (CEQ) is responsible for implementing NEPA by issuing guidance to agencies on how to perform the required impacts analysis.⁴⁹

NEPA analyses must consider cumulative impacts.⁵⁰ Under NEPA, cumulative effects are the environmental impacts resulting from the proposed action's incremental impacts when combined with other past, present, and reasonably foreseeable future actions.⁵¹ Actions by federal agencies, non-federal agencies, and private parties must be considered in the CIA.⁵² The cumulative impacts discussion should include "some quantified or detailed information."⁵³ Broad, generalized statements about possible cumulative effects that exclude substantial detail do not comprise a sufficient cumulative impacts discussion, nor do they constitute a "hard look" if there is no explanation about why more details were not provided.⁵⁴

Agencies must identify possible cumulative impacts through a scoping process.⁵⁵ The scoping process is an "early and open process" that defines the scope of the issues, actions, alternatives, and impacts to be examined in an EIS, including identifying the major issues and removing any non-significant issues from further study.⁵⁶ It also determines the appropriate methodology for EAs, the extent of analysis necessary, the timing of agency reviews, and the project

^{45. 40} C.F.R. § 1501.6(a) (2020); see Cal. Trout v. Fed. Energy Regul. Comm'n, 572 F.3d 1003, 1016 (9th Cir. 2009).

^{46.} See generally 40 C.F.R. § 1501.6(a)-(b) (2020).

^{47.} N. Plains Res. Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1075 (9th Cir. 2011).

^{48.} Earth Island Inst. v. U.S. Forest Serv., 351 F.3d 1291, 1300 (9th Cir. 2003) (Agencies typically inform the public of NEPA-related actions by publishing information in the Federal Register, updating their websites, and placing notices in newspapers.). *How Citizens Can Comment and Participate in the National Environmental Policy Act Process*, EPA, https://www.epa.gov/nepa/how-citizens-can-comment-and-participate-national-environmental-policy-act-process (last updated Oct. 5, 2022).

^{49.} Council on Environmental Quality, WHITE HOUSE, https://www.whitehouse.gov/ceq/ (last visited May 29, 2023).

^{50.} See Native Ecosystems Council v. Dombeck, 304 F.3d 886, 886, 895–96 (9th Cir. 2002).

^{51. 32} C.F.R. § 651.16(a) (2019).

^{52.} *Id*.

^{53.} Neighbors of Cuddy Mountain v. U.S. Forest Serv., 137 F.3d 1372, 1379–80 (9th Cir. 1998).

^{54.} See Muckleshoot Indian Tribe v. U.S. Forest Serv., 177 F.3d 800, 811, 814 (9th Cir. 1999).

^{55.} See generally 40 C.F.R. § 1501.9 (2020).

^{56. § 1501.9(}a).

schedule.⁵⁷ Scoping may begin as soon as practicable after the proposal is sufficiently developed for agency consideration.⁵⁸ To select the timeframe to evaluate past and future cumulative impacts that may interact with the proposed action, agencies must consider relevant factors like the proposed action's temporal and physical proximity to other actions and the existing or planned locations of natural resources, manmade facilities, areas of environmental degradation, and human communities.⁵⁹ Agencies must also "articulate[] a rational connection between the facts found and the choice made."⁶⁰ The CEQ also requires agencies to explain their decisions in the context of project-specific effects.⁶¹ Furthermore, agencies should contact the appropriate off-post officials, such as tribal, state, county, or local planning officials.⁶²

The CEQ suggests that agencies follow three steps when conducting a NEPA CIA.⁶³ First, identify the boundary of each type of resource analysis involved in the proposed action; boundaries may be temporal or geographic. Second, set the baseline significance level for each resource category and describe the affected environment. Third, identify the action's environmental consequences, which includes determining cause and effect relationships, the magnitude and weight of cumulative effects, and potential mitigation means.⁶⁴

C. CIA Framework Under the CEQA

CEQA is California's corollary to NEPA. A self-executing statute, CEQA requires California state and local public agencies to inform decision makers and the public about proposed projects' potential significant environmental effects and to mitigate those effects as much as possible. 65 CEQA is very similar to NEPA. Just as NEPA requires federal agencies to initially prepare an EA for their proposed projects, leading to an EIS where a project's environmental impacts are found to be significant, CEQA requires the lead state agency to prepare an "Initial Study" (IS) that briefly describes a proposed project and any of its potential environmental impacts, including cumulative impacts, followed by an "Environmental Impact Report" (EIR) if the IS finds that a project's

^{57.} NEPA and Transportation Decisionmaking: Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process, FED. HIGHWAY ADMIN., https://www.environment.fhwa.dot.gov/nepa/QAimpact.aspx (last visited May 29, 2023).

^{58. § 1501.9(}a).

^{59.} See COUNCIL ON ENV'T QUALITY, CONSIDERING CUMULATIVE EFFECTS UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT 13, 16 (Office of NEPA Pol'y & Compliance, 1997), https://www.energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf.

^{60.} Selkirk Conservation All. v. Forsgren, 336 F.3d 944, 962 (9th Cir. 2003).

^{61.} See COUNCIL ON ENV'T QUALITY, supra note 59, at 16–17.

^{62. § 1501.9(}b).

^{63.} COUNCIL ON ENV'T QUALITY, supra note 59, at v-vi.

^{64.} Id.

^{65.} See Frequently Asked Questions About CEQA, CAL. NAT. RES. AGENCY (2014), https://files.resources.ca.gov/ceqa/more/faq.html; CAL. CODE REGS. tit. 14, § 15002(a)(1)–(2) (2005).

environmental effects will be significant.⁶⁶ The EIR must include a detailed statement of all the project's major environmental effects, including cumulative impacts.⁶⁷

However, CEQA's definition of environmental effects is different from NEPA's. NEPA's definition is more specific in what kinds of effects are encompassed by the term "effects" and expressly names cumulative effects in its definition.⁶⁸ In contrast, CEQA's definition is more general, broader, and does not expressly name cumulative effects in its definition.⁶⁹

Additionally, unlike NEPA, CEQA has a substantive mandate that state agencies refrain from approving projects for which "feasible alternatives or feasible mitigation measures" exist. 70 CEQA defines "cumulative impact" as an impact produced by combining a proposed project's impacts with other projects causing related impacts.⁷¹ CEQA analyses will examine a project's cumulative impacts when the project's possible environmental impacts are individually minor but "cumulatively considerable." "Cumulatively considerable" means that a project's incremental effects are significant when combined with the effects of past, present, and reasonably foreseeable future projects.⁷³ A project's contribution to cumulative impacts is not necessarily cumulatively considerable if it implements a mitigation measure designed to alleviate the cumulative impact.⁷⁴ If an agency concludes that a project's incremental effect is not cumulatively considerable, it must still discuss this effect in its CIA by explaining how it reached that conclusion, including why a project's incremental effect plus other projects' effects do not have a significant combined cumulative impact.75

Under CEQA, the CIA must discuss the cumulative impacts' severity and probability of occurrence.⁷⁶ This discussion must be guided by "practicality and reasonableness" and focus on the characteristics of the other identified projects that contribute to the cumulative impact.⁷⁷

CEQA requires several elements for an adequate CIA. First, the agency must provide either: (1) a list of past, present, and probable future projects generating cumulative impacts, including projects outside the relevant agency's

^{66.} See Council on Env't Quality & Cal. Governor's Off. of Plan. & Rsch, NEPA and CEQA: Integrating Federal and State Environmental Reviews 7 (2014), https://opr.ca.gov/docs/NEPA_CEQA_Handbook_Feb2014.pdf; Cal. Pub. Res. Code § 21100 (1994); Cal. Code Regs. tit. 14, § 15064(h) (2018).

^{67.} See Cal. Pub. Res. Code § 21100.

^{68. 40} C.F.R. § 1508.1(g) (2022).

^{69.} See Cal. Code Regs. tit. 14, § 15358 (2005).

^{70.} Pub. Res. § 21002.

^{71.} CAL. CODE REGS. tit. 14 § 15130(a)(1) (2010).

^{72. § 15130(}a).

^{73.} CAL. CODE REGS. tit. 14 § 15065(a)(3) (2010).

^{74. § 15130(}a)(3).

^{75. § 15130(}a), (a)(2).

^{76. § 15130(}b).

^{77.} *Id*.

control,⁷⁸ using factors chosen at the agency's discretion, such as the nature of the environmental resources at issue, the project's location, and its type, to determine whether to include a related project;⁷⁹ or (2) a publicly-available summary of projections in an adopted local, regional, or statewide plan that assesses conditions contributing to the cumulative impact.⁸⁰ Second, agencies must define the geographic scope of the area affected by the projects' cumulative impacts, offering a reasonable explanation for its chosen geographic bounds.⁸¹ Third, the agency must summarize the projects' expected environmental impacts.⁸² Fourth, the agency must analyze the projects' cumulative impacts and assess any reasonable, feasible alternatives to avoid or alleviate the project's contributions to any major cumulative impacts.⁸³ Nevertheless, NEPA and CEQA's CIA requirements have not been the most effective in advancing environmental justice concerns.

II. CIA UNDER NEPA AND CEQA IS INADEQUATE TO ADDRESS ENVIRONMENTAL JUSTICE CONCERNS

The CIA frameworks under the statutory texts of NEPA and CEQA do not meaningfully address environmental justice concerns because they do not fully reflect projects' environmental justice effects or ensure better outcomes for environmental justice communities. It is important that the federal government is more aware of the environmental justice implications of their actions to promote social, economic, and health equity for underserved communities, but the CIA frameworks have been insufficient in ensuring that agencies consider the environmental justice impacts of their actions. Subpart A of this Part will explain environmental justice and why it is important. Subpart B will examine how the CIA frameworks in NEPA and CEQA fall short in addressing environmental justice, using the Ninth Circuit's decision in *Center for Community Action and Environmental Justice* to demonstrate specific ways in which the CIA frameworks are inadequate in realizing the goals of environmental justice.

A. Environmental Justice and Its Importance

According to the Environmental Protection Agency (EPA), environmental justice is the "fair treatment" of all people, regardless of race, culture, and income level, regarding the development, implementation, and enforcement of

^{78. § 15130(}b)(1)(A).

^{79. § 15130(}b)(2).

^{80. § 15130(}b)(1)(B).

^{81. § 15130(}b)(3).

^{82. § 15130(}b)(4).

^{83.} See § 15130(b)(5).

environmental laws and regulations.⁸⁴ However, although there is currently no universally agreed-upon environmental justice definition among environmental justice organizations, such organizations tend to define environmental justice as the right of all communities, particularly low-income Black and Brown communities, to equal environmental protection under the law and the right to live, work, play, and pray in environments that are healthy, safe, and free of pollutants and other life-threatening conditions.⁸⁵ When identifying environmental justice concerns, the EPA's definition of environmental justice is more narrow, whereas the definition that environmental justice groups tend to use is much more holistic. This difference could exacerbate the gap between what environmental laws accomplish and what is needed to incorporate environmental justice principles into those laws.⁸⁶

This Note uses the environmental justice definition that environmental justice organizations tend to use because its emphasis on equal legal protection, essential public health rights, and involvement of communities of color⁸⁷ aligns with the seventeen Principles of Environmental Justice.⁸⁸ A critical guide to the present-day grassroots environmental justice movement, the Principles of Environmental Justice were established in 1991 in Washington D.C. at the First National People of Color Environmental Leadership Summit, which formalized the environmental justice movement internationally.⁸⁹ These principles widened the movement's scope to include community empowerment, housing and transportation, public health, worker safety, land use, and opposition to colonialism, exploitation, and oppression.⁹⁰

The modern environmental justice movement recognizes that certain groups, namely low-income communities of color, bear unequal environmental and economic burdens like poor air quality, contaminated drinking water, and proximity to toxic industrial facilities due to commercial operations and federal, state, and local regulations.⁹¹ Moreover, these communities have a right to be free from "ecological destruction" and a right to ethical and responsible land use

^{84.} Learn About Environmental Justice, EPA, https://www.epa.gov/environmentaljustice/learn-about-environmental-justice (last updated Sept. 6, 2022).

^{85.} What is Environmental Justice?, supra note 19.

^{86.} See Bruce A. Morrison, Closing the Gap on Systemic Environmental Injustices, AM. BAR ASS'N (2022), https://www.americanbar.org/groups/young_lawyers/publications/tyl/topics/environmental-law/closing-gap-systemic-environmental-injustices/.

^{87.} See What is Environmental Justice?, supra note 19.

^{88.} Principles of Environmental Justice, FIRST NAT'L PEOPLE OF COLOR ENV'T LEADERSHIP SUMMIT (1991), https://www.ejnet.org/ej/principles.pdf.

^{89.} See id.

^{90.} See Robert D. Bullard, Environmental Justice in the 21st Century: Race Still Matters, 49 PHYLON 151, 152 (2001), https://www.jstor.org/stable/pdf/3132626.pdf?refreqid=excelsior%3Ad3d065 3f31aa2077f66e414ffbc3f333&ab_segments=&origin=&acceptTC=1.

^{91.} See, e.g., Eric J. Krieg & Daniel R. Faber, Not So Black and White: Environmental Justice and Cumulative Impact Assessments, 24 ENV'T IMPACT ASSESSMENT REV. 667, 667 (2004), https://www.sciencedirect.com/science/article/pii/S0195925504000708; What is Environmental Justice?, supra note 19.

to promote a sustainable planet.⁹² A key concept within the environmental justice movement is environmental racism, which is the development and enforcement of environmental laws that disproportionately negatively affect specific racial groups, usually Black and Indigenous people of color, by furthering the subordination and domination of those groups.⁹³ Environmental justice is made possible when all communities have easy access to information and can participate in decision making that will enable them to exercise agency over their living environment.⁹⁴

Understanding the importance of environmental justice requires understanding the historical roots of the environmental justice movement. The environmental justice movement originated with the 1982 polychlorinated biphenyl (PCB) protest in Warren County, North Carolina. The state government had designated the primarily Black community of Afton to host a hazardous waste landfill to store 60,000 tons of soil contaminated with PCBs, a carcinogenic chemical compound, igniting major protests. After the protests, numerous reports showed that people of color and low-income communities suffered greater environmental harm from pesticide exposure, toxic waste facilities, and transportation infrastructures than their white and wealthy counterparts. For example, in its 1987 report *Toxic Wastes and Race in the United States*, the United Church of Christ's Commission for Racial Justice found that race was the most important factor in predicting the location of hazardous waste sites in the United States.

Environmental justice is important for several reasons. It allows people to maintain some autonomy over external decisions that affect their ability to lead healthy lives, and as such environmental justice should be regarded as a

^{92.} Principles of Environmental Justice, supra note 88.

^{93.} Pamela Duncan, Environmental Racism: Recognition, Litigation, and Alleviation, 6 TUL. ENV'T.L.J. 317, 325 (1993); Jessie Laurore et al., To Protect Children of Color, Leaders Must Understand and Address Environmental Racism, CHILDTRENDS (Feb. 9, 2021), https://www.childtrends.org/blog/to-protect-children-of-color-leaders-must-understand-and-address-environmental-racism.

^{94.} What is Environmental Justice?, supra note 19.

^{95.} Joan Martinez-Alier et al., *Between Activism and Science: Grassroots Concepts for Sustainability Coined by Environmental Justice Organizations*, 21 J. OF POL. ECOLOGY 21, 21–22 (2014), https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/56698/IDL-56698.pdf?sequence=2.

^{96.} Off. of Legacy Mgmt., *Environmental Justice History*, U.S. DEP'T OF ENERGY, https://www.energy.gov/lm/environmental-justice-history (last visited Sept. 15, 2023); Jacob Thompson, *We Birthed the Movement: The Warren County PCB Landfill Protests, 1978-1982*, UNIV. OF N.C. AT CHAPEL HILL LIBR. (Aug. 18, 2022), https://library.unc.edu/2022/08/we-birthed-the-movement/#:~:text=%E2%80%9CWe%20Birthed%20the%20Movement%3A%20The,majority%20Black%20community%20of%20Afton.

^{97.} See Martinez-Alier et al., supra note 95, at 21.

^{98.} BENJAMIN CHAVIS, TOXIC WASTES AND RACE IN THE UNITED STATES: A NATIONAL REPORT ON THE RACIAL AND SOCIO-ECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES, xiii (Comm'n for Racial Just., United Church of Christ, 1987), https://www.nrc.gov/docs/ML1310/ML13109A339.pdf; Renee Skelton & Vernice Miller, *The Environmental Justice Movement*, NAT. RES. DEF. COUNCIL (March 17, 2016), https://www.nrdc.org/stories/environmental-justice-movement.

fundamental human right.⁹⁹ However, most human rights laws do not contain explicit environmental health provisions.¹⁰⁰ Additionally, environmental justice is a significant component of the broader global struggle to improve the environment, particularly for those who have historically had to live closest to substantial sources of pollution.¹⁰¹ This is also especially relevant to the race to mitigate climate change, which will exacerbate the disparate environmental health burdens that low-income communities of color face.¹⁰² Furthermore, environmental justice encourages economic alternatives that would help foster environmentally safe livelihoods in marginalized communities.¹⁰³ It affirms these communities' right to a safe environment in which to work, rather than forcing them to choose between a toxic home and economic ruin.¹⁰⁴

Take the controversial Amazon proposal at the San Bernardino Airport, for example. On the one hand, in five years, the proposed facility would create approximately 4,000 jobs and millions of dollars in revenue. On the other hand, the facility's noise and air pollution from numerous daily plane, car, and truck trips would significantly exacerbate the already-poor quality of the San Bernardino community's air, environment, and health outcomes. On Under key environmental justice principles, San Bernardino environmental organizations and labor unions have found that the Amazon project fails to address residents' concerns about the project's effects on their quality of life in exchange for substandard, low-paying jobs. Essentially, residents want *both* a healthy environment *and* community-centered economic development. Ericka Flores, an organizer at Center for Community Action and Environmental Justice, has stated that economic development is needed. And although San Bernardino residents are neither anti-warehouses nor anti-development, exploitative warehouses close to residential areas are "not the only way to have a thriving San Bernardino."

^{99.} Ben Crump, Why Is Environmental Justice Important?, BEN CRUMP: TRIAL LAW. FOR JUST., https://bencrump.com/environmental-justice-lawyer/why-is-environmental-justice-important/ (last visited May 29, 2023).

^{100.} See Alan Boyle, *Human Rights and the Environment: Where Next?*, 23 EUR. J. OF INT'L L. 613, 614 (2012), https://academic.oup.com/ejil/article/23/3/613/399894.

^{101.} Skelton & Miller, supra note 98.

^{102.} Alique G. Berberian, David J. X. Gonzalez, & Lara J. Cushing, *Racial Disparities in Climate Change-Related Health Effects in the United States*, 9 CURRENT ENV'T HEALTH REPORTS 459, 460 (2022), https://doi.org/10.1007/s40572-022-00360-w.

^{103.} See Principles of Environmental Justice, supra note 88.

^{104.} See id.

^{105.} See generally Ctr. for Cmty. Action & Env't Just. v. Fed. Aviation Admin., 18 F.4th 592, 595–96 (9th Cir. 2021).

^{106.} Brian Whitehead, San Bernardino Residents Raise Concerns Over Massive Air Cargo Logistics Center Bound for Airport, SAN BERNARDINO SUN (Apr. 23, 2019, 1:27 PM), https://www.sbsun.com/2019/04/18/san-bernardino-residents-raise-concerns-over-massive-air-cargo-logistics-center-bound-for-airport/.

^{107.} See Woodcraft, supra note 7.

^{108.} See Whitehead, supra note 106.

^{109.} Id.

^{110.} *Id*.

Instead, aligning with environmental justice aims, public agencies could approve of responsible warehouses that utilize quiet, low-emissions electric vehicles and other clean technologies to reduce their environmental effects¹¹¹ and offer sufficient wages, reasonable work hours, and comprehensive benefits to their workers.¹¹² In addition, as the key actors here, large companies like Amazon as well as the regulators approving the projects can take responsibility for actively investing in the communities and environment such that residents do not have to sacrifice the air they breathe for a paycheck. Having a comprehensive CIA framework in place that measures all of a project's impacts is crucial, for it is the first step toward meaningfully addressing environmental justice concerns because the magnitude of the issues would be better understood.

B. Environmental Justice Concerns and CIA

The CIA requirements of NEPA and CEQA inadequately address environmental justice concerns because their requirements do not capture true cumulative impacts. For example, San Bernardino County now has the worst air quality in the nation, but projects like the Amazon air cargo facility at the San Bernardino Airport continue flying through the FAA permitting process. 113 The effects of San Bernardino County's preexisting horrific air quality combined with the significant emissions tied to operating the approved Amazon facility will have long-term cumulative effects on the quality of the San Bernardino community's physical environment and respiratory health, suggesting that NEPA's statutory provisions for CIAs are inadequate. The approving agency, the FAA, undertook a CIA and, on the surface, fulfilled the CIA requirements, yet still ended up approving the Amazon project. Thus, the status quo for analyzing cumulative impacts is legally inadequate, regardless of whether government agencies take their CIAs seriously.

1. Overview of Center for Community Action

The Ninth Circuit's decision in *Center for Community Action and Environmental Justice* provides a key example of the inadequacy of NEPA's CIA provisions to consider or address environmental justice concerns. In *Center for Community Action*, multiple environmental organizations and the State of California petitioned the Ninth Circuit to review the FAA's EA prepared under NEPA for a new Amazon distribution center at the San Bernardino Airport (Project).¹¹⁴ The petitioners alleged the FAA violated NEPA and erred in finding

^{111.} See id.

^{112.} See Principles of Environmental Justice, supra note 88 ("Environmental Justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care").

^{113.} Telephone Interview with Emily Jeffers, supra note 21.

^{114.} Ctr. for Cmty. Action & Env't Just. v. Fed. Aviation Admin., 18 F.4th 592, 596, 616 (9th Cir. 2021).

that constructing and operating the Project would have "no significant environmental impact." 115

The Project envisioned the Eastgate Air Cargo Facility, an air cargo facility meant to support large-scale air cargo operations. ¹¹⁶ This involves constructing and operating a 658,000-square-foot office building for sorting and distributing packages delivered by third-party air carriers moving to and from the airport. ¹¹⁷ Moreover, the Project will include implementing taxiways and a parking apron for fourteen aircraft, two 25,000-square-foot maintenance buildings, and 2,000 parking spaces. ¹¹⁸ The new facility will be situated on the former Norton Air Force Base, which once housed hazardous materials dumped by the Air Force and the airport. ¹¹⁹

In its final EA, the FAA concluded that the project would have "no significant impact" on the environment.¹²⁰ Yet, according to the FAA's EA, the Project will entail twenty-four daily aircraft takeoffs and landings, 192 daily roundtrip truck trips, and 3,486 daily passenger car trips during the first year of operation.¹²¹ On average, the Project would inject 355 tons of toxic air pollutants into the community from 7,516 truck trips per year.¹²² Likewise, a year before the FAA released its finding of "no significant impact," the State of California assessed the Project's environmental effects under CEQA.¹²³ The State of California's EIR concluded that the Project's operations would result in "significant impacts" on noise, air quality, and greenhouse gases.¹²⁴

The petitioners thought the FAA erred in finding no significant impact because, in its CIA, the agency did not consider all the necessary relevant information, provide sufficiently specific, quantifiable data on other related projects, or explain why objective data about these projects could not be provided. For example, the petitioners suggested that the FAA should have assessed more than the eighty projects adjacent to the study area for their cumulative impacts on air quality or explained why these projects' cumulative impacts could not be analyzed. Nevertheless, the Ninth Circuit majority held that "there is no reason to believe that the [FAA's] EA is deficient." First, the petitioners failed to identify or provide measurable data on the project's specific

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115. Id. at 596.
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^{116.} Id. at 597, 616.

^{117.} Id. at 616.

^{118.} Id. at 597, 616.

^{119.} Id. at 616.

^{120.} Id. at 597.

^{121.} Id. at 616.

^{122.} Woodcraft, supra note 7.

^{123.} Ctr. for Cmty. Action, 18 F.4th at 616.

^{124.} *Id*.

^{125.} See id. at 604.

^{126.} Id. at 618–19.

^{127.} Id. at 613.

cumulative environmental effects. ¹²⁸ Second, the petitioners did not demonstrate the weight of the FAA's failure to follow its own NEPA duties in creating its EA. ¹²⁹ Third, the petitioners failed to raise a substantial question as to whether the project may have a major environmental impact. ¹³⁰ However, unlike Judge Rawlinson's dissent, the majority opinion did not address environmental justice, environmental racism, or the racial and socioeconomic characteristics of the neighborhoods surrounding the approved project site. ¹³¹ On the other hand, as Judge Bumatay clarified in his concurrence, the majority did not address these environmental justice concerns because no party raised them, not because they are unimportant. ¹³² Nevertheless, although NEPA did not require the FAA to consider the environmental justice implications of the Project's approval, the majority here still could have taken the realities of the surrounding community into account.

2. Judge Rawlinson's Dissent

While the Ninth Circuit majority ultimately denied the petitioners' request to review the FAA's EA, Judge Rawlinson dissented, famously stating that "this case reeks of environmental racism." Judge Rawlinson defined environmental racism as "the creation, construction, and enforcement of environmental laws that have a disproportionate and disparate impact upon a particular race[]..." 134 To support her assertion, Judge Rawlinson drew attention to several critical aspects of the case that the majority opinion and the FAA's EA merely glossed over. 135 For example, she emphasized how: (1) San Bernardino County is "one of the most polluted corridors in the entire United States" with extreme levels of harmful air pollutants; (2) the racial demographics of the San Bernardino neighborhoods immediately surrounding the site of the Project, are, not coincidentally, overwhelmingly Latinx, Black, and low-income; 136 and (3) these communities of color experience some of the highest respiratory health burdens in California. 137

Furthermore, Judge Rawlinson proposed that environmental racism may have motivated the FAA's finding of "no significant impact." Judge

- 128. Id. at 604.
- 129. Id. at 603-04.
- 130. Id. at 602.
- 131. See generally id.
- 132. *Id.* at 613.
- 133. Id. at 614.
- 134. Duncan, *supra* note 93, at 325.
- 135. See Ctr. for Cmty. Action, 18 F.4th at 614–15.
- 136. In her dissent, Judge Rawlinson suggests that the racial demographics of the San Bernadino neighborhoods adjacent to the Project site are not coincidentally disproportionately Latinx, Black, and low-income because of historical neglect and systemic racism under environmental laws. *See id.* at 614–15; *see also* Duncan, *supra* note 93, at 321.
 - 137. See Ctr. for Cmty. Action, 18 F.4th at 614–15.
 - 138. *Id.* at 614–15.

Rawlinson suggested that the EA "would not [have seen] the light of day if this [P]roject [was] sited anywhere near the wealthy enclave where the multibillionaire owner of Amazon resides." ¹³⁹ In other words, Judge Rawlinson implied that the FAA would have taken a more exacting "hard look" in their EA for a project affecting a wealthier community. The FAA must also apply this same level of quality review to the San Bernardino residents who have already endured a "quantifiable detriment to their health" from the cost of air pollution. ¹⁴⁰ Judge Rawlinson lamented that "such is the nature of environmental racism." ¹⁴¹

Judge Rawlinson discussed several deficiencies in the FAA's EA in support of her conclusion. For instance, the EA did not establish a sufficiently broad study area to encompass the magnitude of the Project's environmental effects. 142 The study area only extended about eleven square miles total from the Project site, even though the Project's truck trips would go, on average, about fifty-three miles beyond the study area. 143 Therefore, the EA did not consider the environmental, socioeconomic, health, and noise impacts of these additional fifty-three miles of truck trips. 144 Additionally, in its CIA, the EA failed to comprehensively analyze over eighty projects immediately outside the study area, partly attributable to its overly narrow study area bounds. 145 The EA evaluated these projects only for cumulative traffic impacts, not for overall cumulative impacts.¹⁴⁶ Moreover, the EA undercounted the number of daily truck trips involved in the project's operation and construction. 147 It also ignored the State of California's analysis finding that the project would result in "significant and unavoidable" environmental effects in an already heavily polluted San Bernardino County. 148 Similarly, the EA ignores the San Bernardino Valley's EPA designation as an "extreme" non-attainment area for particulate matter. 149

Ultimately, Judge Rawlinson concluded that the FAA's EA did not properly evaluate the "emissions-spewing facility that disproportionately impacts communities of color." She found that under NEPA, the EA failed to take the required "hard look" at the Project's environmental consequences, and its conclusion of "no significant environmental impact on the already overly

^{139.} Id. at 622.

^{140.} Id.

^{141.} *Id*.

^{142.} Id. at 617–18

^{143.} Amazon Project may generate one-way trips by heavy trucks that will extend well beyond the General Study Area, the average trip being 64.25 miles. *See id.* at 618.

^{144.} Id.at 618

^{145.} *Id*.

^{146.} Id. at 619.

^{147.} See id. at 621.

^{148.} Id. at 616.

^{149.} Id. at 615.

^{150.} Id. at 622.

polluted San Bernardino Valley" did not "pass muster under NEPA." ¹⁵¹ Thus, the FAA should be required to prepare a more robust EIS because the petitioners raised a substantial question as to whether the Project will have a major environmental effect on the surrounding community. ¹⁵² In closing her dissent, Judge Rawlinson called on her colleagues to do better to create an environmentally just future for future generations. ¹⁵³

3. The Inadequacy of the FAA's CIA in Center for Community Action

The FAA's CIA was deficient, which led to its finding of no significant impact and court deference to the agency, approval of a project that will exacerbate environmental justice in the San Bernardino County community. This case illustrates a need to address environmental justice concerns. This Subpart reviews the FAA's directive, explains how that likely informed its approach to the CIA in this case, and discusses why the FAA's CIA was deficient.

The problems with the FAA's CIA do not necessarily arise solely because the FAA conducted a statutorily inadequate CIA under NEPA. Instead, the issues with the FAA's CIA are better attributed to the insufficiency of NEPA's current CIA requirements to consider environmental justice issues in the first place. 154 To fully account for environmental justice concerns, Congress should expand NEPA's statutory requirements, and the CEQ should instruct the agencies performing the EAs to account for broader cumulative effects.

Acknowledging the FAA's distinct statutory mandate and limited focus on environmental protection is important. The FAA is not a federal environmental agency. Rather, under the Airport and Airway Improvement Act of 1982, the FAA has a statutory mandate to "facilitate the establishment of air cargo hubs." and encourage the "development of a national system of air cargo hubs." Moreover, the FAA does not decide where to build civilian airports; instead, it provides federal financial aid to support airport development. The Airline Deregulation Act of 1978 also indicates that the FAA does not regulate the routes or services of air carriers.

First, as Judge Rawlinson noted in her dissent, the FAA's eleven-mile study area was not broad enough to sufficiently analyze the Project's total

^{151.} *Id.* at 621.

^{152.} See id. at 598, 616–17.

^{153.} Id. at 622

^{154.} See Cumulative Impact Assessment vs Cumulative Risk Assessment: Knowing the Difference Makes a Difference, BAKER BOTTS L.L.P. (Feb. 15 2022), https://www.bakerbotts.com/thought-leadership/publications/2022/february/cumulative-impact-assessment-vs-cumulative-risk-assessment.

^{155.} Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991).

^{156.} Id. at 208.

^{157.} Id. at 197.

^{158.} *Id*.

environmental, socioeconomic, and health impacts. ¹⁵⁹ Since the CIA was based on the eleven-mile study, it was similarly flawed. ¹⁶⁰ Because of the narrow spatial scope of the study area, the FAA's CIA did not comprehensively analyze about eighty projects immediately outside the study area. However, NEPA does not require agencies to abide by any minimum for the spatial scope of their study areas for CIAs, ¹⁶¹ and agencies have some discretion in setting the CIA's geographic bounds. ¹⁶²

Second, although the CIA evaluated these eighty projects for cumulative traffic impacts, it did not consider their other cumulative impacts. 163 This conflicts with the simple conclusion that if these projects would affect traffic, they would also affect air quality, noise levels, and ultimately, residents' health outcomes through increased vehicular emissions.¹⁶⁴ Judge Rawlinson highlighted that there is "no logical reason . . . to divorce traffic figures from emission calculations" since mobile sources, such as trucks, generate emissions. 165 Thus, if the FAA failed to include most mobile air pollutant sources in its emissions calculations, it likewise failed to offer a "convincing statement of reasons explain [that the Project's] impacts to insignificant."166 Furthermore, the FAA did not describe why it assessed the eighty projects for traffic effects only, nor did its CIA explain why the analysis was so limited. 167 As such, the FAA's explanations do not meet its NEPA obligations.

Third, the FAA's CIA described only twenty-six past, present, and future projects in the General Study Area, and in analyzing their cumulative environmental effects, merely provided a table with minimal descriptive information rather than in-depth project descriptions or quantified data. The FAA's CIA was permitted to consist of tables containing detailed information instead of quantified data. However, the only information provided for each project was a brief description of the project, the address, the status or timeframe, and the possible resources affected by the projects' collective impacts.

^{159.} Ctr. for Cmty. Action & Env't Just. v. Fed. Aviation Admin., 18 F.4th 592, 617–18 (9th Cir. 2021).

^{160.} Id. at 619.

^{161.} See COUNCIL ON ENV'T QUALITY, supra note 59, at 12–16.

^{162.} See id.

^{163.} Ctr. for Cmty. Action, 18 F.4th at 619.

^{164.} See id. at 614-15, 619.

^{165.} Id. at 621.

^{166.} See Am. Wild Horse Campaign v. Bernhardt, 963 F.3d 1001, 1007 (9th Cir. 2020) (holding that, in reviewing an agency's decision not to prepare an EIS, the Court uses an arbitrary and capricious standard that requires it to determine whether the agency has taken a "hard look" at the consequences of its actions and provided "a convincing statement of reasons to explain why a project's impacts are insignificant").

^{167.} Ctr. for Cmty. Action, 18 F.4th at 619.

^{168.} Id.

^{169.} Id. at 604-05.

^{170.} Id. at 619.

Ninth Circuit previously rejected tables that also contained limited information. For example, in *Bark v. U.S. Forest Service*, the court rejected a table that "merely named" the listed projects, requiring that the U.S. Forest Service provide more comprehensive information about the projects, such as a quantified assessment of their combined impacts.¹⁷¹ In addition, the court in *Klamath-Siskiyou Wildlands Center v. Bureau of Land Management* also disapproved of a table that failed to offer an "objective quantification of the [combined environmental] impacts."¹⁷² Here, offering basic details about the twenty-six projects was not enough to rigorously analyze their cumulative impact on the environment.¹⁷³

Additionally, the FAA's "explanation of the cumulative effects . . . [was] similarly inadequate."174 For instance, the CIA claimed that the twenty-six cumulative projects have a "moderate to low" potential to permanently and significantly affect the area's cumulative air quality without quantifying the projects' individual or collective emissions in support of this claim.¹⁷⁵ In analyzing roadway noise, the CIA indicated that vehicular traffic would need to double to markedly raise noise levels. 176 However, it did not consider if these projects' traffic volume could or would double; therefore, it did not find any cumulative impacts regarding noise.¹⁷⁷ Yet, the CIA did not elaborate on this finding, nor did it measure expected traffic or noise levels. 178 Although the FAA conceded that it did not quantify its conclusions, ¹⁷⁹ it still failed to explain in its CIA "why objective data about the projects cannot be disclosed." 180 While the FAA stated that its explanations were sufficiently detailed, this argument ran counter to the Ninth Circuit's Klamath-Siskiyou decision where the court rejected a CIA that did not explain why the agency could not provide objective data or specify the data it used to reach its conclusions.¹⁸¹ Thus, the court should have determined that the FAA offered "the kind of conclusory statements, based on 'vague and uncertain analysis,' that are insufficient to satisfy NEPA's requirements." 182 As a result, the holes in the FAA's CIA have allowed projects like this one to fly through the permitting process, in clear conflict with critical environmental justice concerns, for environmental justice communities are more

^{171.} Bark v. U.S. Forest Serv., 958 F.3d 865, 872 (9th Cir. 2020).

^{172.} Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt., 387 F.3d 989, 994 (9th Cir. 2004).

^{173.} Id. at 995.

^{174.} Ctr. for Cmty. Action, 18 F.4th at 619.

^{175.} Id.

^{176.} Id. at 619-20.

^{177.} Id.

^{178.} Id.

^{179.} Id. at 620.

^{180.} Opening Brief for Petitioner at 38, Ctr. for Cmty. Action & Env't Just. v. Fed. Aviation Admin., 18 F.4th 592, 619 (9th Cir. 2021) (No. 20-70272).

^{181.} Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt., 387 F.3d 989, 994 (9th Cir. 2004).

^{182.} See Bark v. U.S. Forest Serv., 958 F.3d 865, 872 (9th Cir. 2020).

likely to have unaccounted cumulative impacts that current CIA processes and government agencies are able to implicitly ignore.

This case shows that the FAA's review clearly failed to meet NEPA's explicit, though already inadequate, CIA requirements. However, even if the CIA could be considered statutorily compliant, such as by the Ninth Circuit majority, the FAA's CIA did not fully capture the Amazon project's environmental effects because of the flaws in NEPA's statutory CIA requirements. Thus, the CIA did not meaningfully address environmental justice impacts. Clearly, the CIA process needs to be changed.

III. PROPOSED MODIFICATIONS TO CIA TO ADDRESS ENVIRONMENTAL JUSTICE CONCERNS

To better account for environmental justice concerns moving forward, CIAs under NEPA and CEQA should: (1) solicit local community input on how an action's effects would interact with those of other actions; (2) be conducted at a regional scale; (3) be managed at a policy or expanded regulatory level instead of a project-specific level; (4) involve interagency coordination among multiple jurisdictions and government tiers; and (5) require developing and consulting with a national environmental baseline database to strengthen predictive models.

These proposed changes do not necessarily require amending NEPA and CEQA's statutory texts, nor do they necessarily alter how judges assess the adequacy of CIAs in environmental assessments. Instead, they can be carried out by modifying the federal and state regulations that implement NEPA and CEQA, respectively. In NEPA's case, the CEQ could modify the regulations, and for CEQA, the California Secretary of Resources could modify the regulations. ¹⁸³ This Note explores each modification in turn.

A. Solicit Public Input from Affected Local Communities

First, in conducting their CIAs, government agencies should actively seek local environmental justice communities' knowledge, perspectives, and experiences. This insight will help the agency understand how a proposed project's incremental effects may interact with other past, present, and future actions' collective effects while ensuring that environmental justice concerns are heard. These efforts are particularly important because community members may have specific experiences or historical knowledge that may not be memorialized in any database or environmental study, even though they could provide valuable insight into projects' cumulative effects. Community members will also live with the tangible everyday consequences of a CIA and any associated projects, so their perspectives should be prioritized.

^{183.} See CEQ NEPA Regulations, NEPA.GOV, https://ceq.doe.gov/laws-regulations/regulations.html (last visited Sept. 15, 2023); see also Frequently Asked Questions About CEQA, supra note 65.

One way to do this is to hold public town halls during the CIA process. Government agencies should make these forums accessible to those with limited English-speaking abilities or restrained work schedules. 184 It should also advertise town halls through local news channels, newspapers, and social media sites, as well as post notices about town hall events at popular community gathering places like community centers, public libraries, or grocery stores. In addition, agencies should collaborate with community groups, organizers, and advocates on the ground for further community outreach, such as by attending community group meetings instead of having them approach the agency. It is also recommended that agency representatives undergo cultural competency training before engaging with local communities.

It is important to note that this type of community engagement is more meaningful than communities going through the traditional notice and comment process. This recommendation is distinguishable from the right to comment publicly because, by actively soliciting community feedback and allowing them to have their questions answered in a setting more familiar to them, true community engagement breaks down significant barriers to public participation present in the commenting process, such as educational, occupational, and language barriers. These barriers pose issues to navigating current public comment procedures because some individuals or communities may not have the time, access to technology and the Internet, or technical and legal expertise to draft a persuasive, informative comment sufficient to capture agencies' attention. This is also distinct from a public comment period because the public feedback solicitation would occur during the CIA process as opposed to after the EA has already been completed.

B. Conduct CIAs at a Regional Scale

Second, because cumulative impacts on communities are best understood at regional scales, agencies' CIAs should encompass this scope. ¹⁸⁵ This is because CIAs performed at narrower spatial scales can overlook significant interactions among human communities, stressors, and factors located outside the CIA's immediate boundaries. ¹⁸⁶ Conducting CIAs at a regional scale can also help make decisions more strategic for future planning and development by bolstering knowledge about the quality of the environment on a regional basis. ¹⁸⁷ Although

^{184.} See Maria Perez et al., Engaging Non-English Speakers for a More Equitable Democracy, NEW AM. (July 5, 2022), https://www.newamerica.org/the-thread/engaging-non-english-speakers-for-a-more-equitable-democracy/ (stating that public meetings, including city council meetings and legislative hearings, are usually held only in English and during work hours, in turn excluding many people, including a disproportionate number of non-English speakers).

^{185.} See Robert Connelly, Canadian and International EIA Frameworks as They Apply to Cumulative Effects, 31 ENV'T. IMPACT ASSESSMENT Rev. 453, 453 (2011), https://www.sciencedirect.com/science/article/pii/S0195925511000205.

^{186.} See Clark, supra note 23, at 324.

^{187.} See id.

regional CIAs can be limited by restricted baseline data at this broader spatial scale, ¹⁸⁸ developing a national environmental baseline database, described in the fifth recommended CIA modification, can help fill this gap.

Performing CIAs at a regional scale would not mean that government agencies like the FAA will need to be involved in regional planning. Instead, agencies would merely need to consult with a regional map of important environmental justice factors and indicators, such as the Center for Disease Control and Prevention's Environmental Justice Index¹⁸⁹ and the EPA's Environmental Justice Screen¹⁹⁰ for NEPA implementation, and California's CalEnviroScreen 4.0191 for CEQA implementation. Once the agency consults with the map to see what factors related to demographics, preexisting environmental quality, and resources are present in the regional study areas, the agency should aim to import some of the map's pertinent data and information into their EA. As mandated by statute, there would be subsequently no other procedural tasks the agency will need to perform to conduct the CIA regionally. Regional-scale CIAs would also help account for areas where new projects are constantly being developed to see how proposed projects would fit into the current regional network, so the agency does not necessarily need to perform as much background work instead. However, a drawback is that the environmental justice maps may not be kept up to date, so they may not always account for newly built projects.

C. Manage CIAs at a Policy or Expanded Regulatory Level

Third, CIAs should be managed at a policy or expanded regulatory level. This modification complements the prior modification to conduct CIAs on a regional scale. In this recommendation, CIAs would be managed at a policy or expanded regulatory level rather than on an individual project-specific basis. Currently, CIAs occur on an individual project basis, evaluating potential impacts generated by individual activities. Pecause of the project-specific nature of EAs, their data is not always conducive to performing accurate CIAs. Ultimately, in the long term, the development of sacrifice zones when the same conductive to the project such as the

^{188.} See Cathryn Clarke Murray et al., Cumulative Effects in Marine Ecosystems: Scientific Perspectives on its Challenges and Solutions, CTR. FOR OCEAN SOL. 6, 31 (2014), https://www.researchgate.net/publication/272091105.

^{189.} *See, e.g., Environmental Justice Index (EJI) Explorer*, U.S. DEP'T OF HEALTH & HUM. SERV., https://onemap.cdc.gov/portal/apps/sites/#/eji-explorer.

^{190.} See, e.g., EPA's Environmental Justice Screening and Mapping Tool (Version 2.11), ENV'T PROT. AGENCY, https://ejscreen.epa.gov/mapper/.

^{191.} See, e.g., CalEnviroScreen 4.0, CAL. OFF. OF ENV'T HEALTH HAZARD ASSESSMENT (2023), https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40.

^{192.} See COUNCIL ON ENV'T QUALITY, supra note 59, at 8–9.

^{193.} See Murray et al., supra note 188, at 31.

^{194.} Reynard Loki, 'Sacrifice Zones': How People of Color Are Targets of Environmental Racism, YALE F. ON RELIGION & ECOLOGY (April 7, 2021), https://fore.yale.edu/news/%E2%80%98Sacrifice-zones%E2%80%99-How-people-of-color-are-targets-of-environmental-racism. ("Sacrifice zones" are

San Bernardino community should be avoided, and performing CIAs at a policy or expanded regulatory level may be a better way to account for this long-term planning.¹⁹⁵

To practice this, agencies can draw from programmatic EAs conducted under NEPA. Agencies employ programmatic EAs where actions under a particular program are routine and likely to have similar impacts that can be assessed broadly. 196 Managing CIAs in such a way can permit more efficiency in preparing EAs by decreasing the need for repetitive analysis. 197 However, it is important to note that managing CIAs at a policy or expanded regulatory level would likely be very difficult to implement. This proposal may also abdicate individual developers of responsibility for their contributions to environmental justice issues. Conducting CIAs at a higher regulatory level may not necessarily outweigh that moral cost. It is important that individual developers maintain some role in conducting CIAs as a tool to ensure social accountability.

D. Involve Interagency Coordination Among Multiple Government Jurisdictions

Fourth, when conducting CIAs, agencies should be required to engage in interagency coordination among multiple government jurisdictions and tiers. ¹⁹⁸ This is because the EA fragmentation insufficiently serves environmental justice concerns in CIAs. The fragmentation causes EAs to miss important information as well as unnecessarily expend resources to discover information that other agencies might already have. Interagency coordination at various levels of government can help set environmental justice objectives at the forefront of CIA execution, encourage the circulation of best practices that account for the voices and concerns of local communities, and better plan for developments that consider the future of environmental justice communities. ¹⁹⁹ This, in turn, keeps these communities' best interests in mind and creates more potential for community advocates and representatives to play larger roles CIAs.

populated areas where residents are subjected to concentrated and intensive levels of pollution because of close physical proximity to toxic industrial facilities, such as power and chemical plants, landfills, factory farms, and oil refineries. The health and safety of the people in these pollution hotspots are effectively "sacrificed" for corporate economic gain. *See id.* These communities are disproportionately low-income and people of color as a product of environmental racism in addition to systemic social, economic, and political structures, including weak environmental laws, corporate negligence, and lack of access to health care. *Id.*)

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^{195.} See Clark, supra note 23, at 321.

^{196.} NEPA Analysis: Programmatic Environmental Assessment, Nat'l Inst. of Just. (Sept. 9, 2022), https://nij.ojp.gov/funding/nepa-analysis-programmatic-environmental-assessment.

^{197.} Id.

^{198.} See Clark, supra note 23, at 330-31.

^{199.} See id.

E. Develop and Consult a National Environmental Baseline Database

Lastly, government agencies should invest in developing a national environmental baseline database that they can consult with when they perform regional CIAs. Government agencies and their experts would be responsible for building and maintaining the database. The database should include key environmental justice and socioeconomic indicators that are not typically included in environmental databases, such as age, race, income level, education, English-speaking ability, and health outcomes. This database can rely on existing databases but should fill any gaps in the data that arise while conducting a regional CIA, which may prevent an agency from providing adequate detail on a project's contributions to cumulative environmental impacts.

To create the database, government agencies that perform environmental research or assessments in the United States should share their data in a standardized approach to allow for information merging and usage in other studies. A bank of national environmental baseline data will improve predictive models' ability to predict cumulative impacts adequately and will also encourage the usage of more consistent data for environmental assessments. 201

CONCLUSION

CIAs under NEPA and CEQA are currently flawed. However, with the above amendments to NEPA and CEQA's CIA frameworks, government agencies' EAs of projects, such as the Project in San Bernardino, will be better positioned to consider and prioritize environmental justice concerns moving forward. Low-income communities of color, like the San Bernardino community, have fundamental human rights to clean air, sustainable economic opportunities, and healthy livelihoods. Their rights to an environmentally just world should not be infringed by a finding of "no significant impact" under an inadequate CIA.²⁰² To quote Justice Rawlinson's *Center for Community Action* dissent, "Residents of the San Bernardino Valley are not disposable. Their lives matter."²⁰³

^{200.} See id. at 330, 327.

^{201.} See id. at 330.

^{202.} See Ctr. for Cmty. Action & Env't Just. v. Fed. Aviation Admin., 18 F.4th 592, 615 (9th Cir. 2021).

^{203.} Id. at 622.