

The Emergence of Environmental Justice in General Plans: Lessons From California's Senate Bill 1000

Urban Affairs Review

1–39

© The Author(s) 2023

Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/10780874231175841

journals.sagepub.com/home/uar



Michelle E. Zuñiga¹ 
and Michael Méndez²

Abstract

At the center of demands for cleaner air, water, and soil in communities disproportionately impacted by environmental hazards, are often cities and counties. Local jurisdictions are uniquely positioned to shape policies and engage with residents in processes that can transform land-use patterns that have negatively impacted low-income, people of color communities. This study assesses the approaches to environmental justice (EJ) that California local jurisdictions with high levels of cumulative environmental health impact are developing in their general plans, under Senate Bill 1000. Results indicate positive outcomes such as the establishment of EJ advisory committees. However, findings also underscore challenges such as a lack of political support from elected officials and minimal resources to implement measures. We find that most general plans include EJ considerations, however, there are concerns regarding how their implementation will unfold. We provide practice-based recommendations to assist planners across the nation working to develop effective EJ considerations.

Keywords

environmental justice, land-use policy, urban planning, general plans

¹University of North Carolina at Charlotte, Charlotte, NC, USA

²University of California, Irvine, Irvine, CA, USA

Corresponding Author:

Michelle E. Zuñiga, Geography and Earth Sciences, The University of North Carolina at Charlotte, 9201 University City Blvd, Charlotte, NC 28223-0001, USA.

Email: mzuniga@uncc.edu

Introduction

Urban planning has an uneasy relationship with environmental justice (EJ).¹ Poor planning decisions and discriminatory practices have historically heightened the burdens of environmental contamination in low-income neighborhoods, Black, Indigenous, and people of color communities, in comparison to White, wealthy communities (Bullard 1993; Lerner 2012; Mendez 2020). Since the 1980s, activists have garnered some scholarly and regulatory support for changes to policy and planning processes (Cole and Foster 2001), but planners have been slow to adopt an explicit EJ framework in land use policies (Bryant 2022; Sze et al. 2009). The field, however, has the capacity to help ensure that future development does not repeat the unjust environmental outcomes of the past.

A potential vehicle for this shift is the general plan.² It directs a local community's growth and development priorities and articulates a future vision through long-term goals, objectives, and policies related to land use (Loh and Kim 2021; Mui et al. 2021; Redaelli 2021). General plans have been recognized as a crucial tool to shape future development (Dalton et al. 1989; Fulton 2018) and prioritize capital project requests (Mathur 2019). This article explores these plans' capacity to foster EJ and reduce health disparities through the implementation of California Senate Bill (SB) 1000 (authored by Senator Connie Leyva).

Adopted in 2016 and implemented in 2018, this law calls for local jurisdictions with disadvantaged communities³ to include EJ considerations (land use policies addressing contextual environmental inequities) in their general plans.⁴ SB 1000 is intended to ensure transparency and community engagement in planning processes, mitigate the harm of living near environmental hazards, and facilitate equitable access to health-promoting amenities such as recreation, healthy and affordable food options, and safe and sanitary housing (State of California DOJ 2022; Mui et al. 2021; Walker, Keane, and Burke 2010). This law is considered a national model by planning and civic associations (CEJA 2017; Civic Solutions 2022).

More direction, however, is needed on how best to accomplish this goal. In response, our research examines the following: (1) How and to what extent have the jurisdictions with the highest cumulative environmental health impact scores⁵ incorporated EJ into their general plans? These scores identify disadvantaged communities that are most burdened by multiple sources of pollution and other factors such as socioeconomic inequality. And (2), What challenges regarding EJ policy have arisen through the implementation of California's SB 1000, and how can they be addressed? As we interviewed planners, state attorneys, and community members, we identified some common obstacles whose resolution can lead to better outcomes in the

future. We find that most general plans developed by jurisdictions with the highest cumulative environmental health impact scores include a variety of EJ considerations. However, planners and EJ leaders share concerns regarding their implementation due to a lack of funding/resources, political support,⁶ and/or understanding of EJ among decision makers.

In the following sections, first, we describe the history of EJ in California and its implications for low-income neighborhoods and communities of color. We then place SB 1000's legal requirements within this context. Third, we provide an overview of our methods, including how we identified the jurisdictions from which we drew general plans to study, how we conducted interviews, and our analytical framework for assessing EJ considerations. Fourth, we share our results, taking a multifaceted approach to evaluating EJ considerations, highlighting challenges in their development, and exploring the criteria for compliance established by the California Attorney General's Bureau of Environmental Justice. Finally, we conclude with practice-based recommendations for planners and policymakers to work toward EJ more effectively.

History of Environmental Justice and Land Use in California

The contemporary EJ movement emerged nationally in 1982, to protest the siting of a hazardous waste landfill in Warren County, North Carolina, a rural and predominantly African-American region. Although this protest failed to achieve its goal, it was the first environmental protest by people of color in the United States (US) to garner widespread media attention. The movement's earliest claims can be summed up with the concept of "environmental racism," emphasizing how people of color communities are targeted for disproportionate exposure to pollutants or degraded environments, compared with the general population (Bullard and Johnson 2000). This process has been coupled with the systemic exclusion of people of color in decisions on environmental policymaking, enforcement, and remediation (Méndez 2020).

In California, similar campaigns (Méndez 2020; Pastor, Sadd, and Hipp 2001; Pulido 1996; Sze et al. 2009) led by communities of color have opposed industrial contamination, fought mining on Indigenous land, sought meaningful participation in land-use decision-making and chemical policy reform, and called for stronger regulation of sensitive land use issues such as the proximity of schools to hazards (Claudio 2007; Pastor, Sadd, and Hipp 2001, 266). One notable effort, the United Farm Workers' anti-pesticide campaign in the San Joaquin Valley (1965–1971), protested farm

labor conditions by publicizing the health effects of agricultural chemicals (Pulido and Peña 1998). In the 1980s, the Mothers of East Los Angeles, a group of Latinas, successfully resisted the development of hazards such as freeways, landfills, and a state prison in their community (Thomas 2018).

In 1988, residents of Kettleman City in central California successfully resisted the City's plans to site a toxic waste incinerator near a rural and low-income Latina/o migrant community (Cole 1994). This movement followed the release of a study paid for by the state's Waste Management Board that encouraged this type of discriminatory planning (Cerrell Associates 1984; Netter 2010). In the 2000s, California EJ groups drew connections between global climate change and its disproportionate local impacts (e.g., hazardous air quality and heatwaves) on communities of color. Activists engaged in contentious debates with state and local policymakers to orient climate change policies toward equitable public health outcomes (Méndez 2020; Pellow 2016).

Historically, jurisdictions have caused harm not only through their actions but also by failing to include the voices of the most marginalized communities in the urban planning process (Goldsmith, Raditz, and Méndez 2022). This has fostered unjust development patterns that community leaders continue to challenge today. Legal scholar Pannu (2012) argues that unincorporated areas were often identified as a burden for local governments. For example, in 1971, in Tulare County, California, government officials ignored health concerns and the infrastructure needs of low-income communities of color, classifying them as "non-viable" (areas incapable of developing successfully) in their general plan (Pannu 2012). Government services and resources were withheld despite the growing Latina/o migrant population in these communities (PPIC 2006).⁷ Environmental injustice also extends to the fields of disaster and climate action planning, which often exclude vulnerable populations such as undocumented Indigenous migrants, LGBTQ+, and incarcerated people (Goldsmith, Raditz, and Méndez 2022; Goldsmith, Méndez, and Raditz 2023; Golembeski et al. 2022; Méndez 2015; Salkin 2004). As a result, these groups are disproportionately harmed by the health and socio-economic impacts of wildfires and extreme weather events (Boyd-Barrett 2018; Méndez, Flores-Haro, and Zucker 2020; Wilson et al. 2022).

SB 1000 in the Context of California EJ Policy and Planning

In growing recognition of the inequitable distribution of local pollution and its effects on health, SB 1000 now requires local jurisdictions with

disadvantaged communities to develop meaningful community engagement and land use policies that reduce environmental hazards and associated health risks in these areas (California DOJ 2022; SB 1000, Section 65302 2016). Despite this crucial step, concerns about poor environmental quality and its health consequences are still widespread in the state. In a 2020 state-wide survey, nearly 50% of respondents said air pollution was a serious threat to health; African-Americans and Latina/os were more likely than other groups to indicate this. In addition, nearly 70% of respondents recognized the threat of polluted drinking water, including 76% of Latina/o respondents, compared with 63% of Whites (Dykman 2020). California's longstanding environmental leadership and these persistent environmental threats make it an important site to assess the implementation of EJ considerations in general plans.

Prior to the passage of SB 1000, only a handful of local governments developed considerations to address these threats. National City, located in San Diego County, was the first to develop a standalone health and EJ element in its 2011 general plan. A city of nearly 61,000 residents (United States Census 2019), it sits 11 miles from the US–Mexico border; contains warehouses, industrial facilities, and three major freeways; and is adjacent to a naval base where ships often idle, emitting pollution. In collaboration with a community-based organization, Environmental Health Coalition, National City created an element that was optional at the time. It highlighted health risks and provided goals, policies, and actions to address issues related to air quality, land use, and physical activity (CEJA 2017).

The City of Jurupa Valley, the second to adopt an EJ element in 2014, was required to do so by a legal settlement over its approval of a warehouse development determined to disproportionately impact nearby communities. This element was recognized by the Inland Empire Section of the American Planning Association (APA) with the Best Practices in Planning award and the Advancing Diversity and Social Change Award from the California State APA in 2015 (Civic Solutions 2022).

Increasingly, state agencies are also updating their land use plans to include EJ considerations. For example, the California Coastal Commission (CCC) adopted its first EJ policy in 2019, granting it the authority to acknowledge EJ when assessing permits and making land-use decisions. This policy provides a framework for analyzing the impacts of development to ensure the equitable distribution of environmental benefits in coastal communities (CCC 2019). The California State Lands Commission (CSLC) has an EJ policy, adopted in 2018, promoting equity and inclusive decision-making. It also acknowledges the historically forced displacement of Native Nations and works toward the return of ancestral tribal lands (CSLC 2021). Under SB 1000, the California Energy Commission (CEC) evaluated whether its electric

vehicle charging station siting plan excluded low-income communities of color (CEC 2022).

While SB 1000 now requires⁸ general plans to include EJ considerations, significant challenges lie ahead, including widespread uncertainty about how to develop these considerations. Planners have some guidance, such as resources and webinars produced by the state's Office of Planning and Research (OPR) and the SB 1000 Implementation Toolkit developed by the California EJ Alliance (CEJA 2017; Governor's Office of Planning and Research 2017). Nevertheless, planners often lack financial, technical, and political support to create and implement EJ considerations. Among respondents to the 2019 OPR Annual Planning Survey, in which 142 California cities and counties participated, 55% indicated that EJ had not been addressed in their general plans. Of the planners surveyed, over half reported having very little or no capacity to do so. Just 20% felt adequately supported by elected leaders and department managers, and only 14% felt they had enough capacity to address EJ (Governor's Office of Planning and Research 2019). The recommendations we offer in this article are intended to address these and other significant obstacles.

Beyond the creation of policies themselves, much work remains to ensure that governments implement them equitably. Scholars have documented a long history of instances in which opponents of the EJ policy have been able to weaken its implementation. This type of move creates processes that offer the illusion of participation, without any meaningful engagement of residents or significant policy change (Arnstein 1969; Harrison 2015; Lievanos 2012; London, Sze, and Liévanos 2008; Méndez 2020; Pulido, Kohl, and Cotton 2016). Pulido, Kohl, and Cotton (2016) have also highlighted the ways in which state regulation harmed activists' goals for EJ by coopting equity language without implementing any real structural change. Others argue that EJ considerations have often failed due to a lack of sufficient benchmarks, compliance, and legal power (Targ 2005). In this context, EJ scholars describe California as an environmental leader by enacting new laws or regulations that generally go beyond what other states or the federal government requires. Yet they have also shown that these trailblazing laws often exclude strong mandates to address disparities in the communities with the most cumulative environmental health impacts (London et al. 2013; Mendez 2020; Sze et al. 2009).

Over the next few years, we will witness how public officials put concepts of EJ into practice via SB 1000. Will they institutionalize the definition of EJ as advanced by activists? Or will strong ties between powerful government and business actors ensure the status quo or the cooptation of EJ principles (García et al. 2021; Méndez 2022a; Pellow 2016; Pulido, Kohl, and Cotton 2016; Solis 2020)? The sociologist Harrison (2022a, 2011, 192) suggests

that the institutionalization of EJ principles requires “taking seriously inequality, oppression, a lack of participatory parity, and inadequate basic capabilities in all aspects of environmental regulatory practice.” Thus, environmental regulations must actively resist the ways in which they themselves can “both deepen environmental problems and render them invisible within current regulatory practice” (Angel and Loftus 2019; Harrison 2011, 192; Méndez 2020, 188).

Alternatively, scholars have proposed deviating away from the state apparatus given dissatisfaction with its services and its dual character focused on dominance. Angel and Loftus (2019) further describe the power of everyday workers (including planners) who “embrace the state as a productive site of struggle” in pursuit of gains and transformation in the state apparatus despite its historic harm. Such notions lead to questions regarding the efficacy and the transformative power of land use policies like SB 1000. The California jurisdictions that have implemented SB 1000 take numerous approaches, given drastic differences in geography, political support, demographics, and staff capacity. A clearer understanding of these variations, along with the challenges faced, will help inform future EJ policy and practice within California and throughout the country (Harrison 2022b; Solis 2020).

Methods

We employ a variety of sources and approaches to explore the development and characteristics of EJ considerations in general plans. Interviews with planners (public and private sectors), community leaders, and the state Attorney General’s Office, as well as a document analysis, are used to assess the scope of coverage and the barriers experienced. Comment letters from the Attorney General’s Office also offer insight into the criteria used to evaluate compliance. Relevant gray literature, governmental websites, and newspaper articles are utilized to contextualize EJ considerations (Bowen 2009). Initial data gathering for this research was conducted from June 2020 to July 2021, with stakeholder reviews of results in February 2022 and November 2022.

General Plan Selection

The California Environmental Protection Agency’s Environmental Health Screening tool (CalEnviroScreen, version 3.0)⁹ was employed to identify counties and cities containing census tracts with the highest cumulative environmental health impact scores in the state, those in the top 25%. State agencies use this threshold to designate a given area as disproportionately affected by environmental injustice. SB 1000 only requires jurisdictions within this

level to complete an EJ element (State of California Department of Justice 2022; SB 1000, Section 65302 2016).

CalEnviroScreen, a screening tool created in 2013, uses a science-based method to map the various contaminants and stressors that communities face, given their health status and living conditions. It ranks California census tracts based on several indicators (see Figure 1) and generates an index score. Traditional risk assessments focus on the increased sensitivities of specific groups (such as the elderly and children), but rarely on community characteristics that influence vulnerability to contamination (California Office of Environmental Health Hazard Assessment 2014). CalEnviroScreen, as a place-based tool, provides information that assists policymakers in focusing their resources toward priority areas (California Office of Environmental Health Hazard Assessment 2014). It has been employed by government agencies to operationalize equity considerations in funding programs and environmental assessments (Lee 2021; Méndez 2015).

Using CalEnviroScreen data, all census tracts in the top 25% of scores were identified. These census tracts are located in 238 cities and 29 counties (Figure 2). Nearly 35% of cities are in the Central Valley's farming communities, where pesticide use, and air pollution are major concerns. Nearly 11% are in the San Francisco Bay Area, and nearly 54% are in Southern California, both of which are affected by urban development including highways and industry (see Table 1 for additional demographic data). The websites of these 267 jurisdictions were reviewed to download their most recently adopted or draft general plans and determine whether they had developed explicit EJ considerations. In cases where a general plan was not found, or an EJ emphasis was nonexistent, officials with the jurisdiction were asked

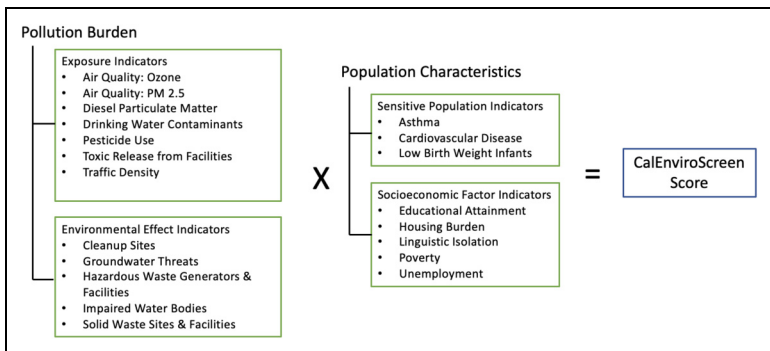


Figure 1. The formula for calculating CalEnviroScreen scores.

Source. Cal EPA (2018).

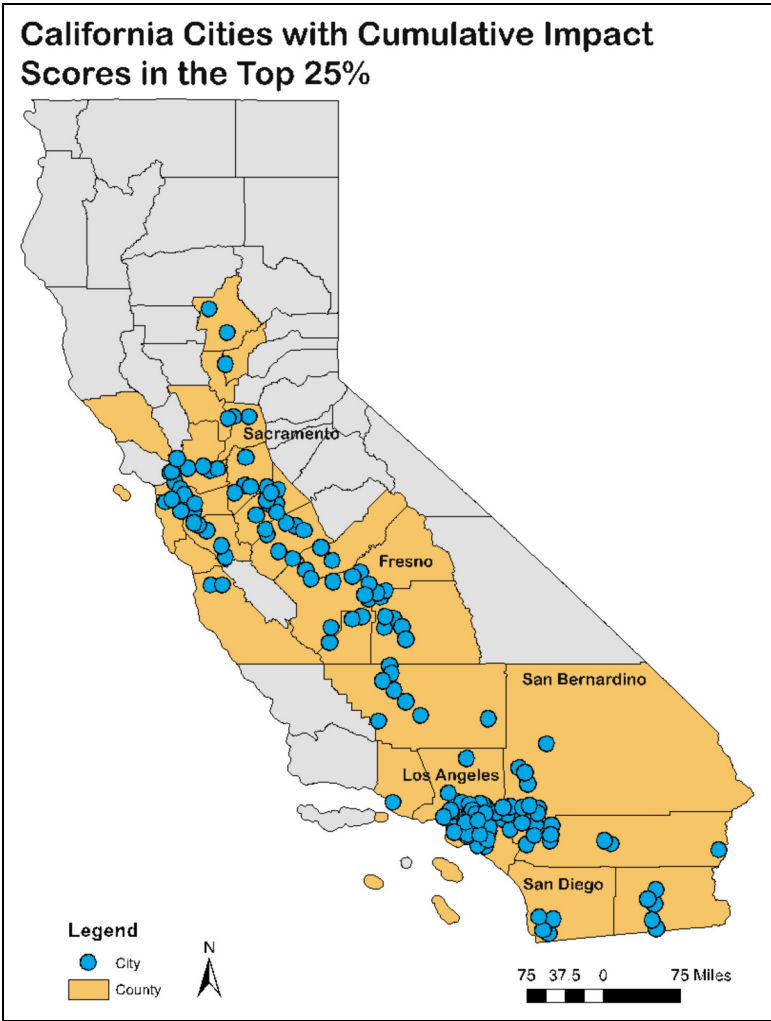


Figure 2. The 238 cities and 29 counties containing census tracts with the top 25% of cumulative environmental health impact scores.

by email or phone whether they had an EJ element or would update their plans soon.

We found that 33 cities and four counties (Figure 3) had adopted EJ considerations in their general plans (i.e., policies/topics related to equity and pollution mitigation or food deserts) or were in the process of doing so. Plans that

Table 1. Demographics of Local Jurisdictions in Study.

City/county	Population	CA region	Median household income (2020)	% Black (2016–2020)	% Asian (2016–2020)	% Hispanic (2016–2020)	% of population > 25		% of low-income households that are housing burdened	Area (sq. miles)
							years of age without high school education	years of age without high school education		
State Average	N/A	N/A	US\$78,682	6.5%	15.9%	40.2%	17.5%	17.5%	18.5%	163,696
Alhambra	84,649	Southern	US\$66,593	1.6%	53.4%	33.5%	17.6%	17.6%	22.5%	7.63
Beaumont	49,241	Southern	US\$88,932	4.6%	10.1%	37.6%	12.9%	12.9%	15.4%	30.91
Bell	35,728	Southern	US\$47,740	1.2%	0.3%	92.1%	47.4%	47.4%	24.4%	2.5
Ceres	48,769	Central	US\$59,247	2.0%	7.1%	54.8%	28.3%	28.3%	19%	8.01
Corona	168,819	Southern	US\$88,434	5.7%	9.2%	42.8%	16.5%	16.5%	17.6%	38.83
El Cajon	106,215	Southern	US\$56,637	5.0%	4.2%	31.6%	16.2%	16.2%	24.9%	14.43
Fontana	213,739	Southern	US\$75,681	9.7%	6.4%	65.9%	28.4%	28.4%	18.9%	42.43
Fowler	6,751	Central	US\$59,663	2.2%	11.3%	63.9%	N/A	N/A	N/A	2.53
Fresno	525,010	Central	US\$53,368	7.5%	12.4%	46.4%	24.9%	24.9%	21.3%	111.96
Gillroy	58,756	Central	US\$107,729	2.0%	6.4%	56.0%	30.7%	30.7%	23.6%	16.15
Hanford	56,910	Central	US\$65,974	6.7%	4.6%	44.3%	22.4%	22.4%	13.6%	16.59
Huntington Beach	200,641	Southern	US\$97,469	0.8%	11.0%	17.1%	6.8%	6.8%	15.5%	26.75
Huntington Park	58,173	Southern	US\$46,738	0.6%	0.8%	97.6%	53.2%	53.2%	28.2%	3.01
Indio	91,240	Southern	US\$53,434	1.8%	1.7%	68.4%	23%	23%	22.3%	29.18
Inglewood	107,762	Southern	US\$58,536	43.9%	1.4%	49.4%	23.2%	23.2%	24.8%	9.07
Jurupa Valley	105,053	Southern	US\$77,787	3.2%	3.6%	71.4%	30.8%	30.8%	17.9%	43.68

(continued)

Table 1. (continued)

City/county	Population	CA region	Median household income (2020)	% Black (2016–2020)	% Asian (2016–2020)	% Hispanic (2016–2020)	% of population > 25		% of low-income households that are housing burdened	Area (sq. miles)
							years of age without high school education	% of population without high school education		
Kerman	15,037	Central	US\$61,599	0%	7.3%	70.6%	41.5%	16.3%	3.23	
Los Angeles	3,900,000	Southern	US\$65,290	9.6%	11.4%	48.1%	23.8%	25.7%	468.67	
Lindsay	13,474	Central	US\$37,073	0.7%	2.6%	86.5%	54%	21.9%	2.61	
Long Beach	467,354	Southern	US\$66,410	13.5%	13.2%	40.1%	21.1%	21.3%	50.29	
Manteca	81,592	Central	US\$76,846	3.5%	6.5%	37.4%	17.2%	16.5%	17.73	
Modesto	215,030	Central	US\$62,873	3.9%	6.8%	35.7%	20.2%	18.4%	36.87	
National City	61,431	Southern	US\$49,176	4.5%	20%	64.2%	26%	23%	7.28	
Oxnard	209,877	Southern	US\$77,050	3.2%	7.9%	71.6%	33.5%	18.5%	26.89	
Pittsburg	72,437	Northern	US\$83,163	17.8%	15.1%	41.7%	22.8%	18.2%	17.22	
Placentia	51,671	Southern	US\$100,707	1.6%	15.0%	38.2%	13.5%	14.9%	6.57	
Sacramento County	1,552,000	Northern	US\$70,684	10.2%	14.3%	21.2%	12.3%	17.3%	964.64	
San Bernardino County	2,857,960	Southern	US\$65,761	8.7%	6.3%	48.6%	20.8%	17.8%	20,056.92	
Sanger	25,313	Central	US\$52,349	2.8%	4.3%	76.6%	34.7%	22.1%	5.52	
Santa Ana	332,725	Southern	US\$72,406	1.2%	10.1%	78.7%	40.4%	22.4%	27.27	
Santa Maria	99,553	Central	US\$67,634	1.3%	5.4%	70.1%	43.5%	18.9%	22.76	
Santa Monica	91,411	Southern	US\$98,300	3.8%	9.9%	12.1%	5.1%	19.2%	8.41	

(continued)

Table 1. (continued)

City/county	Population	CA region	Median household income (2020)	% Black (2016–2020)	% Asian (2016–2020)	% Hispanic (2016–2020)	% of population > 25 years of age without high school education	% of low-income households that are housing burdened	Area (sq. miles)
Shafter	16,998	Central	US\$47,433	0.6%	0.1%	80%	44.4%	20.5%	27.94
Stockton	311,178	Northern	US\$58,393	12%	21.8%	40%	25.9%	22.3%	61.67
Tulare	471,012	Central	US\$56,024	4.7%	2.5%	56.6%	27%	16.6%	20.93
Ventura County	846,006	Southern	US\$89,295	1.8%	6.9%	39.7%	15.3%	16.2%	1843.13
West Sacramento	53,727	Northern	US\$73,979	5.3%	8.4%	32.9%	N/A	N/A	21.43

Source. US Census Bureau (2015–2020), CalEnviroScreen 4.0 (2021), and USA.com (2012–2014).

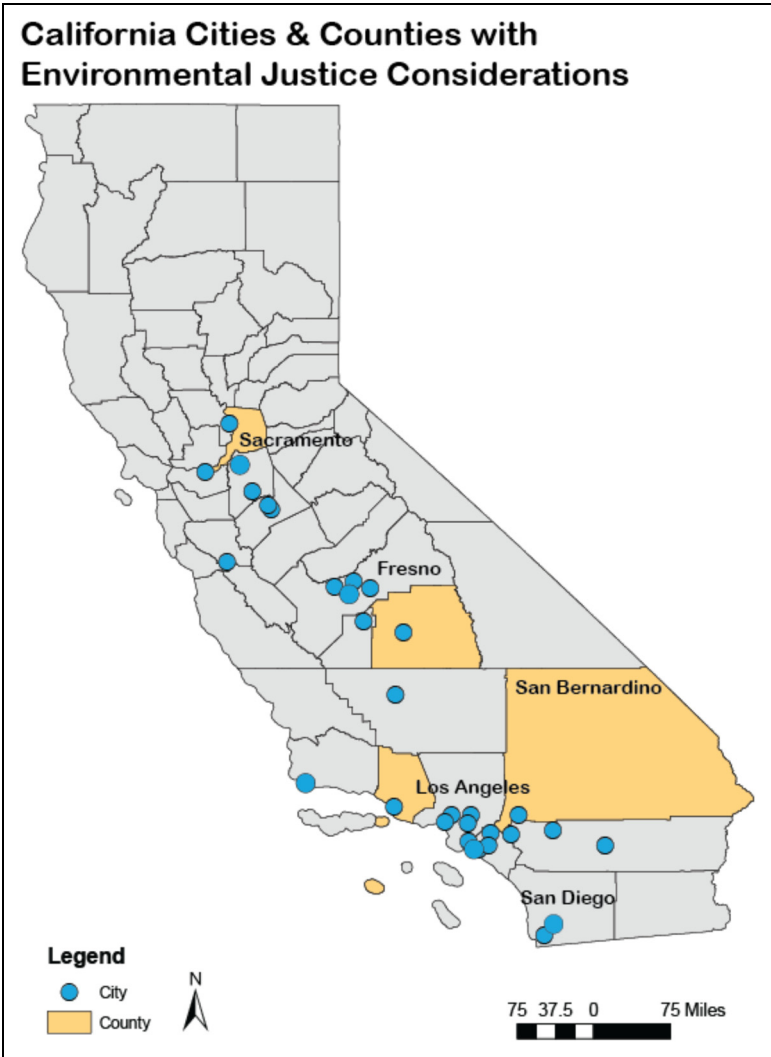


Figure 3. The 33 cities and four counties have adopted or drafted environmental justice (EJ) considerations in their general plans.

did not elaborate on EJ and provide clear objectives and policies were not studied. Omissions may reflect the fact that revisions to general plans usually occur every few years (Brinkley and Stahmer 2021), and our analysis represents the state of the field during our study period. Nonetheless, these

findings can assist jurisdictions when they are ready to update their general plans with SB 1000 requirements.

Table 2 shows the list of the 37 cities and counties whose plans were assessed. After evaluating their general plans, we found that 21 jurisdictions had adopted plans meeting SB 1000's requirements, seven were in the initial stages of doing so,¹⁰ and nine had included EJ considerations prior to the enforcement of SB 1000.

Evaluation of EJ in General Plans

Once jurisdictions were identified, we conducted a document analysis to assess how and to what extent they have incorporated EJ in their general plans. In doing so, we expand on existing qualitative research to assess general plans for topics such as climate change and sustainability (Berke and Conroy 2000; Daniels et al. 2021; Loh and Kim 2021). We also build upon Brinkley and Wagner's (2022) study that focuses broadly on EJ policies in general plans. They draw from 461 California plans and identify EJ policies using quantitative methods and content analysis. Their research, however, includes many jurisdictions that do not have the highest cumulative environmental health impact scores (as identified by the State of California). This novel research, while providing new insights for planners, does not explicitly evaluate progress and compliance toward achieving SB 1000 goals and mandates. Nor does it examine local government and community engagement in response to the new legislation. A more robust analysis of EJ considerations is needed for areas specifically identified as the most disadvantaged communities by the state to assist planners and community advocates undergoing general plan updates.

Similarly, other scholars have emphasized general plans and the urban planning process as a useful means to foster equity and improve conditions in communities of color (Bullard 2007; Valencia 2023) or identified climate action plans as "tactical opportunities" toward social and EJ (Shrock et al. 2015; Méndez 2015). Our work complements these efforts by reviewing 37 localities' general plans with the most disadvantaged communities, paying close attention to multiple dimensions of EJ. Our study, moreover, elevates interview data regarding the challenges planners, government officials, and community advocates are confronted with in implementing SB 1000 mandates. The limitations of relying solely on document analysis have also been noted, such as it may not fully capture the robust discussion that occurs during the drafting and adoption process and is also likely to reflect the biases of the main authors (Yin 2003). In sum, our research offers new insights and is grounded in valuable lessons learned across a

range of stakeholders in California and can enlist policy inspiration for EJ communities across the nation.

To achieve our research goals, we first identify different types of EJ considerations, using Schlosberg's (2007) EJ framework to capture the range of approaches and to broaden perspectives on how EJ is typically assessed. In this framework, procedural justice focuses on the rights of residents to substantively participate in the planning process. Distributive justice suggests that environmental harm and benefits should be equally distributed. Recognition of justice acknowledges the effects of structural and historic inequalities on certain communities. And the strengthening of capabilities equip residents with resources for them to flourish—for example, access to health care and employment opportunities, affordable housing, ease of transportation and mobility, healthy food options, and quality education (Krieger 2021; Méndez 2020; Pellow 2016; Schlosberg 2007).

We then turn to three other central themes in the field of EJ, determining the extent to which they are present in the plans we study: perspectives on public health; an understanding of the importance of contextual factors; and connections made with climate change or disaster/emergency plans (Corburn 2020; Goldsmith, Raditz, and Méndez 2022; Pellow 2016; Schlosberg 2007). By assessing EJ in this multifaceted way, we can better capture the diverse approaches of jurisdictions. This research is further complemented by an examination of the compliance mechanisms used by the Attorney General office. Understanding how this agency functions will be crucial for planners and communities as they implement SB 1000.

Interviews

A total of 33 semi-structured interviews with planners, state attorneys, consultants, and community leaders involved in SB 1000 implementation in our selected jurisdictions (see Table 3) were conducted and recorded via video conferencing from October 2020 to July 2021 (Weiss 1995; Yin 2003). Interview questions focused on the opportunities and challenges that have arisen through the implementation of SB 1000 (see Table 4). Findings from this study were shared with five planners, community advocates, and an official from the California Attorney General's Office (all of whom were interview respondents) to ensure the results reflect their experiences. Through an interpretive approach (Yanow and Schwartz-Shea 2015), we sought to understand how perceptions, biases, and experiences of EJ translate into actions to improve general plans. To further ensure technical accuracy, four planners from the California Governor's Office of

Table 2. Results: Local Jurisdictions That Have Adopted or Drafted EJ Considerations in Their General Plans.

City/county	Year SB 1000 requirements completed, or other documents reviewed	Type of EJ	Explicit analysis of health co-benefits	Focus on outcome or contextual vulnerability	Advisory council	Links with climate change/disaster planning
Alhambra	2019	D, P, SC	No	Outcome	No	Yes
Beaumont	2020	D, P, R, SC	Yes	Contextual	No	No
Bell	2018	D, P	No	Outcome	No	No
Ceres	2018	R, SC	No	Outcome	No	No
Corona	2020	P, SC	No	Outcome	No	No
El Cajon	2021	D, P, R, SC	No	Outcome	No	No
Fontana	2018	D, P, R, SC	No	Outcome	No	No
Fowler	2020 Policy Paper	D, P, R, SC	No	Contextual	No	Yes
Fresno	2014	P	No	Outcome	No	No
Gilroy	2020	D, P, R, SC	No	Outcome	No	No
Hanford	2017	P	No	Outcome	No	No
Huntington Beach	2017	R, D	No	Outcome	No	Yes
Huntington Park	2017 Draft	P	No	Outcome	No	No
Indio	2019	D, P, R, SC	No	Contextual	No	No
Inglewood	2020	D, P, R, SC	No	Outcome	No	Yes
Jurupa Valley	2014	D, P, R, SC	No	Outcome	No	No
Kerman	2020	D, P, SC	No	Outcome	No	Yes
Los Angeles (City)	2021	D, P, R, SC	Yes	Contextual	Yes	Yes
Lindsay	2019	D, P, R, SC	No	Outcome	No	No
Long Beach	2019	D, P, R	No	Outcome	No	No

(continued)

Table 2. (continued)

City/county	Year SB 1000 requirements completed, or other documents reviewed	Type of EJ	Explicit analysis of health co-benefits	Focus on outcome or contextual vulnerability	Advisory council	Links with climate change/disaster planning
Manteca	2021 Draft	D, SC	No	Outcome	No	No
Modesto	2019	R, SC	No	Outcome	No	No
National City	2011	D, P, SC	Yes	Outcome	Yes	No
Oxnard	2011	N/A	No	Outcome	No	Yes
Pittsburg	2019 Existing Conditions Report	D, P, R, SC	Yes	Contextual	No	No
Placencia	2019	D, P, R, SC	Yes	Contextual	Yes	Yes
Sacramento County	2019	D, P, R, SC	Yes	Contextual	Yes	Yes
San Bernardino County	2020	D, P, R, SC	No	Outcome	No	Yes
Sanger	2020	D, P, R, SC	Yes	Outcome	No	No
Santa Ana	2022	D, P, R, SC	No	Outcome	Yes	Yes
Santa Maria	2021 Existing Conditions Report	D, P, R, SC	No	Contextual	No	No
Santa Monica	2010 Land Use & Circulation Element	N/A	No	Outcome	No	No
Shafter	2021 Draft	D, P, R, SC	Yes	Outcome	Yes	Yes
Stockton	2018	D, P, R, SC	No	Outcome	No	No
Tulare	2020 Draft	D, P, R, SC	Yes	Contextual	Yes	Yes
Ventura County	2020	D, P, R, SC	No	Outcome	No	Yes
West Sacramento	2016	N/A	No	Outcome	No	No

Note. Types of environmental justice (EJ) are abbreviated as D = distributive; P = procedural; R = recognition; and SC = strengthening capabilities.

Planning and Research and two consultant planners (from one of the largest firms in the state), who were not interviewed for this study, provided feedback on our research findings.

Data Analysis

Data analysis was conducted in two stages, by both authors, who coded all data manually. First, deductive codes for our plan review and interviews were derived from the relevant literature. Codes such as distributive and procedural justice were used to assess the approach jurisdictions took to EJ considerations. Binary coding was used at this stage to evaluate whether general plans included or excluded EJ considerations and whether they highlighted the dimensions of interest or not.

In the second stage, inductive coding was used to assess interview data and to highlight emerging themes, exposing challenges and opportunities encountered by stakeholders. Inter-rater reliability was established throughout the analysis by discussing and comparing each researcher's interpretation of findings. Differences were discussed and redressed with no major conflicts emerging between researchers (Armstrong et al. 1997; Saldaña 2014). Given the topic of our research, only elements explicitly related to EJ were coded.

Results

Types of EJ Considerations in General Plans

Many of the plans highlighted procedural, distributional, recognition, and capacity-strengthening aspects of EJ. This demonstrates the relatively high degree to which local jurisdictions acknowledge EJ as a multifaceted issue—an important step in the emergence of more equitable policies in general plans.

Table 3. Interview Respondents.

Position	n
Consultant planners	6
City planners	16
County planners	5
Community and nonprofit leaders	5
California Attorney General's Office	1
Total	33

Procedural Justice. In terms of procedural justice, 29 of 37 plans contained policies intended to enhance community engagement—a pillar of EJ (Schlosberg 2007). This is an important step, given the discriminatory history of urban planning, as well as some planners’ lack of institutional capacity for community engagement (OPR 2019) or reluctance to substantively incorporate public input (Arnstein 1969; Pellow 2016). The most extensive procedural focus comes from the City of Gilroy. It has eight policies aimed at encouraging the involvement of disadvantaged communities (such as farmworkers) in the planning process, including the translation of public meetings and notices, consultation to ensure goals important to the community are being met, and the creation of a strategy for sharing materials with residents. While Gilroy’s approach is not new in planning, the explicit focus on procedural justice is important to ensure community perspectives about EJ are included in the general plan.

A few jurisdictions, seven, went further by establishing EJ advisory councils comprising government and community-based representatives to help develop considerations (see Table 2). A notable example is Sacramento County, where the committee provided expertise on a range of issues, from food policy to air quality and energy access in low-income communities of color.¹¹ Tulare County’s advisory group started informally; planners later sought formality to better convey community concerns and suggestions to elected officials. In addition to helping shape the advisory committee, a public policy fellow working with the county also went door to door to hear from Spanish-speaking residents and invite them to meetings. According to the fellow, several of these residents grew emotional about the invitation, since they had felt forgotten in this rural and predominately low-income Latina/o migrant region.¹² In rather different circumstances, the City of Huntington Park is currently developing an advisory committee

Table 4. Sample of Interview Questions.

Goals, values, and mission	How is environmental justice described in the context of the overall goal of the plans/policies? Is environmental justice a core component?
Process	How do the plans/policies propose to deliver outcomes with environmental justice as a focus? How are decisions made by communities?
Implementation	How does implementation lead to environmental justice outcomes? What are the explicit outcomes described in the approach?

Source. Adapted from the Greenlining Institute’s (Mohnot et al. 2019) “Making Equity Real in Climate Adaptation and Community Resilience Policies and Programs: A Guidebook.”

required by a legal settlement with the State Attorney General to bring the city into compliance with SB 1000.¹³

Such contrast suggests attitudes of public officials toward EJ and substantive community engagement varied widely. Before the passage of SB 1000, several planners indicated they had no intention to include EJ considerations in general plans until they were legally obligated to do so. Some saw SB 1000 requirements as redundant and burdensome, given existing environmental quality regulations. Others are worried about the significant costs developers may incur from EJ mandates. A southern California planner shared, “the part that’s going to be difficult is when these projects come in and the developer tells us we have no responsibility [or budget] for that. That’s an Air Quality Management District issue.” These attitudes are not unusual. Harrison (2019) highlights the hostility government officials can have toward EJ regulations, actively resisting or ignoring them (García et al. 2021; Guana 2015; Méndez 2022a).

For this reason, community organizers can experience frustration and mistrust when they engage with planners around issues of EJ. Framing the parameters of the general plan, moreover, can become a point of contention, as planners seek to limit the scope and manage resident expectations (Harrison 2015; Pulido, Kohl, and Cotton 2016) and community advocates struggle to achieve structural change (Angel and Loftus 2019). For example, organizers often asserted how urban planning has systemically hurt communities of color and emphasized the transformational possibilities of the general plan process: “Planners are seeing it just as a compliance mandate, but we’re seeing this as an opportunity to transform the city.”¹⁴ This vision exceeded what planners regarded as relevant or even possible for the scope of a general plan. For instance, when advocates in northern California requested that the city hire only local workers, planners viewed the request as unrealistic. In such circumstances, several planners described having ended the community engagement process. They cited institutional limitations such as a lack of resources and support from elected officials, strict timelines, and broken trust with the community.¹⁵ Thus, differing expectations can place planners at odds with community organizations when developing EJ considerations (Lievanos 2012; London, Sze, and Liévanos 2008; Méndez 2022a). However, due to advocates’ struggles (Angel and Loftus 2019), policies are emerging to surmount these limitations, such as Santa Ana’s requirement for an equity planner dedicated to collaboration and grant writing for EJ areas (City of Santa Ana GP 2021, CM 16).

Distributive and Recognition Justice. In alignment with the concerns of distributive justice, 28 plans explicitly call attention to areas overburdened with pollution. Jurisdictions often use CalEnviroScreen to identify census tracts that

rank in the top 25% and that have environmental, social, and health issues related to pesticide use, air pollution, water contamination, language isolation, and asthma. With CalEnviroScreen and additional data sources, three jurisdictions created background reports to understand the environmental challenges in their communities. These reports serve as preliminary resources for educating elected officials and the public on the extent of environmental burdens. This is especially important for policymakers who are unfamiliar with local environmental injustices.¹⁶ Once census tracts were identified, a few cities, like Gilroy, referred to them as the “Equity and Engagement (EED) District” and prioritized them in their EJ element. The City of Placentia, for example, channeled investment toward the neighborhood of La Jolla, given its proximity to two freeways and lack of outdoor recreation facilities.

In addition, 25 plans demonstrate recognition of justice by explicitly stating that environmental burdens predominately affect low-income neighborhoods and communities of color. Other jurisdictions did not acknowledge this difference, describing their goals in terms of protecting “*All*” residents. EJ leaders read this as a disregard for the historic environmental racism in the region.¹⁷ For example, an advocate mentioned that Tulare County took decades to recognize its discriminatory designation of low-income and Latina/o communities as “non-viable” in the 1970s. Few jurisdictions mentioned such factors as sources of environmental injustice in their general plans. The City of Placentia, however, used SB 1000 as an opportunity to redress structural inequalities in land use planning. Placentia determined that, in case of conflict between EJ and other land use policies in the general plan, “the goals, policies and objectives of [the former], if viewed as stricter, shall prevail.”¹⁸ Their efforts were awarded the 2020 Award of Merit from the California APA, the 2020 Award of Merit and of Excellence from the Orange County Section of the California APA, and the 2021 Sustainability Award of Merit from the Southern California Association of Governments.¹⁹

Strengthening Capabilities. Most jurisdictions, 28 out of 37, alluded to strengthening capabilities. These jurisdictions expanded their lens beyond environmental hazards to include health, housing, poverty, education, employment, and community facilities. Aligned with the fields of EJ and social determinants of health, this acknowledges that life outcomes are determined in part by the contexts in which individuals are born, live, work, and play (Corburn 2009; Krieger 2021; Méndez 2020). For example, the City of Beaumont argued that amenities and services could be used to build up the community and broaden opportunities (see Figure 4). The City of Santa Ana required the development of “intentional, strategic partnerships” with stakeholders to promote equitable health outcomes by directing “capacity, resources, and programs” toward “[disadvantaged] neighborhoods” (City of Santa Ana 2021, CM 14).

Omissions and Challenges

The omission of various dimensions of EJ from any plan may be attributed in part to the lack of institutional resources that planners reported.²⁰ Their modest teams often felt burdened by SB 1000 requirements. A planner from a small city in the San Diego region wondered how to fund EJ projects in underresourced areas that have been unable to attract economic development.²¹

Other factors limiting engagement with EJ include low levels of awareness among residents (including those living near environmental hazards), planners, and elected officials.²² A consultant planner shared that she had to educate the planning director and staff on the meaning and importance of EJ. She observed, “That whole process of educating internally is the first community engagement because if your internal people don’t understand it or see its value, they’re not going to get the community involved.”²³

The complexity and depth of information needed to identify priority areas can also be daunting. Various planners viewed CalEnviroScreen alone as insufficient. They preferred to use multiple data sources (including interviews, focus groups, the American Community Survey, and the Healthy Places Index) to identify disadvantaged communities that are rendered invisible in some analyses.²⁴ As a consultant planner explained, “Sometimes we work in communities [exempt from SB 1000], but based on community conversations, we know there are other tools we can use and ground-truthing.” Undocumented migrants, for example, are undercounted in the US Census and for that reason underrepresented in CalEnviroScreen (Goldsmith, Raditz, and Méndez 2022; Méndez 2022b).²⁵

Perspectives on Health

In addition to these four approaches to EJ, general plans also emphasized themes that are central to the movement’s priorities, such as health. For some jurisdictions, starting with a broad discussion on health provided a straightforward way for residents to understand EJ (Méndez and Zuñiga 2023).²⁶ Three of 37 plans refer to a previous health element as an important precursor for EJ considerations. The health element also helped planners understand the disparities that exist among vulnerable populations and served to guide future outreach. A Northern California county planner shared that they had a “health and wellness element [that] goes a long way to satisfy the requirements of SB 1000,” which they saw as “a pretty good foundational document,” putting them ahead of other jurisdictions.²⁷ The City of Indio has a health and equity element focused on issues of food and walkability and linked to EJ considerations. Their planner further

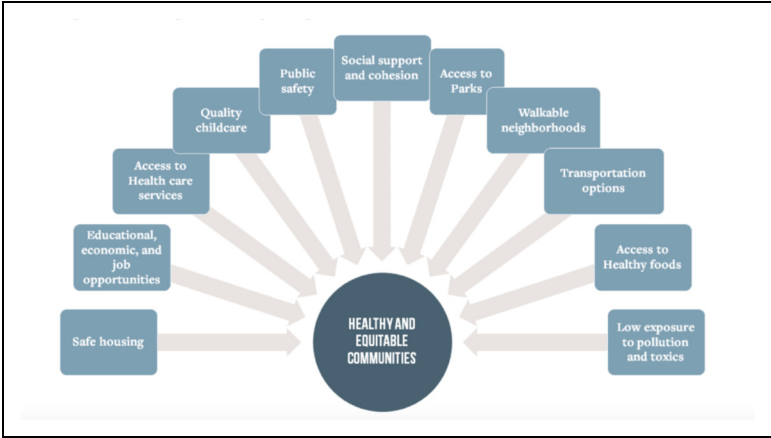


Figure 4. Example of the scope of environmental justice (EJ) considerations discussed in general plans.

Source: City of Beaumont (2020), General Plan.

shared that developers “will now be required to hold at least one meeting in the EJ area to discuss their project and [how it can] be improved to prevent any further erosion of health.”²⁸

In four jurisdictions, local departments of public health also assisted planners in better understanding community health and environmental needs. These partnerships were instrumental in guiding community engagement and acquiring, sharing, and analyzing data, as well as developing EJ goals and policies. According to a county planner, this was because health departments have teams of epidemiologists that generate substantial amounts of data, as well as advanced mapping capabilities.²⁹ The City of Ceres (2018) also recommended strengthening relationships with local health agencies for similar purposes (5–15).

Furthermore, 13 jurisdictions either have embedded or plan to incorporate their EJ considerations within an element titled “Health and Equity,” “Health and Wellness,” or “Health and EJ.” While several jurisdictions foregrounded the interconnection of health equity and EJ (Corburn 2020; Rosen, O’Neill, and Hutson 2022), others strategically used health as a means to “soften” the element when there was not adequate support from elected officials.³⁰ Planners from a small city in Orange County used a “Health and Wellness” frame in lieu of an EJ element because they felt it would be better received by the city council. Nonetheless, according to a consultant planner, even the word “equity” could be a politically contentious term in some localities.³¹ For example, of the 13 that place EJ concerns in health elements, only one

uses “equity” in the title. Such actions mark the challenges of elevating EJ as a key concern in the context of land use planning, particularly in conservative and rural areas of the state.

A resource for overcoming this tension is the concept of health co-benefits. Co-benefits are ancillary near-term health benefits (and cost-savings) of measures to reduce greenhouse gas emissions; once identified, they can help justify specific regulations. Health co-benefits may also provide support for EJ measures, such as innovative land-use policies that reduce air pollution and promote physical activity (Bollen 2015; Méndez 2015). Only nine jurisdictions include the health co-benefits of proposed EJ policies (see Table 2). But instead of a thorough evaluation, they provide nominal statements, such as “the benefits of investment should create opportunities for all to advance, prosper, and live healthy lives in their communities” (City of Los Angeles 2015, 32). In climate change policy, the health co-benefits of mitigation are often expressed in more quantifiable terms, such as decreases in mortality and morbidity rates and healthcare cost-savings (Fann et al. 2012).

Outcome and Contextual Vulnerability—Standalone Elements

“Outcome vulnerability” and “contextual vulnerability” are two distinct approaches to understanding how people are affected by hazards. The former focuses on individual hazards and their direct effects (e.g., health outcomes related to living near a freeway), while the latter is more holistic, providing a multidimensional view (Pellow 2016). Using a contextual framework, variations in climate or environment, as well as their effects on the well-being of communities, are considered to occur within wider political, institutional, economic, and social structures (O’Brien et al. 2007). These structures are contextual conditions that affect people’s exposure to environmental hazards and the effects of climate change, as well as shaping proposed policy responses.

However, only nine general plans in our study mention the contextual conditions tied to EJ. For example, the City of Pittsburg’s existing conditions report draws attention to the effects of “Structural inequalities . . . , local and regional policies, zoning, code enforcement deficiencies, and lack of community engagement and advocacy” (City of Pittsburg 2019, 7–2). The cities of Santa Maria and Fowler and the County of Sacramento also presented a baseline analysis to provide more contextual information on the vulnerabilities that exist in their communities. In Figure 5, we see an example of Tulare County’s approach, linking contextual factors regarding community stress and hazardous chemicals (Tulare County 2020, 50).

Jurisdictions focusing on contextual conditions often provided a standalone EJ element rather than distributing EJ considerations throughout the plan. While both are legal options, out of 37 general plans, only 14 opted

for a standalone element. One planner described this as an opportunity to dive deeper into the local context and “to show how important EJ is to the County, given the history of environmental racism in the region.”³² Other jurisdictions opted instead to distribute considerations throughout other elements.³³ This approach led to a greater focus on outcome vulnerability since there was nowhere to fully address the contextual conditions related to EJ. A handful of jurisdictions acknowledged that their EJ considerations were integrated into their plan at the last minute since they had begun drafting the general plan years before the passage of SB 1000.

Planners’ unfamiliarity with EJ contributed to the emphasis on outcome vulnerability as well. Both government and consultant planners shared that, before the passage of SB 1000, the topic was rarely discussed substantively in their departments. Some were never educated about it or felt it was “not on their radar and a priority.” Others, whose elected officials, or managers did not support EJ, were more comfortable with a broad focus on access to resources or health. Several planners indicated, however, that SB 1000 forced them to have open and thoughtful conversations about equity and inclusion, with their departments, policymakers, and in public settings.³⁴

Connections to Climate Change or Disaster/Emergency Plans

Environmental justice requires recognition that climate change and environmental disasters disproportionately impact low-income neighborhoods and communities of color (Golembeski and Méndez 2022; Méndez 2015, 2020). Nonetheless, only 14 jurisdictions in the study have EJ considerations linked with climate action or disaster plans. Although both are required in general plans,³⁵ they remain disconnected. This tendency indicates a narrow policy focus, lacking holistic and contextual solutions (Goldsmith, Raditz, and Méndez 2022; O’Brien et al. 2007).

The City of Kerman has two disaster policies that are explicitly connected to EJ. They recommend accessible cooling centers and urban greening to reduce climate change impacts in the most disadvantaged neighborhoods (City of Kerman 2020). Kerman cross-references these disaster policies with EJ through a simple label, “EJ.” The City of Placentia developed a technical report on climate change impacts across the city as the basis for a climate action element in the general plan, describing disadvantaged communities’ environmental conditions and the higher risks faced (City of Placentia 2019). The City of Los Angeles has gone further by launching, in 2021, the Climate Emergency Mobilization Office. The office has made interdepartmental policy recommendations with community groups, centering EJ policies related to climate change, disasters, land use, and air quality. These recommendations are intended to be incorporated into the city’s next general plan (City of Los Angeles 2015).

Ensuring Compliance

Created in 2018, the Bureau of Environmental Justice within California's Attorney General's Office protects communities disproportionately burdened by pollution. It fulfills this role by ensuring compliance or reducing exposure to environmental hazards (State of California DOJ 2022). Since 2018, ten localities have been sent 12 comment letters from the Attorney General's Office, providing guidance and/or applauding efforts to implement SB 1000. We found varying interpretations of compliance with SB 1000, which we illustrate through the letters received by two cities in Orange County. The City of Placentia received a comment letter praising its success in developing policies that "holistically [address] EJ" in collaboration with a local nonprofit. The neighboring City of Santa Ana, however, was asked to strengthen its outreach since local groups had requested more robust community engagement and substantive recognition of the environmental inequities in the city.

Notably, the Attorney General's Office can sue local governments for failure to comply with SB 1000. This action has not been taken, but the

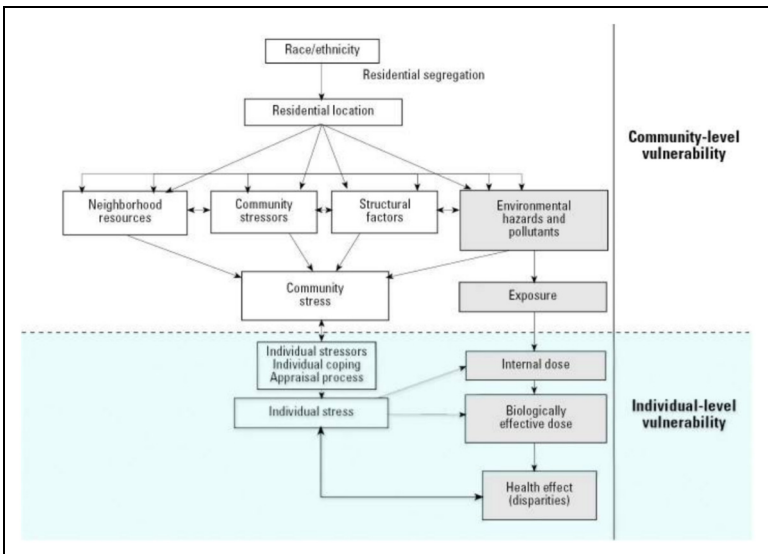


Figure 5. Example of how contextual factors are discussed in an environmental justice (EJ) element.

Source. Tulare County Environmental Justice (EJ) Element, Environmental Health Disparities: A Framework Integrating Psychosocial and Environmental Concepts (Gee and Payne-Sturges 2004).

threat of lawsuits can be a powerful tool. Previously, the office successfully sued several jurisdictions for their failure to incorporate the state's greenhouse gas reduction targets in their general plans.³⁶ These precedents may encourage jurisdictions to comply with requirements to avoid being taken to court. For example, the City of Huntington Park's 2019 general plan did not identify disadvantaged communities or include EJ policies as required by SB 1000. As a result, the Attorney General's Office entered into a settlement agreement with the City (State of California DOJ 2021).³⁷ A Huntington Park resident and advocate for Communities for a Better Environment (2022) praised this outcome, stating, "I am very happy with this decision; it is a win that we achieved with our community. Now, we need the City to work with us to make sure we have strong housing and environmental policies for me and my neighbors."

While the Bureau analyzes whether general plans substantively mitigate the perceived or real compounded health risks of a particular jurisdiction, its compliance review is largely complaint-driven. Its efforts rely on "an active community who have clear ideas of what they are looking for out of a general plan's EJ element."³⁸ For example, local advocates in Huntington Park and Santa Ana directed grievances to state attorneys, providing context for compliance assessments of these cities.³⁹ Furthermore, jurisdictions are given wide discretion to decide what policies are best for their communities. According to the Attorney General's Office, SB 1000 is intended to be "broad enough to not confine the local jurisdiction to one path."⁴⁰ This tension between prescriptiveness and flexibility often places planners at odds with community groups, who demand more stringent policies (Angel et al. 2019; Méndez 2022a; Pulido, Kohl, and Cotton 2016; Targ 2005).

Policy Recommendations

The results of this research highlight the challenges of developing more equitable general plans and invite planners to shift how EJ is viewed, assessed, and implemented. Progress in this field is particularly urgent, given the history of dissatisfaction with the state's methods of EJ implementation (Targ 2005) and as climate change continues to disproportionately impact low-income communities of color. Some challenges, such as apathy or resistance from elected officials, as well as long-standing environmental racism (Pulido 2016), can largely be resolved politically and are beyond the scope of this study. Based on our interviews with key stakeholders and the document analysis, we focus on challenges that can be addressed through broader access to resources, data, and technical assistance and training.

Support the Development of an EJ Advisory Committee. Environmental justice advisory committees help ensure that residents are involved from the outset of the general planning process. These committees are typically made up of community leaders, public health workers, and residents from disadvantaged communities. Jurisdictions with advisory committees reported having more robust conversations and were able to develop more substantive EJ policies. These committees serve as a platform not only to discuss policy recommendations but also to share EJ experiences. They can also help avoid conflict arising from differing expectations, by creating a clear framework for communication and decision-making.

Provide More Resources for Jurisdictions to Incorporate EJ in General Plans. State and federal governments should provide additional resources and staff training to local governments whose communities are most burdened by environmental hazards, especially jurisdictions that are underresourced. One approach would be to provide funding opportunities for the hiring of consultants and community leaders to strengthen capacity around EJ policy development and implementation. Jurisdictions that hired consultants and local organizations for public engagement often had more robust EJ considerations. Technical assistance and training can also help by raising awareness of systemic inequality and environmental racism among planning departments, elected officials, and the public.

Develop a Hybrid Approach, Creating a Standalone Element and Integrating Considerations Throughout the General Plan. The benefits of creating a standalone element include clarity, the elevation of EJ concerns, and the opportunity to recognize large-scale and historical inequities. It can provide a stronger basis for planners to reject development projects that harm disadvantaged communities and help demonstrate to communities that EJ is a major concern for local government. At the same time, integrating considerations in other parts of the plan “shows EJ touches all aspects of the city’s vision for the future.”⁴¹

Link EJ Considerations With Public Health, Climate Action, and Disaster Plans. Our study shows that relatively few governments are substantively integrating their general plans with public health, disaster, and climate action plans to address EJ. This reality raises concerns over how effectively jurisdictions are addressing climate threats, particularly in EJ communities. Some cities across the US are safeguarding these communities by creating departments focused specifically on mitigating the impacts of climate change through an equity lens.

Develop new Tools Relating to the Interaction of EJ and Climate Change. A uniform platform that quantifies potential climate change and disaster vulnerabilities in EJ communities should be available as a free open-source mapping tool. Agencies like public health, environmental protection, and offices of emergency services can also work together with university partners to develop tools for jurisdictions to identify priority areas, carry out health co-benefits analyses, and bolster cross-referencing of general plans' EJ provisions with those of climate and disaster plans. The failure to develop new tools can exacerbate conditions for communities that already bear the brunt of environmental hazards and climate change.

Establish a State Attorney General Office of EJ Enforcement. State Attorney Generals should create such offices to ensure environmental laws in low-income, communities of color are enforced. In California, the office has been instrumental in facilitating more robust community engagement and substantive EJ elements in general plans.

Conclusion

In this article, we provide an analysis of the emergence of EJ considerations in general plans. Results highlight positive outcomes in some jurisdictions, such as the development of EJ advisory committees and contextual analyses to educate public officials about environmental harm in the communities that they represent. However, many governments face significant challenges, including a lack of political support, limited discussions of environmental racism, ineffective community engagement, and few resources to implement and monitor measures. Without support from senior planners and elected officials and better engagement with environmental justice populations and organizations, progress toward EJ will be slow. Based on our data, there are strong concerns by community groups regarding how EJ implementation will unfold and whether future development will perpetuate historic environmental inequities. Hence, the real work of EJ takes place in the implementation and enforcement of laws. Environmental justice will not be fully realized without strong oversight and political leadership, and racial diversification of planning institutions (Méndez 2022a; Solis 2020). In California, the Attorney General's office has had a key role in compelling reluctant jurisdictions to implement EJ considerations.

Nevertheless, our research shows that SB 1000 is providing some localities with a proactive instrument to redress local environmental hazards and ensure more equitable land use policies. By offering their examples and corresponding recommendations, we hope to contribute to more equitable environmental

and land use planning throughout the US. However, we acknowledge this study is limited in scope and only reflects the early stages of SB 1000 implementation. More research is needed to understand how governments are involving civil society actors in establishing explicit links between EJ and general plans. Case studies can further explore how and why particular localities develop such connections. Environmental governance requires a variety of decision points that include establishing who makes policy choices, and which standards and knowledge are used in developing those decisions (Mendez 2015). Critically examining how general plans are created in practice will offer a more robust understanding of the agendas, politics, motivations, and expertise that guide the progress of these plans towards achieving EJ.

Acknowledgments

We would like to thank Jennifer Davis, Joseph Lambert, Monica Guerra, Simran Malhotra, Darnell Grisby, Erik de Kok, Christie Vosburg, Beth Hotchkiss, Brendan Reed, William Walker, Todd Smith, Katherine Idziorek, Avispa Roy, Jessica Debats Garrison, Gabriela Zayas del Rio, and Juan Reynoso, for their generous comments and suggestions. We also appreciate John Kinsey for their assistance with demographic data collection. We thank the anonymous reviewers for their time in providing feedback regarding our manuscript. We are also grateful for the numerous interviewees who broadened our understanding of SB 1000. We also thank the environmental justice organization leaders who shared their time and invaluable perspectives and planners that provided comments during our SB 1000 panel at the October 2022 California American Planning Association annual conference.


Declaration of Conflicting Interests

The author(s) declared the following potential conflicts of interest with respect to the research, authorship, and/or publication of this article: Michael Méndez serves as a gubernatorial appointee to the California Regional Water Quality Control Board (Region 4). The board engages regularly with regulated entities, including local governments.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Michelle E. Zuñiga  <https://orcid.org/0000-0002-9275-9131>

Notes

1. The US Environmental Protection Agency defines EJ as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies” (Environmental Protection Agency 2022).
2. In California, each city and county is required to adopt a general plan consisting of seven topical elements (i.e., chapters): land use, circulation, housing, conservation, open space, noise, and safety (Governor’s Office of Planning and Research 2017).
3. According to California Legislative Information (https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB1000), a disadvantaged community is “an area identified by the California Environmental Protection Agency [via CalEnviroScreen] ... or an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation.”
4. If the city/county analysis finds no disadvantaged communities, an EJ element is not required. Visit the California Legislative Information page for detailed information regarding Senate Bill 1000 and requirements.
5. These scores, generated by the state’s methodology CalEnviroScreen, are discussed in the methods section.
6. We define “political support” through the public policy scholarship by Post et al. (2010) that argues it exists when there is (1) a sufficient set of decision-makers, (2) with a common understanding of a particular problem on the formal agenda, (3) is committed to implementing, and (4) a commonly perceived, potentially effective policy solution.
7. For the conditions that foster these unequal outcomes, see also Mohai and Saha 2015, Rothstein 2017, and Morello-Frosch and Jesdale 2006.
8. If the city/county analysis finds no disadvantaged communities, an EJ element is not required. Nonetheless, local jurisdictions are still strongly encouraged to develop EJ considerations regardless of presence of disadvantaged communities.
9. Visit the CalEnviroScreen 3.0 web page for further information on the tool’s science and methodology. CalEnviroScreen 4.0 was released after we concluded our research.
10. In these cases, drafts, policy papers, or existing conditions reports were assessed.
11. Interview with a county planner, virtual, September 30, 2020.
12. Interview with a community leader, virtual, November 20, 2020.
13. Review of findings with consultant planner, virtual, October 22, 2022.
14. Interview with community leader, virtual, November 8, 2020.
15. Interview with a consultant planner, virtual, October 20, 2020.
16. Interview with a consultant planner, virtual, October 20, 2020.
17. Interview with a community leader, virtual, October 28, 2020.
18. Interview with a consultant planner, virtual, October 20, 2020.
19. Interview with city planner, virtual, October, 20, 2020.
20. Interview with a city planner, virtual, November 6, 2020.

21. Interview with a city planner, virtual, November 6, 2020.
22. Interview with a community leader, virtual, November 20, 2020.
23. Interview with a consultant planner, virtual, November 20, 2020.
24. Interview with a consultant planner, virtual, November 5, 2020.
25. Interview with a consultant planner, virtual, November 5, 2020.
26. Interview with a city planner, virtual, November 20, 2020.
27. Interview with a county planner, virtual, November 6, 2020.
28. Interview with a city planner, virtual, November 3, 2020.
29. Interview with a county planner, virtual, November 6, 2020.
30. Interview with a city planner, virtual, November 20, 2020.
31. Review of findings with a consultant planner, virtual, November 17, 2022.
32. Interview with a county planner, virtual, September 30, 2020.
33. Interview with a city planner, virtual, October 12, 2020.
34. Interview with a city planner, virtual, October 12, 2020.
35. California's Senate Bill 379 requires local jurisdictions to integrate climate adaptation into their general plans.
36. Interview with Attorney General's Office, virtual, February 17, 2021.
37. Review of findings with a consultant planner, virtual, October 15, 2022.
38. Interview with Attorney General's Office, virtual, February 17, 2021.
39. Interview with a community leader, virtual, November 3, 2020.
40. Interview with Attorney General's Office, virtual, February 17, 2021.
41. Interview with a city planner, virtual, October, 12, 2020.

References

- Angel, James, and Alex Loftus. 2019. "With-Against-and-Beyond the Human Right to Water." *Geoforum: Journal of Physical, Human, and Regional Geosciences* 98: 206–13.
- Armstrong, David, Ann Gosling, John Weinman, and Theresa Marteau. 1997. "The Place of Inter-Rater Reliability in Qualitative Research: An Empirical Study." *Sociology* 31 (3): 597–606.
- Arnstein, Sherry R. 1969. "A Ladder of Citizen Participation." *Journal of the American Institute of Planners* 35 (4): 216–24.
- Berke, Philip R., and Maria Manta Conroy. 2000. "Are We Planning for Sustainable Development? An Evaluation of 30 Comprehensive Plans." *Journal of the American Planning Association* 66 (1): 21–33.
- Bollen, Johannes. 2015. "The Value of Air Pollution Co-Benefits of Climate Policies: Analysis With a Global Sector-Trade CGE Model Called WorldScan." *Technological Forecasting and Social Change* 90: 178–91.
- Bowen, Glenn A. 2009. "Document Analysis as a Qualitative Research Method." *Qualitative Research Journal* 9(2), 27–40.
- Boyd-Barrett, Claudia. 2018. "After Massive Fires, California Considers Doing More to Help Undocumented Victims." *California Health Report*. Accessed September, 2022. <https://www.calhealthreport.org/2018/09/11/massive-fires-california-considers-help-undocumented-victims/>.

- Brinkley, Catherine, and Carl Stahmer. 2021. "What Is In a Plan? Using Natural Language Processing to Read 461 California City General Plans." *Journal of Planning Education and Research*, 0739456X21995890.
- Brinkley, Catherine, and Jenny Wagner. 2022. "Who Is Planning for Environmental Justice—and How?" *Journal of the American Planning Association*, 1–14. <https://doi.org/10.1080/01944363.2022.2118155>
- Bryant, Christian. 2022. "How City Planning Can Support Environmental Justice (In The Loop)." *Newsy*. Accessed June 6, 2022. <https://www.newsy.com/stories/how-city-planning-can-support-environmental-justice/>.
- Bullard, Robert D. 1993. "Anatomy of Environmental Racism and the Environmental Justice Movement." *Confronting Environmental Racism: Voices from the Grassroots* 15: 15–39.
- Bullard, Robert D. 2007. *Growing Smarter: Achieving Livable Communities, Environmental Justice, and Regional Equity*. MIT Press.
- Bullard, Robert D., and Glenn S. Johnson. 2000. "Environmentalism and Public Policy: Environmental Justice: Grassroots Activism and Its Impact on Public Policy Decision Making." *Journal of Social Issues* 56 (3): 555–78.
- California Coastal Commission. 2019. "Environmental Justice and Social Equity." <https://www.coastal.ca.gov/env-justice/>.
- California Energy Commission. 2022. "Electric Vehicle Infrastructure Deployment Assessment – SB 1000." Accessed June, 2021. [https://www.energy.ca.gov/programs-and-topics/programs/clean-transportation-program/electric-vehicle-infrastructure#:~:text=SB%201000%20\(2018\)%20requires%20the,of%20new%20charging%20station%20infrastructure.](https://www.energy.ca.gov/programs-and-topics/programs/clean-transportation-program/electric-vehicle-infrastructure#:~:text=SB%201000%20(2018)%20requires%20the,of%20new%20charging%20station%20infrastructure.)
- California Environmental Justice Alliance & Placeworks. 2017. "SB 1000 Implementation Tool Kit Planning for Healthy Communities." Accessed June, 2020. <https://caleja.org/2017/09/sb-1000-toolkit-release/>.
- California Office of Environmental Health Hazard Assessment. 2014. "Draft California Communities Environmental Health Screening Tool (CalEnviroScreen)." Accessed June, 2020. <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30#:~:text=CalEnviroScreen%20is%20a%20screening%20tool,go%20to%20the%20OEHHA%20website.>
- California State Lands Commission. 2021. "Environmental Justice." Accessed June, 2021. <https://www.slc.ca.gov/wp-content/uploads/2018/11/EJPolicy.pdf>.
- Cerrell Associates. 1984. "Political Difficulties Facing Waste-to-Energy Conversion Plant Siting." *Senior Associate for California Waste Management Board*, 1–57, http://www.voicesfromthevalley.org/wp-content/uploads/2011/10/cerrell_report.pdf.
- City of Beaumont. 2020. "Beaumont General Plan." Accessed March, 2021. https://www.beaumontca.gov/DocumentCenter/View/36923/Beaumont-GPU_Final-rev-22521.
- City of Ceres. 2018. "City of Ceres General Plan 2035." Accessed June, 2020. <https://www.ci.ceres.ca.us/DocumentCenter/View/2510/General-Plan-2035>.
- City of Kerman. 2020. "City of Kerman 2040 General Plan." Accessed July, 2020. https://kermangp.com/images/docs/kpgu_final_general_plan.pdf.

- City of Los Angeles. 2015. "Plan for a Healthy Los Angeles." Accessed June, 2020. https://planning.lacity.org/odocument/2442d4df-34b3-4683-8eb9-b5ea1182782b/Plan_for_a_Healthy_Los_Angeles.pdf.
- City of Los Angeles. 2021. "Climate Emergency Mobilization Office." Accessed June, 2021. <https://www.climate4la.org/>.
- City of Pittsburg. 2019. "Envision Pittsburg Existing Conditions Report." Accessed November, 2019. <https://pittsburg.generalplan.org/documents-and-maps>.
- City of Placentia. 2019. "City of Placentia General Plan." Accessed June, 2020. <https://www.placentia.org/166/General-Plan-Update>.
- City of Santa Ana. 2021. "Draft Environmental Justice Policy Framework for the General Plan Update." Accessed December, 2021. <https://storage.googleapis.com/prodcity/santaanaca/uploads/2022/04/Environmental-Justice-Policy-Framework-Draft-%E2%80%93December-2021.pdf>.
- Civic Solutions. 2022. "Jurupa Valley Environmental Justice Element." Accessed October, 2021. <http://civicsolutions.com/our-work/environmental-justice-element-for-jurupa-valley/>.
- Claudio, Luz. 2007. "Waste couture: Environmental impact of the clothing industry." A449-A454.
- Cole, Luke W. 1994. "The Struggle of Kettleman City: Lessons for the Movement." *J. Contemp. Legal Issues* 5: 67.
- Cole, Luke W., and Sheila R. Foster. 2001. *From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement*. Vol. 34. NYU Press.
- Communities for a Better Environment [@cbe_cal]. 2022. "Huntington Park Resident, CBE Member, and Plaintiff Speaks on SB 1000." Instagram. Accessed July 14, 2022. <https://www.instagram.com/p/Cgfb9sqpmYY/?igshid=YmMyMTA2M2Y%3D>.
- Corburn, Jason. 2009. *Toward the Healthy City: People, Places, and the Politics of Urban Planning*. MIT Press.
- Corburn, Jason. 2020. Health in All Policies: Urban Development, Toxic Stressors, and Health Equity. In *Handbook of Global Health*, 1–24. Cham: Springer.
- Dalton, Linda C., Mark Conover, Gary Rudholm, Randal Tsuda, and William C. Baer. 1989. "The Limits of Regulation Evidence From Local Plan Implementation in California." *Journal of the American Planning Association* 55 (2): 151–68.
- Daniels, Susan, Abby Anacki, Libby Rushley, Lori Keyser, and Celine Alkhayri. 2021. *Division of Planning Research on Call (ROC) 2020-14 Task 5: Effective EJ and LEP Engagement Strategies and Methods for Statewide Plans*. No. FHWA/OH-2021-11.
- Dykman, Alyssa. 2020. "Race and Ethnicity Matter in Californians' Views on Environmental Disparities." *Public Policy Institute of California*. Accessed August 5, 2020. <https://www.ppic.org/blog/race-and-ethnicity-matter-in-californians-views-on-environmental-disparities/>.
- Environmental Protection Agency. 2022. "Environmental Justice." Last modified March 23, 2023. <https://www.epa.gov/environmentaljustice>.
- Fann, Neal, Amy D. Lamson, Susan C. Anenburg, Karen Wesson, David Risley, and Bryan Hubbell. 2012. "Estimating the National Public Health Burden Associated

- with Exposure to Ambient PM_{2.5} and Ozone.” *Risk Analysis: An International Journal* 32 (1): 81–95.
- Fulton, William. 2018. *Guide to California Planning*. Solano Press Books.
- García, Ivis, April Jackson, Andrew J. Greenlee, Anaid Yerena, Benjamin Chrisinger, and C. Aujean Lee. 2021. “Feeling Like an ‘Odd duck’ the Experiences of African American/Black and Hispanic/Latin/o/a/x Planning Practitioners.” *Journal of the American Planning Association* 87 (3): 326–40.
- Gee, Gilbert C., and Devon C. Payne-Sturges. 2004. “Environmental Health Disparities: A Framework Integrating Psychosocial and Environmental Concepts.” *Environmental Health Perspectives* 112 (17): 1645–53.
- Goldsmith, Leo, Michael Méndez, and Vanessa Raditz. 2023. “Disaster Response Must Help Protect LGBTQ+ Communities.” *Issues in Science and Technology*. Accessed March 10, 2023. <https://issues.org/disaster-response-lgbtq-goldsmith-mendez-raditz/>.
- Goldsmith, Leo, Vanessa Raditz, and Michael Méndez. 2022. “Queer and Present Danger: Understanding the Disparate Impacts of Disasters on LGBTQ+ Communities.” *Disasters* 46 (4): 946–73.
- Golembeski, Cynthia, Andrea Armstrong, Ans Irfan, Michael Méndez, and Nicholas Shapiro. 2022. “Climate Change and Incarceration: People in Prison Are Vulnerable to Extreme Temperatures, Diseases, and Displacement.” *Think Global Health*. Accessed April 29, 2022. <https://www.thinkglobalhealth.org/article/climate-change-and-incarceration>.
- Golembeski, Cynthia, and Michael Méndez. 2022. “Only One Earth: Global Health and Climate Justice on World Environment Day and Beyond.” *World Medical & Health Policy*. Accessed June 06, 2022. <https://onlinelibrary.wiley.com/doi/full/10.1002/wmh3.526>.
- Governor’s Office of Planning and Research. 2017. “State of California General Plan 2017 Guidelines.” Published July 31, 2017. https://opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf.
- Governor’s Office of Planning and Research. 2019. “2019 Governor’s Office of Planning and Research (OPR) Annual Planning Survey.” Accessed August, 2020. https://opr.ca.gov/docs/20200828-2019_Annual_Planning_Survey_Results.pdf.
- Guana, Eileen. 2015. “Federal Environmental Justice Policy in Permitting.” In *Failed Promises: Evaluating the Federal Government’s Response to Environmental Justice*, edited by David Konisky, 57–83. Cambridge, MA: The MIT Press.
- Harrison, Jill Lindsey. 2011. *Pesticide Drift and the Pursuit of Environmental Justice*. MIT Press.
- Harrison, Jill Lindsey. 2015. “Coopted Environmental Justice? Activists’ Roles in Shaping EJ Policy Implementation.” *Environmental Sociology* 1 (4): 241–55.
- Harrison, Jill Lindsey. 2022b. “Environmental Justice and the State.” *Environment and Planning E: Nature and Space*. 25148486221138736.
- Harrison, Jill Lindsey. 2019. *From the Inside Out: The Fight for Environmental Justice Within Government Agencies: 278–9*. MIT Press.
- Krieger, Nancy. 2021. *Ecosocial Theory, Embodied Truths, and the People’s Health*. Oxford University Press.

- Land use: general plans: safety and environmental justice, Section 65302, Cal SB 1000. 2015-2016. Chapter 587, (Cal Stat. 2016).
- Lee, Charles. 2021. "Another Game Changer in the Making? Lessons From States Advancing Environmental Justice Through Mapping and Cumulative Impact Strategies." *Envtl. L. Rep* 51: 10676.
- Lerner, Steve. 2012. *Sacrifice Zones: The Front Lines of Toxic Chemical Exposure in the United States*. MIT Press.
- Liévanos, Raoul S. 2012. "Certainty, Fairness, and Balance: State Resonance and Environmental Justice Policy Implementation." *Sociological Forum* 27 (2): 481–503.
- Loh, Carolyn G., and Rose Kim. 2021. "Are We Planning for Equity? Equity Goals and Recommendations in Local Comprehensive Plans." *Journal of the American Planning Association* 87 (2): 181–96.
- London, Jonathan, Alex Karner, Julie Sze, Dana Rowan, Gerardo Gambirazzio, and Deb Niemeier. 2013. "Racing Climate Change: Collaboration and Conflict in California's Global Climate Change Policy Arena." *Global Environmental Change* 23 (4): 791–9.
- London, Jonathan K., Julie Sze, and Raoul S. Liévanos. 2008. "Problems, Promise, Progress, and Perils: Critical Reflections on Environmental Justice Policy Implementation in California." *UCLA Journal of Environmental Law and Policy* 26: 255.
- Mathur, Shishir. 2019. "Linking Planning with Budgeting: Examining Linkages Between General Plans and Capital Improvement Plans." *Journal of Planning Education and Research* 39 (1): 65–78.
- Méndez, Michael Anthony. 2015. "Assessing Local Climate Action Plans for Public Health Co-Benefits in Environmental Justice Communities." *Local Environment* 20 (6): 637–63.
- Méndez, Michael. 2020. *Climate Change from the Streets: How Conflict and Collaboration Strengthen the Environmental Justice Movement*. Yale University Press.
- Méndez, Michael, Genevieve Flores-Haro, and Lucas Zucker. 2020. "The (In)Visible Victims of Disaster: Understanding the Vulnerability of Undocumented Latino/a and Indigenous Immigrants." *Geoforum; Journal of Physical, Human, and Regional Geosciences* 116: 50–62.
- Méndez, Michael. 2022a. "The Reflective Practitioner in the Context of Racial and Environmental Justice." *Planning Theory & Practice*. Published Online, 28. Accessed June, 2022. <https://www.tandfonline.com/doi/full/10.1080/14649357.2022.2082710>
- Méndez, Michael. 2022b. "Behind the Bougainvillea Curtain: Wildfires and Inequality." *Issues in Science and Technology*, published by the National Academies of Sciences, Engineering, and Medicine, 38 (2): 84–90.
- Méndez, Michael, and Michelle E. Zuñiga. 2023. "Understanding Challenges to Health Equity in Climate Action and Land Use Planning." *American Journal of Public Health* 113 (2): 177–8.

- Mohai, Paul, and Robin Saha. 2015. "Which came first, people or pollution? A review of theory and evidence from longitudinal environmental justice studies." *Environmental Research Letters* 10 (12): 125011.
- Mohnot, Sona, Jordyn Bishop, and Alvaro Sanchez. 2019. "Making Equity Real in Climate Adaptation and Community Resilience Policies and Programs." *The Greenlining Institute*. Accessed August, 2019. <https://greenlining.org/wp-content/uploads/2019/08/Making-Equity-Real-in-Climate-Adaption-and-Community-Resilience-Policies-and-Programs-A-Guidebook-1.pdf>
- Morello-Frosch, Rachel, and Bill M Jesdale. 2006. "Separate and unequal: residential segregation and estimated cancer risks associated with ambient air toxics in US metropolitan areas." *Environmental health perspectives* 114 (3): 386–93.
- Mui, Yeeli, Maryam Khojasteh, Alexandra Judelsohn, Avery Sirwatka, Sylvia Kelly, Patrick Gooch, and Samina Raja. 2021. "Planning for Regional Food Equity." *Journal of the American Planning Association* 87 (3): 354–69.
- Netter, Sara. 2010. "Birth Defects Plague Tiny California Town." *ABC News*. Accessed February 5, 2010, <https://abcnews.go.com/Health/Wellness/birth-defects-plague-california-town-kettleman-city/story?id=9757487>.
- O'Brien, Karen, Siri Eriksen, Lynn P. Nygaard, and A. N. E. Schjolden. 2007. "Why Different Interpretations of Vulnerability Matter in Climate Change Discourses." *Climate Policy* 7 (1): 73–88.
- Pannu, Camille. 2012. "Drinking Water and Exclusion: A Case Study from California's Central Valley." *Calif. L. Rev.* 100: 223.
- Pastor, Manuel, Jim Sadd, and John Hipp. 2001. "Which Came First? Toxic Facilities, Minority Move-In, and Environmental Justice." *Journal of Urban Affairs* 23 (1): 1–21.
- Pellow, David N. 2016. "Toward a Critical Environmental Justice Studies: Black Lives Matter as an Environmental Justice Challenge." *Du Bois Review: Social Science Research on Race* 13 (2): 221–36.
- Public Policy Institute of California. 2006. "Just the Facts California's Central Valley." Accessed June, 2020. https://www.ppic.org/wp-content/uploads/content/pubs/jtf/JTF_CentralValleyJTF.pdf.
- Pulido, Laura. 1996. "Introduction: Environmental Racism." *Urban Geography* 17 (5): 377–9.
- Pulido, Laura. 2016. "Flint, Environmental Racism, and Racial Capitalism." *Capitalism Nature Socialism* 27 (3): 1–16.
- Pulido, Laura, Ellen Kohl, and Nicole-Marie Cotton. 2016. "State Regulation and Environmental Justice: The Need for Strategy Reassessment." *Capitalism Nature Socialism* 27 (2): 12–31.
- Pulido, Laura, and Devon Peña. 1998. "Environmentalism and Positionality: The Early Pesticide Campaign of the United Farm Worker's Organizing Committee, 1965-71." *Race, Gender & Class*: 33–50.
- Redaelli, Eleonora. 2021. "Including Preservation in Planning: Albina and Portland's Comprehensive Plan." *Journal of the American Planning Association* 87 (2): 266–81.
- Rosen, Jovanna, Moira O'Neill, and Malo Hutson. 2022. "The Important Role of Government in Comprehensive Community Initiatives: A Case Study Analysis

- of the Building Healthy Communities Initiative.” *Journal of Planning Education and Research* 42 (3): 350–64.
- Rothstein, Richard. 2017. *The color of law: A forgotten history of how our government segregated America*. Liveright Publishing.
- Saldaña, Johnny. 2014. “Coding and Analysis Strategies.” *The Oxford Handbook of Qualitative Research*: 581–605.
- Salkin, Patricia E. 2004. “Environmental justice and land use planning and zoning.” *32 Real Est. LJ* 429.
- Schlosberg, David. 2007. *Defining Environmental Justice: Theories, Movements, and Nature*. OUP Oxford.
- Schrock, Greg, Ellen M Bassett, and Jamaal Green. 2015. “Pursuing equity and justice in a changing climate: Assessing equity in local climate and sustainability plans in US cities.” *Journal of Planning Education and Research* 35 (3): 282–95.
- Solis, Miriam. 2020. “Conditions and Consequences of ELULU Improvement: Environmental Justice Lessons from San Francisco, CA.” *Journal of Planning Education and Research*: 0739456X20929407.
- State of California Department of Justice. 2022. “Environmental Justice.” Accessed November, 2022. <https://oag.ca.gov/environment/justice>.
- State of California Department of Justice Office of Attorney General. 2021. “Attorney General Bonta Announces Settlement with Huntington Park to Address Environmental Justice in Local Land Use Planning.” Accessed December, 13, 2021. <https://oag.ca.gov/news/press-releases/attorney-general-bonta-announces-settlement-huntington-park-address#:~:text=OAKLAND%20%E2%80%93%20California%20Attorney%20General%20Rob,in%20their%20land%20use%20planning>.
- State of California Department of Justice Office of Attorney General. 2022. “SB 1000 - Environmental Justice in Local Land Use Planning.” <https://oag.ca.gov/environment/sb1000>.
- Sze, Julie, Gerardo Gambirazzio, Alex Karner, Dana Rowan, Jonathan London, and Deb Niemeier. 2009. “Best in Show? Climate and Environmental Justice Policy in California.” *Environmental Justice* 2 (4): 179–84.
- Targ, Nicholas. 2005. “The States’ Comprehensive Approach to Environmental Justice.” In *Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement*, edited by David Pellow, and Robert Brulle, 171–84. Cambridge, MA: The MIT Press.
- Thomas, Christopher Scott. 2018. “The Mothers of East Los Angeles: (Other) Mothering for Environmental Justice.” *Southern Communication Journal* 83 (55): 293–309.
- Tulare County. 2020. “Draft Environmental Justice Element.” Accessed October, 2020. <https://tularecounty.ca.gov/rma/planning-building/environmental-justice/environmental-justice-report-draft/>.
- United States Census. 2019. “Quick Facts National City, CA.” Accessed November, 2022. <https://www.census.gov/quickfacts/nationalcitycitycalifornia>.
- Valencia, Enrique. 2023. “Evaluating Meaningful Engagement Under Environmental Justice Mandates: A Case Study of California’s SB1000 Implementation in Santa Ana.” *Critical Planning* 26 (1): 94–114.

- Walker, Renee E., Christopher R. Keane, and Jessica G. Burke. 2010. "Disparities and Access to Healthy Food in the United States: A Review of Food Deserts Literature." *Health & Place* 16 (5): 876–84.
- Weiss, Robert S. 1995. *Learning from Strangers: The Art and Method of Qualitative Interview Studies*. Simon and Schuster.
- Wilson, Robin, Michael Méndez, Edward Maibach, and Gabrielle Wong-Parodi. 2022. Engaging Socially Vulnerable Communities and Communicating About Climate-Related Risks and Hazards. In *Societal Experts Action Network (SEAN), Policy Brief*, 1–29. Washington DC: National Academies of Sciences Press.
- Yanow, Dvora, and Peregrine Schwartz-Shea. 2015. *Interpretation and Method: Empirical Research Methods and the Interpretive Turn*. Routledge.
- Yin, Robert K. 2003. "Case Study Research Design and Methods Third Edition." *Applied Social Research Methods Series 5*: 87–92.

Author Biographies

Michelle E. Zuñiga is an assistant professor of urban and community planning in the Department of Geography and Earth Sciences at the University of North Carolina at Charlotte.

Michael A. Méndez is an assistant professor of environmental planning and policy in the Department of Urban Planning and Public Policy at the University of California, Irvine.